Media Literacy in Practice: Assessing and Addressing Competency Gaps among M.A. Mass Communication Students

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Abstract

The study aims to assess the media literacy competency of M.A. Mass Communication students enrolled in six universities – three each from Odisha and Jharkhand (one Central, one State, and one Private university in each state). An in-person survey was conducted to collect data from 263 of the 280 enrolled students. To assess media literacy related competencies, the study used a structured questionnaire developed using the UNESCO Media and Information Literacy (MIL) framework. In order to improve clarity and prevent conceptual redundancy, the five competencies defined in the original framework were subsumed into three primary domains: Access (information navigation), Analyse and Evaluate (critical understanding), and Create and Act (content production and participation). SPSS statistical tools and Microsoft Excel were used to analyse the data. Findings of the study show a distinct trend in student performance: the strongest competency domain was Access (information navigation), followed by Create and Act (production and participation). On the other hand, the poorest area was Analyse and Evaluate (critical understanding), indicating significant weaknesses in Mass Communication students' critical skills. In order to improve media literacy education in these regions, the study highlights need for curriculum reforms, conducive policy interventions, faculty development programs fostering media literacy education.

Keywords: media literacy, mass communication education, UNESCO MIL Framework, critical thinking, survey.

1. Introduction

The contemporary digital revolution has significantly led to the rapid expansion of new media tools and technologies. While this tectonic shift in the Information and Communication Technologies (ICT) offers individuals a plethora of opportunities to produce and consume content, it has also brought up significant challenges in the form of misleading information, ultimately creating a serious instability in the communication landscape. Terminologies like "fake news" and "post-truth," which were formerly confined to political discourse, are now part of our day-to-day conversation (Monsees, 2021). This information disorder has diluted the beauty of rationale debate, polarising and undermining the public sphere, and destabilising the institution of journalism (Lokot, Diakopoulos, 2016). Acknowledging Media literacy as vital and emerging competency is the need of the hour, enabling people to be critical, objective, and rational media users.

A thorough description of media literacy is given by the National Association of Media Literacy Education (NAMLE), which defines it as the capability to access, analyse, evaluate, create, and act across all forms of communication. This ability encourages the critical analysis of media

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text during both consumption and production across various platforms, going beyond the functional literacy of reading and writing skills. As a result, media literacy is recognised as an essential life skill required for surviving and thriving in this information saturated world. It is essential to preserve fundamental democratic principles, such as privacy and freedom of speech (Jolls, Johnsen, 2017). Additionally, it is a powerful tool in addressing issues associated with information disorder as it empowers citizens to effectively navigate a complex information landscape, critically examine the reliability of information sources, and comprehend the underlying power structures controlling the media ecosystem (Bakir, McStay, 2018).

Colleges and universities are among the most suitable spaces to train young minds in critical thinking, objective analysis, rational media use, and ultimately to nurture informed and engaged citizens. Media literacy is a vital skill for media and communication students, as they are likely to become future journalists, mass communicators, gatekeepers, watchdogs, or important stakeholders within the information ecosystem (Kamerer, 2013). Incorporating media literacy components into classroom teaching-learning activities and laboratory exercises is considered a highly effective strategy to foster critical and analytical thinking among students, as validated by various prior studies. Students who develop such critical skills are better positioned to make personal and collective decisions wisely and rationally. Additionally, prominent scholars in the field of media literacy, such as Hobbs and Frost (Hobbs, Frost 2003), have consistently emphasised the need for structured educational interventions to enhance students' understanding and evaluation of the media content they encounter. However, several studies also indicate that higher education institutions continue to underestimate and fail to incorporate media literacy as a formal component of curricular frameworks, particularly in poor and underdeveloped nations.

Though media education has already completed 100 years of its existence in India, the emphasis on media literacy competency within media education curricula has remained largely neglected. A clear-cut policy framework addressing this aspect is still lacking. In eastern India, particularly regions such as Odisha and Jharkhand, which continue to face limited accessibility to quality education, progress has been slow, with inadequate faculty strength and weak integration of media literacy competency skills into university curricula (Kumar, Singh, 2020). Although a few studies have attempted to assess the media literacy competency of mass communication students in the Indian context, a clear research gap remains in the form of, or due to the absence of, a systematic assessment of media literacy skills among mass communication students in underdeveloped regions such as Odisha and Jharkhand. To address this gap, the present study operationalises media literacy skills using UNESCO's Media and Information Literacy framework, which emphasises five interrelated competencies: access, analyse, evaluate, create, and act. In this context, the study focuses on assessing these five key competencies among MA Mass Communication students in Odisha and Jharkhand. Such operationalisation ensures a structured and internationally recognised standard for evaluating students' media literacy competency, identifying existing gaps, and suggesting measures for improvement.

2. Materials and methods

This study employed a quantitative research design to assess the media literacy competencies of M.A Mass Communication students in selected universities of Odisha and Jharkhand.

This study employed a quantitative research design to assess the media literacy competencies of M.A. Mass Communication students in selected universities of Odisha and Jharkhand. The study laid its foundation on the UNESCO Media and Information Literacy (MIL) framework, focusing on five key competencies – Access, Analyse, Evaluate, Create, and Act – to operationalise the concept of media literacy. Although the UNESCO Media and Information Literacy (MIL) framework identifies five core competencies as Access, Analyse, Evaluate, Create, and Act, it treats these competencies as closely interrelated rather than mutually exclusive. The UNESCO report on the Media and Information Literacy (MIL) framework repeatedly highlights Access (locating and navigating information) as foundational, Analyse and Evaluate (critical thinking and assessment of media messages) as core cognitive competencies, and Create and Act (media content creation and participatory engagement) as applied and participatory competencies. Although UNESCO has not numerically classified these competencies into three domains, conceptually it has grouped them accordingly. Furthermore, several scholars in the field of media literacy, such as S. Livingstone (Livingstone, 2004), and R. Hobbs (Hobbs, 2010), have categorically organised these competencies

into three clusters or domains, as outlined above, to avoid conceptual overlap and to ensure statistical clarity in analysis.

