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Analysis of the Impact of Industrial Training on Student's Academic Performance

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Abstract: This study analyzes the impact of industrial training on the academic performance of students. Industrial training, also known as internship or practical training is a common requirement in many academic programs that provides students with practical, hands-on experience in their chosen field of study. The aim of this study is to determine whether industrial training positively affects students' academic performance. The research methodology involves collecting data through surveys and interviews with students who have completed industrial training, as well as analyzing their academic records before and after the training. The findings of this study will provide insights into the effectiveness of industrial training as a tool for improving students' academic performance.

Index Terms: Industrial training, Survey questions, impact on the academic performance, apply theoritical concepts

1 INTRODUCTION

Industrial training, also known as internship or practical training is a critical component of many academic programs. It involves students working in an actual work setting to gain practical experience and exposure to the professional world [1]. The Internship program is typically created to cater to the needs of young graduates and postgraduates globally who are unemployed and have completed 14 to 16 years of education. The primary objective of this program is to enhance and fortify the students' skills, equipping them for their chosen profession [2]. Universities now face both possibilities and challenges as a result of the growing popularity of knowledge management in many of the bigger private sector organizations. The opportunities pertain to creating (and evaluating) methods for knowledge management and establishing fresh alliances with companies to enhance organizational competence [3]. The impact of industrial training on students' academic performance can be significant in several ways. Now a days quality has become a decisive factor in attracting students and faculty to an institution. Institutions that provide high-quality education will endure in the current environment. Industry training is one of the major curricular needs of every technical institute [4]. In essence, all types of training offer a practical setting for students who are pursuing academic programs to apply the theories and knowledge they have acquired in university. By introducing work-related problems and examples, they are able to enhance their academic experience [5]. It is necessary to include industrial training as a compulsory requirement for students to complete before they are eligible to graduate. Through this training, students will have the opportunity to connect what they have learned in the classroom with the practical application of those concepts in the industry. Additionally, the training will

expose them to new knowledge and skills that they may not have acquired during their academic studies, better equipping them to succeed in the job market [6]. Industrial training can increase students' motivation to learn. When students see the real-world applications of the concepts they are learning in the classroom, they are more likely to be engaged and motivated to learn. Moreover, Industrial training exposes students to different communication styles and workplace cultures. This exposure can help them improve their communication skills, both verbal and written, which can be beneficial in their academic work [7].

Industrial training provides an opportunity for students to build professional networks and establish relationships with potential employers. This can be beneficial for students after graduation when they enter the job market [8]. The program of work experience offered to students provides them with a chance to participate in real-world work settings beyond the confines of the classroom. The influence of the Students Industrial Work Experience (SIWES) program has raised concerns among educational and economic planners, especially regarding employment prospects for graduates [9]. By offering academic credit for internships and promoting them as a means to gain an advantage in the job market, universities have spearheaded efforts to make internships more attractive and beneficial for students, with the assistance of academic advisors [10].

The idea of industrial training can vary among students, as it depends on their personal experiences and perspectives. Many of the students often see industrial training as an opportunity to gain real-world experience and exposure to the professional world. This experience can help them understand how the concepts they learn in the classroom apply to actual work situations. Ensuring competitiveness in the global arena is now heavily reliant on the training, education, and development of employees across all levels in organizations. This is viewed as a crucial component [11]. However, some students may see industrial training as a time-consuming obligation that takes away from their academic studies. They may feel that they must balance the demands of their training with the demands of their coursework. Overall, the idea of industrial training can be viewed positively or negatively by students depending on their individual experiences and perceptions. However, it is generally recognized as a valuable component of many academic programs that can provide students with important career development opportunities. Also it can be said that one of the most effective and practical ways for industry and institutions to cooperate is industrial training [4]. Therefore, present study based on the survey conducted among university students to get their feedback on industrial training to deeply analyze the impact on their personal and professional life.

2 METHODS AND METHODOLOGY

Several instruments can be used to evaluate training effectiveness. Tests, questionnaires, interviews, observations, performance records,etc.[12] In here line survey was conducted to gather information related to the industrial training impact among students. Most importantly, following key points and steps were followed during the survey.

2.1. Determine the objective of the survey,

Before conducting the survey, it was important to determine what we really want to achieve. For example, do we want to understand the overall impact of industrial training on academic performance or specific aspects such as practical knowledge, communication skills, or motivation to learn?

