

# Training and Development Along with HR Analytics in Health Science Institute to Optimize the Employee Attrition Rate

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**ABSTRACT-** Development and training are two sides of the same coin. The management to meet its deadline, both techniques should be merged. Determining the needs of people in terms of both quantity and kind is the goal of personnel planning. Both current and future needs shall be taken in consideration when determining the number of people. Effective personnel planning also depends on the kind of individual required. This study's objective is to evaluate and comprehend the efficacy of training and development across the university's departments and institutes. Recruitment and selection, succession planning, training and development, employee attrition, and workforce mobility are just a few of the critical areas that HR analytics address in effective workforce planning. HR dashboards play a crucial role by rapidly gathering and presenting data, offering actionable insights that improve decision-making. HR professionals may quickly see trends and make informed decisions to meet future workforce demands by arranging data in an easily accessible style. This makes it possible for HR departments to develop proactive retention plans, ensuring that businesses have the best people at every stage of the employee lifecycle. It provides instant access to employee performance data and enables data-informed decision-making, HR analytics is crucial in modern firms. HR analytics offer crucial information and help businesses evaluate the performance of both individual workers and the company. Organizations shall make well-informed decisions that improve future performance, raise employee engagement, and reduce attrition rates by using past data and performance results.

**Keywords:** Training, Career development, Attrition rate and HR analytics.

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## 1. INTRODUCTION

Organizational growth, or better decision-making and problem-solving, is facilitated by training and development. It facilitates comprehension and implementation of organizational policies. Leadership abilities, motivation, loyalty, improved attitudes, and other traits that successful employees and managers typically exhibit are all aided by training and development. The concepts of training and development are closely related and are intended to support the company's goals while simultaneously boosting employee productivity and efficiency. This essay will illustrate the numerous distinctions between training and development, despite their general similarities. An essential component of a new hire's orientation and induction is training. He receives training so that he may comprehend his duties and obligations and learn how to carry out the activities assigned to him effectively and effortlessly. A new hire cannot execute his

work to a suitable level until after a short training period. Training focuses on quick development because it increases an employee's productivity for the company. Employee development is a continuous activity that extends well beyond training. Training is a crucial part of the orientation and induction process for new hires. He undergoes training in order to understand his responsibilities and duties and to learn how to complete the tasks given to him efficiently and with ease. Only after a brief training period can a new hire perform his work to a satisfactory level. Quick development is the main objective of training since it boosts employee productivity for the business. Employee development goes much beyond training and is an ongoing process. A manager may occasionally assign a worker a task that contributes to his growth but may not be part of his job description. Therefore, it is evident that while it is simple to observe the observable results of a training program, it is more challenging to measure the advantages that the business derives from employee development because it truly aids in the personal growth of employees. To put it briefly: Training is an event, whereas development is a process. Training concentrates on the company's short-term objectives, whereas development focuses on the individual employee. The benefits of development are far more subtle than the benefits of training, which can be quantified in terms of the organization's gains. Recruitment and selection, succession planning, training and development, employee attrition, and workforce mobility are just a few of the critical areas that HR analytics address in effective workforce planning (Odom & Hyams-Ssekasi, 2023). In particular, HR dashboards play a crucial role by rapidly

gathering and presenting data, offering actionable insights that improve decision-making. HR professionals may quickly see trends and make informed decisions to meet future workforce demands by arranging data in an easily accessible style. For example, looking at past data might reveal the key elements affecting employee churn. This makes it possible for HR departments to develop proactive retention plans, ensuring that businesses have the best people at every stage of the employee lifecycle (Jain & Jain, 2020).

Because it provides instant access to employee performance data and enables data-informed decision-making, HR analytics is crucial in modern firms. Organizations can gain a comprehensive and accurate picture of employee performance through interactive and aesthetically pleasing graphs by implementing HR analytics solutions like dashboards. This makes it possible for management and HR teams to see trends, assess productivity, and identify areas that require attention quickly. According to Pandya (2023), HR analytics offer crucial information and help businesses evaluate the performance of both individual workers and the company as a whole. Organizations can make well-informed decisions that improve future performance, raise employee engagement, and reduce attrition rates by using past data and performance results.

## 2. LITERATURE REVIEW

Training is an organized procedure by which people learn knowledge and acquire skills for a definite purpose. The purpose of training is basically to bridge the gap between job requirements and the present competence of an employee. Training is aimed at improving the behaviour and performance of a person. It is a never-ending or continuous process. Development involves preparing the individual for a future job and growth of the individual in all respects. The development of complements training because human resource can exert their full possible performance only when the learning process goes far beyond the simple routine. Training and development promote optimum utilization of human resources, reduces the cost, improve production and morale and leads to organizational excellence. Saba et al. (2015) studied the impact of training and development on employees' performance and productivity and overall organizational performance in Pakistan. The main objective is to find out the positive outcomes of training and development, enhancement of training and the need for training and development of an organization. A strong optimistic relation has found between training and development and employees' performance and productivity. Abeba et al. (2015) highlighted that training and development on employee's performance and effectiveness. Data was collected among 100 employees at university various institutes and departments. Findings revealed a significant relationship between training and development, employee performance and effectiveness. Finally, it was concluded that the training and development activities of the institutes and departments of University have positive output and outcomes. Studies in Indian Place focused on the impact of job insecurity, the role of ambiguity, self-monitoring and perceived fairness on individual readiness for change. It is revealed that perceived fairness of previous change is an important factor affecting individual readiness for change

and insisted that managers should give special attention to this. Francis Boadu et al. (2014) revealed that management and employees faced peculiar problems during training and development exercises. Management complained regarding funds whilst employees' expresses concern about the time pre allotted to various training and development programmes. Kavitha Rani et al. (2014) analyzed the training and development in public sector.

