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Evaluating the Benefits, Challenges, and Educational Impact of Workplace Internships for Higher Education Students

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Abstract

Workplace internships are an essential link between education and practice with opportunities for acquiring applicable skills. This research considers the advantages, obstacles, and pedagogical effects of workplace internships on higher-education students. The study used mixed method research collecting data from students, faculty and employers through surveys and interviews. The findings highlight some of the most important advantages, including experiential learning and competency development in work. In addition, it reveals such problems as workload pressures and mentoring deficiencies. The research suggests an improvement of internship programs' efficiency to provide utmost educational benefits and equip students to meet the needs of today's labour market.

Keywords: Workplace Internship, Benefits, Challenges, Higher Education

Introduction

Internships at workplaces are now viewed as a vital part of higher education as they help learners gain work experience, specific competencies in industry, and improve prospects for employability. Graduates with work experience have more chances to be hired than those with only academic achievements (Jackson, 2015). According to Gault, Leach & Duey (2010) students, with internships, are enabled to activate their academic knowledge in genuine situations at work. This, in fact, links what students learn in higher institutions and the experience they gain at work. Knouse, & Fontenot (2008) state that many research internships have a positive impact on increasing the opportunities of employment. Therefore, internships programs are considered as contemporary elements that should be provided at higher education due to the fact they increase graduates' employability.

However, there are some considerable gaps in the literature in clarifying the actual strengths and weaknesses of internships. According to Gault et al. (2010), most of the previous research has concentrated primarily on the immediate result of internships, like employability and the availability of instant job offers. Also, Chen & Shen (2012) believe that a considerable number of studies have failed to examine the challenges faced by students during internship experiences, like discrepancies between tasks assigned during internships and academic objectives established, limited availability of mentors, and disparate access to internship positions. It is very important to identify such challenges as they could be a critical factor in understanding the overall advantages of workplace internships for higher education students.

The present research tries to bridge this gap through an analysis of internships' advantages and challenges in the workplace, considering their educational effect on student learning. Furthermore, it recognizes the necessity for more research on structural and systemic obstacles to students' internship experiences, like inequities in access to and quality of placements. By investigating these factors, this research aims to offer suggestions for enhancing the development and execution of internship programs which should be more inclusive, effective, and aligned with learning objectives.

Literature Review

Introduction to Internships in Higher Education

Internships in the workplace offer practical opportunities for experiential learning so that students can utilize the academic knowledge and acquire skills which are relevant to the field of career (NACE, 2023). In fact, the internships are inherent in the higher education as they bridge the gap between theory and real-world practice. Through the internships, students gain opportunities of professional networking, hands-on experience and enhancement in employment (Hora et al., 2021).

Having their roots in the early 20th century, internships appeared first in the fields of health care and manufacturing as apprenticeships providing training in workforce and practical learning (Collins, 2020). In the present day, the internships enlarged to include disciplines in business, technology, and education, hence mirroring the changing needs within the labor market. In contemporary contexts, internships are highly valued not only as precursors to potential job opportunities but also as spaces that allow students to develop innovation, critical thinking, and flexibility (Hurd, 2022).

Internships have grown to involve education, technology, and business, reflecting labor market demands. Recently they are valued not only as paths to employment but also as opportunities for students to think critically and foster innovation (Helyer & Lee, 2014; Hurd, 2022). The internships worth in higher education lies in their double impact: enhancing academic understanding by connecting theory to practice and preparing students for careers by developing market-relevant skills. Accordingly, internships have become key components of modern educational frameworks (Internship Council, 2023; Lopes et al., 2019).

Benefits of Workplace Internships

Internships in workplace provide important professional as well as academic benefits and that is by connecting educational theories with the practical experience. Furthermore, internships are essential in developing skills like problem-solving, communication, and collaboration. All of these skills are, in fact, important for one to succeed in a career (Hergert, 2009). Many studies have shown that students who have completed internships are more prepared for the labor market and have better rates of employability when they are compare to those graduates who have not had this experience (Gault et al., 2000). In addition, internships broaden one's understanding and solidifying academic concepts through offering an avenue for the application of theory in real-life situations (Reddy & Moores, 2006). For instance, a student in business who applies theories in finance in an internship program, gets a much deeper understanding of the problem solving and decision-making. Moreover, these skills are very crucial for the career development as such experiences allow students to open up opportunities for mentorship and to build up vocational networks. Therefore, internships are an essential element of the modern education, that connects academic objectives with the professional practice.

