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Article

# Sustainable Strategies for Innovative Cooperation in Human Resources Training between Business Sector and Universities through Internship Programs from the Pre to Post COVID Period

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**Abstract:** Internships can foster educational alliances between industry (business environment) and academic institutions, which can facilitate both flexibility and accelerated innovation. The purpose of this research is to search for the factors that determine HRD through the implementation of the Internship program among the students of Democritus University of Thrace and reveal the correlation between the factors. Also, this paper investigated the impact of the COVID-19 Eras on Human Resource Development (HRD) Factors and finally, investigated the correlation between the two variables "Recruitment in the specialization" and "Covid Eras". The sample of the research consisted of 1398 students of DUTH who implemented Internships during the academic years 2015-2016 to 2021-2022. A questionnaire with 60 variables was created for data collection. A random sampling method was applied to collect the sample. From the results of the survey, ten factors were extracted for human resource training that explained 75.512% of the total variance and for each one, Cronbach's Alpha reliability was tested, which was high. In detail, the factors revealed were Learning Outcomes, Efficacy, Emotional Commitment, Satisfaction, Participation, Empowerment, Role Ambiguity, Role Conflict, Supervisor and Collaboration. From the results of the study, it was evident that HR development - training is a multi-dimensional concept and is a necessary condition for the competitiveness of the firms. Training can help to improve the flexibility of the firm, but also to motivate the staff by implementing multidisciplinary training programs. Overall, internship programs are beneficial for students to develop a wide range of skills, as the hands-on experience obtained enhances and supplements the theoretical learning from educational institutions.

**Keywords:** internship; training; development; human resources; university; covid

## 1. Introduction

Innovation benefits both the service provider and customers, improves the provider's competitive advantage and is based on technology or systematic methods. Service innovation is increasingly seen as a set of criteria for a business's competitive strategy. Its primary objective is to assist businesses by improving their service capabilities during the planning stages of service criteria development. The introduction of innovative ideas has spurred additional research and development in services, leading to new methods of delivering benefits, creating new service concepts, or developing new business models. This progress is achieved through continuous operational

improvements, advancements in technology, performance enhancements, investment in human resources, and better customer experience management.

There have been extensive discussions on the role of human resource management in modern organisations. Justifying the actual contribution of human resource management in the business arena has been a key concern for many academics and researchers; hence, numerous empirical studies had been conducted which examined the impact of different human resource management practices on the overall performance of businesses [1].

The innovation process does not conclude with the adoption of new or modified technologies. Considerable effort is needed during their implementation and efficient utilization, enabling the business to develop the necessary skills for successful innovation integration [2]. In order to achieve optimal operation of new or significantly improved services, some changes in the organization of employees and their training must also take place. The successful implementation of innovations is influenced by nine factors: market selection, strategic human resource management, employee training, market responsiveness, empowerment, behavioral evaluation, marketing engagement, employee commitment, and quality of materials [3].

An attempt was made by [4] emphasized the importance of empowering human resources to address the complexity and flexible nature of Industry 4.0. Managing quality solely through technology without considering human skills can be futile. Quality Management 4.0 is an integrated, coherent, and interconnected system where reliability and efficiency depend on each component. Quality production cannot be achieved without a quality workforce.

Businesses, in their effort to ensure the administrative support of employee training activities and to motivate trainees to learn in order to be able to successfully transfer the knowledge they have acquired to their job-related tasks, have set themselves the goal of becoming 'training organisations' [5]. Internship programs enable organizations to provide this by utilising the cooperation between the Universities and the market. The same author states that Training and Development "T&D" programs can improve the competitiveness of a firm as they directly increase the value of its intangible assets i.e., create business asset in human capital, customer capital, social capital and intellectual capital. An 'organization' has the potential to gain a competitive advantage over other businesses as through human resource training it can transform its available resources into capabilities that are unique for the business itself [6]. According to [7], training that aims at developing the organizations' human capital (by transmitting techniques, skills and values through which individuals give meaning to their work and fit into the organization) typically focuses on the complete long-term development of employees competences. Allocating money for educational purposes, however, should be seen as an investment to achieve better results both in the short and long term and not as a cost to the business's operations [8].

