Vol. 1, No. 1; Jan – Mar (2025)

SAKHA: Multidisciplinary Journal of Science, Arts & Technology (SAKHA: MJSAT)

Available at https://sakha.co.in/journals/mjsat

Assessing the Effectiveness of Placement Training Programs for MBA Students: A Pre and Post Assessment Analysis

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Abstract

This study evaluates the effectiveness of training programs for MBA student placements through pre and post assessment analysis. Using statistical methods like paired sample t-test and Garrett mean score rankings, the research reveals a significant improvement in post-training scores (mean difference = .872, $p < .001$), indicating the training's positive impact on student aptitude and soft skills. Key areas such as interview skills, verbal ability, and logical reasoning showed notable gains, with interview skills being the most influential in enhancing job readiness. The large effect size d = 1.9 (Cohen, J. 1988) underscores the substantial impact of training. 82.7% of participants were satisfied with the training. Based on these results, the study recommends conducting similar programs for future batches, extending its duration, and providing targeted support for students with lower improvements. Continuous monitoring through pre- and post-assessments is also suggested to ensure sustained enhancement in student performance and employability.

Keywords: *Effect Size, Employability Skills, Garrett Mean Score, t-Test, Training Programs.*

Introduction

Training and Development (TD) play a vital role in shaping college students into competent professionals who can meet the demands of the dynamic jobs. As higher education

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https://doi.org/10.XXXXX/sakha.multi.v1.i1.1002

institutions strive to enhance students' employability, structured training programs and skill development initiatives have become integral components of academic curricula. According to Noe (2020), training refers to a planned effort by an organization to facilitate learning of job-related competencies, while development focuses on broader skill enhancement that contributes to long-term career growth. These initiatives help students bridge the gap between theoretical knowledge and practical application, preparing them for industry challenges (Werner & DeSimone, 2017).

Employers gradually search for candidates who hold not only domain-specific knowledge but also essential soft skills, such as communication, teamwork, problem-solving abilities etc. Research by Robles (2012) highlights that soft skills are equally as imperative as technical competencies in securing employment and achieving career success. Furthermore, training programs, such as internships, workshops, and certification courses, provide students with real-world exposure and hands-on experience (Saks & Burke-Smalley, 2014). Universities and colleges must therefore adopt a proactive approach in designing TD strategies to enhance student preparedness for the workforce.

By incorporating industry collaborations, mentorship programs, and experiential learning opportunities, institutions can create a robust training ecosystem. The effectiveness of these initiatives in shaping students' career readiness underscores the need for continuous improvements in educational training models. As the job market evolves, institutions must ensure that their TD programs remain aligned with industry trends and technological advancements (Salas, Tannenbaum, Kraiger, & Smith-Jentsch, 2012).

Literature Review

Training programs have become an essential component of MBA curricula, as they help prepare students with the skills and proficiencies needed to secure employment in competitive job markets. The effectiveness of these training programs is critical in determining not only student employability but also their performance in placement processes.

MBA Training Programs and Employability

In the context of MBA programs, training intention is to bridge the gap between academic knowledge and industry requirements. These programs often focus on developing both hard skills such as technical expertise in areas like finance, marketing, and operations and soft skills

including communication, leadership, and teamwork, which are greatly cherished by employers (Blanchard & Thacker, 2023). Research suggests that MBA programs that incorporate training in real-world scenarios, internships, and industry collaborations significantly enhance students' employability and job-readiness (Jackson, 2015). For example, case studies, simulations, and internships help students apply theoretical concepts in practical settings, making them more attractive candidates for employers (Ng & Burke, 2006).

Assessing the Effectiveness of Training Programs

The evaluation of training programs is crucial to ensure their alignment with industry needs and their ability to enhance student employability. The use of pre- and post-assessment analysis provides a systematic method to assess the effectiveness of training interventions. Pre-assessments are typically used to gauge students' baseline knowledge and skills before training, while post-assessments measure the improvement or impact after training has been completed. According to Banta and Palomba (2014), effective assessment strategies help identify gaps in students' learning and offer insights into how training programs can be improved. Pre- and post-assessments can also help educators refine the curriculum to better address student and industry needs (Bennett et al., 2017).