Challenges of Workplace Internships

A multitude of challenges encounter higher education students before and during workplace internships. Students face intense competition as many of them lack practical experience which make it difficult to

stand out among peers. Hora & Song, 2023 claimed that it is a challenging task to craft an effective resume and cover letter meeting the professional standards. Moreover, students struggle to find suitable internship opportunities that meets their career goals and that cause them frustrate and hesitate.

According to Divine et al., 2007 students may feel overwhelmed in the professional environment during internship because of their expectations and responsibilities that differ from the academic setting. Moreover, a lack of mentorship or support may encounter the students which had effects on their ability to learn and grow their roles during the internship ((Yahya al et., 2019; Divine et al., 2007). Another challenge might face the interns is the communication barriers because of the diverse workplaces. Hora & Song, 2023 mentioned that it is difficult and challenging to students to navigating workplace dynamics, understanding the corporate culture and building the professional relationships. Finally, students' overall productivity and learning experience might get affected by their anxiety feeling which is caused of the pressure they put on their selves to perform well (Yahya al et., 2019).

Addressing these challenges requires resilience, adaptability, and effective support systems from educational institutions and employers. A critical component of higher education are the workplace internships which are increasing to offer students essential opportunities for their career development and professional growth. But there are still unanswered concerns about internship accessibility, program design, and experience quality. Moreover, availability remains an important concern, as many students come across as lack of industry connections and geographic limitations affect the opportunities to secure internships (Clarke, 2018; Hora et al., 2021). According to Wolinsky-Nahmias & Auerbach, 2022, even though students managed to secure internships, the nature of tasks assigned and the level of mentorship provided can vary widely their experiences' quality. Studies like (Grenfell & Koch, 2018; Saunders, 2000; Schultz, 1992; Swift&Kent,1999) discussed the risk management of internships in HEIs which covered concerns of legal liability, compensation and health and safety to the institution and faculty. Risk ranges beyond injury or emotional harm to people, and damage or loss to physical or financial assets (Power et al., 2009).

Educational Impact of Internships

Many researchers as Hynie et al., 2011; Hora & Song, 2023 & Divine et al., 2007 agreed that the internship play an important role in determining the educational outcomes and student engagement. The practical experiences provided by internships develop the academic learning through applying the theoretical knowledge in real-world settings which foster deeper comprehension and retention of academic material, leading to improved academic performance. Moreover, motivation and engagement are boosted by internships which offer students a clear understanding of their career paths and professional expectations, and that leads to increased academic commitment.

Bridging the gap between academic learning and industry expectations is the vital role of internships which expose students to the competencies and skills that employers seek and value to help align the real-word demands with the educational curricula (Divine et al., 2007; Hora & Song, 2023).

Finally, the final grades and degrees classes are impacted directly by internships experiences as mentioned in the empirical studies (Gomez, Lush, & Clements, 2004; Mandilaras, 2004; Mansfield, 2011; Rawlings; Reddy & Moores, 2006).

Theoretical Frameworks or Models

A comprehensive theoretical framework, like Kolb's Experiential Learning Theory (1984) can be used to analyze the higher education internships in workplace. Kolb's theory asserts that through altering experiences knowledge can be created in the learning process. There are four different stages in the

Learning Cycle of Kolb: starting with the concrete experience, then reflective observation, followed by the abstract conceptualization, and finally the active experimentation.Internships are directly related to this cycle in that they provide the student with hands-on experiences (reflecting the concrete experience) and boost reflection on taken actions (reflecting the reflective observation), and foster the relationship between concepts and theories (reflecting the abstract conceptualization)and as students utilize their gained knowledge into dynamic situations (reflecting the active experimentation).

Likewise, another theoretical model that gives more importance to the collaborative learning and social interaction in the formation of skills is the theory of Social Constructivist of Vygotsky (1978). In internships, students can construct knowledge through guidance and feedback which they get through their interaction with professionals. This supporting structure thus points out that internships are key in bridging the gap between the academic learning and the practical application.