The close cooperation of these gives impetus to the creation of a common interest, ambition and goal for a shared vision [9] in any well-organised internship. Internships are often seen to be mutually beneficial to the intern, the educational institution and industry [10,11]. A study in the US [12] conducted among 160 companies offering internships to undergraduate and graduate students concluded that student maturity, initiative and responsibility can influence performance, which in turn leads to firm satisfaction.

The purpose of this research was to determine the factors that determine HRD through the implementation of the Internship program among the students of Democritus University of Thrace and explored the correlation between the factors. Also, this paper revealed the impact of the COVID-19 Eras on Human Resource Development (HRD) Factors and finally, investigated the correlation between the two variables "Recruitment in the specialization" and "Covid Eras".

## **2. Literature Review**

### *2.1. Internship*

Strengthening innovation and knowledge transfer is a high priority in EU policy and is at the heart of European programs and funding. In this new environment, universities and public research

organisations play a key role in knowledge transfer and innovation outcomes, because they integrate physical and institutional channels to transform basic research results into pre-competitive results ready for industrial exploitation. The development of more effective principles and mechanisms to promote the university-market-industry link becomes necessary to implement knowledge transfer and develop innovative solutions.

Student internships are crucial for producing well-trained graduates for future employment, offering essential exposure to the real-world industry. Additionally, employers use internship programs to identify and recruit potential candidates for their organizations [13]. The internship gives students the opportunity to work for a short period of time in a real working environment. They have the opportunity to transfer their scientific knowledge to real-life conditions and apply it. They are also given the opportunity to enhance their scientific knowledge with professional skills and qualifications. Through the internship, students come into contact with the modern business and working environment and are prepared for their smooth integration and integration after receiving their degree. At the same time it provides the opportunity to network with institutions and business executives. It is a fact that during their studies, the opportunity to gain professional experience is particularly useful for their later professional career and really contributes to the smooth start of their professional career [14].

Internships, as a form of workplace training, are an important component of many professional programs [15]. It helps students bridge the gap between the academic educational process and its practical application by exposing them to real-life situations [16]. The definition of an internship varies based on the group of participating students (interns), the duration, the type of employment, their ultimate goals, and the context in which the internships are organized [17].

For educational institutions, internships can strengthen ties with industry and help students better understand business and industry expectations. For industry, internships serve as a foundation for producing future candidates for the workforce [18]. A well-organized internship will help students make a smooth transition from educational institution to industry [19].

## *2.2. Human Resources Training and Development*

Training is the organized learning process that aims to acquire knowledge and skills for a specific purpose. According to [20], the term human resource development has a broader meaning. Specifically, they state that human resource development is a learning process with a longer time horizon whose goal is for employees to acquire knowledge and develop competencies that can be used in the future, in tasks that require more responsibility and initiative. Development therefore has a human-centered character, since the whole learning process aims to develop the personality of the employee so that in the future he or she will be able to cope with situations, take initiative and make decisions that are not only related to the technical dimension of the tasks but also to solving organizational issues.

Given the importance of enhancing human resource skills in Industry 4.0, companies should adopt strategies to boost their workforce's competitiveness. Focusing solely on process automation will result in financial savings, but integrating strategies that leverage human resources' capacities and talents, along with technology, can lead to substantial business growth and goal achievement. Managers must consistently and carefully monitor digital developments and changes that enhance production efficiency and improve various functions, including human resource management. By enhancing human resource skills and capacity, companies can promote process innovation, reflecting a strong "innovation orientation" [21]. Nowadays economic crisis has cover the world due to wars and uncertainty, so organizations pay attention to their human assets for growth and excellence and specifically to employees who have strong determination and willpower [22].