Research Design

The researcher conducted a survey among MA Mass Communication students across six universities in Odisha and Jharkhand to assess their media literacy skills. The questionnaire, used as the primary data collection tool, was developed in accordance with the UNESCO Media and Information Literacy (MIL) framework, and a corresponding codebook was prepared to ensure systematic analysis. The questionnaire comprised a variety of items, including Likert-scale items, binary items, ordinal frequency-based items, and a few open-ended questions. Likert-scale responses were measured on a five-point scale (1–5). Binary responses, such as Yes/No, were also operationalised on a five-point scale for analytical efficacy, with Yes = 5 and No = 1. Ordinal items (for example, time-based responses such as hours of media use) were standardised to a 1–5 scale according to their order of magnitude. Open-ended responses were content-coded and assigned numerical values (1–5) to ensure accuracy in quantitative analysis. In addition, nominal questions were analysed using frequency distributions and binary indicators (0 = non-use, 1 = use) rather than a five-point scale. This coding approach was adopted to ensure uniform quantitative treatment across all variables.

Sample

The respondents for this study consisted of MA Mass Communication students enrolled in six universities across Odisha and Jharkhand. A total of 280 students were admitted to Mass Communication programmes in these six universities during the academic session 2022–2024, out of which 263 responses were collected. Seventeen responses could not be recorded, yet the study achieved a notably high response rate. The table below presents the distribution of admitted students and collected responses across the universities.

Table 3. University-wise distribution of admitted students and responses

University	Admitted Students	Responses Collected
Central University of Odisha (CUO) – Central	24	24
Berhampur University (BU) – State, Odisha	48	42
Birla Global University (BGU) – Private, Odisha	30	29
Central University of Jharkhand (CUJ) – Central	37	37
Ranchi University (RU) – State, Jharkhand	130	120
Amity University Ranchi (AUR) – Private, Jharkhand	11	11
Total	280	263

Instrument

The questionnaire for the study was developed in alignment with the UNESCO MIL framework. The instrument was designed to assess various competencies of Mass Communication students, related to their ability to access, analyse, evaluate, and create or act upon media content. Before the actual field survey, the questionnaire was piloted using Google Forms and circulated in a few WhatsApp groups comprising the researcher's peers and Mass Communication students. The feedback received during the pilot study was incorporated to refine the instrument and ensure better clarity, reliability, and internal consistency. But in the main study, physical copies of the questionnaire were administered during the field survey to assess the media literacy competencies and skills of the students.

Data Collection

The data collection for this study was carried out by the researcher through in-person visits to the Mass Communication departments of the six selected universities between June 2024 and August 2024. The physical questionnaires were distributed to students in classroom settings after obtaining prior permission from the authorities of the respective departments. Conducting the survey in person enabled greater student engagement and allowed the researcher to address students' queries related to the questionnaire, thereby ensuring greater accuracy in the data collection process.

Data Analysis

The collected responses were coded and recorded into Microsoft Excel for data cleaning and organisation. The researcher received binary, ordinal, and open-ended responses during data

collection, which were coded using a predefined scoring scheme to maintain consistency. A cleaned dataset was prepared in alignment with the developed codebook and subsequently imported into SPSS for statistical analysis.

Means and standard deviations were used to calculate each media literacy competency domain in order to gain a clear understanding of the overall media literacy skills of the students. The study also conducted a comparative analysis across various variables, including state, type of university, gender, exposure to media literacy training, and the educational background of the respondents. SPSS software was used to compute the descriptive statistics. The findings of the study were then presented in the form of tables, charts, and figures for further interpretation and discussion.

3. Discussion

The present study interprets its findings within the existing studies on digital and media literacy, fact-checking, critical media engagement.

The findings of the study reveal a clear and consistent pattern across all variables, indicating that students perform most strongly in the Access domain of media literacy, followed by Create and Act, with Analyse and Evaluate being as the weakest domain. The comparatively higher scores in the Access domain suggest that students are digitally adept and comfortable with locating and navigating media text from media sources. This finding in tuned with existing research which highlights that young media users often possess stronger digital and technical skills, particularly in accessing and using content through modern media technologies, but access does not mean the media users have capacity to judge the consumed content objectively and rationally (Guess et al., 2020).

The widespread penetration of digital devices and the expansion of digital infrastructure have led to extensive use of social media among Indian youth, resulting in increased consumption of digital information across the country, especially in the last decade. However, access to digital devices, consumption of digital information, or technical proficiency alone do not constitute sufficient criteria for being considered media literate (Van der Linden, 2021). Accessing media content or information from multiple sources does not necessarily result in mindful consumption. The findings of this study indicate that although students are comparatively proficient in accessing information from diverse media sources, they demonstrate relatively low performance in the Analyse and Evaluate domain. This highlights a significant gap in their critical thinking abilities, analytical judgement, and capacity to evaluate media content. This further indicates that M.A. Mass Communication students are not adequately equipped to critically interpret media messages in order to assess the reliability of information or identify implicit biases and stereotypes that may significantly influence and manipulate media consumers. Previous studies have cautioned that media education often prioritises the development of digital skills and technical proficiency, which primarily strengthen the Access component of media literacy, while placing comparatively less emphasis on the critical analysis and interpretation of media messages (Hameleers, 2022).

The comparative analysis reveals that M.A. Mass Communication students from Odisha perform slightly better in media literacy competencies than their counterparts in Jharkhand. It is noteworthy that Berhampur University and Birla Global University in Odisha offer dedicated courses on Media Literacy within their curricula, which may be one of the key factors contributing to the comparatively higher media literacy scores among students in Odisha. In contrast, universities in Jharkhand continue to face several infrastructural and structural challenges. For instance, Ranchi University operates with inadequate departmental resources, an outdated curriculum, and a lack of permanent faculty members. On the other hand, although the Central University of Jharkhand has permanent faculty in place, it still faces significant infrastructural constraints and resource shortages. As a result, students have limited opportunities for practical learning, including structured training in media literacy competencies. Previous studies have established that institutional support, curriculum design, and pedagogical practices play a crucial role in shaping and sharpening students' media literacy skills of the students (Aslett et al., 2023).

