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EXPLORING SUSTAINABLE HUMAN RESOURCE MANAGEMENT PRACTICES IN THE HEALTHCARE INDUSTRY: A COMPREHENSIVE INSTRUMENT DEVELOPMENT AND VALIDATION STUDY

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Abstract:
Both researchers and industry professionals are starting to take notice of the growing trend of sustainable human resource management practices in companies. Improved productivity, employee engagement, and the company's reputation are just a few of the results that may be achieved by implementing sustainable HRM practices. A genuine and reliable tool is needed since the literature on sustainable HRM is vast, complicated, and covers a lot of ground. In light of Sustainable HRM's major role, this study seeks to measure the degree to which the healthcare industry has incorporated sustainable HRM by creating an instrument for assessing sustainable human resource management. The first step in conducting psychometric testing on a newly developed scale is to determine its CVR. Currently, 452 healthcare professionals from both public and private institutions in Hyderabad were surveyed for the research. A validated instrument is used to examine the variables in the research. The data was analyzed using metrics such as Content Validity Ratio, Reliability analysis, Common Method Variance, Descriptive statistics, and Independent t-test. The study's results demonstrated that the tool is appropriate for investigating hospitals' sustainable human resource management methods. Sustainable staffing (SS), sustainable training and development (STD), sustainable performance evaluation (SPE), sustainable compensation (SC), and sustainable diversity management (SDM) all vary significantly in how they are integrated. Sustainable work-life balance (SWLB) and sustainable occupational health and safety (SOH) practices revealed no significant difference in the healthcare industry, according to the research. Sustainable human resource management techniques are an important part of sustainable development, and this research adds to our understanding of the notion and how to interpret it. This study's instrument has great potential to become a reliable tool for evaluating HRM strategies that are sustainable across all economic sectors. Our goal is to help those in charge of the healthcare industry put these strategies into action and persuade others to do the same so that everyone may benefit from the long-term results.

Keywords- SustainV F;'able Performance Evaluation; Sustainable Training and Development; Sustainable Work-Life Balance Content Validity Ratio; Healthcare Sector; Sustainable Human Resource Management.

Introduction

The Indian economy is seeing fast growth in the healthcare sector. Many consider this industry to be one of the backbones of our civilization. When a city, state, or nation has enough hospitals that are well-equipped, it shows that the government cares about its residents. Personnel such as medical physicians, nurses, and others in the healthcare industry are also employed by

hospitals. Hospitals have taken on a more pivotal position in people's life due to the current pandemic crisis that we have been experiencing for the last two years. We have certainly come to understand the vital role that hospitals and medical personnel play in our economy. However, when we compare this to 'warriors,' we see that health care workers confront a terrifying environment on all fronts, including socially, mentally, and physically. Because of their regular interaction with infected people, soldiers are more likely to get the disease. Anxiety, despair, and stress are symptoms experienced by healthcare staff who provide support to COVID-19 patients, according to one study. Hospital staff now put in longer hours. Stressful conflicts between work and family life are common among healthcare workers (Tomar & Dhiman, 2013). Not only that, but PPE disposal has recently emerged as a major environmental issue, compounding other problems including excessive plastic waste, water loss, and unsustainable practices (Dr.Naveen Prasadula, 2023). Sustainable human resource management, in its current conceptual form, is a hot topic. In addition to society, environmental, strategic, and psychological factors should be included in modern Sustainable Human Resource Management (Kainzbauer & Rungruang, 2019; Mazur, 2015). According to Zaugg, Blum, and Thom (2001), the idea of sustainability is going through a radical change. According to D'Adamo et al. (2020), it is important to include environmental preservation into everyday tasks. Hospitality, tourism, and other related fields have long made use of sustainability management (Filho et al., 2020; Joong et al., 2019; Zaid et al., 2018). Following the Brundtland Commission's 1987 establishment of the idea of "sustainable development," the notion of corporate social responsibility has been popular in the business sector for the last two to three decades. Realizing the significance of society and society's role in building businesses, the business sector has shifted its attention to "care for society" (Nath, Kumar, Behura, Tara, & Sundararajan, 2019). According to Molamohamadi (2013), in this kind of setting, every business aspires to generate results that are good for everyone: the environment, society, and the bottom line. Complex study constructs need the calculation of research instrument validity. When a measuring device can reliably assess the target variables, we say that it has validity (Zamanzadeh, V., et al. 2014). According to Mochon and Schwartz (2020), there are three ways to evaluate an instrument's validity: content, construct, and criteria. Second, we have implemented reliability and validity tests (Hajebrahimi, Alimohammadzadeh, Hosseini, Maher, & Bahadori, 2020; Tabacchi et al., 2020; Talaee et al., 2022; Wong, 2021). We have also tested the research instrument's content validity index (Rathi, Kaswan, Garza-Reyes, Antony, & Cross, 2022). As a third point, we may utilize Common Method Variance to filter out any biases introduced by collecting procedures. As a fourth point, the article contrasted the public and private healthcare systems. Finally, we suggest avenues for further study based on our results that might encourage more thorough examinations of hospitals' sustainability initiatives that are already in place.