Another research of [23] stresses that human resource training is a necessary condition for the competitiveness of firms. Even the smartest strategy can be fruitless if the firm is not supported by adequate personnel, placed in the right job positions. The human resources training is an investment for the company because it focuses on the development of their competencies and skills, achieving the enhancement of their productivity and leading to the reduction of the cost of the work produced.

In straightforward terms, businesses that have a positive view towards training their employees see it as an investment that will bring them future benefits. As a result, the advantages that come from investing in their staff outweigh the costs involved [24].

**Hypothesis 1:** There is a strong positive correlation between the factors of HRD: Learning Outcomes, Efficiency, Emotional Commitment, Satisfaction, Participation, Empowerment, Role Ambiguity, Role Conflict, Supervisor and Cooperation.

**Hypothesis 2:** Covid Eras have significant impact on the evaluation of the factors of HRD.

**Hypothesis 3:** There is a significant correlation between the two variables "Recruitment in the specialization" and "Covid Eras".

### 3. Materials and Methods

For this research 1398 students of the Democritus University of Thrace in Greece (507 men, 889 women, 2 other) completed the questionnaire. They participated as beneficiaries in the framework of the Program "Internship of students of DUTH", for the academic years 2015-2016 to 2021-2022, implemented with the funding of the National Strategic Reference Framework (NSRF) 2014-2020.

The questionnaire was developed taking into account the questionnaires from the surveys of [25-27] as well as additional questions concerning the training of human resources and consequently in the development of future business executives. The questionnaire consists of 71 questions divided into three sections.

A. The first section concerns the information on personal data and the consent/assent of the research participant (questions 1- open-ended and 2- closed-ended).

B. The second section is about the demographic characteristics of the beneficiaries and the characteristics of the internship they implemented, with eight questions (questions from 3-10 closed-ended except the 8th one which is open-ended), related to gender, age, year of study they belonged to when they implemented the internship, the department of study, the academic year in which the internship was implemented, the name of the host organization, the duration of the internship and finally a question about their continued employment at the host organization after the end of the internship.

C. The third section concerns the evaluation of the internship program and consists of 60 questions divided to subsections related to the following concepts

- Learning Outcomes
- Efficiency
- Emotional Commitment
- Satisfaction
- Participation
- Empowerment
- Role Ambiguity
- Role Conflict
- Supervisor
- Cooperation

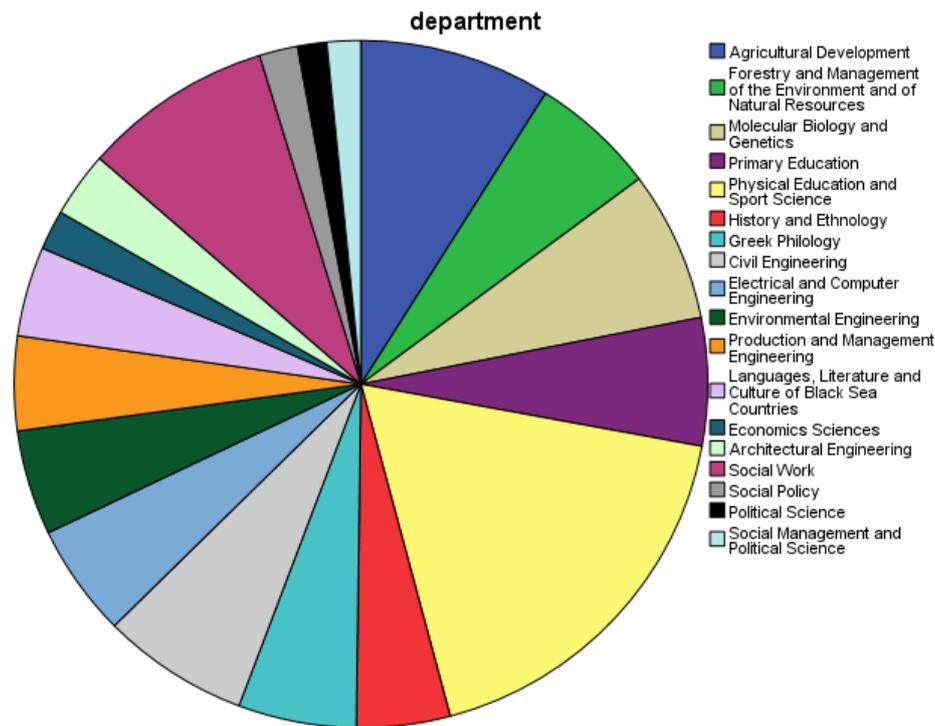
After the completion of their internship, students received an email to evaluate the internship program. The research took place until October 2022.

