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Impact of AI-Enabled Information Systems and Management Training on Students' Interview Performance: A Pre- and Post-Training Study

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ABSTRACT: Communication skills play an important role in students' interview performance and employability. This study examines the impact of a communication skills training programme on students' communication competencies using a pre- and post-training research design. The study was conducted among 520 students, and data were collected using a five-point Likert-scale questionnaire covering five dimensions: verbal communication skills, non-verbal communication skills, active listening skills, confidence, and interaction skills. A paired-samples t-test was employed to determine whether significant differences existed between students' scores before and after the training programme. The findings revealed a statistically significant improvement in all five dimensions after the training. The results indicate that the training programme enhanced students' verbal and non-verbal communication, active listening, confidence, and interaction skills. Among the dimensions, confidence demonstrated the highest improvement. The study concludes that structured communication skills training can significantly enhance students' communication competencies and contribute to their preparedness for interviews and professional interactions. The findings highlight the importance of integrating communication and soft-skills training programmes into student development and employability initiatives.

INTRODUCTION

In the contemporary higher education and employment environment, **Artificial Intelligence (AI), information systems, and information management have emerged as important components of students' academic development and employability**. The transition from college to the workplace requires students not only to possess academic knowledge and technical expertise but also to effectively search, evaluate, organize, and use information for professional purposes. The increasing availability of AI-enabled technologies has created new opportunities for students to access information, prepare professional content, analyze

problems, and make informed decisions. Among the various stages of recruitment and selection, the **job interview** is particularly important because it provides an opportunity for candidates to demonstrate their knowledge, abilities, problem-solving capacity, confidence, and professional preparedness. A student may possess strong academic qualifications, but limited ability to effectively use information and technology may restrict the student's preparedness for modern interview situations.

Artificial Intelligence and Student Employability

Artificial Intelligence has increasingly become an important component of education, professional development, and workplace practices. AI-enabled tools can assist students in searching for information, generating and organizing content, identifying relevant resources, practicing interview questions, analyzing responses, and obtaining personalized feedback. The ability to use such technologies effectively can contribute to students' digital readiness and their preparation for employment.

For students, AI can provide opportunities to simulate professional situations and obtain information related to organizations, job profiles, industry trends, and interview requirements. AI-based tools can also support students in preparing responses, identifying areas for improvement, and practicing different types of interview questions. However, effective use of AI requires students to possess appropriate information-management capabilities rather than simply depending on AI-generated outputs.

Role of Information Systems and Management in Student Development

Information Systems and Management involves the effective use of technology, information, people, and processes to collect, process, organize, evaluate, and utilize information for meaningful purposes and decision-making. In the contemporary digital environment, students increasingly interact with information systems through learning management systems, databases, digital platforms, search engines, AI applications, and other technology-enabled resources.

Effective information management is particularly relevant to interview preparation. Students may need to collect information about prospective organizations, understand job descriptions, identify industry requirements, research current developments, and organize relevant information before appearing for an interview. The ability to retrieve relevant information and distinguish useful information from unreliable or irrelevant content can therefore contribute to better interview preparedness.

AI Tool Utilization

AI Tool Utilization represents an important dimension of AI-enabled Information Systems and Management training. Students can use AI applications to obtain information, generate ideas, prepare interview questions, develop responses, improve professional documents, and practice simulated interview situations.

For example, students may use AI tools to identify commonly asked interview questions, understand organizational information, generate practice scenarios, and receive suggestions for improving their responses. However, effective AI utilization requires students to understand how to formulate appropriate prompts, interpret AI-generated information, and use the outputs responsibly.

Training in AI tool utilization can therefore provide students with practical opportunities to understand the appropriate application of AI technologies in interview preparation and professional development.

Information Search and Retrieval

Information Search and Retrieval is another important component of information management. Before an interview, students may need to search for information related to the organization, industry, job position, required competencies, current business developments, and other relevant areas. Efficient searching enables students to obtain information required for informed interview preparation.

AI-enabled information systems can simplify the process of searching and retrieving information by providing faster access to relevant content. Students can use digital platforms and AI tools to identify information from multiple sources and organize it according to their preparation needs.

Training in information search and retrieval can therefore help students develop the ability to identify appropriate sources, formulate effective searches, retrieve relevant information, and use that information for interview preparation.