2.2. Develop the survey questions,
Based on the objective of the survey, developed a set of questions that will help us gather the necessary information. The questions were in the form of closed-ended or open-ended questions, depending on the type of data wanted to collect. We inquired about several aspects related to the participants' industrial training, including their level of satisfaction with their current position, the benefits they receive from relevant institutions, the job responsibilities that require theoretical knowledge, the availability of accommodations and complimentary meals at their workplace, the level of interaction they have with both their university and industrial supervisors, and any other relevant information regarding their connections with them.

2.3. Pilots test the survey,
Before launching the survey, pilot test was conducted with a small group of students to ensure that the questions are clear, relevant, and unbiased. This was useful to identify any issues and make necessary changes before distributing the survey to a larger group.

2.4. Select the sample,
Determination of the sample size and selection criteria for the survey was crucial. For example, you may want to select students who have completed industrial training or are currently undergoing it. You can also consider factors such as academic level, field of study, and gender.

2.5. Distribute the survey,
Once the survey is ready and the sample is selected, distribute the survey to the participants. It was followed through various methods such as email, online survey platforms, or in-person distribution.

2.6. Analyze the data,
After collecting the survey responses, analyzed the data to understand the impact of industrial training on students' academic performance. Moreover, statistical software was used to analyze the data and identify any patterns or trends.

2.7. Draw conclusions and recommendations,
Based on the data analysis, drew conclusions and recommendations on the impact of industrial training. This can help academic institutions and employers to improve the effectiveness of industrial training programs. It is crucial to adhere to ethical guidelines while conducting a survey, including safeguarding confidentiality and obtaining explicit consent from participants.

2.8. Ethical considerations,
The study followed ethical guidelines for research involving human subjects. Participants were informed of the purpose of the study, their rights as participants, and the confidentiality of their responses.

3 RESULTS

Fig. 1. Happiness: present training position

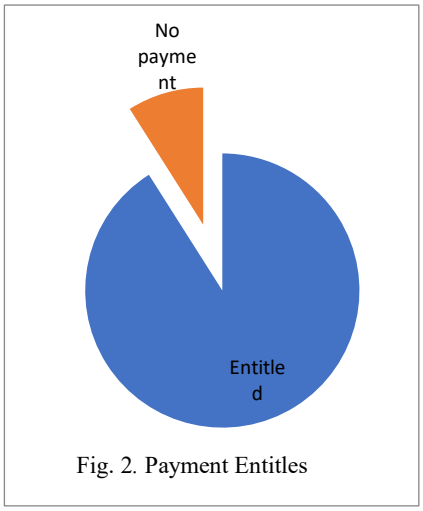

Fig. 2. Payment Entitles

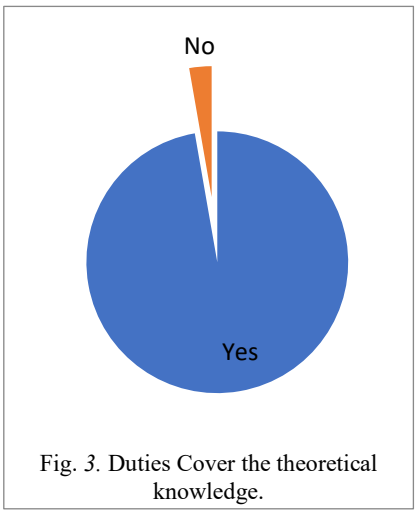

Fig. *3.* Duties Cover the theoretical knowledge.

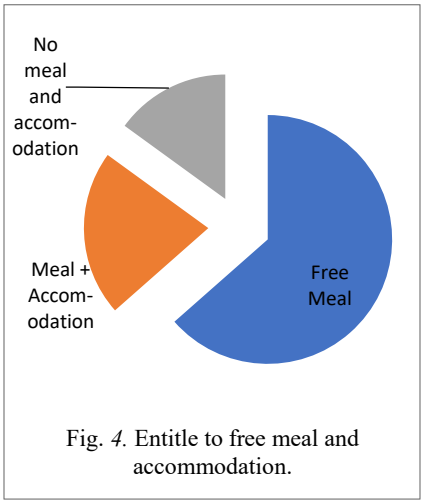

Fig. *4.* Entitle to free meal and accommodation.