For statistical analysis, it was used frequency analysis and descriptive analysis to determine the mean scores, standard deviations and percentages. Also, for the control of the validity of the questionnaire, it was used PCA and varimax rotation. For the reliability test, Cronbach's coefficient  $\alpha$  was calculated. Furthermore, to correlate the relationship between the factors and the degree of dependence between them, the Pearson correlation coefficient was calculated. Crosstabs analysis was applied to describe in more detail both the variables "Recruitment in the specialization" and "Covid Eras" and chi-Square test was used for the correlation between them. Finally, to investigate whether

covid-19 period has an effect on students' perception of HRD factors, one-way ANOVA was also applied.

#### 4. Results

In the survey there was representation of students from all 18 departments of DUTH that participated in the Internship Program that period as shown in Figure 1 below.



**Figure 1.** The representation at the research of 18 departments of DUTH that participated in the Internship Program.

The duration of the internship varies for each department and includes a period of one to three months as shown in Table 1.

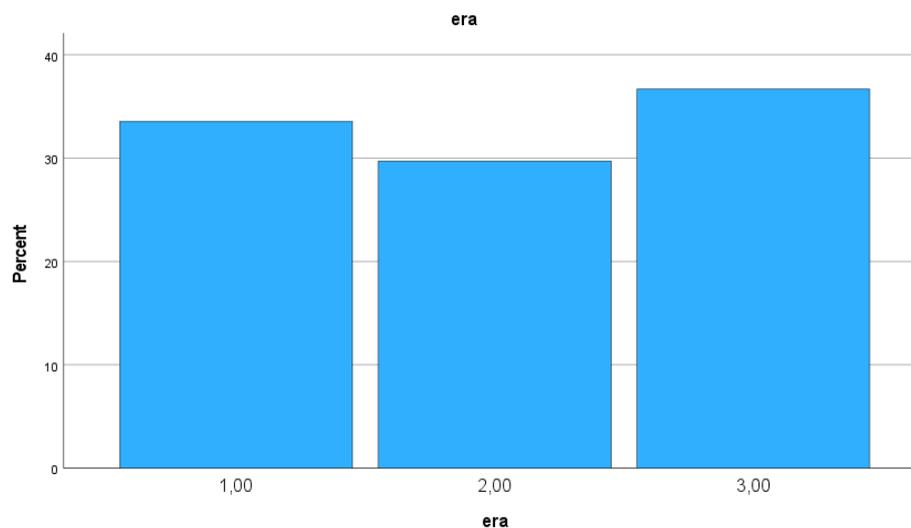
**Table 1.** Internship duration.

		Frequency	Percentage
Duration	1 month	286	20,5
	2 months	885	63,3
	3 months	227	16,2
Total		1398	100,0

Given that during the collection of the results, the pandemic due to the spread of covid-19 intervened, the need for further separation arose. Specifically, the compute command was applied in order to create an additional variable which was defined as "covid-19 era" and includes three periods of students that implemented internship, a) the pre-covid era with the academic years 2015-2018 (era 1), b) the covid era 2019-2020 (era 2) and c) the post-covid era 2021-2022 (era 3). The results via the compute command are shown in the table covid-19 era and are listed below in Table 2 and Figure 2.