Review of Literature

The notion of sustainability has been bolstered by the name "Sustainable Development," which was bestowed by the United Nations' World Commission on Economic Development (WCED). Considering the global economic expansion in 1987 led to the coining of this word. The United Nations Commission's definition has gained widespread acceptance. One definition of sustainable development is "the practice of allocating resources in a way that ensures they can continue to be used to meet the needs of future generations without sacrificing those of the

present" (Macke & Genari, 2019). It is clear from this first definition of sustainability that the economic, social, and environmental dimensions must all be considered in tandem (Stefano et al., 2017). Within this framework, sustainable human resource management refers to the ethical pursuit of an organization's social, economic, and environmental objectives via the creative, efficient, and innovative use of human resources (Diaz-carrion, López-fernández, & Romero-fernandez, 2020b). By addressing the growing challenge of efficiency and (sustainable) investment in HRM initiatives, it is described as "an extension of strategic HRM" (Indiparambil, 2019). "By emphasizing human resource development, regeneration, and renewal over the long term, sustainable human resource management offers a new approach to people management that is considered as an extension of strategic HRM" (Macke & Genari, 2019).

1.1 Aims

- The research study aims to develop a research instrument of sustainable human resource management in the hospital sector.
- Another aim is to evaluate the incorporation of sustainable human resource management in public hospital sector and private hospital sector.

1.2 Research Gap

There are several instruments with different dimensions are available to access to sustainable human resource management. One of these, for measuring the SHRM practices across different countries an instrument is prepared by (Diaz-carrion, López-fernández, & Romero-fernandez, 2020a) is considered valid, efficient and reliable instrument. This SHRM instrument contains the various statements on functions of management: staffing, training and development, performance evaluation, compensation, diversity management, work-life balance and occupational health and safety. In order to fill the gap in the literature, we have adapted this instrument in the Indian context that to hospital sector. Although, we are taking opinion of health care professionals (Nursing staff) with respect to the sustainable human resource management practices because this context is also missing in the earlier studies. Moreover, studies on sustainable human resource management in Hyderabad are relatively less in number; a validated instrument will add potential for improving well-being of employees of health care professionals. The aim of the study is to develop an instrument; reliable and valid for hospital sector and also to examine sustainable human resource management practices incorporated by private and public hospitals of Hyderabad.

2. Research Methodology

The current study is compiled after the review of research articles.. Data were collected mainly through the secondary source. The model adopted for the study is theory driven model which is emphasizing on the insights about the selected topic. The figure 1 states the methodology followed to conduct the research.