***Literature Review: Methodologies* in Previous Research on Workplace Internships**

Studies conducted on internships have employed different approaches like qualitative, quantitative as well as mixed-method approach. Studies like the one of Binder et al. (2015) have used qualitative approach, relying on focus groups and interviews, in order to investigate mentorship and experiential learning. Gault et al. (2010), in their quantitative study, conduct statistical analysis and surveys for the purpose of assessing employability and the achievement of the academic objectives. Studies of mixed methods use both thematic analysis as well as surveys like the one of Zopiatis and Constanti (2012) in order to explore and give broader understanding of students' satisfaction and the kind of skills they gain.

However, there are still some gaps in the literature like longitudinal research deficiency, insufficiency of remote internships' studies, and limited focus on different disciplines. In order to address these gaps, this study looks at the short as well as the long impact through a range of disciplines and participants' viewpoints, incorporating the internship formats.

Conclusion and Gaps in the Literature

While workplace internships have been examined in research, some remarkable gaps still remain, in particular the challenges and the educational effect in specific regions like the Middle East, or across programs unlike traditional areas such as engineering and business. Most noticeably, though, is the deficiency of research into applying the theoretical frameworks—Kolb's Learning Cycle—to the analysis of the outcomes of the internship. Such gaps suggest the need for more research into the details of how internships strengthen engagement and improve skills in different contexts. Considering this need, this study is of extreme importance for its timeliness to guide the institutions of higher education in designing regionally applicable and impactful programs related to the internship.

Methodology

This part explains the research design, population, data collection instruments, and data analysis techniques utilized to examine the benefits as well as the drawbacks and learning effects of internships in the work environment for higher education students. The present study adopts both quantitative and qualitative research designs. Quantitative will allow statistical testing of relationships between variables, while qualitative will provide in-depth insights on individual experiences and perspectives of the students.

1. Participants:

The population under study is the students of higher education who have finished their work experience internships. The sample size comprises 287 students of male and female. It is believed to be sufficient to

ensure validity and reliability. The selection was randomly conducted over the population using the stratified sampling on the given strata:

- Academic specializations (Education, Healthcare, IT, Business, Engineering, Finance, etc.)
- Internship length (short-term versus long-term internships)
- Sector (private, government)
- Quality of supervision (high, medium, and low)

This ensures that different student experiences are adequately represented. In stratified sampling used in gathering data, ethical considerations were handled carefully. To begin with, informed consent was given to the participants, indicating to them the purpose of the study, the nature of what was expected of them, and their right to withdraw at any time. Secondly, privacy and confidentiality were maintained, particularly when dealing with sensitive information regarding supervision quality or work experience. Apart from this, maintaining equity and eliminating prejudices at the sampling level so that no specific group was disproportionately represented or underrepresented was also necessary.

2. Instruments:

A survey method was utilized in gathering the data. The survey employed the Likert-based questions in scaling variables that are applicable to the internship experience of the students. The survey was conducted online via Google Forms to ensure ease and accessibility for all of the respondents.

With regard to the qualitative data, a semi-structured interview session was held with a few of the participants (10 students) who have completed their internships. These interviews provided more in-depth information on the personal experiences, problems, and opinions of students that cannot be obtained through quantitative instruments. The questions during the interview were open-ended in nature, and the students were allowed to elaborate and reflect on their experiences.

The students were informed of the aim of the study, how their information would be utilized, as well as their right to confidentiality. All the information collected was anonymized and kept securely to ensure the privacy of the students. Students were informed that participation is voluntary, and they retain the right to withdraw at any time without any implications.

The research instruments' reliability and validity, such as structured interviews and questionnaires, are critical to determining the credibility and accuracy of the research outcome. Reliability is the ability of the instruments to provide consistency and stability in yielding comparable results every time they are applied under standard conditions (Creswell & Creswell, 2018). For improving reliability, questions were phrased specifically and clearly, and pilot studies were carried out. Validity, however, quantifies to what degree the measuring instruments adequately capture the target constructs. Content validity was attained through the coordination of the questions with the research aims, whereas construct validity was attained through the careful organization of the survey and interview questions to correspond with the variables being studied (Saunders et al., 2019).

Answers were scored by averaging each subscale and the total questionnaire score. Higher scores reflect stronger positive relationships between the independent and dependent variables. The subscale scores were examined to determine the particular strengths and weaknesses of the programs. In the case of the interviews, they were analyzed based on the perceptions of the students that showed a number of dominant themes associated with the dependent variables like skill development, quality of supervision, internship length, career readiness and industry impact.