**Table 2.** Covid-19 eras.

		Frequency	Percentage	Valid percentage
Temporal areas	Era 1	463	33,1	33,6
	Era 2	410	29,3	29,7
	Era 3	506	36,2	36,7
	Total	1379	98,6	100,0
Missing values		20	1,4	
Total		1398	100,0	

**Figure 2.** Pre-covid, covid and post-covid Eras of students that implemented internship.

For the control of the validity of the questionnaire, principal components analysis method and the varimax rotation were applied for the 60 variables. The sample consisted of 1398 students. Principal component analysis revealed 10 factors that explained 73.512% of the total variance (Table 3). The names of the factors were given based on the human resources training literature and the researchers' construction design. The survey used those factors with eigenvalues above 1 (Guttman - Kaiser). The smallest loading used to divide the questions into the factors was 0.40. Loadings are the weight of each variable on each factor (correlation index) and provide basic information for the interpretation of the factors. The higher the loading the easier the interpretation of the factor. For the reliability test, Cronbach's coefficient  $\alpha$  was calculated for each factor and in total. Cronbach's coefficient  $\alpha$  for the 60 questions of the scale was found to be high ( $\alpha = .969$ ).

**Table 3.** PCA, number of variables, factor's loadings, eigenvalue, variance, Cronbach  $\alpha$ , mean score and standard deviation of each factor.

FACTORS	N.	Loadings	Eigenvalue	Variance %	$\alpha$	Factor	Factor
	Items					Mean	St.D.
Learning outcomes	17	.739	12.430	20.717	.963	3.699	.929
		.729					
		.810					
		.744					
		.784					

		.772					
		.715					
		.670					
		.649					
		.611					
		.598					
		.528					
		.719					
		.689					
		.658					
		.692					
		.559					
<b>Efficiency</b>	7	.609	5.146	8.577	.936	3.672	0.952
		.688					
		.683					
		.640					
		.705					
		.662					
		.510					
<b>Emotional commitment</b>	6	.776	4.579	7.631	.944	3.783	1.068
		.796					
		.770					
		.877					
		.883					
		.760					
<b>Satisfaction</b>	8	.553	4.334	7.224	.958	3.875	1.039
		.535					
		.616					
		.689					
		.648					
		.676					
		.681					
		.588					
<b>Participation</b>	6	.566	4.306	7.177	.876	3.317	0.893
		.706					
		.774					
		.811					
		.807					
		.739					
<b>Empowerment</b>	5	.739	3.553	5.921	.876	3.981	0.841
		.792					
		.848					

		.843					
		.825					
<b>Role Ambiguity</b>	3	.773	2.703	4.506	.915	3.629	1.093
		.766					
		.712					
<b>Role Conflict</b>	3	.870	2.589	4.315	.853	1.994	1.027
		.890					
		.821					
<b>Supervisor</b>	3	.805	2.523	4.205	.934	3.789	1.170
		.817					
		.832					
<b>Cooperation</b>	2	.857	1.944	3.240	.921	3.438	1.260
		.855					

To correlate the relationship between the factors and the degree of dependence between them, the Pearson correlation coefficient was calculated which is used to show the linear relationship between the variables. Range of Correlation Coefficient Type of Relationship between variables:

- From -1,0 to -0,7 Strong negative relationship
- From -0,0 to -0,3 Weak negative relationship
- From -0,3 to +0,3 Minimal or no relationship
- From +0,3 to +0,7 Weak positive relationship
- From +0,7 to +1,0 Strong positive relationship

Table 4 summarizes the range of the correlation coefficient that may exist between the variables and the conclusions drawn about the strength and direction of correlation. According to the data in Table, it appears that there is a strong positive correlation between the factor Learning Outcomes and Satisfaction with a correlation coefficient of 0.808\*\*, the factor Learning Outcomes and Efficiency with a correlation coefficient of 0.774\*\* and the factor Efficiency and Satisfaction with a correlation coefficient of 0.702\*\*. There is also a weak positive pairwise relationship between the participation factor and the supervisor (0.357\*\*), collaboration (0.336\*\*), learning outcomes (0.520\*\*), ambiguity (0.382\*\*), satisfaction (0.448\*\*) and efficiency (0.535\*\*) factors. The Table 4 shows that the correlations are statistically significant ( $p < 0.005$ ).