2.1.1 Consultation from experts

Computing CVR is necessary to examine that which statements are required to be the part of questionnaire and which are not required. We have distributed the questionnaire through Google form and hard copies. Content and construct validity were examined. The panel members composed of five industry experts (managers from the hospitals) and five academicians (Assistant and Associate Professors). Details of the experts are given in the table (1). The list of experts who are invited for their consultations are given in table below: -

Table 1: List of Experts

S. No	Experts	Name of the organization	Qualification	Experience
1	Expert 1	HR Manager, Shrimaan Hospital	MBA in HRM	8 years
2	Expert 2	HR Manager, Joshi Hospital	MBA in HRM	3 years
3	Expert 3	HR Manager, Care Max hospital	MBA in HRM	10 years
4	Expert 4	HR Manager, Oxford hospital	MBA in HRM	5 years
5	Expert 5	HR Manager, Tagore hospital	MBA in HRM	7 years
6	Expert 6	Associate Professor, RCIT	PhD Management	22 years
7	Expert 7	Assistant Professor, IIM	PhD in HRM	8 years
8	Expert 8	Associate Professor, IIM	PhD in HRM	14 years
9	Expert 9	Associate Professor, LPU	PhD in HRM	12 years
10	Expert 10	Assistant Professor, 11M	MBA Healthcare Management	4yrs

Source: From survey (five industry experts and experts from academia having expertise in this field.)

Table 2: Minimum values of CVR

S. No.	No. of panelists	Minimum values of CVR
1	5	.99
2	6	.99
3	7	.99
4	8	.75
5	9	.78
6	10	.62
7	11	.59
8	12	.56

Source: (LAWSHE, 1975)

3.1.4 Tool for performing Validity test (CVR)

Validity is the degree to which an instrument measures what it is supposed to measure. Content validity (CV) determines the degree to which the items on the measurement instrument represent the entire content domain (Norashida, Norshahira, & Lukman, 2021). A CV ratio (CVR) is a numeric value indicating the instrument's degree of validity determined from expert's ratings of CV (Shrotryia & Dhanda, 2019). CVR tells us the validity of particular item. In the Content Validity Ratio, the researcher is supposed to ask the panel of experts to give their view points on the items generated for the constructs of the study. In this study, content validity was determined using Content Validity Ratio (CVR) by assessing the level of each item based on three scale name: Essential (Very important), Useful, but not essential (useful,

but not important), Not Necessary (no need) (Wilson, Pan, & Schumsky, 2012). To determine content validity of the content, calculations should be performed using the formula CVR= ne-(N/2) / N/2) (Shrotryia & Dhanda, 2019). This formula explains that CVR refers to the value of particular value on three levels. ne is the number of panel members rated each item as 'Essential', while N, is the total number of panelists involved in the study (N=10).

Steps to perform Content Validity Ratio

The formula for computation of CVR=

$$\text{CVR} = ne - \frac{N}{2} / N/2$$

Where,

ne= is the number of panelists identifying as an item 'essential' N= is the total of number of panelists

- If all the panel members marked any item as 'essential'- CVR is 1.
- If none of the panel member marked any item as 'essential- CVR is 0.
- When the number of panelists rating an item as 'essential' is more than half, but less than all, CVR is between 0- 0.99.

3.1.5 Quantification of Content validity

According to content value ratio (Norashida et al., 2021), the values range from -1 to +1. Here, 1 value of CVR indicates that a particular item is considered important by most of the experts. In contradiction to this, if less than half experts rated an item 'Essential' the value for CVR is less than 0. Similarly if CVR value is more than 0, it represents that more than half of the experts rated the item as 'Essential'. If CVR value is equal to zero it shows that a part of experts represents an item as not important and another part shows that the item is essential. Lastly, if CVR is equal to 1 clearly indicates that all experts agreed to mark an item as 'Essential'. We have selected 10 experts according to the expertise in their particular fields which are from academia as well as hospital industry. Out of 59 statements, 34 statements are accepted because 34 statements has its CVR equal to or more than 0.62, while other 22 statements had values below 0.62. According to the Lawshe table (2), if CVR is less than 0.62- statements not accepted, because we have got the validation of questionnaire from total number of 10 experts. Table 3, 4, 5, 6, 7, 8, 9 shows the summary that measures the evaluation gained from ten experts against the 59 statements of Sustainable Human Resource Management instrument. In Staffing, out of 7 statements 5 are acceptable. From training and development, 3 statements are acceptable out of 6 statements. Similarly, out of eights statements four statements are retained from performance evaluation. Under diversity management, five statements are acceptable from nine statements. Work-life balance has four statements are retained and in health and safety, we accepted seven statements from nine available. From table 3, item 5, 6 are not retained in the instrument because firstly, these statements have their CVR value less than 0.62. Secondly, the reason behind not retaining has been specified by the experts stating that hospitals neither manages the exit of their employees nor helps the dismissed employees.Identically, table 4 containing 3 items as 'not retained' with the reason that