Information Evaluation

The availability of large amounts of digital and AI-generated information also creates the need for Information Evaluation skills. Information obtained through AI and digital platforms may vary in terms of accuracy, relevance, reliability, and completeness. Therefore, students need to develop the ability to evaluate information rather than accepting every AI-generated response without verification.

In the context of interview preparation, students may use AI-generated information about companies, industries, job roles, or current affairs. Evaluating the credibility and relevance of such information can help students avoid inaccurate or inappropriate responses during interviews.

Training in information evaluation can encourage students to compare information, verify important facts, identify relevant content, and exercise appropriate judgment while using AI-enabled information systems.

Information Organization and Management

Information Organization and Management refers to the ability to systematically arrange, summarize, store, and manage information so that it can be accessed and used effectively. Interview preparation often requires students to deal with information obtained from multiple sources.

Students may need to organize information related to their academic qualifications, projects, achievements, career objectives, organizational background, job requirements, and potential interview questions. AI and digital tools can support students in summarizing and categorizing such information.

Effective organization of information can enable students to retrieve relevant points quickly and structure their responses more effectively during an interview. Training in information organization and management can therefore contribute to systematic and efficient interview preparation.

AI-Assisted Decision-Making

AI-Assisted Decision-Making represents the fifth dimension of the AI-enabled Information Systems and Management training. Modern workplaces increasingly use data and AI-supported systems to assist with analysis, problem-solving, and decision-making. Students therefore need to develop the ability to use AI-generated information as a support for decision-making while retaining their own judgment.

During interviews, candidates may be asked situational, analytical, or problem-solving questions. The ability to analyze available information, consider alternatives, and arrive at logical conclusions can help students respond more effectively to such questions.

Training in AI-assisted decision-making can provide students with opportunities to understand how AI-supported information can be used for analysis and problem-solving while emphasizing the importance of human judgment and critical evaluation.

Interview Performance and Student Employability

Interview performance is an important indicator of students' preparedness for employment. An interview provides employers with an opportunity to assess candidates beyond their academic qualifications. Candidates may be evaluated on their preparation, understanding of the organization and job role, quality of responses, confidence, problem-solving ability, professional behaviour, and overall presentation.

Students who are well prepared and capable of using relevant information effectively may be better positioned to respond to interview questions. The ability to retrieve appropriate information, evaluate its relevance, organize it effectively, and use it to support decision-making can contribute to overall interview preparedness.

Consequently, developing students' capabilities in AI-enabled Information Systems and Management may provide an additional avenue for strengthening their preparation for contemporary recruitment and selection processes.

Need for AI-Enabled Information Systems and Management Training

Although AI and digital information systems are increasingly available to students, access to technology alone does not guarantee effective utilization. Students may require structured training to understand how to use AI tools, search and retrieve relevant information, evaluate information critically, organize information systematically, and use AI-supported information for decision-making.

A structured training programme can provide students with knowledge, practical exposure, guided activities, feedback, and repeated opportunities to apply AI and information-management concepts to realistic professional situations. Such training can help students develop greater awareness of how technology and information can be used effectively for interview preparation.

However, simply conducting a training programme does not establish whether students' interview performance has actually improved. The effectiveness of the intervention needs to be evaluated through an objective and systematic assessment of students before and after the training.

Rationale for the Present Study

The present study is designed to examine the effectiveness of AI-enabled Information Systems and Management training on students' interview performance. The study focuses on five dimensions of the training intervention: AI Tool Utilization, Information Search and Retrieval, Information Evaluation, Information Organization and Management, and AI-Assisted Decision-Making.

A pre-test and post-test research design is adopted in which the same group of students is assessed before and after participation in the training programme. The study involves 520 students, and their responses are collected using a structured questionnaire designed to assess the relevant dimensions of AI-enabled Information Systems and Management training and students' interview performance.

The use of the same respondents before and after training is particularly appropriate because it allows changes in individual students' scores to be examined. Instead of comparing two unrelated groups, the study evaluates whether the same students demonstrate improved interview performance following exposure to the training intervention.

Significance of the Study

The study has practical significance for students, educational institutions, faculty members, placement departments, trainers, and employers. For students, AI-enabled Information Systems and Management training can provide practical knowledge regarding the effective use of technology and information during interview preparation. It can help students develop greater awareness of how AI and digital information systems can support their preparation for contemporary recruitment processes.