From an institutional perspective, the study finds that private universities demonstrate stronger media literacy competencies compared to other types of institutions. This outcome may be attributed to better infrastructural facilities, regular curriculum revision, greater flexibility in academic decision-making, and the integration of emerging skills aligned with contemporary industry demands. Private institutions often enjoy greater autonomy to update syllabi, introduce digital tools and technologies, and organise regular academic activities such as seminars, workshops, and conferences, all of which may contribute to enhanced media literacy outcomes

among students. In contrast, students from public universities demonstrate strong performance in the Access domain but lag considerably in the Analyse and Evaluate and Create and Act domains. It is to be noted that though public universities such as Berhampur University have introduced a dedicated paper on media literacy, student feedback suggests a significant gap between curriculum design and actual teaching, learning, and training practices. In other words, while media literacy has been formally included in the curriculum, its effective implementation remains limited, with departments lagging behind in translating curricular intent into meaningful pedagogical practice. These findings strengthen the argument that the mere inclusion of media literacy components in the curriculum is not sufficient; rather, it must be supported by effective pedagogical practices, skilled faculty members, and an experiential learning environment within institutions (Aslett et al., 2023).

One of the key findings of this study is that Mass Communication students who had exposure to formal media literacy training programmes demonstrated better performance compared to those without such exposure. This result suggests that structured media literacy interventions in the forms of seminars, fact-checking workshops, and expert lectures – can play a significant role in strengthening students' critical thinking and analytical abilities.

Previous studies have acknowledged that targeted media literacy training programmes can equip students with the skills to assess media content, evaluate its credibility, identify implicit biases and stereotypes, and overall enhance their critical engagement with media (Cunliffe-Jones et al., 2021; Roozenbeek, van der Linden, 2020). Similarly, students with a prior educational background in Mass Communication before enrolling in the master's programme demonstrated higher media literacy competency scores compared to those without such a background. Their prior familiarity with media concepts, professional practices, ethical considerations, content production processes, and foundational theories appears to have contributed to stronger media literacy competencies among these students.

One of the notable findings of this study is that there is minimal difference in media literacy competencies between male and female Mass Communication students in Odisha and Jharkhand. A consistent pattern was observed across genders, with students performing comparatively well in the Access domain, moderately in the Create and Act domain, and weak in the Analyse and Evaluate domain. This finding aligns with previous research indicating that gender-based differences in digital and media literacy skills are gradually narrowing, while structural and institutional factors play a more dominant role in shaping media literacy outcomes (Tang et al., 2024).

The findings of this study have important implications for media curriculum design, pedagogical practices, faculty development programmes, and higher education policy. The study finds that the Analyse and Evaluate domain of media literacy is the weakest among Mass Communication students. This indicates a pressing need for curriculum components to place greater emphasis on developing critical thinking skills, enabling students to analyse consumed information, and identify implicit biases and stereotypes embedded in media content. This observation closely aligns with the principles of the Five Laws of Media and Information Literacy, which emphasise critical thinking as a central tool for fostering informed, engaged, and responsible citizenship (Neylan et al., 2023).

Secondly, the moderate performance observed in the Create and Act domain of media literacy indicates a strong need for greater emphasis on practical and experiential learning among Mass Communication students. This highlights the necessity for institutions to make adequate provisions for establishing well-equipped multimedia laboratories, employing skilled technical staff, and ensuring access to fact-checking and verification tools. Such infrastructural and pedagogical support can significantly enhance students' practical competencies. This view is supported by existing scholarship, which suggests that experiential learning plays a crucial role in developing technical proficiency as well as a deeper understanding of the ethical dimensions of media practices (Roozenbeek, van der Linden, 2020).

Thirdly, an effective media literacy education ecosystem is unimaginable without the presence of well-trained and competent faculty members who are equipped with contemporary digital pedagogy, verification tools and techniques, critical understanding of media texts, and media analysis skills. Higher education authorities, along with institutional administrations, must therefore prioritise the development of structured faculty development programmes aligned with the evolving dimensions of media literacy. This includes organising regular workshops, promoting interdisciplinary collaborations, and fostering partnerships with media organisations and fact-checking institutions. Such initiatives are

essential for strengthening faculty capacity and ensuring effective delivery of media literacy education, as emphasised by previous studies (Neylan et al., 2023).

Finally, although some universities have introduced a stand-alone paper dedicated to media literacy, this approach needs to be adopted more widely. Media literacy components should be systematically integrated into the existing curricula of all universities to ensure comprehensive and consistent development of media literacy competencies among students.

4. Results

The following section presents a detailed account of the characteristics of the respondents from the six selected universities in Odisha and Jharkhand. The study focused on variables related to the respondents, such as state, gender, university, type of university, exposure to media literacy (ML) training, and background in Mass Communication.

Table 1. Distribution of Respondents by Gender and State

State	Male (N/%)	Female (N/%)	Total
Odisha	49 (51.6)	46 (48.4)	95
Jharkhand	79 (47.0)	89 (53.0)	168
Total	128 (48.7)	135 (51.3)	263

The above table presents the gender-wise distribution of respondents. The data indicate a fairly balanced representation of male and female students. In Odisha, males constitute 51.6 % of the respondents, while females account for 48.4 %. In Jharkhand, male respondents represent 47 %, whereas females comprise 53 %. Overall, the gender distribution shows a near-equal representation, with males accounting for 48.7 % and females for 51.3 % of the total respondents.

Table 2. Distribution of Respondents by University

State	University	N	% within state
Odisha	CUO	24	25.3
	BU	42	44.2
	BGU	29	30.5
Jharkhand	CUJ	37	22.0
	RU	120	71.4
	AUR	11	6.5
Total		263	100

Table 2 presents the distribution of respondents across six universities in both states. In both Odisha and Jharkhand, state universities constitute the highest share of participants. In Odisha, Berhampur University accounts for the largest proportion of respondents at 44.2 %, followed by Birla Global University with 30.5 % and the Central University of Odisha with 25.3 %. In Jharkhand, Ranchi University represents the highest proportion of respondents, comprising 71.4 %, followed by the Central University of Jharkhand at 22 % and Amity University Ranchi at 6.5 %.