preferences of employees has been rarely asked while developing training programs. Training programs are not mandatory for all the employees; they can go for training by their own choice. Table 5 represents the performance appraisal, from this particular variable out of eight, four statements are retained. Item 1, 3 are considered repetitive by experts in the field. Item 5 is not retained because according to the experts opinions hospital management rarely concentrates on the development of employees. Item 7 is from the different function of management that is career development so; it will not be included in performance evaluation.

Under compensation, table 6 there are various statements that are not retained in the instrument. Item 2, 6, 7 are considered not necessary and repetitive in every variable under study and retirement plans are not provided to employees in private organizations. Similarly, compensation plans are not flexible that employees decide the portion of monetary and non-monetary benefits according to their own wish as mentioned in item 8. Item 9 have its CVR value very low.

Now, table 7 the Diversity management in which item 1 is not retained because no climate survey is conducted in hospitals for maintaining the dignity of employees. Item 3, 6 are not retained because most of experts marked these items as 'not necessary'. Similarly, item 8 is marked not necessary by three of the experts and gave reasoning that discrimination does prevail if employees are coming from vast localities. Table 8 discusses the statements of Work-Life Balance, out of which four statements are acceptable because only these practices are followed in the hospitals. Lastly, table 9 highlights statements of occupational health and safety item 6 and item 7 are not retained through the Content Validity Ratio scale.

Table 3: CVR values of Staffing component

S. no.	1. Sustainable Human Resource Management	Experts										No. of experts	CVR value	R/NR
	1.1 Staffing	1	2	3	4	5	6	7	8	9	10			
1	My hospital had transparent and unbiased selection process.	1	1	1	1	1	1	1	1	1	1	10	**1**	**R**
2	My hospital encourages internal promotion over external contracting for staff motivation	1	1	1	1	1	1	1	2	1	2	9	**0.8**	**R**
3	My hospital provides us clearly with the detailed internal selection process and appoint individual accordingly.	1	1	1	1	1	2	1	1	1	1	9	**0.8**	**R**
4	My hospital implements specific programs to facilitate the integration of new candidates.	2	1	1	1	1	1	1	1	1	1	9	**0.8**	**R**
5	My hospital helps the dismissed employees by implementing programs such as- training, preparation for	1	1	1	1	3	2	1	1	1	1	7	**0.4**	**NR**
6	My hospital manages the exit of employees from the hospital.	2	3	1	2	1	3	1	1	3	1	5	**0**	**NR**
7	My hospital considers personal identity-environmental management fit in recruitment and selection.	1	1	1	1	1	1	1	1	1	2	9	**0.8**	**R**

- N= is the total number of experts from the field
- CVR= 0.62 (according to the number of experts- Lawshe table)
- Items with 0.62 and more than this value must be retained
- Items with less than 0.62 value must be detained or modified.
- R= Item retained, NR= item not retained

Table 4: CVR values of Training and Development component

S. No	1.2 Training & development	1	2	3	4	5	6	7	8	9	10	No. of experts	CVR value	R/NR
1	My hospital provides us with periodic training that is according to the job description of every employee, regardless of any professional category, gender, age, etc.	1	1	1	1	1	1	1	1	1	1	10	1	R
2	My hospital takes into account preferences of all the employees while determining training.	1	1	1	1	1	1	2	1	3	2	7	0.4	NR
3	My hospital establishes training according to the talent, commitment and performance appraisal of every employee.	1	1	1	1	1	1	1	1	1	3	9	0.8	R
4	My hospital has individual training itinerary (schedule) for each and every employee regardless of their type of contract, their gender, their age.	1	1	2	2	1	1	1	1	1	3	7	0.4	NR
5	My hospital offers mentoring training program as a part of training.	1	1	1	3	1	1	1	1	3	1	9	0.8	R
6	My hospital provides adequate training to promote environmental management as a core organizational value.	2	1	1	1	1	2	1	1	1	3	7	0.4	NR