The descriptive type and based on primary data collected through a questionnaire filled by the employees. This paper explained some suggestions to enhance training and development strategies, and cope up with the existing challenges in the wake of severe competition in the training and development. The findings of the study suggested that training and development were inevitable and unavoidable in any sector.

**Sandeep Yadav et.al (2018)** The significance of employing data mining techniques to predict employee attrition trends has been the main focus of their research on "Early Prediction of Employee Attrition using Data Mining Techniques." For their study on employee attrition prediction, researchers have included various organizational departments and the IT industry. The following variables were used by the authors to measure the reasons for attrition: department, time spent in the company (years), name of the employee, number of projects handled, average monthly hours, job satisfaction level, last evaluation, absences, promotion & rewards during the previous five years, compensation, and salary level. The study Hot Encoding procedure is used to steely several departments such as IT, Accounting, Management, HR, Product Management, Sales, Support, and Technical. Techniques like Data Pre-processing, Featuring Engineering, Data Modelling, and Comparison are applied. The Hot Programming Method's classification results are obtained using the SVM Model and Logistic Regression. The findings of these studies demonstrate that employee attrition can affect a company in a variety of areas, including reputation, earnings, market position, and time and financial costs. Therefore, if the company can take preventive action throughout the hiring process, it would help lower attrition. It was recognized that there are other reasons for employee attrition besides pay, professional advancement, and promotions. The business must also take other factors into account while hiring. And by adopting this idea, the company may create accurate and reliable models that can lower the cost of hiring and retaining excellent workers and make it possible to determine the employee attrition position by employing the right data extraction techniques.

**Setiawan (2020)** Setiawan et.al done the research on "HR Analytics-Employee Attrition using Logistic Regression." To analyze employee attrition, researchers employed logistic regression. The authors use R Studio for data preparation, logistic regression, data mixing, empirical data analysis, model evaluation, and visualization in order to gain a deeper understanding. Data collection and business awareness, data pre-management, experimental data analysis, model selection and preparation, and model analysis and evaluation are the five phases that the authors developed for their study. The number of companies operated, total work experience, years with

current supervisor, frequent professional travel, poor work environment satisfaction, department HR, marital status (married or separated), early logout, working overtime, and poor job satisfaction are some of the variables used to study employee attrition.

Among the primary justifications were the employee and the company. The study's retention statistics make it abundantly evident that the business must improve its human resources department by evaluating the working environment, employee workload, job happiness, and manager-leader-subordinate communication.

**Christopher Boomhower (2018)** "Employee Attrition-What makes an Employee Quit." With particular reference to civil workers, the study aims to comprehend the fundamental causes of employee resignation. The authors looked at publicly accessible data from IBM, the Bureau of Labor Statistics, and the Office of Personnel Management.

The researchers applied the principal Component Analysis methodology for exploring the reasons of attrition. The findings of the study, that pay scale is one of the major reasons for quitting the job. The significant highlights of the study show that, significant reduction in chances of an employee resigning as his or her service length increases, chances increase or decrease dependent on employee age, and chances of leaving are low if the employee is in the specification pay plan.

**Bradley E. Wright (2010)** With the aid of a model, the research aims to assess the relationship between attrition and job attraction-selection. The public sector was taken into consideration by the writers, who also looked at the motivation of public service among lawyers in the public and private sectors. The other is to comprehend the impact of PSM and how it affects the choice of personnel sector.

The American Bar Association (ABA) collected the data in order to analyze the employment patterns of attorneys. In order to test the job attraction, selection, and attrition model, the authors created a survey with participants and panel respondent demographics by sector of employment. Researchers came to the conclusion that there is a complex relationship between PSM and sector employment. These findings do not entirely support either mechanism's chances that employee reward preferences will align with the goals each sector supports, even though the data used in this study does not rule out the possibility that these answers are the result of adaptation rather than magnetism-selection processes.

**Eric W. MacIntosh (2009)** The current study aims to investigate the relationship between organizational culture, work satisfaction, and intention to leave the fitness industry. To assess opinions on corporate culture in the fitness sector, "The Cultural Index for Fitness Organizations (CIFO)" was created. Researchers interviewed several administrators, executives, and seasoned employees of fitness companies in order to comprehend the importance of these enterprises. A seven-point lid kart scale was used to administer the questionnaire and gather the results.

Eleven dimensions were considered in the study: the existence of an organization, successful members, relationships, reinforcement, creativity, marketing-sales, organizational dependability, ability and health, upkeep, work ethic, and environment. Eight elements that define common aspects of culture in this context were identified using experimental factor analysis: organizational existence, service-gear, service systems, sales, validation, staff competency, ambience, and relationships among personnel. Path analysis was used to create organizational culture proportions, work satisfaction, and intention to quit. According to the study's findings, there was a 14.3% difference in job satisfaction and a 50.3% difference in the intention to leave the company. It was evident that the fitness business has a complex organizational culture with multiple characteristics.