3. Procedure:

Data was collected between February and March 2025. The participants were randomly selected from different higher education institutions covering only the private sector. First, an ethical letter was obtained from the research department at Gulf College. Also, an approval letter was issued from the National Centre for Statistical Information. Furthermore, in order to get sufficient facility and support during the distribution of the surveys among the colleges, it was very important to obtain the facilitating Researcher's Task letter from the Ministry of Higher Education, Research and Innovation. Therefore, questionnaires were distributed easily to the students in each college internally. The interviews were conducted with ten selected students based on their availability from different specializations. The responses were anonymized to ensure confidentiality and the ethical approval was attained from Gulf College's Institutional Review Board.

Quantitative questionnaire data were analyzed with SPSS version 26. Descriptive statistics were processed to describe the students' perceptions. Qualitative interview data were analyzed by thematic analysis. The transcripts were coded by NVivo software based on Braun and Clarke's (2006) six-step process. Use of inferential and descriptive statistics was selected to identify patterns and distinctions in question answers aligned with the study aim to quantify program effectiveness. Thematic analysis was employed for qualitative data to reveal repeated themes and understandings of the students' perceptions, offering a more interpretation of the quantitative findings.

4. Results/Findings:

Workplace internships play a crucial role in bridging the gap between academic learning and practical work experience. This study evaluates the benefits, challenges, and educational impact of workplace internships for higher education students in Oman. The research explores how internships contribute to skill development, the influence of internship duration and supervision quality on student satisfaction, and how internship availability across different sectors affects career readiness.

Through an examination of students' perspectives, the study aims to answer the following questions:

1. To what extent do higher education students in Oman feel their workplace internships contributed to the development of specific skills?
2. How do internship duration and supervision quality correlate with students' overall satisfaction with their internship experience?
3. What are the main challenges students face during their internship programs?
4. How does the availability of internships in different sectors impact students' satisfaction and career readiness?

The findings provide valuable insights into the effectiveness of internship programs in preparing students for the workforce. Key results highlight the extent to which students perceive internships as beneficial, common challenges they face, and factors that contribute to overall satisfaction. Additionally, the study examines sectoral differences in internship opportunities and their impact on students' confidence in entering the job market. These results offer recommendations for educators, policymakers, and employers to enhance the structure and quality of internship programs in Oman.

Discussion

Demographic Frequency Table

Table 1: Demographic Characteristics of Respondents

Table 1: Demographic Profile of Students

Measure	Item	Frequency	Percentage (%)	Valid Percent
Internship Duration	1 month	65	54.2	54.2
	2 months	15	12.5	12.5
	More than 2 months	40	33.3	33.3
	Total	120	100.0	100.0
Gender	Male	39	32.5	32.5
	Female	81	67.5	67.5
	Total	120	100	100
Field of Study	Computer Science	8	6.67	6.67
	Engineering	7	5.83	5.83
	Business	69	57.50	57.50
	Finance	17	14.17	14.17
	science	1	0.83	0.83
	Healthcare	2	1.67	1.67
	Law	3	2.50	2.50
	Education	3	2.50	2.50
	other	10	8.33	8.33
	Total	120	100.0	100.0
Internship Sector	Oil & Gas	12	10	10
	Tourism	5	4.16	4.16
	Logistic	6	5	5
	Marketing	12	10	10
	Automotive	2	1.67	1.67
	Construction	1	0.86	0.86
	Service	7	5.83	5.83
	Government	23	19.16	19.16
	Telecommunication	5	4.16	4.16
	Banking	14	11.66	11.66
	Engineering	4	3.33	3.33
	Trading	8	6.67	6.67
	other	21	17.5	17.5
Total		120	100	100

Previous research (Engelbrecht 2019; Grotta et al., 2013) has shown that long placements, which typically last for six months, significantly raise the chances of finding employment within six months

of graduation. Besides, the placements have been shown to ease the transition of young people into the labor market (O'Higgins and Pinedo Caro 2021). However, the research survey findings indicate that the majority of the students (54.2%) did 1-month, 33.3% did more than 2 months of internships, and 12.5% of them did 2-month internships.