For educational institutions, the findings can provide evidence regarding the usefulness of integrating AI, information systems, and information-management training into academic and placement activities. Placement departments can use the findings to strengthen interview-preparation programmes by incorporating technology-enabled information practices.

Faculty members and trainers can also use the findings to design activities that encourage students to search, evaluate, organize, and apply information effectively. Employers may benefit indirectly from graduates who are better prepared to use digital technologies and information resources in professional situations.

Focus of the Present Study

The present study therefore attempts to determine whether AI-enabled Information Systems and Management training can produce measurable improvement in students' interview performance. By incorporating five dimensions—AI Tool Utilization, Information Search and Retrieval, Information Evaluation, Information Organization and Management, and AI-Assisted Decision-Making—the study provides a structured framework for examining the contribution of technology-enabled information competencies to interview preparation.

The use of a paired-samples t-test enables the study to determine whether the difference between students' pre-training and post-training scores is statistically significant. Thus, the study moves beyond discussing the general importance of AI and information management and provides empirical evidence regarding the effectiveness of a structured training intervention.

Overall, the study is based on the premise that effective use of AI and information systems is a developable competency. Providing students with structured opportunities to use AI tools, search and retrieve information, evaluate information critically, organize information effectively, and apply AI-supported information to decision-making can contribute to their preparation for employment. The findings of the study are therefore expected to provide useful evidence for strengthening AI-enabled Information Systems and Management training as a component of student development, employability enhancement, and interview preparation programmes.

LITERATURE REVIEW

Osmani et al. (2019) – Graduate Employability Skills: Osmani, Weerakkody, Hindi, and Eldabi examined graduate employability skills by comparing the attributes expected by employers with those possessed by graduates. Their review highlighted **communication, teamwork, planning, time management, self-motivation, and problem-solving** among the important employability attributes. The study identified a continuing gap between employer expectations and graduate capabilities, suggesting that higher education institutions need to strengthen employability-oriented learning. The findings provide a strong basis for considering communication skills as an essential component of students' preparation for employment.

Tushar and Sooraksa (2023) – Global Employability Skills: Tushar and Sooraksa conducted a semi-systematic review of research on employability skills required in the 21st-century workplace. Their review of three decades of literature identified **communication, problem-solving, teamwork, adaptability, and willingness to learn** as consistently important employability skills. The study also highlighted a mismatch between employer expectations and the skills possessed by graduates. This finding emphasizes the need for educational institutions to provide structured opportunities for students to develop communication and other employability competencies before entering the workplace.

Bhatnagar and Sengupta (2021) – Employability and Skill Gap among MBA Graduates in India: A literature review focusing on MBA graduates in India found that employers expect graduates to possess not only technical knowledge but also **communication, emotional intelligence, critical thinking, problem-solving, and interpersonal skills**. Communication was identified as one of the frequently emphasized competencies. The authors recommended greater emphasis on soft skills within MBA education to reduce the gap between academic preparation and industry requirements. This study is particularly relevant to the present research because it establishes the importance of communication development in the Indian higher education context.

Naim et al. (2015) – Verbal and Non-Verbal Behaviours in Job Interviews: Naim et al. investigated the relationship between verbal and non-verbal behaviours and job interview performance using interview sessions involving undergraduate students. Their framework examined **facial expressions, language, prosody, pauses, and other behavioural characteristics**. The study demonstrated that interview ratings could be associated with both verbal and non-verbal characteristics of candidates. The findings are relevant to the present study because they support the inclusion of both verbal and non-verbal communication as separate dimensions when evaluating students' interview-related communication abilities.

Agrawal et al. (2020) – Behavioural Analysis of Job Interviews: Agrawal and colleagues examined multimodal behavioural characteristics for assessing job interview performance. Their research considered **facial expressions, speaking rate, eye contact, speech, and other behavioural cues** during interviews. The authors emphasized that recruitment interviews assess not only professional qualifications but also interpersonal and behavioural characteristics. Their work indicates that communication-related behaviours can provide important information about candidates' interview performance and supports the need for training students in both verbal and non-verbal aspects of professional communication.

Solewicz et al. (2017) – Non-Verbal Communication in Interviews: Solewicz, Orenshtein, and Friedland examined the relationship between acoustic characteristics of speech and perceptions of interviewees. The study explored how speech-related non-verbal characteristics varied across interview situations and how such characteristics were associated with perceptions of candidates. The research demonstrates that communication during interviews involves more than the literal content of responses; characteristics such as voice and delivery also contribute to how candidates are perceived. This supports the present study's focus on non-verbal communication as a distinct dimension.