**Romila Singh (2013)** The Social Cognitive Career Theory Model was employed by the authors to forecast the intentions of female employees to leave their jobs. Since they may be important for professional development, the SCCT model is used to forecast the relationship between outcome opportunities, chosen career goals, successful actions, benefits, and self-ability. Researchers discovered the movement of women's representatives in engineering and the physical sciences by applying STEM theory to gain a deeper understanding. They also learned about their deliberate decline from the profession and post-degree.

Workplace attitudes, the connection between occupational attitudes and social and self-intellectual influences, Self-ability will facilitate the relationship between progressive opportunities at work and job position or job attitudes. Job Attitudes and Self-ability positively correlated with each other, Job attitudes should be related with Outcome opportunities or expectations. Outcome expectations will facilitate the correlation between growth opportunities at employment and job attitudes. Self-ability and outcome prospects will build the correlation between growth opportunities at workplace and job attitudes.

**Kashyap Bhuva (2018)** The study on Machine Learning Techniques for Forecasting the Employee Attrition Rate was conducted by Kashyap Bhuva et al. (2018). Researchers took into account the IT organization and gathered a sample from IBM USA's employee database. Based on an analytics project workflow, the current study examined the following segments: (1) Raw Dataset (2) Information Processing (3) Scaling and Feature Selection (4) Modeling (5) Model Assessment and Adjustment (6) Deployment & Monitoring Index Terms: Support Vector System, Random Forest, Lasso, Logistic Failure, Judgmental Structure, and Straight Discriminant Analysis The analytical instruments employed in the study are known as analytical procedures. utilizing a variety of algorithms and combinations of many target criteria, researchers forecasted the attrition of IBM, USA data utilizing 35 data mining techniques and machine learning algorithms. Since staff attrition is one of the largest business problems, the authors discovered why data mining can be used to anticipate employee turnover intelligently and effectively. The results of the prediction using data mining approaches with similar datasets



reveal that, if exactness is the desired parameter, the Linear Discriminant Analytical result outperforms the others, followed by the Logistic Regression Model for a given dataset.

**Louis Lévy-Garboua (2008)** The German Socioeconomic Panel's wealth maximization hypothesis of quitting behavior was applied by the researchers in their study on job satisfaction and resignations (1985-2003). According to the authors, one of the most significant factors for workers with extraordinarily high levels of experience and competency is job happiness. The Wealth Maximization model, employee surprises, job satisfaction, and voluntary retirement were all taken into consideration by the researchers. An employee's propensity to leave or resign from the company must be compared to the existing values of future results and the outside opportunities in comparison to the current position, according to the authors' explanation of the reasons for quitting.

The findings demonstrated that economists may readily extract or discover a wealth of hidden data or evidence using a straightforward subjective survey question regarding work structure and satisfaction level. Instead of employing any conventional techniques, a company or industry might actually acquire a prospect to develop them with this survey.

**Rupesh Khare (2019)** In their study on Employee Attrition Risk Assessment using Logistic Regression Analysis, Rupesh Khare et al. used the logistic regression technique to forecast the likelihood of employee attrition in a company that relies on the demographic information of its divided workforce. Based on a real-world project, researchers conducted the study and gathered demographic data from both current and former employees. The creators of the questionnaire assess the likelihood of resignation among present employees. The authors separated the overall risk of attrition into two sections. (1) Risk by Demographics and (2) Risk by Behavior. The current study primarily uses logistic regression to forecast employee attrition risk based on demographic data. A suitable retention strategy has also been planned out, with an emphasis on the risk categories that have been established.

**Resham Sundrani (2019):** the work done her research on "Study on Employee Attrition & Retention Exploring the Issues and Challenges". The study looked into the significant financial and intangible expenses associated with losing knowledgeable and skilled workers. According to the researcher, the firm and its employee-related policies ought to represent the finest HR practices. The HR strategy ought to go beyond providing transactional support to being a partner in the business plan of the company.

### 3. OBJECTIVE OF THE STUDY

The research work is carried out for the purpose of achieving certain basic objectives such as:

1. To study the existing training practices along with determine the ability of the participants in the training program to perform jobs for which they were trained.

2. To test the effectiveness of training efforts undertaken and to identify the errors and deficiencies in the current training practices.

3. To suggest better ways and techniques avoid deficiencies if any in the existing training practices.

4. To comprehend the role that HR analytics play in important performance areas and how HR analytics may be used to reduce attrition.

5. To be familiar with the different HR analytical tools that businesses use & determine the benefits and difficulties associated with applying HR analytics in a corporate environment.

6. To look at actual cases where HR analytics tools have been used.

### 4. MATERIAL AND METHOD

**Data Collection Methods** - The primary data is collected from the employees of university of various institutes and departments through the questionnaire. Secondary Data The secondary data is collected from internal sources as well as an external source. Internal source of data is collected through newspapers, magazines etc. The external source of data is collected from the internet and from the textbooks. Sampling in this study, the data is collected from the University considering the nature and extent of the study and with the time constraint, a sample size of 100 employees of university has taken.

One of the most widely used HR analytics tools is R. For statistical analysis and visualization, it is most well-known. Large data collections can be explored using it. such as having the capacity to examine and purify millions of rows of data. Python is an extremely helpful programming language that can be used in place of R. This programming language is mostly used by IT businesses for their analytical work.