Table 3. Distribution of Respondents by University Type

University Type	N	%
Central	61	23.2
State	162	61.6
Private	40	15.2
Total	263	100

The above table presents the distribution of respondents based on the type of university in the selected states. The majority of the respondents belong to state universities, accounting for 61.6 % of the total sample. This is followed by central universities, which comprise 23.2 % of the

respondents. Private universities represent the smallest proportion, accounting for 15.2 % of the total sample.

Table 4. Distribution of Respondents by ML Training

State	Yes	No
Odisha	38	57
Jharkhand	53	115
Total	91	172

The above table presents data on the exposure of M.A. Mass Communication students to media literacy training programmes or events in the two states. Out of the 263 respondents, only 35 % reported having exposure to some form of media literacy training, such as workshops, seminars, or conferences focused on media literacy. In contrast, a majority of the respondents (65 %) reported having no such exposure. This indicates a major gap in formal media literacy training among M.A. Mass Communication students.

Table 5. Respondents by Mass Communication as Educational Background

State	No	Yes	Other
Odisha	76	19	0
Jharkhand	90	70	8
Total	166	89	8

Table 5 presents the educational background of the MA Mass Communication students.

Out of the 263 respondents, 166 reported having no previous educational background in Mass Communication before enrolling in the master's programme. Among the respondents, 89 reported holding a bachelor's degree in Journalism and Mass Communication, while 8 reported having completed short-term courses, such as a PG Diploma in Mass Communication, prior to joining the master's programme. This distribution indicates that a substantial proportion of students in the master's programme did not have a prior formal Mass Communication background. Including such variable in the study therefore provides a broader and more nuanced perspective for assessing the media literacy competencies of M.A. Mass Communication students.

To assess the media literacy competency of M.A. Mass Communication students in the two states, this study draws on the UNESCO Media and Information Literacy (MIL) framework, which has been widely used by prominent scholars in the field of media literacy, such as S. Livingstone (Livingstone, 2004), and R. Hobbs (Hobbs, 2010). The UNESCO framework conceptualises media literacy through five core competencies: Access, Analyse, Evaluate, Create, and Act. However, to ensure analytical clarity and avoid conceptual overlap among these competencies, the present study subsumed them into three broader domains: Access (locating and navigating information) as a foundational competency; Analyse and Evaluate (critical thinking and assessment of media messages) as core cognitive competencies; and Create and Act (media content creation and participatory engagement) as applied and participatory competencies.

Table 6 represents the allocation of question items in the survey instrument

Table 6. The allocation of question items in the survey instrument

Competency (UNESCO MIL Framework)	Full Questionnaire Items
Access (Locating Information)	3.1. Time spent consuming media content 3.2. Preferred media platform 3.3. Use of social media 3.4. Active social media platforms 5.6. Awareness of fact-checking sites 5.7. Name fact-checking sites 5.10. Comfort using digital tools/technologies

Competency (UNESCO MIL Framework)	Full Questionnaire Items
	5.13(a). Identify official website of The Hindu 5.13(b). Interpret lock symbol on websites 5.14. Knowledge of Google reverse image search
Analyse & Evaluate (Critical Understanding)	3.5. Do social media spread misinformation? 4.1. Media organisations have biases? 4.2. Who controls media content? 4.3. Understanding 'media framing' 4.4. Interpretation of media framing 5.2.(Q1): Sources of media content 5.2.(Q2): Techniques used to attract attention 5.2.(Q3): Who benefits from bias? 5.3. Do you verify media information? 5.4(a). Authenticity of 500 note 5.4(b). Methods of verification 5.5. Authenticity of Rahul Gandhi video 5.8. Frequency of using fact-checking sites 5.11. Knowledge of deepfake technology 5.12. Reaction when content goes against belief
Create & Act (Participation and Production)	5.9. Fact-checking before sharing 5.10. Comfort with digital tools (creation ability) 5.12. Decision/action when content goes against belief 5.16. Verify accuracy before publishing/sharing own content

The study employed descriptive statistics to assess the three core media literacy competencies measured on a five-point scale, which are presented as mean scores and standard deviations in the table below.

Table 7. Means and Standard Deviations of Media Literacy Competency Scores

Competency	Mean	SD
Access_Score	1.82	0.46
AE_Score	0.98	0.22
CA_Score	1.75	0.45
ML_Overall	1.52	0.31

The findings indicate that M.A. Mass Communication students achieved the highest mean score in the Access (locating and navigating information) domain (M = 1.82, SD = 0.46). This was followed by a moderate score in the Create and Act (media content creation and participatory engagement) domain (M = 1.75, SD = 0.45). In contrast, the lowest mean score was observed in the Analyse and Evaluate competency (critical thinking and assessment of media messages) (M = 0.98, SD = 0.22). This result highlights a significant gap in students' critical thinking, analysis, and evaluation skills within Mass Communication education.

The tabular data presented earlier are also illustrated in Figure 1, which depicts the three broad media literacy competencies of M.A. Mass Communication students across Odisha and Jharkhand. The bar chart clearly shows that Access emerges as the strongest competency among the students, followed by Create and Act, while Analyse and Evaluate appears as the weakest competency.