This dissemination indicates short internships as most frequent for students. Hora et al. 2020) explain that short internships can offer general exposure to workplaces but can restrict the depth of learning and the potential for applying theoretical concepts. Longer internships, in comparison, promote greater skill acquisition and professional development (P. Maertz et al., 2014). The high incidence of shorter internships could indicate institutional policy or industry demands for short-duration placement.

The gender split is female, with 67.5% of the respondents being female and 32.5% male. This corresponds with more recent studies showing increased women's take-up of higher education and internships, particularly in business studies (Gamboa et al., 2021).

Gender differences in STEM internships remain, with technical fields such as technology and engineering being mostly taken up by male students (Xu & Lastrapes, 2022). The imbalances could be a manifestation of common social trends where female students take up business and finance but men dominate technical studies. Gender mix, fields of study, and sector are in accordance with findings published in earlier research: Business and finance internships are highly accessible, whereas technical disciplines such as engineering have fewer participation (Hora et al., 2020). Gender representation is reflective of general education participation trends, with more female representation in non-STEM fields (Saraiva et al., 2025).

The discipline most covered is Business (57.5%), followed by Finance (14.17%) and Computer Science (6.67%). These are less covered: Engineering (5.83%), Healthcare (1.67%), and Law (2.5%).

This is as stated by Dlouhy & Froidevaux, (2024). who noted that business internships are more prevalent due to the cross-cutting employment opportunities by industry. The low participation in the STEM field can be attributed to lower employment opportunities as well as the scale of technical skills required (Liu et al., 2020).

Government (19.16%) is the most favored place of internship followed by Banking (11.66%), Oil & Gas (10%), and Marketing (10%). In contrast, Automotive (1.67%) and Construction (0.86%) are industries with the minimum number of participants. Government internship popularity is an indicator of national moves to encourage public sector involvement in workforce development (Al-Rawajfah et al., 2021). Evidence by Chen, et al. (2020) supports that students prefer established sectors like finance and oil & gas due to enhanced resources and systematic training sessions. Low participation in specialized fields like construction could indicate fewer available internships and specialized skill needs (Young & Foo, 2024). Programs funded by the government are also becoming a serious source of internship opportunity, especially in countries where youth employability is prioritized (Al-Abri, 2024).

The demographic variables display a liking for shorter internships, female predominance, and business-oriented fields of study. The trends ratify both local and global trends, with the business and government sectors offering the largest number of internship places. Further research may explore the impact of internship duration on long-term employability and the gender gap in the technical disciplines.

Table 2

Correlations

	Personal & Professional Growth	Risk Management	Internship Duration	Challenges of Internship
IP	**.864****	**-.264****	**.703****	**.626****

****. Correlation is significant at the 0.01 level (2-tailed).**

Analysis of the Correspondence between Internship Programmes (IV) and Dependent Variables (DVs). The correlation analysis indicates strong correlations among Internship Programs (IP) and the four dependent variables: Personal & Professional Growth, Risk Management, Internship Duration, and Challenges of Internship, with all of them being statistically significant at the 0.01 level (2-tailed).

Internship Programs and Personal & Professional Growth

According to the survey results, there is a strong and positive relationship correlation observed between **Internship Programs and Personal & Professional Growth (r = .864, p < .01)**, suggesting a robust and direct relationship. Well-conducted internship programs thus play a vital role in the participants' growth, both personally and professionally. And, such a result is consistent with prior literature on the importance of internships in developing practical skills, career readiness, and employability (Gault et al., 2010; Jackson, 2018). Gault et al. (2010) emphasize that students who engage in extensive internship programming experience significant gains in their professional competencies and career self-efficacy. Jackson (2018a) likewise notes the role of internship in developing skills.

It was a very strong positive correlation (r =. 864, p <. Recent research confirms this link between IP and Personal & Professional Growth (Barnard, 2020; Barnard, 2022) (01). A study by Jerez Gomez et al. Internships help build specific skill sets, and competencies, which is what employers look for while recruiting (2023). Similarly, Al-Abri et al. (2024) found that internships greatly support individual and professional development through skill-building.

Internship Programs and Risk Management

There is a negative but statistically significant correlation between Internship Programs and Risk Management (r = -. 264, p <. 01). However, as the quality and structure of internship programs improve, a decrease in perceived risks associated with workplace uncertainties is observed. This conclusion echoes the results of earlier studies (Rothman, 2007; Narayanan et al., 2010), which demonstrate that internships can equip students with deeper industry knowledge and risk avoidance mechanisms, considerably lessening their anxieties about future employability. Internship experience provides an authentic context for learning (Rothman, 2007) and an opportunity to apply academic theory to practice.