The most fundamental HR analytics tool is Excel. We use this tool a lot for any kind of graphical and numerical computations. This tool is also widely used by HR teams and all organizations. For all staff, Excel is the most user-friendly tool. Tableau and Power BI are very similar in that they both enable the collection and visualization of several data sources. This program, which was developed in 2003 for research conducted at Stanford University, has established a similar position globally. In the present situation, it is among the top business intelligence tools.

One of the most popular HR analytics tools in the social sciences is SPSS. This program is incredibly easy to use; even those without a strong background in statistics can use it to examine data. Anyone who want to evaluate data can do it with ease because it is incredibly user-friendly. This study made a sincere effort to comprehend the importance of HR analytics in order to provide the organization with excellent performance. The first section identifies the research gap by reviewing the prior work completed by current authors. The second section emphasized the research's study goals. The input method and output structure of effective factors for lowering attrition in the organization are explained in the last section.

## 5. RESULT AND DISCUSSION

100 participants were involved in Questionnaire Survey - Project on Training & Development.

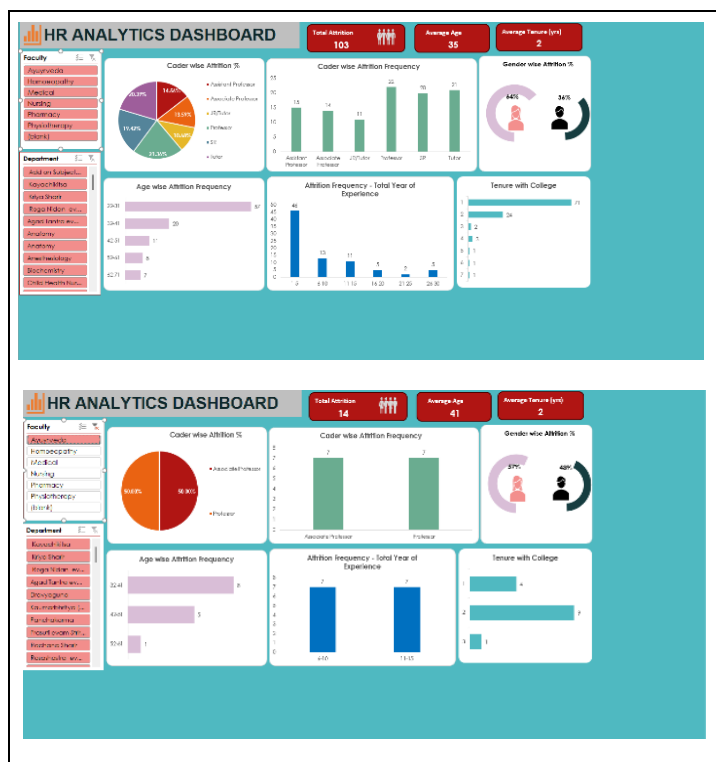
The gender wise analysis 52% females and 48% males are involved in studies which represent that female staffs are marginal more employed rather the male in the teaching professional. The age group analysis states that 49% staffs are between age group of 25 to 35 yrs, 37% staffs are between age group of 35 to 45 yrs, 11% staffs are above 45 yrs and 3% staffs are below 25 yrs. The analysis state that below 25 yrs and above 45 yrs are to attend the training, and fulfill the objectives of development at university. The analysis represented that 43% are & 1 to 3 yrs, 31% above 3 yrs, 14% are 7 to 12 months and 12% are 0 to 6 months. The results represent 0 to 6 months and 7 to 12 months are still in process of training and development sand shall be achieved by conducting the program on regular time intervals. The data analysis interprets that medical college (Ayurveda/Homoeopathy/Nursing/Physiotherapy and Medicine) -Participation of staffs is 65% wherein training is regular conducted for UG and PG program. While technical college (Engineering & IT&CS) and professional degree college (Pharmacy & Design) -Participation of staffs is 20%wherein training to be conducted for UG and PG program. While for social science, Law and Education program -Participation of staffs is 15%, so overall UGC Regulations along with BCI and NCTE Regulations shall be implemented at the faculty level to understand the regulations in line with T & E scheme.

About 86% teaching staffs in three categories (Medical/ Technical/ Social Science) and 14 % non-teaching staffs overall were included in the survey, so that proper evaluation to be carried out. It was found that each medical council the training and development are held on regular interval, while for Technical and Social Science group proper training is required for teaching staff about council requirements and UGC implementation time to time. Non-Teaching staff shall be given training for manner and procedure at the University and Institute level to be followed. It is required to groom them about the dress up sense and other manner to be followed by each of them.

In all 82 % staff states that training is held regular for newly joined employee and about 18% of which (14%) non- teaching and 04 % teaching staff need to be identified and proper training to be conducted. While different Head of the Cell, Chairperson of the various committee, University officers and Management personnel shall be introduced by the newly joined staff and they shall know about their Institute and University well.