Andrews and Higson (2008) – Graduate Employability: Andrews and Higson examined graduate employability and the competencies expected from graduates entering employment. Their work emphasized the importance of a combination of

academic knowledge and transferable skills, including communication and interpersonal abilities. The study indicated that graduates need more than discipline-specific knowledge to succeed in employment. This perspective supports the argument that higher education institutions should provide students with opportunities to develop communication and other transferable skills alongside academic learning.

Jackson (2015) – Employability Skill Development: Jackson investigated the development of employability skills within higher education and emphasized the importance of integrating employability development into students' learning experiences. The research suggested that skills such as communication, teamwork, and interpersonal interaction require opportunities for application and practice rather than merely theoretical instruction. The study is relevant to communication skills training because it reinforces the importance of experiential learning activities through which students can practice professional behaviours.

Succi and Canovi (2020) – Soft Skills and Employability: Succi and Canovi investigated students' and graduates' perceptions of soft skills and their importance for employability. Their research emphasized that soft skills are increasingly important in the transition from education to employment and that students need opportunities to develop these competencies. Communication and interpersonal abilities form an important part of these skills. The study supports the need for institutions to incorporate structured soft-skills development into educational programmes.

Cimatti (2016) – Definition and Importance of Soft Skills: Cimatti examined the importance of soft skills for employability and workplace performance. The study discussed competencies such as **communication, interpersonal relationships, teamwork, problem-solving, and adaptability** as essential capabilities for professional success. The research argued that technical knowledge alone does not guarantee effective workplace performance. This provides conceptual support for examining communication training as an important component of students' career preparation.

Robles (2012) – Executive Perceptions of Top Soft Skills: Robles examined the soft skills considered important by business executives. The study identified **communication, courtesy, flexibility, integrity, interpersonal skills, professionalism, positive attitude, responsibility, teamwork, and work ethic** among important workplace competencies. Communication and interpersonal skills were particularly relevant to effective professional interaction. The findings reinforce the importance of preparing students not only academically but also in terms of behavioural and communication competencies.

Schulz (2008) – Importance of Soft Skills in Professional Life: Schulz discussed the increasing importance of soft skills in professional and organizational environments. The study highlighted that effective workplace performance requires competencies that extend beyond technical knowledge, including communication and interpersonal capabilities. The author emphasized that soft skills can influence how individuals interact with others and function within organizations. This provides theoretical support for developing communication skills among students before they enter professional employment.

Riebe, Girardi, and Whitsed (2010) – Employability and Communication: Riebe and colleagues examined approaches to developing graduate employability through higher education. Their work emphasized active and experiential learning approaches that provide students with opportunities to develop transferable competencies. Communication and interpersonal interaction are important components of such employability development. The study suggests that practical learning activities can help students transfer communication abilities from educational settings to professional contexts.

Suarta et al. (2017) – Employability Skills and Higher Education: Suarta and colleagues investigated the competencies required by graduates and the role of higher education in developing employability skills. Their findings emphasized the importance of **communication, interpersonal skills, teamwork, problem-solving, and other transferable competencies**. The study suggested that curriculum and learning approaches should be aligned with workplace expectations. This is relevant to the present study because communication training can act as a structured mechanism for reducing the gap between students' existing skills and workplace expectations.

Tushar and Sooraksa (2023) – Employer Expectations and Graduate Skill Gaps: The broader findings of Tushar and Sooraksa's literature review indicate that communication has remained one of the most consistently demanded employability skills across different periods. The authors also identified a continuing mismatch between the competencies expected by employers and those possessed by graduates. This suggests that employability development should not be treated as an incidental outcome of higher education but should be supported through deliberate training and learning interventions.

The reviewed literature indicates that **communication is consistently recognized as a core employability competency**. Studies focusing on graduate employability show that employers expect graduates to possess communication alongside teamwork, problem-solving, adaptability, and interpersonal competencies.

The literature also indicates that communication is **multidimensional**. Effective interview communication involves verbal expression as well as non-verbal behaviour, including facial expressions, eye contact, voice characteristics, posture, and other behavioural cues. Research on automated and multimodal interview assessment further demonstrates that verbal and non-verbal characteristics can be associated with perceptions and evaluations of interviewees.