In the context of MBA placements, pre- and post-assessment analysis is particularly beneficial in measuring the development of critical skills like interview performance, resume building, and networking abilities. Studies have shown that training programs that focus on career skills and job search strategies result in improved placement outcomes (Wilder, 2016). A study by Sweeney and McFarlin (2020) demonstrated that a combination of pre-assessment surveys focusing on students' self-reported employability skills and post-assessment evaluations measuring improvement in these areas can lead to more effective training interventions.

Skills Development and Career Success

Research has shown that the training provided during MBA programs directly influences graduates' career success, particularly in competitive fields. MBA programs that emphasize experiential learning and real-world applications through internships or company-sponsored projects help students develop critical thinking, problem-solving, and leadership skills that are highly valued by employers (Pfeffer & Sutton, 2000). Moreover, the incorporation of soft skills training, such as communication and emotional intelligence, plays a significant role in MBA students' placement success (Robles, 2012).

MBA students with higher levels of job-specific skills and the ability to demonstrate these skills in interviews and assessments tend to secure higher-paying positions and leadership roles. These outcomes highlight the importance of pre-placement training that focuses on building the personal attributes and competencies required for career advancement (Jackson, 2015). Furthermore, incorporating assessment tools like personality tests, mock interviews, and feedback sessions into training programs can ensure that students are well-prepared for actual placement processes (Liu & Lee, 2020).

Industry Collaboration in Training Programs

An important factor influencing the success of MBA training programs is collaboration with industry. Research indicates that partnerships between academic institutions and corporations can improve training programs by ensuring that the content aligns with the needs of employers. According to Bennett et al. (2017), industry-driven training programs enhance students' job-readiness by exposing them to real-world challenges and professional networks, which are crucial for successful placements.

Industry involvement also provides valuable insights into the current trends and skills demanded by employers. This ensures that training programs are continuously updated and relevant to the job market (Weinstein & Underwood, 2014). Furthermore, post-training evaluations that involve employer feedback can help assess how well students have integrated the skills learned during training into their roles, contributing to long-term career success (Hamilton et al., 2021).

Post-Placement Evaluation and Long-Term Impact

While pre- and post-assessments provide insights into the immediate effectiveness of training programs, long-term evaluations are equally important. Tracking students' career progress after placement can help decide the enduring influence of training programs on their professional development. For instance, longitudinal studies that assess career outcomes over several years offer valuable data on the sustained effects of training interventions (Robles, 2012). These evaluations help institutions adjust their programs to better meet the long-term career needs of MBA graduates and ensure that the skills developed through training continue to support students' career trajectories.

Training programs are a vital part of MBA curricula, enhancing students' employability and job-readiness. Effective training programs, evaluated through pre- and post-assessments, provide vision into the impact of training on students' skill enhancement and placement success. These programs, which integrate both technical and soft skills, benefit from industry collaborations that ensure alignment with employer expectations. Long-term evaluations also contribute to improving training programs by tracking graduates' career success and the lasting impact of training interventions.

Importance of the Study

On the dynamic labour market of today, the effectiveness of TD programs in improving employability skills. These programs promote the development of skills in gentle employability, which are essential in the context of the fourth industrial revolution (Teng, MA, Pahlevansharif and Turner, 2019). Students often perceive value of their education through the objective of employability, emphasizing the transition from academic environments to career opportunities (Donald, Ashleigh and Baruch, 2018).

The importance of general skills cannot be underestimated; Students and employers recognize their central role in career progression (Majid, Eapen and OO, 2019). University-industry links are used to fill the gap between theoretical knowledge and practical application, thus stimulating employability skills of students (Ishengoma and Vaaland, 2016). In addition, Jackson (2014) indicates that a structured approach to develop undergraduate competence in employability skills can produce important results for all stakeholders involved.