The training & development program motivated 91% staff and remaining 9% staffs are from non -teaching staff wherein training program shall be based on the cadre (non- teaching) separately. A maximum of 100% of the employees responded that the training method adopted by the organization is effective and there are no drawbacks in them. 88% of the employees are satisfied with the training arrangements and amenities provided by the organization for the purpose of training. Employees

responded that their training program is of sufficient duration. training sessions were well organized by their organization training personnel communication is good in their training sessions. The majority of the employees are satisfied with the training personnel in their organization. On questioning the problem, they faced during the training session's majority of above 95% of the respondents replied that they did not face any problems during the training programs conducted by their organizations. The majority of the respondents feel good about the physical set up of the training. The employees feel that the training programs conducted or attended help to be more comfortable and convenient in their working environment. The employees responded that the need for training is important. Technical knowledge and skills are acquired through training. On the level of importance given by the organization in training their employees 90% strongly agree that the organization gives more importance, there is no disagreement the employees feel that on the job training method is more effective than off the job training methods. About 12% of the employees gave a negative response to attending such training programs once again.



In all 06 Institutes we included in the studies (Ayurveda/Homoeopathy/Medical/Nursing/Pharmacy/Physiotherapy), wherein total 417 are involved in teaching and other skill activity at institute level. Out of which 103 resigned and left the organization. The overall attrition rate is 27% which is overall high at the health Science institute because the central government is in process of improving the health care system by implementing various program under various scheme. About 15 Assistant Professor: 14 Associate Professor: 22 Professor: JR/ SR at medical college: 11/20 & Nursing Tutor :21. A policy shall be designed and implemented at the Institute level depending on the pattern going for salary scale in 4-5 institute nearby institute. The average age is 35 yrs to the upper limit

old age i.e. 70 age Female: 64% and 36% male are the count of teaching in ERP system. Later the individual institute shall carry out to understand the pattern of recruitment and process along with the factors of retention to be maintain stability at the institute level. The institute analysis and interpretation of result is done inline the council regulations time to time to maintain the standard of Education in constituent college /institute.

**Faculty of Ayurveda-** 14 department , it is observed that 07 each cadre Associate Professor & Professor in total ( 14) left the organization/– Clinical branch- Kayachikitsa (00) / Panchakarma (01) / Shalya Tantra (00) /Shalakya Tantra (02)/ Prasuti evam Striroga (02)/ Kaumarbhritya (Balaroga) (02)/ Swasthavritta and Yoga (00)/ Agad Tantra evam Vidhi Vaidyaka (01)-08 resigned. Pre-clinical subjects-Rachana Sharir (00)/ Samhita and Siddhanta (02)/ Rasashastra evam Bhaishajya Kalpana (01)/ Dravyaguna (01) / Kriya Sharir (01)/ Roga Nidan evam Vikriti vigyana (01) -06 resigned. The average age limit for staff is 41 yrs and tenure is 2 yrs (57% Female & 43% male)

As per the NCISM Regulation 2016 the total requirement for teaching staff for the UG and PG program is 55 staff out of which 14 resigned so the attrition rate is 25% which is too high compared and the cadre of Associate Professor and professor resigning is not a good factor for development of each department in the field of Academic, Research and skill modules. NCISM 2024 Regulation yet to be implemented the requirement of teaching staff is 61and the if same practice is followed the attrition rate is 22% which is again too high. HR section along with the HoI recommendation shall be taken in various factors of HRM for staff retention. Retention refers to an organization's ability to keep its employees for an extended period. It's the process of implementing strategies to reduce employee turnover and encourage employees to stay with the organization. This includes creating a positive work environment, offering competitive compensation and benefits, and providing opportunities for growth and development.



**Faculty of Homoeopathy-** 13 department, it is observed that Assistant Professor (03) Associate Professor (01) & Professor (06) in total (10) left the organization. In the following Department Community Medicine (00), Forensic Medicine & Toxicology (00), Gyn & Obgy (01), Materia Medica (00), Homoeopathy Pharmacy (00), Human Anatomy (01), Physiology & Biochemistry (01), Pathology & Microbiology (01), Practice of Medicine (00), Repertory & case taking (02), Surgery (01) and Organo of Medicine (01).The average age limit for staff is 43 yrs and tenure is 3 yrs ( 50% Female & 50% male)