Internship Programs and Internship Duration

There is also a very high positive relationship between Internship Programs and Internship Duration (r =.703, p <.01), which suggests that more extensive and longer internship programs are associated with greater positive outcomes. This relationship is in line with studies (D'Abate et al., 2009; Surridge (2009) that suggest the internship duration matters in order to achieve optimum learning outcomes and professional development. Moreover, D'Abate et al. (2009) argue that longer internships allow for greater industry exposure and more skills learned, which results in increased overall career preparedness.

Surridge,

Internship Programs and Challenges of Internship

Moderate positive correlation exists between Internship Programs and Challenges of Internship ($r = .626$, $p < .01$), implying that internships are both good and have some challenges. This finding is consistent with previous research (Zhao & Liden, 2011; Nunley et al., 2016) reporting the dual nature of internships in which students face practical and psychological challenges even as they gain from them. Zhao and Liden (2011) emphasize that while internships lead to career success, they also make enormous demands and stress, particularly when expectations are unclear or support systems are lacking.

The findings indicate that Internship Programs have a positive correlation with Personal & Professional Growth, Internship Duration, and Challenges of Internship, but a negative correlation with Risk Management. These results are in line with previous studies that emphasize the multidimensionality of the impact of internship experiences on students' academic, professional, and psychological growth. Future research should explore the mechanism of these associations and how to optimize internship programs to gain benefits without risks.

internship experiences.

The Analysis of Interviews

In our research, we conducted structured interviews in the fall semester of 2024 with ten higher education students from different private institutions in Oman who are aged 21 to 26 years old. These ten respondents had diverse work experiences and were at different specializations. In a sector-wide review, students said they developed skills relevant to their respective fields. Students 1 said, “I worked in a marketing department where I worked on communication skills and learned to work in teams.” This emphasizes on teamwork and communication skills in performing our duties in a professional environment. Student 4 said, "I learned organizational and leadership skills through project work and team lead." Such an experience is beneficial to students in that it allows them to apply what they learn in the classroom in real-world settings (Gault, Leach, Duey, 2010).

However, a noticeable gap exists in skill learning through supervision quality. Student 5, who received low supervision, felt frustrated: "I didn't receive adequate guidance. Though I gained coding skills, I don't feel prepared for the IT employment market." This confirms Deschaine (2016), who mentions that effective mentorship and feedback in internships are key factors to skill learning and career development. Quality of supervision was one of the most significant areas that affected general satisfaction. High-quality supervisors, such as Student 3, who asserted, "My supervisor was excellent in providing guidance," indicated strong satisfaction and higher career readiness. Conversely, inadequate supervision was a source of dissatisfaction, as seen in Student 10's comment: "I didn't feel like I got enough feedback from my supervisor." Narayanan, Olk, and Fukami (2010) confirm that the degree of supervisor involvement is positively linked to internship satisfaction and later career confidence.

Medium quality supervision students (for instance, Student 6, who said, “The supervision was not as close as I would have liked”) experienced uncertainty. Although they emphasized beneficial learning opportunities, inconsistent feedback hindered their advancements. This is supported by Sweitzer and King (2013), who note that partial guidance may foster uncertainty and discourage the development of professional identity during internships.

Career readiness varies greatly with regard to supervision and the nature of the tasks completed. Student 8 told us, "I worked on technical design projects. There was excellent supervision,

and much of my experience was 'hands-on,' which will be beneficial for my career direction.

I am extremely prepared to venture out into engineering careers. This supports guidelines from Nunamaker (2020), which state that hands-on education and active mentorship make students job-ready. At the same time, students who do not receive sufficient supervisor attention, such as Student 5 who complained of being "unprepared for the IT job market," indicate that inadequate supervision holds back the maximization of the internship effectiveness. This finding is consistent with the argument by Knouse and Fontenot (2008), which argues that formal mentorship plays a central role in maximizing internship opportunities.

Regarding the business sector, students (1, 4 and 9) acquired organizational, leadership, and communication skills. Good quality of supervisors made them highly ready, and moderate supervision made them moderately ready.