Another important theme is the **skills gap between graduates and employer expectations**. Reviews of graduate employability literature have consistently identified differences between the competencies expected in the labour market and those possessed by graduates. The Indian context is also important, as literature on MBA graduates has specifically identified communication and interpersonal skills as areas requiring greater attention in higher education.

The literature further suggests that communication competencies can be strengthened through **practice-oriented and experiential approaches** rather than through theoretical instruction alone. Activities such as mock interviews, role plays, presentations, group discussions, feedback, and simulated professional situations can provide students with opportunities to apply communication skills.

RESEARCH GAP

Although previous studies have established the importance of artificial intelligence, information systems, digital competencies, and employability skills, much of the existing literature focuses on AI adoption, technology acceptance, information management practices, digital literacy, or the role of technology in enhancing employability. Comparatively fewer studies directly evaluate the pre-training and post-training change in students' interview performance following structured AI-enabled Information Systems and Management training. In particular, there is scope for empirical research examining whether structured training integrating AI tool utilization, information search and retrieval, information evaluation, information organization and management, and AI-assisted decision-making can produce measurable improvements in students' interview preparation, response quality, confidence and composure, problem-solving ability, and professional presentation. The present study addresses this gap by using a pre-test and post-test design involving 520 students and applying a paired-samples t-test to determine whether significant changes occur in students' interview performance following the AI-enabled Information Systems and Management training programme.

Thus, the present research extends the existing literature by moving beyond the general discussion of AI and information management as employability-enhancing competencies to empirically examining the effectiveness of a structured AI-enabled Information Systems and Management training intervention in improving students' interview performance.

OBJECTIVES

- To assess students' interview performance before the AI-enabled Information Systems and Management training programme.
- To assess students' interview performance after the AI-enabled Information Systems and Management training programme.
- To compare students' interview performance before and after the AI-enabled Information Systems and Management training programme.
- To determine whether the AI-enabled Information Systems and Management training programme produces a significant improvement in students' overall interview performance.

HYPOTHESES

Null Hypothesis (H₀):

H₀₁: There is no significant difference in students' AI Tool Utilization before and after AI-enabled Information Systems and Management training.

H₀₂: There is no significant difference in students' Information Search and Retrieval before and after AI-enabled Information Systems and Management training.

H₀₃: There is no significant difference in students' Information Evaluation before and after AI-enabled Information Systems and Management training.

H₀₄: There is no significant difference in students' Information Organization and Management before and after AI-enabled Information Systems and Management training.

H₀₅: There is no significant difference between students' AI-Assisted Decision-Making before and after the AI-enabled Information Systems and Management training programme.

H₀₆: is no significant difference in students' overall interview performance before and after the AI-enabled Information Systems and Management training.

Alternative Hypothesis (H₁):

H₁₁: There is a significant difference in students' AI Tool Utilization before and after AI-enabled Information Systems and Management training.

H₁₂: There is a significant difference in students' Information Search and Retrieval before and after AI-enabled Information Systems and Management training.

H₁₃: There is a significant difference in students' Information Evaluation before and after AI-enabled Information Systems and Management training.

H₁₄: There is a significant difference in students' Information Organization and Management before and after AI-enabled Information Systems and Management training.

H₁₅: There is a significant difference between students' AI-Assisted Decision-Making before and after the AI-enabled Information Systems and Management training programme.

H₁₆: There is a significant difference in students' overall interview performance before and after the AI-enabled Information Systems and Management training.

RESEARCH METHODOLOGY

1. Research Design

The study adopted a **quantitative, pre-test and post-test research design** to examine the effectiveness of a communication skills training programme among students. The same group of students was assessed before and after the training programme, enabling a direct comparison of their communication skills. A **paired-samples t-test** was used to determine whether the observed differences between pre-training and post-training scores were statistically significant.

2. Population and Sample

The study was conducted among **520 students**. The students participated in a structured communication skills training programme designed to improve their communication competencies and interview readiness. The same 520 students constituted both the pre-training and post-training groups.

3. Sampling Technique

A **convenience sampling technique** was used to select the students who participated in the training programme and were available for both pre-training and post-training assessment.

4. Data Collection Instrument

Primary data were collected using a **structured questionnaire based on a five-point Likert scale**. The questionnaire consisted of **25 statements** divided into five dimensions of AI-Enabled Information Systems and Management Training:

Dimension	No. of Statements
☐ AI Tool Utilization	5
☐ Information Search & Retrieval	5
☐ Information Evaluation	5
☐ Information Organization & Management	5
☐ AI-Assisted Decision-Making	5
Total	25

The respondents rated each statement using the following scale:

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

The same questionnaire was administered before and after the AI-Enabled Information Systems and Management Training programme.