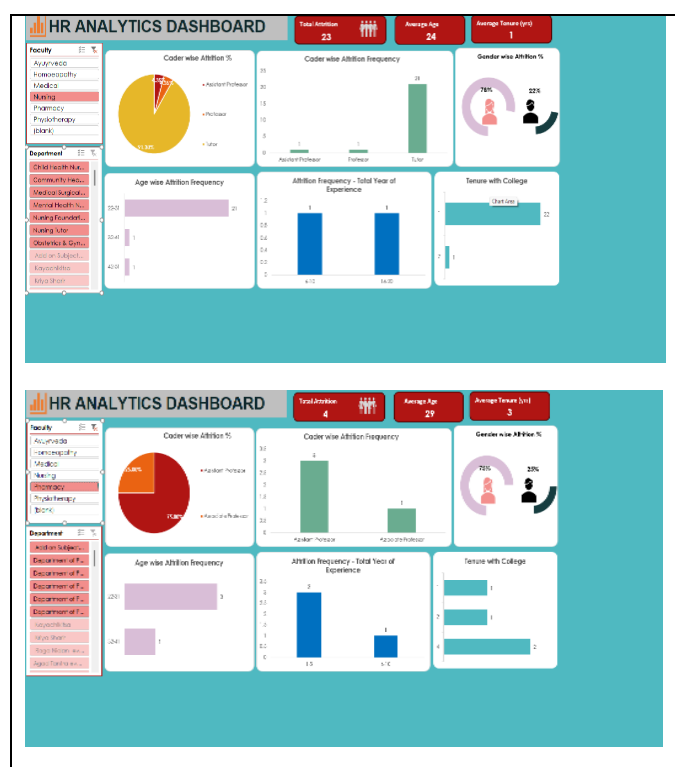
As per the CCH Regulation 2013/NCH 2018 the total requirement for teaching staff for the UG and PG program is 37 staff out of which 10 resigned so the attrition rate is 27% which is too high compared and the cadre of Associate Professor and Professor resigning is not a good factor for development of each department in the field of Academic, Research and skill modules. NCH 2024 Regulation the requirement of teaching staff is 49 and the if same practice is followed the attrition rate is 20% which is again too high. HR section along with the HoI recommendation shall be taken in various factors of HRM for staff retention. Retention refers to an organization's ability to keep its employees for an extended period. It's the process of implementing strategies to reduce employee turnover and encourage employees to stay with the organization. This includes creating a positive work environment, offering competitive compensation and benefits, and providing opportunities for growth and development. The clinical subjects- FM/ Obgy/Surgery/ PM/OM, Allied Subjects- Anatomy, Physiology & Biochemistry/Pathology & Microbiology, Homoeopathic subjects: MM/ Hom. Pharmacy/ RR & case taking is staff requirement is in more demand as the studies carried out.

**Faculty of Medicine-** 20 department , it is observed that 08 Assistant Professor/ 05 Associate Professor & Professor (08) along with JR Tutor (11) & SR Tutor (20) in total ( 52) left the organization/–Department of Anatomy (01) ( age 70 yrs), Physiology (00) , Biochemistry (00), Microbiology (01) (age 30 yrs) Pathology (00), Pharmacology (00), General Medicine (04) age 51 yrs, General Surgery ((05) age 49 yrs, Obgy & Gyn (03) age 51 yes, Pediatrics (00), Community Medicine (00), Dentistry (00), Ophthalmology(00), Orthopedics (00), Otolaryngology (00), Anesthesiology (03) age 56 yrs, Dermatology (01) age 33 yrs , Forensic Medicine (00), Radio-diagnosis (03) age 54 , Jr tutor (11) age 27 yrs and Sr Tutor (20) age 28 yrs. The average age limit for staff is 37 yrs and tenure is 1-2 yrs (62 % Female & 38 % male)

As per the NMC Regulation 2023 the total requirement for teaching staff for the UG program is 204 (114 teaching staff: 32 Tut/Demo: 58 Sr Tutor) staff out of which 52 resigned so the attrition rate is 26 % which is too high compared and the cadre of Associate Professor and Professor resigning is not a good factors for development of each department in the field of Academic, Research and skill modules- 150 seats . NMC 2023 Regulation for the requirement of staff is 253 for 200 seats (142 teaching staff: 40 Tut/Demo: 71 Sr Tutor) and the if same practice is followed the attrition rate is 21% which is again too



high. HR section along with the HoI recommendation shall be taken in various factors of HRM for staff retention. Retention refers to an organization's ability to keep its employees for an extended period. It's the process of implementing strategies to reduce employee turnover and encourage employees to stay with the organization. This includes creating a positive work environment, offering competitive compensation and benefits, and providing opportunities for growth and development. This year the PG program is commencing so the cadre ratio goes more because Professor number matter, because more the Professor and infra structural facilities the PG seats shall be allotted which need to be taken into consideration ( Maximum of 4 seats per Professor) .

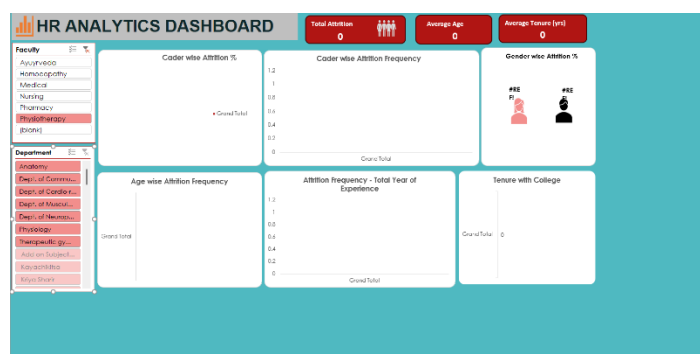


**Faculty of Nursing-** 05 department, it is observed that 01 Assistant Professor & Professor (01) along with nursing tutor 21 in total (23) left the organization. The child Health Nursing (00), Community Health Nursing (00), Medical Surgical Nursing (00), Mental Health Nursing (01) age 43 yrs tenure 7 yrs, OBGYN Nursing (01) 37 yrs tenure 1year , Nursing Tutor (21) 22 years and tenure 1 year. The average age limit for staff is 24 yrs and tenure is 1-2 yrs (78 % Female & 22 % male). As per the INC Regulation the total requirement for teaching staff for the Diploma, UG & PG program is 75 staff out of which 23 resigned so the attrition rate is 30 % which is too high compared and the cadre of Assistant Professor, Professor and Nursing Tutor resigning is not a good factor for development of each department in the field of Academic, Research and skill modules. HR section along with the HoI recommendation shall be taken in various factors of HRM for staff retention. Retention refers to an organization's ability to keep its employees for an extended period. It's the process of implementing strategies to reduce employee turnover and encourage employees to stay with the organization. This includes creating a positive work

environment, offering competitive compensation and benefits, and providing opportunities for growth and development.