- N= is the total number of experts from the field
- CVR= 0.62 (according to the number of experts- Lawshe table)
- Items with 0.62 and more than this value must be retained
- Items with less than 0.62 value must be detained or modified.
- R= Item retained, NR= item not retained

Table 5: CVR values of Performance Evaluation component

S. No.	1.3 Performance evaluation	1	2	3	4	5	6	7	8	9	10	No. of experts	CVR value	R/NR
1	My hospital has rigorous assessment procedure to determine an employee's development plan.	1	2	1	1	3	2	1	1	1	1	7	0.4	NR
2	My hospital sets promotion based on employee's merit.	1	1	1	1	1	1	1	1	1	2	9	0.8	R
3	My hospital evaluates the performance of all the employees, decide career plans for all employees, regardless of their type of contract, their gender, their age, their ethnicity, etc.	1	1	2	3	1	2	1	1	1	1	7	0.4	NR
4	My hospital employs different assessment systems depending on the different employee groups.	1	1	1	1	3	1	1	1	1	2	9	0.8	R
5	My hospital takes responsibility of every employee about their development.	1	1	1	1	1	1	3	3	3	1	7	0.4	NR
6	My hospital offers periodic feedback to all the employees about their development.	1	1	1	1	1	1	1	1	2	1	9	0.8	R
7	My hospital provides the opportunity to all the employees to decide on their careers.	1	2	1	3	1	1	1	3	1	1	7	0.4	NR
8	My hospital considers how well employee is doing at being ecofriendly as part of their performance appraisals.	1	1	1	1	1	1	2	1	1	1	9	0.8	R

- N= is the total number of experts from the field
- CVR= 0.62 (according to the number of experts- Lawshe table)
- Items with 0.62 and more than this value must be retained
- Items with less than 0.62 value must be detained or modified.
- R= Item retained, NR= item not retained

Table 6: CVR values of Compensation component

S. No.	1.4 Compensation	1	2	3	4	5	6	7	8	9	10	No. of experts	CVR value	R/NR
1	My hospital remuneration practices are transparent for all the employees of the organization.	1	1	1	1	1	1	1	1	2	2	9	0.8	R
2	My hospital's salary gap between the highest and the lowest wage (including managers) is agreed between employees and managers of the hospital.	3	2	1	1	3	3	1	2	3	1	4	-0.2	NR
3	My hospital's reward policy does not discriminate by gender, type of contract, etc.	1	1	1	1	1	1	1	1	2	1	9	0.8	R
4	My hospital compensation system considers the skills, job position and employee's performance.	1	2	1	1	1	2	1	1	1	1	9	0.8	R
5	My hospital links rewards to both individual and collective performance.	1	2	1	1	1	1	1	3	1	1	9	0.8	R
6	My hospital provides social benefits as motivation and a retention mechanism (retirement plan, Health Insurance etc).	2	3	1	1	1	1	1	1	1	1	8	0.6	NR
7	My hospital takes into consideration employees' expectations when establishing compensation plans.	1	1	1	1	1	2	1	1	1	2	8	0.6	NR
8	My hospital has a flexible compensation plan in which employees can decide which parts of their salary are monetary and which are social benefits	2	1	2	3	3	2	1	1	1	3	4	-0.2	NR
9	My hospital performs audits of salary review processes to ensure they are not discriminatory, and use them to improve the remuneration system.	2	1	2	1	1	2	1	1	1	2	6	0.2	NR
10	My hospital links part of the compensation to employees' compliance with CSR goals.	1	1	1	2	1	1	1	1	1	1	9	0.8	R
11	My hospital also provides non-monetary compensation to the employees.	2	1	1	1	1	1	1	1	1	2	9	0.8	R
12	My hospital rewards employees for giving suggestions about quality or organizational health and safety improvements.	1	1	1	1	3	1	3	1	3	1	7	0.4	NR
13	My hospital relates employee's eco-friendly behavior to rewards and compensation.	1	1	1	1	1	1	1	1	1	3	9	0.8	R