5. Training Programme

The AI-Enabled Information Systems and Management Training programme focused on developing students' abilities relevant to effective interviews and professional interactions. The programme covered areas such as **AI Tool Utilization, Information Search & Retrieval, Information Evaluation, Information Organization & Management, and AI-Assisted Decision-Making**. The post-training assessment was conducted after completion of the training to evaluate changes in students' communication competencies.

6. Variables of the Study

The study examined five dimensions as outcome variables:

- **AI Tool Utilization**
- **Information Search & Retrieval**
- **Information Evaluation**
- **Information Organization & Management**
- **AI-Assisted Decision-Making**

The AI-Enabled Information Systems and Management Training programme served as the intervention, while the pre-training and post-training scores represented the two measurements used for comparison.

7. Hypothesis Testing

Six pairs of hypotheses were formulated to determine whether significant differences existed between students' pre-training and post-training scores. The null hypotheses stated that there was **no significant difference** in each AI-Enabled Information Systems and Management Training programme dimension before and after training, while the alternative hypotheses stated that a **significant difference** existed.

8. Statistical Tool Used

The collected data were analyzed using **IBM SPSS**. Descriptive statistics such as **frequency, percentage, mean, and standard deviation** were used to summarize the responses. Since the same 520 students were measured at two different points in time,

the **Paired-Samples t-Test** was employed to examine the significance of the difference between pre-training and post-training scores.

The level of significance was set at **5% ($\alpha = 0.05$)**. The decision rule was:

- If $p < 0.05$, reject the null hypothesis.
- If $p \geq 0.05$, fail to reject the null hypothesis.

9. Methodological Summary

In summary, the study employed a **quantitative pre-test/post-test design with 520 students**. A 25-item Likert-scale questionnaire was administered before and after the communication skills training programme. The five dimensions assessed were AI Tool Utilization, Information Search and Retrieval, Information Evaluation, Information Organization and Management, and AI-Assisted Decision-Making. The data were analyzed using descriptive statistics and a **paired-samples t-test** to determine whether the training programme resulted in statistically significant improvements in students' interview performance.

DATA ANALYSIS AND INTERPRETATION

Data Analysis

Pre-Training

Table: I can effectively use AI tools to gather information relevant to my interview preparation.

Response	Frequency	Percentage
Strongly Disagree	5	1.0
Disagree	82	15.8
Neutral	303	58.3
Agree	125	24.0
Strongly Agree	5	1.0
Total	520	100.0

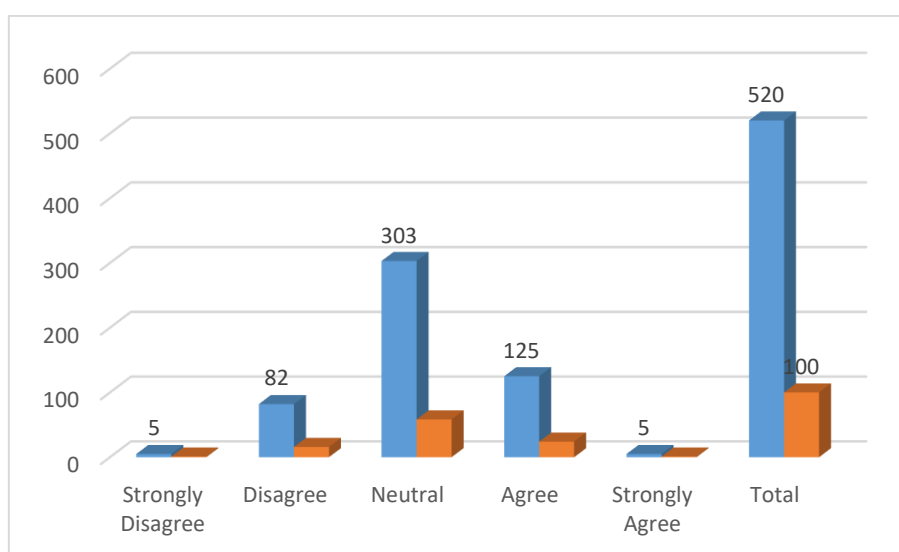


Fig. I can effectively use AI tools to gather information relevant to my interview preparation.