To gain a deeper understanding of variations in media literacy skills among Mass Communication students, the study examined several demographic variables that have the potential to influence competency scores. These variables include state and university location, type of university, gender, exposure to media literacy training, and prior academic background in Mass Communication. The following analysis presents a comparative overview of media literacy competencies among students based on these variables.
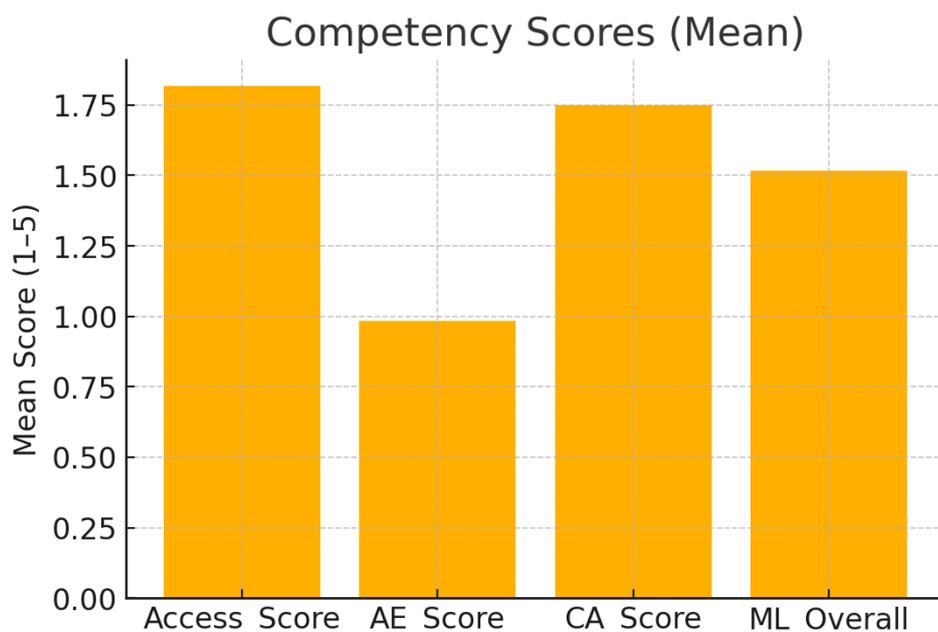
Fig. 1. Bar chart representing the mean competency scores of Students

This section presents a comparative analysis of media literacy scores among M.A. Mass Communication students across the two states. Table 8 reports the mean scores and standard deviations for the three core domains – Access; Analyse and Evaluate; and Create and Act – as well as the overall media literacy scores.

Table 8. State-wise Mean and Standard Deviation (SD) of Media Literacy Competency Scores

State	Access (M ± SD)	Analyse+Evaluate (M ± SD)	Create+Act (M ± SD)	Overall ML (M ± SD)
Odisha	1.98 ± 0.35	1.06 ± 0.16	1.78 ± 0.43	1.61 ± 0.20
Jharkhand	1.73 ± 0.50	0.94 ± 0.24	1.73 ± 0.46	1.47 ± 0.35

Table 8 shows that students from Odisha demonstrate slightly better performance in media literacy competencies compared to their counterparts in Jharkhand.
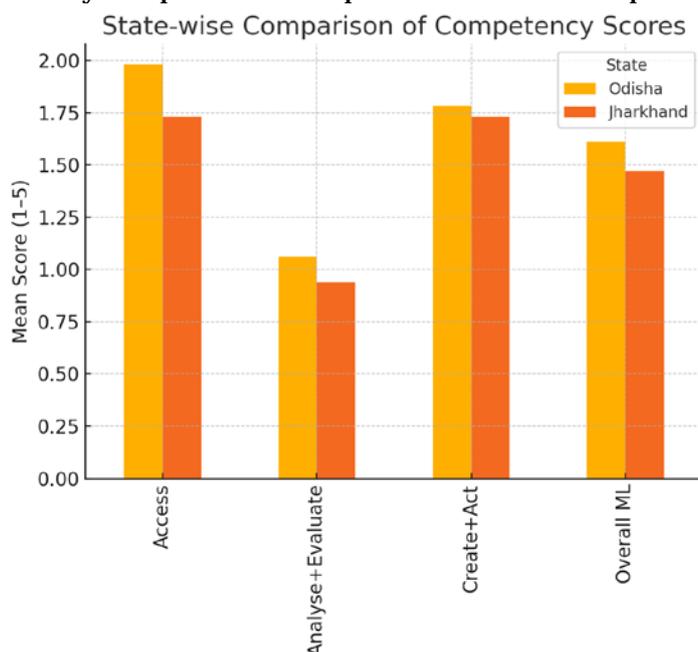
Fig. 3. State-wise representation of of mean and overall competency scores

In the Access (locating information) domain, Mass Communication students from Odisha reported a higher mean score (M = 1.98) compared to those from Jharkhand (M = 1.73). Similarly, in the Analyse and Evaluate (critical understanding) domain, Odisha recorded a mean score of 1.06, while Jharkhand scored 0.94. In the Create and Act domain, Odisha students achieved a mean score of 1.78, marginally higher than Jharkhand's score of 1.73. Overall, these results indicate that students from Odisha perform slightly better across all three domains. However, a common pattern is observed in both states: Access emerges as the strongest competency, Analyse and Evaluate remains the weakest, and Create and Act occupies a moderate position.

The above figure presents a comparative view of media literacy scores across the three domains for Odisha and Jharkhand. A noticeable gap is observed in the Access domain, where students from Odisha perform better than those from Jharkhand. In contrast, the differences in the Analyse and Evaluate and Create and Act domains are marginal, though Odisha continues to show slightly better performance in these areas.

This section presents a comparative analysis of the media literacy competency scores achieved by Mass Communication students across six universities: the Central University of Odisha, Berhampur University, Birla Global University, the Central University of Jharkhand, Ranchi University, and Amity University, Ranchi. The table below reports the university-wise mean scores and standard deviations for the three core media literacy domains.

Table 9. University wise Mean and Standard Deviation (SD) of 3 core Media Literacy domains

University	Access (M ± SD)	Analyse+Evaluate (M ± SD)	Create+Act (M ± SD)	Overall ML (M ± SD)
AUR	1.96 ± 0.25	1.06 ± 0.08	2.03 ± 0.31	1.69 ± 0.15
BGU	1.83 ± 0.37	1.17 ± 0.06	1.82 ± 0.43	1.60 ± 0.15
BU	2.05 ± 0.31	1.11 ± 0.12	1.96 ± 0.32	1.71 ± 0.21
CUJ	1.85 ± 0.46	1.04 ± 0.21	1.62 ± 0.47	1.50 ± 0.34
CUO	2.06 ± 0.34	0.84 ± 0.10	1.40 ± 0.35	1.43 ± 0.12
RU	1.67 ± 0.51	0.90 ± 0.24	1.74 ± 0.45	1.44 ± 0.36