**Faculty of Pharmacy** - 05 department, it is observed that 04 Assistant Professor & Associate Professor (01) out of which 05 left the organization. Pharm Chemistry (03) age 29 tenure 2 yrs. Pharmaceutics (01) 30 age 4 years tenure, Pharmacognosy (00), Pharmacology (01) age 30 tenure 4 years and Pharmacy practice & related subject (00). The average age limit for staff is 24 yrs and tenure is 3yrs (75 % Female & 25 % male).

As per the PCI Regulation the total requirement for teaching staff for the Diploma, UG & PG program is 34 staff out of which 05 resigned so the attrition rate is 16 % which is too high compared and the cadre of Assistant Professor and Associate Professor resigning is not a good factor for development of each department in the field of Academic, Research and skill modules. HR section along with the HoI recommendation shall be taken in various factors of HRM for staff retention. Retention refers to an organization's ability to keep its employees for an extended period. It's the process of implementing strategies to reduce employee turnover and encourage employees to stay with the organization. This includes creating a positive work environment, offering competitive compensation and benefits, and providing opportunities for growth and development.



**Faculty of Physiotherapy** - 06 department, the institute is 2 years old institute established in 2023 and nobody have resigned, but the study was carried out as it falls under the allied Health Science program.

## 6. CONCLUSION

A study on the training programmes of the University has been done in order to find out how effective are the training methods, and how University satisfies the employees in its training measures. This purpose of the study is being fulfilled by taking a survey among the employees of university regarding their level of satisfaction and the positive impacts through training. The findings of the study have revealed that, University has satisfied its employees through varied forms of training inputs and the employees have found to be more competitive in their jobs. But still many improvements should be made and training should be made frequent. New methods should be adopted to make it lively. The study has been successful in its objectives of finding the effectiveness of training in the University various institutes and departments.

HR dashboards are now a crucial component of HR analytics, enabling data-driven decision-making that improves corporate outcomes and workforce management. This application helps HR teams to make informed decisions that address workforce challenges, expedite procedures, and enhance employee involvement by compiling and showing critical employee data. Important insights that support organizational success are provided by HR analytics. Organizations may identify top achievers, identify performance impediments, and more effectively allocate resources by looking at employee performance data, which eventually boosts productivity and improves business outcomes, claim Lawler and Boudreau (2019). An essential component of HR analytics, one of the performance analytics tools helps businesses gain a comprehensive understanding of performance indicators for both teams and individuals. By making it possible to identify areas that require improvement, these tools encourage more targeted interventions and tactics. By using the information gleaned from these assessments, companies can align their personnel management plans with corporate goals (Nurbaiti, 2021), guaranteeing that the required skills are developed in the most in-demand fields, which boosts productivity and expansion overall.

The capacity of HR dashboards to provide meaningful insights into employee attrition trends is among their most noteworthy outcomes. Patterns and trends can be found by using data visualization to analyze important variables including tenure, job role, age, and gender (Oswald et al., 2019). HR professionals can pinpoint specific factors that contribute to employee churn thanks to these insights. Trends may indicate, for instance, that younger employees with less experience leave their jobs more frequently, prompting HR to implement targeted programs like career advancement plans or mentorship programs.

These tactics encourage a more devoted and steady staff while also improving retention. The capacity of HR dashboards to support effective workforce planning is another important potential. HR departments can proactively identify skill and knowledge gaps before they affect organizational performance by looking at employee demographics and attrition trends. An aging workforce, for example, may suggest that succession planning or targeted hiring is necessary to prepare for impending retirements.

HR dashboards provide clear, current data that empowers businesses to take proactive steps, such as developing internal talent or carrying out strategic hiring initiatives, ensuring a staff ready for the future. According to Huang et al. (2023), HR procedures tailored to the characteristics of certain employees can enhance the person-organization fit and promote higher levels of engagement and alignment.

When recommending effective tactics that complement corporate objectives, the potential outcomes of HR analytics and HR dashboards are crucial. Organizations can gain deeper insights into the factors affecting employee behavior, performance, and retention by utilizing HR analytics. On the other hand, HR dashboards provide HR teams with instant

access to actionable data through real-time visualizations. This makes it possible for decision-makers to keep an eye on key indicators like staff engagement, performance, and attrition and quickly adjust plans as necessary.

For instance, if a dashboard reveals a sharp decline in employee engagement, HR can investigate the underlying causes and implement engagement programs to address the issue before it leads to higher attrition rates. Dashboards also enable HR to monitor the effectiveness of ongoing strategies, encouraging continuous optimization and improvement. Organizations may identify areas for improvement and design targeted, data-driven initiatives that promote growth, increase employee happiness, and foster a culture of continuous development by integrating HR analytics with dashboards.