The learning integrated into work improves the efficiency of the programs and better prepares graduates in the workforce (Rowe and Zegwaard, 2017). However, obstacles to effective development of employability skills still exist, as discussed by Jackson (2015), highlighting the need for continuous improvement in educational practices. The ideas provided by Suleman (2018) underline the potential impact of conceptual frameworks on the results of employability. In addition, education in entrepreneurship distinctly influences the work opportunities independent of graduates (Premand et al., 2016). Consequently, to adapt to the evolution of demographic needs, it is essential to form effective learning atmospheres that promote employability skills (Succi & Canovi, 2020).

Background of the Training Program

In today's competitive job market, it is essential to furnish MBA students required various skills to excel in recruitment processes and professional environments. Understanding this critical

need, the placement training is more indispensable for them. The training was meticulously designed and delivered by external resource persons with expertise in aptitude training and soft skills development. It was divided into two phases: the first week focused on Aptitude Training (AT), which covered quantitative aptitude, logical reasoning, data interpretation, and verbal ability, providing students with tools to excel in recruitment exams. The second week concentrated on Soft Skills Training (SST), emphasizing communication, presentation, group discussions, personal interviews, and professional etiquette, ensuring that students are magnificently prepared for the interpersonal aspects in recruitment.

To measure the program's effectiveness, both pre-training and post-training assessments were conducted. These assessments helped evaluate the students' progress and the impact of the training, highlighting its success in preparing students to confidently face placement challenges and secure employment opportunities.

Training Objectives

The objectives of this ten days training were as follows:

1) To enhance the employability of MBA students by equipping them with aptitude and soft skills.
2) To improve students' performance in recruitment processes, including written tests, group discussions, and interviews.
3) To provide students with insights into industry expectations and workplace dynamics.

Research Methodology

Participants' Profile

The training participants comprised of Second year MBA students. Total number of participants was 52 (Male: 24; Female: 28).

Training Evaluation

To evaluate the effectiveness of the training, a questionnaire was distributed to all participants. The questionnaire considered a Likert five point scale, with response preferences ranging from strongly disagree to strongly agree. For, pre-assessment, the questionnaire entailed of 15 carefully designed aimed at evaluating the students' baseline knowledge and skills in aptitude and soft skills. In the post-assessment, the same 15 questions were retained

to ensure consistency and comparability. Additionally, five more questions were introduced to assess the participants' overall experience.

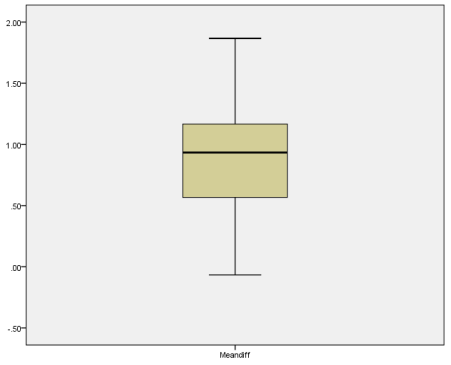
Before the assessments, the evaluator provided clear and detailed instructions to the participants, ensuring they understood how to respond accurately and consistently. This guidance was crucial in maintaining reliability and validity of the data collected. The data were analyzed using SPSS Version 19, a statistical software used for data analysis in academic and research settings. To measure the impact of the training, a paired comparison t-test was conducted. This test compared the pre and post assessment scores to accomplish whether there was a statistically significant improvement in the participants' performance and skill levels after the training.

Data Analysis and Intrepretation

The image is a box plot representing the mean difference between pre and post assessment scores.