- N= is the total number of experts from the field
- CVR= 0.62 (according to the number of experts- Lawshe table)
- Items with 0.62 and more than this value must be retained
- Items with less than 0.62 value must be detained or modified.
- R= Item retained, NR= item not retained

Table 7: CVR values of Diversity Management component

S. No.	1.5 Diversity management	1	2	3	4	5	6	7	8	9	10	No. of experts	CVR value	R/NR
1	My hospital conducts climate surveys to achieve a comfortable working environment in which the dignity of employees is respected and their needs are considered.	2	1	1	1	1	1	1	1	1	1	6	0.4	NR
2	My hospital facilitates the free interaction between employees and their representative.	1	1	1	1	1	1	1	1	2	1	9	0.8	R
3	My hospital communicates to employees the changes that might affect their contractual relationship with the hospital ahead of the minimum period required by laws.	3	1	2	1	1	1	1	3	2	2	5	0	NR
4	My hospital encourages employees' engagement in social projects as part of their working week.	1	1	1	3	3	1	1	1	1	1	9	0.8	R
5	My hospital has formal equal opportunity policies.	1	1	1	3	1	1	3	1	1	1	9	0.8	R
6	My hospital's HR policies are always aimed at assessing the merit of employees.	1	1	3	2	1	3	1	2	3	3	4	0.2	NR
7	My hospital provides training for both employees and managers on the importance of diversity.	1	1	1	1	1	1	1	2	1	2	9	0.8	R
8	My hospital registers incidents related to discrimination and carry out corrective actions.	1	1	3	1	2	1	1	1	3	1	7	0.5	NR
9	My hospital has a person or team responsible for managing diversity at workplace.	1	1	1	1	1	1	1	1	1	2	9	0.8	R

- N= is the total number of experts from the field
- CVR= 0.62 (according to the number of experts- Lawshe table)
- Items with 0.62 and more than this value must be retained
- Items with less than 0.62 value must be detained or modified.
- R= Item retained, NR= item not retained

Table 8: CVR values of Work Life Balance component

	1.6 Work life balance	1	2	3	4	5	6	7	8	9	10	No. of experts	CVR value	R/NR
1	My hospital favors the existence of a proper work-family balance for all the employees.	1	1	1	1	1	1	1	1	1	1	10	1	R
2	My hospital allows modifications of the workday and shifts according to workers' personal needs.	1	1	1	1	1	1	1	1	1	1	10	1	R
3	My hospital is flexible when authorizing paternity/maternity, breastfeeding leave and unpaid leaves for family reasons.	1	1	3	1	1	1	1	1	1	1	9	0.8	R
4	My hospital facilitates transfer employees to other locations for personal or professional reasons (family, health, etc.).	1	1	1	1	3	1	1	1	1	3	9	0.8	R
5	My hospital develops regular audits to verify hospital's compliance with work family balance policy.	2	1	3	2	1	1	1	3	3	2	4	-0.2	NR
6	My hospital has formalized code of conduct based on the main international sustainability standards.	2	3	1	3	3	1	1	3	3	1	4	-0.2	NR
7	My hospital publishes any progress, gap and challenges in the field of responsible personnel management.	2	3	1	1	3	2	1	3	1	3	4	-0.2	NR

- N= is the total number of experts from the field
- CVR= 0.62 (according to the number of experts- Lawshe table)
- Items with 0.62 and more than this value must be retained
- Items with less than 0.62 value must be detained or modified.
- R= Item retained, NR= item not retained