## REFERENCES

- [1] Saba Habib (2015) "Impact of Training and Development on Employees' Performance and Productivity: A Case Study of Pakistan" *European Journal of Business and Social Sciences*, ISSN: 2235-767X Vol.4 No.08 November 2015.
- [2] Abeba (2015) "The Impact of Training and Development on Employee Performance and Effectiveness: A Case Study of District Five Administration Office, Bole Sub-City, Addis Ababa, Ethiopia" *Journal of Human Resource and Sustainability Studies*, 3, 188-202
- [3] Asli Goksoy (2014) "The Impact of Job Insecurity, Role Ambiguity, Self-Monitoring and Perceived Fairness of Previous Change on Individual Readiness for Change" *Journal of Global Strategic Management* [11] 2012, June.
- [4] Francis (2014) "Training and Development: A Tool for Employee Performance in the District Assemblies in Ghana" *IJER*, Vol.2 No.5 May 2014.
- [5] Kavitha Rani (2014) "A Study on Training and Development in Public Sector Banks" *IJMSSR*, Vol.3, No.1, January 2014.
- [6] M. K. Andersen (2017). Analytics for human capital: a convoluted path. *People and Performance: Journal of Organizational Effectiveness*, 4(2), 133–136.
- [7] Bar-Gil, O., Czerniak, O., & Ron, T. (2024). AI for the general public? incorporating AI ethics with people analytics and HR initiatives. 102–527 in *Technology in Society*, 77.
- [8] S. Ekka (2021). The Significance of HR Analytics. (2021). *Journal of Current Business and Government Issues*, 27(2).
- [9] Gallardo-Gallardo, E., and Fernandez, V. (2020). Taking on the issue of HR digitalization: important elements and obstacles to the use of HR analytics. *Journal of International Business Incorporating Journal of Global Competitiveness*, 31(1), 162-187; *Competitiveness Review*.
- [10] Sodeman, W. A., and Hamilton, R. (2019). We pose the following queries: What are the advantages and disadvantages of employing big data analytics for strategic human capital resource management? 85–95 in *Business Horizons*, 63(1).
- [11] Zhang, L., Zheng, J., Feng, C., Huang, X., and Yang, F. (2023). Theory and Implications of Personalized Human Resource Management using AI and HR Analytics. 28(4), 598–610, *Asia Pacific Management Review*.
- [12] In 2020, Jain, P., and Jain, P. being aware of the HR analytics idea. *Emerging Technologies International Journal*, 11(2), 644-652.
- [13] Aher, D., Anute, N., & Kale, H. (2022). The effect of HR analytics on an organization's performance. 9(3), 619-630, *International Journal of Research and Analytical Reviews*.



[14] Q. Mohammed (2019). HR analytics is a cutting-edge tool for making predictive decisions in HR. *Management Journal*, 10(3).

[15] Nurbaiti, B. (2021). HR Analytics: Predicting and Enhancing Financial Performance through Human Resource Data. *ATESTASI Jurnal Ilmiah Akuntansi*, 4(2), 446–462.

[16] Odom, G., & Hyams-Ssekasi, D. (2023). An exploration of the implications of human resources analytics for workforce planning. *Future of Business Administration*, 1(2), 30–42.

[17] Oswald, F. L., Behrend, T. S., Putka, D. J., & Sinar, E. (2019). Big Data in Industrial Organizational Psychology and Human Resource Management: Forward progress for organizational research and practice. *Annual Review of Organizational Psychology and Organizational Behavior*, 7(1), 505–533.

[18] Opatha, H. (2020). HR Analytics: A Literature Review and new Conceptual Model. *International Journal of Scientific and Research Publications*, 10(06), 130–141.

[19] Okatta, N. C. G., Ajayi, N. F. A., & Olawale, N. O. (2024). Leveraging HR Analytics for Strategic Decision Making: Opportunities and Challenges. *International Journal of Management & Entrepreneurship Research*, 6(4), 1304–1325.

[20] Pandya, D. (2023). HR Analytics – importance and challenges. *International Journal of Scientific Research in Engineering and Management*, 07(07).

[21] Peeters, T., Paauwe, J., & Van De Voorde, K. (2020). People analytics effectiveness: developing a framework. *Journal of Organizational Effectiveness People and Performance*, 7(2), 203–219.

[22] Reddy, P. R., & Lakshmikeerthi, P. (2017). HR analytics–effective evidence based HRM tool. *International Journal of Business and Management Invention*, 6(7), 23–34.

[23] Schreiber, A. (2020). *Privacy’s Blueprint: The Battle to Control the Design of New Technologies*. By Woodrow Hartzog. Cambridge, MA: Harvard University Press, 2018.

[24] Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in Human Resources Management: challenges and a path forward. *California Management Review*, 61(4), 15–42.

[25] Tomar, S., & Gaur, M. (2020). HR analytics in business: role, opportunities, and challenges of using it. *Journal of Xi’an University of Architecture & Technology*, 12(7), 1299–1306.

[26] Valecha, N. (2022). Transforming human resource management with HR analytics: A critical Analysis of Benefits and challenges. *International Journal for Global Academic & Scientific Research*, 1(2), 56–66.

[27] Zhang, Y., Xu, S., Zhang, L., & Yang, M. (2021). Big data and human resource management research: An integrative review and new directions for future research. *Journal of Business Research*, 133, 34–50.

[28] Zebua, N. D. K., Santosa, N. T. A., & Putra, N. F. D. (2024). The Role of HR Analytics in Enhancing Organizational Performance: A review literature. *Indonesia Journal of Engineering and Education Technology (IJEET)*, 2(2), 363–368.



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