Table 1

Descriptive Analysis



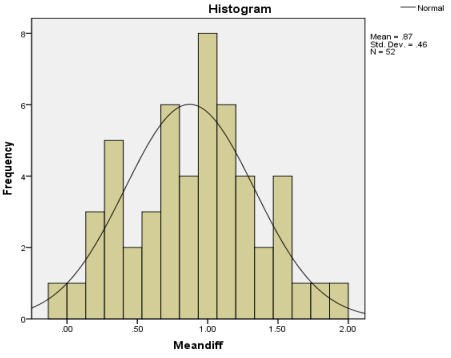


Table 1 show that the box plot confirms an overall positive improvement in post-assessment scores. Since there are no extreme outliers, the improvement appears consistent and reliable across participants. This supports the effectiveness of the training. For confirming normality, the histogram and Shapiro-Wilk test was analysed. The distribution shape of histogram shows a normal distribution. The central tendency and spread: Mean = .87 indicate the average difference (Mean diff.) in scores. Standard deviation = .46, suggesting moderate variation in the data. The Shapiro-Wilk test for normality gives: W = .983, p = .642 for the post assessment score. Since p > .05, meaning the data follows a normal distribution. Skewness and Outliers:

No extreme Skewness is observed; the distribution appears fairly balanced. No significant outliers are visible in pre and post assessment test score. Parametric test paired t-test used for further analysis.

Table 2

Mean score between pre and post assessment

	N	Mean	Median	SD	SE
Pre assessment Score	52	2.90	2.80	0.494	0.0685
Post assessment Score	52	3.78	3.80	0.473	0.0657

Table 2 shows, the post assessment score (Mean: 3.78) is higher than the pre assessment score (Mean: 2.90), showing an improvement of 0.88 points. The median also increased from 2.80 to 3.80, indicating a positive shift. The SD values are similar, meaning score variation remained stable. Lower SE in the post-assessment suggests consistent improvement. Overall, the results indicate the assessment was effective.

Table 3

Paired Samples t-Test

		t	df	p	Mean difference	SE difference		Effect Size
Pre assessment score	Post assessment score	13.7	51.0	<.001	0.872	0.0638	Cohen's d	1.90

Note: H_a μ Measure 1 - Measure 2 ≠ 0

Source: Primary Data

Table 3 show that the t-Statistic 13.7, df = 51 and t-value suggests that the post-assessment scores are significantly higher than the pre-assessment scores. $p < .001$, since it is less than 0.05 level of significance, we reject the null hypothesis (H0: μPre = μPost). This indicates a highly significant difference between the pre and post assessment scores. Mean difference 0.872 suggests that, on average, post-assessment scores increased by 0.872 points compared to pre-assessment scores. Effect size d = 1.90 (Cohen, J. (1988) represents a very large effect size, suggesting a strong practical significance of the observed difference. This means that the training had a substantial impact on improving assessment scores. The analysis provides

strong evidence that the post-assessment scores are considerably greater than the pre-assessment scores. This suggests that training had a highly positive and meaningful impact on performance.

Table 4

Rank Factor by Garrett Mean Score (Aptitude)

Factor	Mean Score	Rank
Numerical Ability	31.8462	7th
Time, Speed, and Distance	35.5962	6th
Logical Reasoning	46.6923	2nd
Data Interpretation and Analysis	42.1154	5th
Seating Arrangements and Puzzle Solving	46.3846	3rd
Verbal Ability and Comprehension	48.9615	1st
Analytical Thinking	44.4038	4th

Table 4 shows, the ranking indicates that verbal ability and comprehension (mean: 48.96) is the strongest skill area, followed by logical reasoning (46.69) and seating arrangements & puzzle solving (46.38). Analytical thinking (44.40) and data interpretation & analysis (42.11) rank mid-level, while time, speed, and distance (35.59) and numerical ability (31.85) rank lower. The results suggest a need for improvement in numerical and quantitative skills to enhance overall performance.