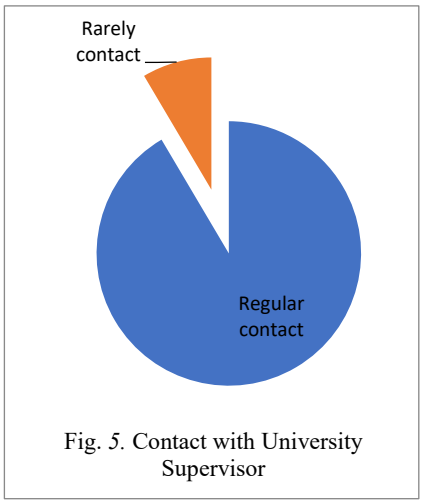

Fig. *5.* Contact with University Supervisor

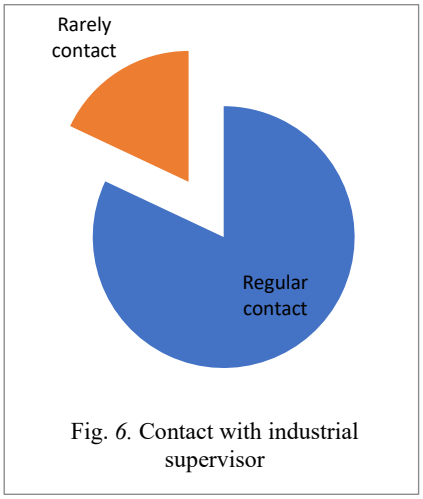

Fig. *6.* Contact with industrial supervisor

In Fig.1 shows about hapiness of the students in present training position. According to that it can be said that the many of students are with happiness in their industrial training period. The impact of industrial training on the happiness of undergraduate students can be significant. Here are some reasons why:

- Professional Development: Industrial training provides students with the opportunity to gain practical experience in their field of study. This helps them develop their skills and knowledge, which can boost their confidence and sense of accomplishment. Students who feel that they are making progress in their professional development are likely to be happier and more motivated.
- Networking: Industrial training allows students to meet professionals in their field, which can be beneficial for their future career prospects. Building a professional network can lead to job opportunities, mentorship, and other benefits. Students who feel that they have a strong professional network are likely to be more optimistic and happier.

- Sense of Purpose: Industrial training gives students a sense of purpose and direction. They have a clear goal to work towards, which can be motivating and energizing. Students who have a sense of purpose are likely to be more engaged and satisfied with their work.
- Financial Stability: Industrial training may provide students with financial stability, as they may receive a stipend or salary during their training. This can alleviate some financial stress and contribute to a sense of happiness and well-being.

In conclusion, industrial training can have a positive impact on the happiness of undergraduate students. It provide s them with professional development, networking opportunities, a sense of purpose, and financial stability.

Based on Fig.2, it can be inferred that nearly all students prefer to receive some payment during their training period. Here are some reasons for that we identified,

- It can help to alleviate the financial burden of the students, who may have to bear expenses such as accommodation, transportation, and food during the training period. This can help students to focus on their training and learning experiences without worrying about financial constraints.
- Receiving payment during the industrial training period can help to motivate students to perform well and take their training seriously. Knowing that they are being compensated for their work can make them feel valued and appreciated, which can increase their sense of responsibility towards their work and encourage them to put in their best efforts.
- Further, receiving payment during the industrial training period can also help students to gain a sense of independence and prepare them for the work world. By receiving a salary, students can learn how to manage their finances and develop skills such as budgeting and financial planning, which can be useful in their future careers.

The majority of students have indicated that they can **co**ver their theoretical knowledge obtained during their university academic period through practical experience gaining during their industrial training**.** It is a most important advantage that they can receive. The percentage of that showed by the Fig.3. It is important for students to reinforce the theoretical knowledge gained during their university academic period with practical experience gained through industrial training. This helps to bridge the gap between theory and practice, and enables students to apply their knowledge to real-world situations. Additionally, practical experience gained through industrial training can provide students with a competitive edge in the job market, as employers often value hands-on experience in addition to academic qualifications. Overall, the ability to apply theoretical knowledge in a practical setting can greatly enhance a student's education and future career prospects.

Through our analysis, we have identified the importance of providing free meals and accommodation to university students during their industrial training period. Fig**.**4 illustrates the number of students who have expressed a desire to receive these benefits. the identified reasons for that are as follows,

- Firstly, it can help to reduce the financial burden on students. During the training period, students may have to bear additional expenses such as accommodation, transportation, and food. Providing

free meals and accommodation can help to alleviate some of these expenses, allowing students to focus on their training without worrying about financial constraints.