The above table presents the variation in media literacy competency scores across six universities in Odisha and Jharkhand. As shown in the table, among the different universities, Berhampur university having a separately dedicated paper on Media Literacy performs very well, followed by private universities demonstrating fair performances, subsequently followed by Central university of Jharkhand and then Ranchi University and central university of Odisha. However, a consistent pattern is observed across all the universities: students perform strongest in the Access domain, weakest in Analyse and Evaluate, and achieve moderate scores in the Create and Act domain.
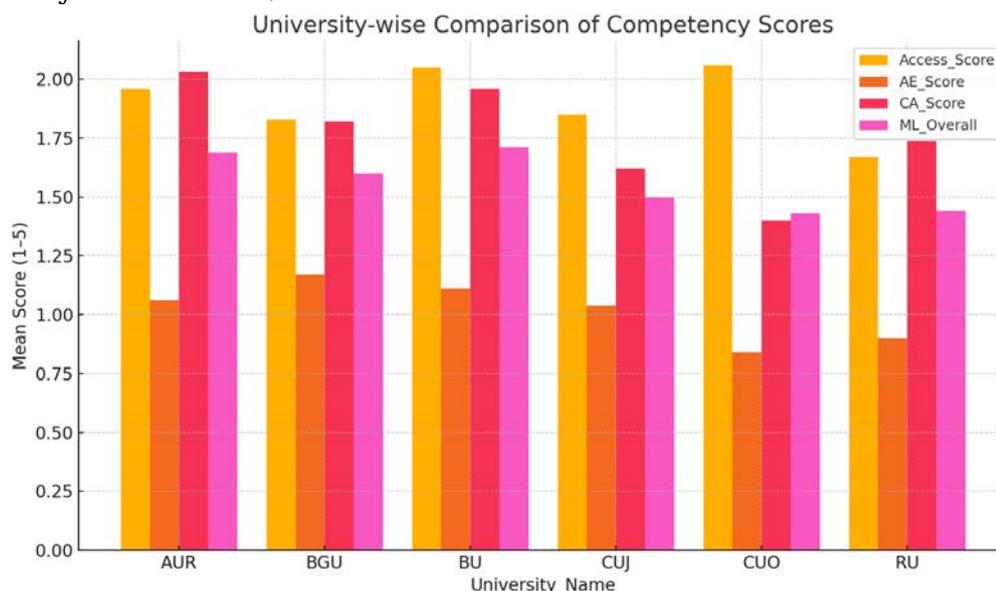
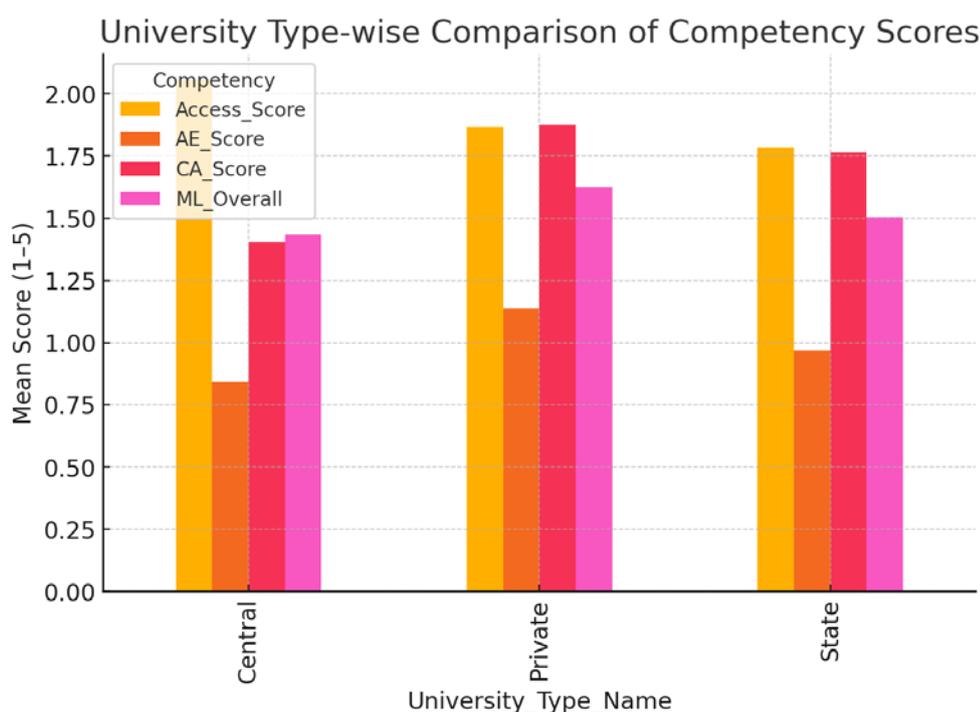**Fig. 4.** University-wise comparison of mean competency scores

Figure 4 provides a visual representation of the table presenting university-wise mean scores and standard deviations for Mass Communication students across the three media literacy competency domains: Access (locating and navigating information), Analyse and Evaluate (critical understanding and analysis), and Create and Act (participation and production). Berhampur University, which offers a dedicated paper on media literacy, may have an advantage that contributes to the stronger media literacy performance observed among its students. The graph also indicates comparatively good performance by Amity University Ranchi and Birla Global University, both private institutions, which demonstrate higher media literacy competency scores. This is followed by the Central University of Jharkhand, while Ranchi University and the Central University of Odisha record comparatively lower scores. Despite these institutional variations, a consistent pattern is evident across all universities. Students perform strongest in the Access domain, weakest in the Analyse and Evaluate domain, and moderately in the Create and Act domain.

This section presents the media literacy competency scores of M.A. Mass Communication students across different types of universities – central, state, and private.