**Table 4.** Pearson Correlation for the 10 factors.

	Participation	Supervisor	Cooperation	Empowerment	Learning Outcomes	Role Ambiguity	Role Conflict	Satisfaction	Emotional Commitment	Efficiency
<b>Participation</b>	1,0	0,357**	0,336**	0,112**	0,520**	0,382**	-0,114*	0,448**	0,288**	0,535**
<b>Supervisor</b>	0357**	1,0	0,449**	0,150**	0,564**	0,495**	-0,207*	0,552**	0,298**	0,526**

<b>Cooperati on</b>	0,336**	0,449**	1,0	0,132**	0,446**	0,424**	- 0,109*	0,437**	0,254**	0,433**
<b>Empower ment</b>	0,112**	0,150**	0,132**	1,0	0,168**	0,104**	0,038	0,158**	0,149**	0,175**
<b>Learning Outcome s</b>	0,520**	0,564**	0,446**	0,168**	1,0	0,627**	- 0,127*	0,808**	0,571**	0,774**
<b>Role Ambiguit y</b>	0,382**	0,495**	0,424**	0,104**	0,627**	1,0	- 0,251*	0,628**	0,347**	0,570**
<b>Role Conflict</b>	-0,114**	-0,207**	-0,109**	0,038	-0,127**	-0,251**	1,0	-0,277**	-0,081**	-0,125**
<b>Satisfacti on</b>	0,448**	0,552**	0,437**	0,158**	0,808**	0,628**	- 0,277*	1,0	0,542**	0,702**
<b>Emotiona l Commit ment</b>	0,288**	0,298**	0,254**	0,149**	0,571**	0,347**	- 0,081*	0,542**	1,0	0,531**
<b>Efficienc y</b>	0,535**	0,526**	0,433**	0,175**	0,774**	0,570**	- 0,125*	0,702**	0,531**	1,0

Sig.(2 tailed) 0.005.

The crosstabs analysis was applied to describe in more detail both the variables "Recruitment in the specialization" and "Covid Eras". The results as shown in Table 5 below show that the variable "recruitment in the specialization" does not show variations during the pandemic era.

**Table 5.** Percentages and number of students recruited in their specialization in each of the three Covid Eras.

<b>Era</b>	<b>Number</b>	<b>% Recruitment in the specialization</b>	<b>% Covid Era</b>
<b>Pre-covid Era</b>	211	35,5%	45,7%
<b>Covid Era</b>	166	27,9%	43%
<b>Post-covid Era</b>	217	36,5%	42,9%
<b>Total students hired</b>	594	100%	43,9%

The results of the Chi-Square test showed that there is no statistically significant correlation between the two variables "Recruitment in the specialization" and "Covid Eras" and Table 6 below demonstrates this.

**Table 6.** Chi-Square Tests "Recruitment in the specialization" and "Covid Eras".

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	,925 <sup>a</sup>	2	,630
Likelihood Ratio	,924	2	,630
Linear-by-Linear Association	,743	1	,389
N of Valid Cases	1354		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 169,34.