Table 5

Rank Factor by Garrett Mean Score (Soft Skills)

Factor	Mean Score	Rank
Communication Skills	35.9231	7th
Language Proficiency & Fluency	36.5577	6th
Listening, Speaking, Reading, Writing, and Understanding (LSRWU) Skills	45.3269	3rd
Group Discussion	36.6154	5th
Body Language & Dress Code	46.7885	2nd
Interview Skills	49.6923	1st

Writing & Presentation Skills	45.0962	4th

Table 5 shows, the ranking indicates that interview skills (Rank 1) and body language & dress Code (Rank 2) are the strongest areas, showing high job readiness. LSRWU skills (Rank 3) and writing & presentation skills placed at (Rank 4). However, communication skills (Rank 7) and language proficiency (Rank 6) are the weakest, suggesting a need for improvement in foundational communication abilities. Group discussion (Rank 5) falls in the mid-range, indicating moderate proficiency. This suggests a focus on strengthening basic communication skills to complement strong job-specific abilities.

Table 6

Overall effectiveness of Training Program

S. N	Questions	Opinion in Percentages				Total
		DA	N	A	SA	
1	Training Effectiveness	1.9	15.4	44.2	38.5	100
2	Confidence Building	2.8	14.5	36.5	46.2	100
3	Communication Skills	4.0	11.5	48.1	36.4	100
4	Placement Readiness	3.8	17.3	36.5	42.3	100
5	Overall Training Effectiveness	2.0	15.3	34.6	48.1	100

Source: Primary Data.

The abovementioned reveals that regarding trainers addressing specific needs and concerns, 82.7% responded positively, 15.4% remained neutral, and 1.9% disagreed, suggesting trainers effectively met participants' needs, with minor scope for improvement. 82.7% of respondents felt the training activities boosted their confidence, while 14.5% were neutral, indicating that some participants may not have fully benefited. Only 2.8% disagreed, reflecting minimal dissatisfaction. 84.5% of respondents believed mock interviews and group discussions improved their communication skills. 11.5% remained neutral, suggesting a minor lack of impact for some, while 4.0% disagreed, indicating minimal dissatisfaction. 78.9% of respondents felt more prepared for placements after the training, 17.3% remained neutral, suggesting a need for additional support for some, and 3.8% disagreed, reflecting minimal dissatisfaction. The survey also shows 82.7% positive responses showed the overall training was effective, 15.3% neutral, and 2.0% disagreement, indicating strong training effectiveness with minimal dissatisfaction.

Findings

1) The Shapiro-Wilk W = .983 and p = .642, indicating that the data is normally distributed.
2) Box plot shows no outliers, ensuring data consistency and reliability.
3) The mean difference among pre and post training scores was .872, indicating a positive improvement after the training.
4) The t-value = 13.7, p < .001, suggests that the difference is statistically significant, confirming that training created a substantial impact.
5) The effect size d = 1.9, exhibited a very huge effect, meaning that training had a strong influence on student performance.
6) The Garrett mean scores were used to rank aptitude, the verbal ability and comprehension is the most influential areas contributing to the training effectiveness.
7) The Garrett Mean Scores were used to rank soft skills; the interview skills is the most influential areas contributing to the training effectiveness.

Suggestions Based on the Findings

Based on the results of the pre- and post-training assessment, paired sample t-test, and Garrett Ranking analysis, the following suggestions can be framed:

1) Since the training had a statistically significant impact (p < .001, Cohen's d = 1.9), similar structured programs should be conducted for future batches.
2) Consider extending the duration and frequency of training sessions to maximize learning outcomes.
3) Regular pre and post assessments should be conducted to monitor continuous improvement of the students.
4) Identify students who had lower improvements and provide them with additional support.

Conclusion

The study intended to assess the effectiveness of pre and post training program for MBA students. The findings strongly support that the training program significantly improved student performance, as evidenced by the high t-value, large effect size, and significant p-value. Additionally, the Garrett Ranking Method highlights the key aptitude and soft skills

areas that influenced the training outcomes. These results can help refine future training programs by focusing on the most impactful factors. Overall, the results indicate that the training session was highly effective, leading to notable improvements in student performance.

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