Table 10. Mean and Standard Deviation (SD) of Competency Scores as per the types of universities

University Type	Access (M ± SD)	Analyse+Evaluate (M ± SD)	Create+Act (M ± SD)	Overall ML (M ± SD)
Central	2.06 ± 0.34	0.84 ± 0.10	1.40 ± 0.35	1.43 ± 0.12
Private	1.86 ± 0.34	1.14 ± 0.08	1.88 ± 0.41	1.63 ± 0.15
State	1.78 ± 0.49	0.97 ± 0.23	1.77 ± 0.45	1.51 ± 0.34

Table 10 presents a comparative overview of media literacy competency scores among students from different types of universities – central, state, and private – in Odisha and Jharkhand. Overall, private universities demonstrate the highest mean scores, followed by state universities and then central universities. Further, the standard deviation values, indicating variation around the mean scores, show that private universities have lower standard deviations, signifying more consistent performance among MA Mass communication students' media literacy competencies. In contrast, higher standard deviation values in state universities indicate greater variation in students' media literacy competencies.

Fig. 5. University type-wise comparison of mean competency scores

The bar graph (Figure 5) presents a comparative overview of competency scores across different types of universities. Private universities achieve the strongest overall media literacy outcomes, recording the highest scores in Analyse and Evaluate (Critical Understanding) and Create and Act (Participation and Production). Central university students perform best in the Access domain (navigating and locating information) but score significantly lower in the other two competencies. State universities fall in the middle range in terms of overall media literacy performance.

The study also incorporates a gender-based perspective on media literacy. Table 11 presents the mean and standard deviation scores for the Access, Analyse and Evaluate, and Create and Act competencies, along with the overall media literacy score, by categorising all Mass Communication students on the basis of gender.

Table 11. Gender wise segregation of Mean and Standard Deviation (SD) of Competency Scores

Gender	Access (M ± SD)	Analyse+Evaluate (M ± SD)	Create+Act (M ± SD)	Overall ML (M ± SD)
Female	1.81 ± 0.45	1.00 ± 0.22	1.80 ± 0.46	1.54 ± 0.31
Male	1.82 ± 0.48	0.96 ± 0.22	1.69 ± 0.43	1.49 ± 0.31

Table 11 presents the gender-wise media literacy competency scores of Mass Communication students in both states. The differences between male and female students are minimal, with only slight variations across the competency domains. Male students scored marginally higher in the Access domain, while female students performed slightly better in both the Analyse and Evaluate and Create and Act competencies. However, the overall pattern remains consistent across genders: Access emerges as the strongest competency, Analyse and Evaluate is the weakest, and Create and Act lies in between.
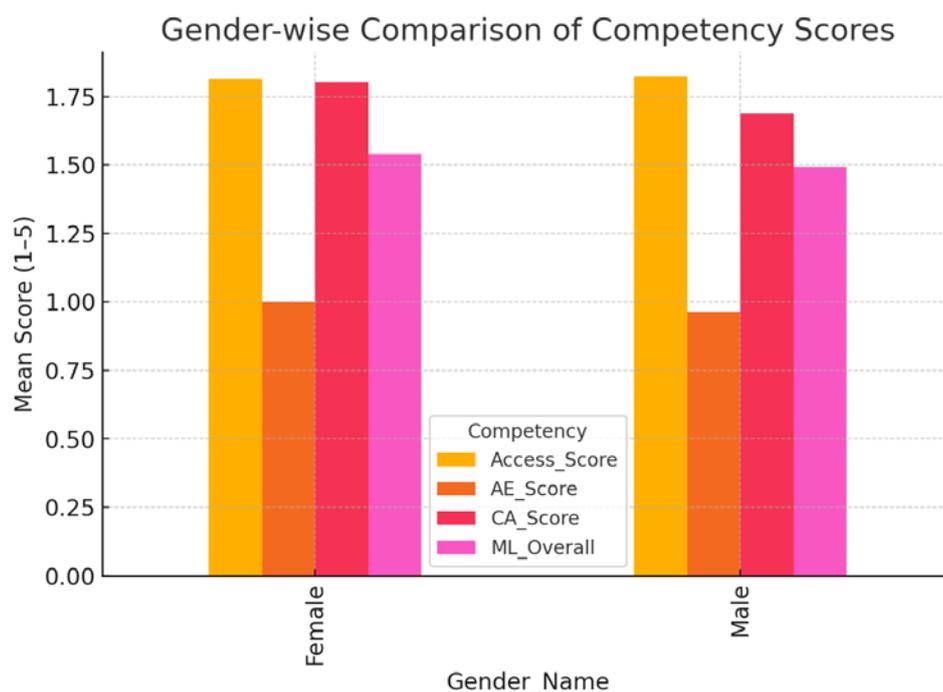
**Fig. 6.** Gender-wise comparison of mean competency scores

Figure 6 presents a visual summary of the gender-wise competency scores of Mass Communication students across the various domains. Supporting the table 11, the above figure presents that gender-based differences in media literacy competencies are minimal in this study.

The study also compares media literacy competency scores between students who have received formal media literacy training – such as fact-checking workshops, seminars, lectures, or conferences specifically focused on media literacy – and those who have not been exposed to such formal media literacy programmes.

Table 12. Mean and Standard Deviation (SD) of Competency Scores by Media Literacy Training

ML Training	Access (M ± SD)	Analyse+Evaluate (M ± SD)	Create+Act (M ± SD)	Overall ML (M ± SD)
No Training	1.83 ± 0.49	0.94 ± 0.22	1.71 ± 0.45	1.49 ± 0.33
Received Training	1.80 ± 0.42	1.06 ± 0.21	1.83 ± 0.43	1.56 ± 0.27