To investigate whether covid-19 period has an effect on students' perception of HRD factors, one-way ANOVA was also applied which revealed statistically significant differences. The time period of covid-19 was divided into three levels. Pre-covid Era with the academic years 2015-2018 (Era 1), Covid Era 2019-2020 (Era 2) and Post-covid Era 2021-2022 (Era 3). The results are presented below:

- Participation  $F_{(2,1366)} = 59.155$ ,  $p < 0.05$
- Supervisor  $F_{(2,1375)} = 59.291$ ,  $p < 0.05$
- Cooperation  $F_{(2,1366)} = 48.876$ ,  $p < 0.05$
- Empowerment  $F_{(2,1368)} = 17.564$ ,  $p < 0.05$
- Learning Outcomes  $F_{(2,1350)} = 64.179$ ,  $p < 0.05$
- Role Ambiguity  $F_{(2,1372)} = 25.762$ ,  $p < 0.05$
- Role Conflict  $F_{(2,1374)} = 6.611$ ,  $p < 0.05$
- Satisfaction  $F_{(2,1365)} = 27.583$ ,  $p < 0.05$
- Emotional Commitment  $F_{(2,1361)} = 6.772$ ,  $p < 0.05$  και
- Efficiency  $F_{(2,1357)} = 75.040$ ,  $p < 0.05$

In order to identify the differences between the levels of the independent variable covid Era a Post Hoc analysis using Scheffe was followed and it was revealed that in almost all levels and all factors there are statistically significant differences which are presented in the table below (Table 7). The only exceptions that do not show statistically significant differences between levels and factors are the following:

- For the Participation factor between the 2nd and 3rd level.
- For the Supervisor factor between the 2nd and 3rd level.
- For the Enhance factor between 2nd and 3rd level.
- For the Learning Outcomes factor between the 2nd and 3rd level.
- For the factor Role Ambiguity between the 2nd and 3rd level.
- For the Role Conflict factor between the 1st and 3rd level.
- For the Satisfaction factor between the 2nd and 3rd level.
- For the Emotional Commitment factor between the 2nd and 3rd level.
- For the Efficiency factor between the 2nd and 3rd level.

Therefore, the covid-19 variable can influence students' perception of HRD factors with Mean Scores shown in detail:

**Table 7.** Factors, Eras and mean score.

		Mean	Std. Deviation
Participation	1,00	2,9689	,97120
	2,00	3,4656	,89640
	3,00	3,5248	,69218
Supervisor	1,00	3,3362	1,28502

	2,00	3,9812	1,11069
	3,00	4,0646	,94782
Cooperation	1,00	3,0250	1,28801
	2,00	3,4888	1,28636
	3,00	3,7966	1,07927
Empowerment	1,00	4,1524	,83895
	2,00	3,8224	,89409
	3,00	3,9470	,76831
Learning_Outcomes	1,00	3,3276	,99401
	2,00	3,8200	,89681
	3,00	3,9493	,76863
Role Ambiguity	1,00	3,3413	1,18716
	2,00	3,7849	1,05109
	3,00	3,7787	,97684
Role Conflict	1,00	2,0557	,99542
	2,00	1,8350	1,04106
	3,00	2,0527	1,02760
Satisfaction	1,00	3,5929	1,13201
	2,00	3,9903	1,03791
	3,00	4,0484	,88252
Emotional Commitment	1,00	3,6286	1,15645
	2,00	3,8283	1,09499
	3,00	3,8689	,94807
Efficiency	1,00	3,2525	1,05173
	2,00	3,8727	,87310
	3,00	3,8992	,77052

## 5. Discussion and Conclusions

The research results indicated that staff development and training are vital for the competitiveness of businesses. Based on these findings, organizations should prioritize the improvement of Training and Development programs. The study identified ten crucial factors that companies and organizations need to consider for internships to be integrated into their human resources training. The research also discovered that students who were offered a job were more content with their internships compared to those who were not. This finding aligns with the research referenced as [28]. Satisfaction was found to be influenced by the trainees' perception of receiving career information during their studies and internships, which in turn affected their performance. When intrinsically motivated and satisfied, trainees exhibited more confidence in the industry and were more willing to pursue a career, as also outlined in the research referenced as [29].