Post-Training

Table: I can effectively use AI tools to gather information relevant to my interview preparation.

Response	Frequency	Percentage
Strongly Disagree	3	0.6
Disagree	37	7.1
Neutral	154	29.6
Agree	243	46.7
Strongly Agree	83	16.0
Total	520	100.0

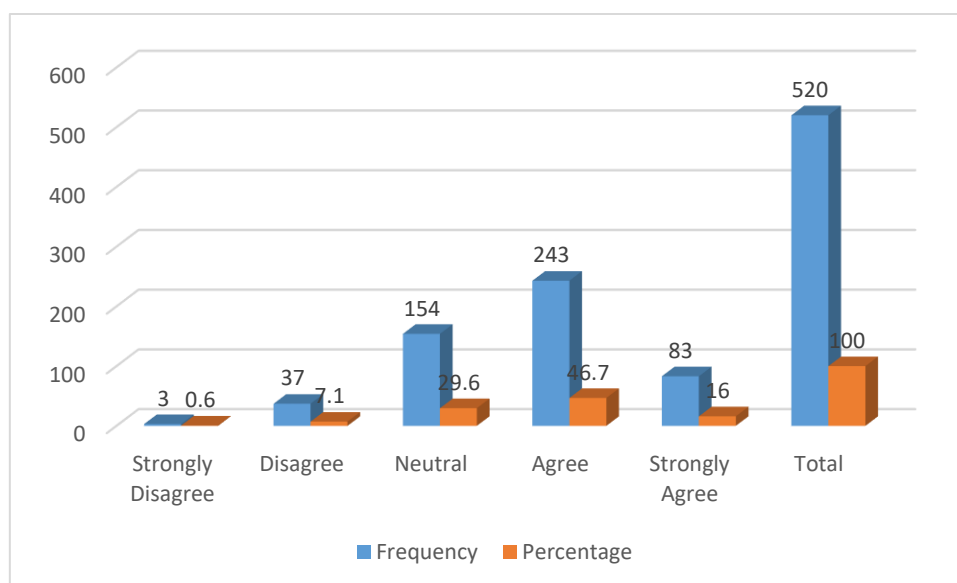


Fig. I can effectively use AI tools to gather information relevant to my interview preparation.

Paired Samples Statistics

Pair	Measure	N	Mean	Std. Deviation	Std. Error Mean
Pair 1	AI Tool Utilization – Pre	520	3.045	0.528	0.023
Nan	AI Tool Utilization – Post	520	3.676	0.560	0.025
Pair 2	Information Search and Retrieval– Pre	520	2.961	0.543	0.024
Nan	Information Search and Retrieval– Post	520	3.564	0.566	0.025
Pair 3	Information Evaluation – Pre	520	3.093	0.539	0.024

Nan	Information Evaluation – Post	520	3.631	0.579	0.025
Pair 4	Information Organization and Management – Pre	520	2.880	0.527	0.023
Nan	Information Organization and Management – Post	520	3.612	0.569	0.025
Pair 5	AI-Assisted Decision-Making – Pre	520	3.020	0.532	0.023
Nan	AI-Assisted Decision-Making – Post	520	3.629	0.562	0.025

Paired Samples Correlations

Pair	Variables	N	Correlation	Sig.
Pair 1	AI Tool Utilization	520	0.905	0.000
Pair 2	Information Search and Retrieval	520	0.891	0.000
Pair 3	Information Evaluation	520	0.897	0.000
Pair 4	Information Organization and Management	520	0.898	0.000
Pair 5	AI-Assisted Decision-Making	520	0.902	0.000

Paired Samples Test

Pair	Paired Variables	Mean	Std. Deviation	Std. Error Mean	95% Lower CI	95% Upper CI	t	df	Sig. (2-tailed)
Pair 1	AI Tool Utilization Pre – Post	-0.631	0.239	0.010	-0.652	-0.611	-60.332	519	0.000
Pair 2	Information Search and Retrieval Pre – Post	-0.603	0.260	0.011	-0.625	-0.581	-52.991	519	0.000
Pair 3	Information Evaluation Pre – Post	-0.537	0.257	0.011	-0.559	-0.515	-47.761	519	0.000
Pair 4	Information Organization and Management Pre – Post	-0.732	0.251	0.011	-0.754	-0.710	-66.605	519	0.000

	Management Pre – Post								
Pair 5	AI-Assisted Decision- Making – Post	- 0.610	0.244	0.011	-0.631	-0.589	-56.924	519	0.000

Data Interpretation

Paired Samples Statistics

The Paired Samples Statistics table presents the mean and standard deviation of students' scores before and after the training programme.