Table 12 clearly shows that M.A. Mass Communication students who were exposed to media literacy training programmes performed comparatively better than those who had not received any form of media literacy training. Notably, students with exposure to media literacy programmes also achieved higher scores in the Analyse and Evaluate domain, which indicates that media literacy interventions can play a significant role in strengthening students' critical thinking and analytical abilities.
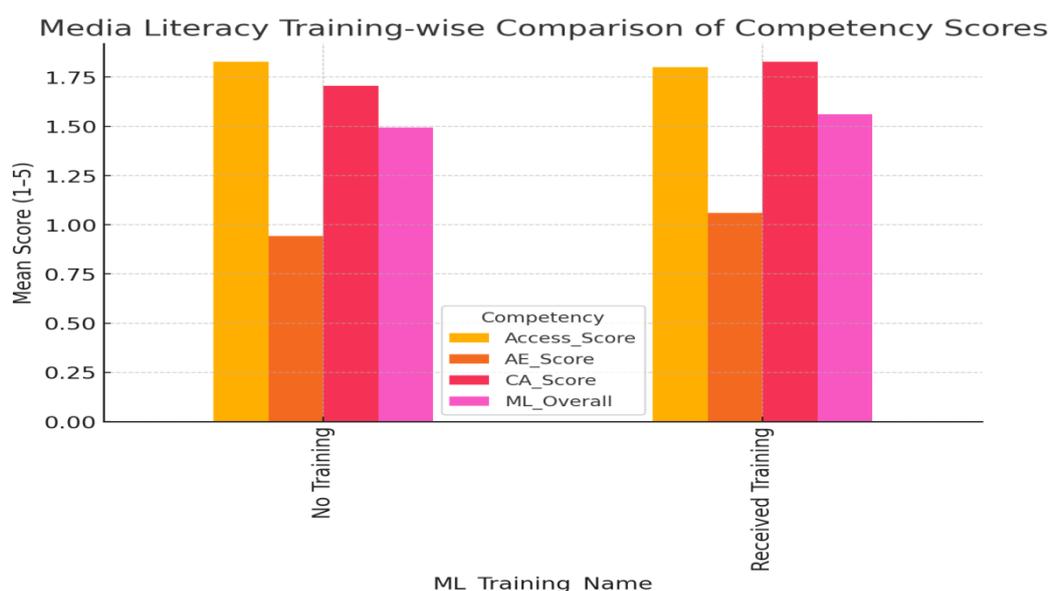
Fig. 7. Comparative outlook on the mean competency scores by media literacy training

The above figure highlights the importance of media literacy training in strengthening students' critical thinking, analytical abilities, and other media literacy-related competencies. The bars representing Mass Communication students who were exposed to media literacy training are consistently higher than those representing students without such exposure, clearly indicating the positive impact of media literacy training on students' competency levels.

This section also offers an additional perspective by examining students' educational background as a variable that may influence the media literacy competencies of Mass Communication students in Odisha and Jharkhand.

Table 13. Mean and Standard Deviation (SD) of Competency Scores by
Mass Communication Background

MassComm Background	Access (M ± SD)	Analyse+Evaluate (M ± SD)	Create+Act (M ± SD)	Overall ML (M ± SD)
No Background	1.77 ± 0.50	0.96 ± 0.25	1.70 ± 0.49	1.48 ± 0.35
With Background	1.89 ± 0.38	1.03 ± 0.16	1.80 ± 0.34	1.57 ± 0.21

Table 13 indicates that students with a prior educational background in Mass Communication demonstrate higher media literacy competency scores compared to those without such a background. This educational background includes students who had completed a

bachelor's degree in Mass Communication or Journalism and Mass Communication, as well as those who had undertaken a PG Diploma in Mass Communication before enrolling in the M.A. Mass Communication programme.
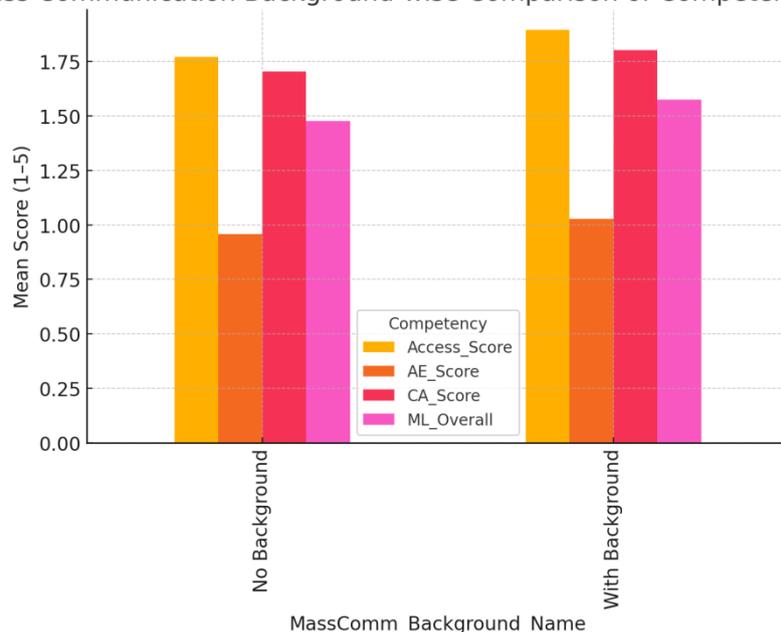
Fig. 8. Comparison of mean competency scores by educational background
(Mass Communication)

Supporting the tabular data presented above, Figure 8 visually demonstrates that MA students with a prior educational background in Mass Communication exhibit higher media literacy competency scores, as reflected by the taller bars in the graph. In contrast, students without such a background show comparatively lower scores across the media literacy domains.

5. Conclusion

To summarise, this study assesses the media literacy competencies of M.A. Mass Communication students in Odisha and Jharkhand by examining the five components of the UNESCO Media and Information Literacy (MIL) framework, which have been consolidated into three broader core domains: *Access* (locating and navigating information), *Analyse and Evaluate* (critical understanding and analysis of media content), and *Create and Act* (media production and participatory engagement). After a close examination of various factors, the study identifies a consistent pattern across all variables in which *Access* emerges as comparatively the strongest competency, *Analyse and Evaluate* remains the weakest, and *Create and Act* falling in between. The study highlights significant gaps in students' critical thinking and analytical abilities, along with a noticeable lack of practical and participatory learning ecosystems in media education. It underscores the urgent need to strengthen media education by systematically integrating media literacy components into the curriculum, particularly in underdeveloped regions such as Odisha and Jharkhand. Communication students of today are expected to become the future journalists, mass communicators, gatekeepers, watchdogs, and opinion leaders, playing a crucial role in shaping and sustaining the information ecosystem. Hence the study strongly advocates placing greater emphasis on the development of critical media literacy skills among Mass Communication students in order to enable them to become critical consumers and responsible producers of media content, ultimately fostering their role as informed and engaged citizens.

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