In the IT industry, there was a divergence in experience. Student 2, under medium control, responded, “I gained much from the practical experience and feel partly prepared for a career in IT,” whereas student 5, under low control, complained and was unprepared.

Regarding other disciplines (Engineer, Finance, and Marketing), the students in these courses reported increased preparedness and satisfaction with proper supervision (Students 7, 8 and 6). This confirms scholarly evidence citing learning environments as contributions to technical aptitude (Abaya. et al., 2021).

Despite the benefits, students also experienced some significant issues in their internships, including poor supervision, inadequate feedback, and role confusion. Student 5, for example, lamented: "I didn't get enough guidance. Although I learned some coding skills, I don't think I'm ready for the IT job market." This corroborates the research of Parker et al. (2018), who note that poor supervision will likely lead to reduced motivation and skill development.

Student 10 similarity experienced frustration within the healthcare environment, the stated “I did not feel like I was getting enough feedback from my supervisor.” Lack of guidance, according to Garavan and Murphy (2001), will make people feel unsure and impact learning outcomes. Inadequate supervisor interaction negatively influences students’ ability to translate theoretical knowledge into practical skills (Maertz et al.,2014).

The level of responsibility assigned to students was another common issue. While Student 7 was assisted by being provided with significant work—"My supervisor gave me a lot of responsibility and provided regular feedback"—other students, and particularly those in the IT sector, complained of being underutilized. Student 2 stated, “I improved my technical skills but sometimes felt the supervision was lacking,” suggesting that additional formal supervision was necessary. Research carried out by Binder et al. (2015) confirms that structured internships with well-established posts result in better learning and career advancement.

Additionally, workplace dynamics were difficult for some students. Student 9 said, "My supervisor was okay, but I didn't feel as much guidance as I would have liked." This refers to the importance of internship programs having formal mentoring systems (Jackson, 2015). Workplace culture and integration problems can influence internship satisfaction and career readiness (Knouse & Fontenot, 2008).

In conclusion, the interviews analysis underscores the high stakes of supervisory quality in shaping the education impacts of internships in workplaces. Effective mentoring facilitates skill attainment, increase job satisfaction, and enhances career preparation. Inadequate supervision limits these advantages and can lead to dissatisfaction and unreadiness. Findings are paralleled in prior research, placing a premium on

systematic internship with active supervision in order to promote learning and preparation for the profession.

Implications

The results of this research have important implications for colleges and universities, employers, and policy makers concerned with optimizing academic returns on workplace internships. The strong relationship of internship satisfaction with skill acquisition, especially in communication and technical skills, indicates that universities and schools need to emphasize the development of greater quality internship experiences that afford structured, skill-enhancing experiences. Furthermore, the significance of quality supervision indicates the necessity to offer training to mentors and supervisors to offer quality guidance, constructive feedback, and career-related advice.

Furthermore, the results show that the skill acquisition is significantly impacted by the internship duration. Because of the greater possibility of working on complex projects, longer internships could be mostly beneficial for the progress of technical competencies. However, shorter internships could also be useful for the development of communication skills, and hence could be a viable option for students looking to develop their interpersonal skills in shorter time frames.

Both policymakers and educational institutions must work together with industry stakeholders to develop internship models that are flexible enough to accommodate the different needs of students. Also, incorporating internship experience as a required or highly suggested course may help increase the preparedness of students in their desired careers.

Conclusion & Limitations

Although this research offers helpful findings regarding the advantages, issues, and learning implications of workplace internships for students in higher education, several limitations need to be mentioned. To begin with, the study is based primarily on the self-reported information of the participants, which could be influenced by biases like social desirability or incorrect self-evaluation of competencies. Second, though the research focuses on the significance of internship length, it ignores other influential factors, for example, the nature of the assignments provided, the prevailing organizational culture, or the students' past experiences. These elements can significantly influence the overall internship experience and its effect on skill development. Finally, the study's focus on internship supervision quality may be to the detriment of other aspects of mentorship, such as the supply of resources, networking, and formalized feedback.

Future research can also more thoroughly investigate the differential effect of internship characteristics, including supervision quality and length, on various academic disciplines. Additionally, future research can include supervisor ratings and objective skill measures to yield an even more well-rounded picture. Lastly, future research can be improved through more in-depth investigation of these variables to identify the role that internships play in career readiness.

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