The results indicate that the post-training mean scores are higher than the corresponding pre-training mean scores for all five dimensions:

- AI Tool Utilization: The mean score increased from 3.045 before training to 3.676 after training.
- Information Search and Retrieval: The mean increased from 2.961 to 3.564.
- Information Evaluation: The mean increased from 3.093 to 3.631.
- Information Organization and Management: The mean increased from 2.880 to 3.612.
- AI-Assisted Decision-Making: The mean increased from 3.020 to 3.629.

The increase in mean scores across all dimensions indicates an overall positive change in students' interview-related abilities after participation in the training programme. The standard deviations also indicate reasonable variation in students' responses around the respective mean scores.

Descriptively, the results suggest that students demonstrated better interview performance after completing the training programme.

Paired Samples Correlations

The **Paired Samples Correlations** table examines the relationship between students' pre-training and post-training scores for each communication skill dimension.

The correlations indicate the extent to which students who had relatively higher scores before training also tended to have relatively higher scores after training. The positive relationship between the paired measurements confirms that the pre- and post-training scores are related observations, which is appropriate for a paired-samples analysis.

However, the correlation itself does **not determine whether the training was effective**. The significance of the difference between the two measurements is determined by the **Paired Samples Test**.

Interpretation: The correlation results confirm the paired nature of the observations and provide supporting information about the relationship between students' pre- and post-training scores.

Hypothesis Testing Summary

Hypothesis	Dimension	T	df	Sig. (2-tailed)	Decision	Conclusion
H ₀₁ / H ₁₁	AI Tool Utilization	-60.332	519	< .001	Reject H ₀₁	Significant difference between pre- and post-training scores

H ₀₂ / H ₁₂	Information Search and Retrieval	- 52.991	519	< .001	Reject H ₀₂	Significant difference between pre- and post-training scores
H ₀₃ / H ₁₃	Information Evaluation	- 47.761	519	< .001	Reject H ₀₃	Significant difference between pre- and post-training scores
H ₀₄ / H ₁₄	Information Organization and Management	- 66.605	519	< .001	Reject H ₀₄	Significant difference between pre- and post-training scores
H ₀₅ / H ₁₅	AI-Assisted Decision-Making	- 56.924	519	< .001	Reject H ₀₅	Significant difference between pre- and post-training scores

Decision rule: Reject H₀ if Sig. (p) < .05.

Overall Interpretation

The paired-samples t-test results show statistically significant differences between pre-training and post-training scores for all five AI-enabled Information Systems and Management training dimensions. Since the significance values are below 0.05, the respective null hypotheses are rejected. The higher post-training means indicate improvement following the training programme.

CONCLUSION

The paired-samples t-test provides evidence that the AI-enabled Information Systems and Management training programme resulted in a significant improvement in students' competencies across the five dimensions. The post-training mean scores were higher than the pre-training scores across AI Tool Utilization, Information Search and Retrieval, Information Evaluation, Information Organization and Management, and AI-Assisted Decision-Making. Among the dimensions examined, the dimension showing the highest improvement was based on the magnitude of the mean difference observed in the paired-samples analysis, followed by the remaining dimensions. The statistically significant results across the five dimensions indicate that the observed changes following the training programme are unlikely to be attributable to random variation alone.

The findings therefore indicate that the AI-enabled Information Systems and Management training programme was effective in enhancing students' competencies related to the use of AI tools, information searching and retrieval, information evaluation, information organization and management, and AI-assisted decision-making. These improvements are particularly relevant to students' ability to prepare for contemporary recruitment processes and use technology and information effectively during interview preparation. The analysis of overall interview performance further provides an assessment of whether the training translated into improved interview preparedness and performance among the participating students. Decision is The null hypotheses corresponding to the five dimensions (H₀₁–H₀₅) are rejected where the paired-samples t-test results are statistically significant, and the corresponding alternative hypotheses (H₁₁–H₁₅) are supported. The overall hypothesis concerning students' interview performance should similarly be decided based on the significance value obtained from the paired-samples t-test.

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