The findings indicate that the supervisor's role is crucial in the work environment. Supervisors should share their experiences with student interns to enhance the learning process. Mentoring is important in the internship program. Students who have supervisors as mentors in internship programs tend to have better experiences. Mentors can help students navigate the organization and learn valuable skills for their career aspirations. This was also supported by research from [30], who suggested that organizations should establish appropriate working hours for student interns and provide fair salaries.

Our research indicates that institutions should ensure that they provide adequate training programs to enhance student satisfaction during internships as potential employees. Similarly, businesses should have innovative policies to support new employees. On-job Training can increase employee satisfaction and commitment as it stimulates personal development and self-esteem based on the organization. This finding aligns with the research of [31]. The quality of learning during internships significantly impacts overall satisfaction. Students can expect to improve their learning outcomes and job readiness, thus providing valuable human resources to the industry, in line with the research of [29]. According to the study by [32], internships help interns become more responsible, confident, dedicated, and adaptive, and assist in updating technical skills. Interns demonstrate dedication to their work during internships and enhance their skills and technical knowledge.

Empowerment of trainees can lead to better learning outcomes and improved preparation for their intended careers, thus providing valuable human resources to the industry. Role ambiguity helps measure the clarity of the work assigned to trainees. Clear expectations benefit trainees with well-defined programs and specific tasks, as opposed to those in open-ended programs with less-defined objectives [33,34]. Regression analysis in [35] shows that HRM practices, such as selection, participation, and employee empowerment, have a significant and positive effect on employee job performance. The study suggests that training moderates the impact of HRM practices on employees' performance and that the sustainability of HRM practices greatly affects job performance. The research in [36] enhances managers' understanding of the role of empowerment-focused HRM practices. Lastly, stakeholder cooperation is an important factor highlighted in the research. Both the industry and academia should collaborate to create a comprehensive internship program for students, as indicated in the research [37].

The results revealed that Covid Eras have significant impact on the evaluation of the factors of HRD (Pre-covid Era, covid Era, post-covid Era). During covid period, the higher education faced difficulties in training and internship programs. Students had to adjust to a new and difficult situation and businesses adopted new methods of distance services. In accordance with reference [38], it is suggested that blended teaching (b-teaching) is beneficial for developing internship competencies. It is important to align the activities developed during internships with the evaluated skills. Blended methods could include: a) On Job training, suggested methods: demonstration, coaching, mentoring, controlled internship, job briefing, cross training. b) Off Job Training (at the university), proposed methods: role plays, induction training, case studies, simulation training, detailed outline of an internship course, lecture-discussions, and written assignments. c) Distance learning (E-learning) for deeper understanding in teaching and combining academic and labor market knowledge.

## 6. Implications

The internship program provides students with a better understanding of how it enhances their skills and helps them secure placement. This aligns with the findings of a study by [39], which can assist institutions in creating effective internship programs that benefit all involved parties. Another study by [40] identified curriculum requirements as a crucial aspect of hotel internship experiences, reflecting the responsibilities of educational institutions in shaping these experiences. The study emphasized that internship achievements and curriculum requirements significantly influence internship satisfaction and career intention. Since today's trainees are tomorrow's employees, organizations can benefit from their feedback and use it to improve their HR processes. Therefore, educational institutions and supervisors should strive to enhance their curricula by consulting relevant studies and collaborating with companies. These changes are vital mainly due to the economic downturn, high unemployment rates and new forms of employment such as rotational and part-time work. Occupational integration is defined as the process of stabilization in the employment of people who have never participated in the active population, it is considered a change of situations in the context of an individual process of transition from an initial to a final situation. The level of unemployment combined with additional macroeconomic conditions is a key determinant of integration in accordance with the research [41].

## 7. Limitations and Future Research

The study could be replicated in the future using more diverse samples from various universities or countries to expand the results. In conclusion, fostering innovative cooperation between the business sector and universities through internship programs can enhance the understanding of innovation dynamics and facilitate strategic HR training and development.

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