- Free meals and accommodation can help to improve the overall well-being and health of the students. Good nutrition is essential for students to perform well in their training, and providing free meals can ensure that they have access to healthy and nutritious food. Additionally, providing accommodation can help to reduce stress and anxiety related to finding and affording suitable living arrangements during the training period.
- Providing free meals and accommodation can help to level the playing field for all students. Students from low-income families may face additional financial burdens during the training period, and providing free meals and accommodation can help to ensure that they have the same opportunities for success as their peers.

Overall, providing free meals and accommodation to university students during their industrial training period can help to reduce financial burdens, improve well-being and health, and promote equal opportunities for all students.

In Fig. 5 shows that the percentage of number of students contacting with university supervisors in their industrial training programme. Contacting university supervisors during a student's training period can be highly beneficial for a number of reasons including:

- Guidance and mentorship: University supervisors can provide guidance and mentorship to students during their training period. This can include advice on how to navigate the challenges of the program, feedback on research projects, and support for personal and professional development.
- Networking opportunities: University supervisors often have extensive networks in their field of expertise, which can be beneficial for students looking to make connections and expand their professional network. This can lead to opportunities for internships, research collaborations, and job opportunities after graduation.
- Access to resources: University supervisors may have access to resources such as specialized equipment, research databases, and funding opportunities that can benefit students during their training period.
- Accountability: Regular communication with university supervisors can help keep students on track with their goals and deadlines, ensuring that they are making progress and meeting expectations.
- Professional development: University supervisors can provide guidance on professional development, including strategies for presenting research, writing papers, and networking with colleagues. This can help students build skills that are essential for success in their chosen field.

Overall, contacting university supervisors during a student's training period is an important step in building a strong professional relationship and setting the foundation for future success.

In Fig.6 shows that the contacting about the industrial trainees with the industrial supervisors. There are many advantages of better connection of student who are in industrial training period with industrial supervisors including:

- Real-world experience: Industry supervisors can provide students with real-world experience and insight into their chosen field. This can help students develop practical skills and knowledge that can be applied in future jobs.
- Career guidance: Industry supervisors can provide guidance on career development, including strategies for finding and applying for jobs, developing professional skills, and networking with colleagues. This can help students build a strong foundation for future success.
- Career guidance: Industry supervisors can provide guidance on career development, including strategies for finding and applying for jobs, developing professional skills, and networking with colleagues. This can help students build a strong foundation for future success.
- It helps to obtain best mentoring system.

  The most effective mentorship program at work may also be successful by enabling newcomers to acquire job competencies as quickly and effectively as possible. Newcomers or interns may be able to develop their job competencies through the interpersonal process of learning with the help of mentors, as well as strengthen social links within an organization as a whole [13]**.**
- Also networking opportunities, access to resources are the another benefits of good relation between industrial supervisors and trainees.

Industrial training can have a significant impact on the academic performance of undergraduate students in a positive way. Here are some reasons why:

- Practical Experience: Industrial training provides students with the opportunity to apply the theoretical knowledge they have learned in the classroom to real-life situations. This helps them gain practical experience, which can enhance their understanding of their field of study. This, in turn, can improve their academic performance by helping them better understand and apply theoretical concepts.
- Improved Time Management: Industrial training requires students to balance work responsibilities with academic coursework. This can help students develop better time management skills, which can have a positive impact on their academic performance. Students who are able to manage their time effectively are more likely to complete their assignments on time, study effectively, and perform better academically.
- Increased Motivation: Industrial training can provide students with a sense of purpose and direction. This can increase their motivation to perform well academically, as they can see how their classroom learning can be applied in a real-world setting. Students who are motivated are more likely to put in the effort required to excel academically.
- Improved Problem-Solving Skills: Industrial training exposes students to real-life problems that they may not encounter in the classroom. This can help them develop better problem-solving skills, which can be applied to academic coursework. Students who are able to solve problems effectively are more likely to perform well academically.

4 CONCLUSIONS

Industrial training has a significant impact on the academic performance of students. It provides an opportunity for students to apply their theoretical knowledge in a practical setting, which can enhance their understanding of the subject matter. Through industrial training, students are exposed to new techniques and technologies that they might not have encountered in the classroom. They also develop essential soft skills such as communication, teamwork, and problem-solving, which are valuable for their future careers. Industrial training also enables students to establish connections with professionals in their field, which can lead to future employment opportunities. Overall, industrial training is an integral part of a student's academic journey, and it should be encouraged and supported by educational institutions.

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