Table 9: CVR values of Occupational Health and Safety component

	1.7 Occupational health & safety	1	2	3	4	5	6	7	8	9	10	No. of experts	CVR value	R/NR
1	My hospital has formal health and safety committees that carry out monitoring and control activities beyond those required by law.	2	1	1	1	1	1	1	1	1	1	9	0.8	R
2	My hospital involves employees in the establishment of a plan for prevention of occupational risks.	1	2	1	1	1	1	1	1	1	1	9	0.8	R
3	My hospital minimizes psychological and physical work risks at workplace.	2	1	1	1	1	1	1	1	1	1	9	0.8	R
4	My hospital provides training to improve accident prevention/health and safety of the employees beyond what is required by law.	1	1	1	1	1	1	1	1	1	1	10	1	R
5	My hospital promotes healthy living inside and outside work; for example, developing sports activities, raising awareness of the benefits of healthy living, etc.	2	1	1	1	1	1	1	1	1	1	9	0.8	R
6	My hospital is concerned about both workers' and their families' health by providing free medical reviews, psychological support services, etc.	1	1	2	2	2	1	1	1	3	1	6	0.2	NR
7	My hospital keeps a record of job accidents, illnesses, and employees at risk of suffering occupational diseases with the goal of improving health and safety at the hospital.	2	1	2	3	3	1	1	1	1	1	6	0.2	NR
8	My hospital employees fully understands the extent of corporate environmental policy.	1	1	1	1	1	2	1	1	1	2	9	0.8	R
9	My hospital encourages employees to provide suggestions on environmental improvement.	1	1	1	1	1	1	1	1	1	2	9	0.8	R

- N= is the total number of experts from the field
- CVR= 0.62 (according to the number of experts- Lawshe table)
- Items with 0.62 and more than this value must be retained
- Items with less than 0.62 value must be detained or modified.
- R= Item retained, NR= item not retained

2.2 Common Method Variance

In order to get the best quality output from the instrument we have developed, we have applied Common Method Variance- a method which able to maintain the rigor of research (Jordan & Troth, 2020). Biases in research generally occurs when data for all the variables are collected using the same method. Bias aroused when you find difficulty in gathering exact response or

respondent unable to recall the situation we are asking for. There are four sources of biases-bias produced by using common source, bias produced by item characteristics, bias produced by item context and bias produced through measurement context (Jakobsen & Jensen, 2015). In order to remove these biases, there are two ways: procedural and statistical. The biases that can be removed before the data collection produce higher quality results. The table (10) below source of common method biases and how can we remove them while preparing the questionnaire.

Table 10: Procedural methods to remove bias

HOW TO REMOVE BIASES (CHECKLIST)		
Sr. No.	**Reasons that cause common method bias**	**Remedies**
1	Lack of verbally between respondent and researcher	Pre-testing the questions so that respondents can better understand. Presenting questions in audio form (can be used in Google forms).
2	Lack of understanding about the topic	Select respondents who have necessary experience about the topic.
3	Complex questions	Simplifying complex questions use simple language and vocabulary to meet the capabilities of respondents.
4	Ambiguous statements	Use clear and concise language; try to define complex and unfamiliar statements.
5	Double barrel questions	Avoid double barrelled statements.
6	Presentation of items in questionnaire	Presenting long statements in audio-visual form if possible (Soft copies).
7	Questions that call for further clarification	Take an extra effort to retrieve the information necessary to answer the question accurately.
8	Low personal relevance of issue	Explain respondents that why particular statements if important and how it will provide useful consequences.
9	Low self-efficacy to provide correct answers	Personal opinion and perspective of respondent is utmost necessary.
10	Low need of cognition	Make them realize the after consequences ofyour research, increasing personal relevance of the task.

11	Low need of self-expression, self-disclosure	Enhance willingness to self-disclosure by emphasizing their personal benefits out of research.

Source: (MacKenzie & Podsakoff, 2012), (Jordon & Troth, 2020)

We have applied this method in our research instrument also in order to remove biases. We have turned four straight asked statements to double barrelled statements in order to know the consistency of responses and what is the flow of responses given by respondents. We have removed repetitive statements, changed the complex statements into the simpler form to make understandable for the respondents. Lastly, we prefer to collect data in the mode in which the respondents are comfortable and to make them realize that data will solely be utilized for research purpose.

Table 11: How to remove Bias from the instrument

Sr. No.	Source of Bias in Instrument	Coding	Statements containing Bias	Statements without Bias
1	Double Barrel Statement	SC3	My hospital links rewardsto both individual and collective performance.	My hospital never links rewardsto both individual and collective performance.
2		SH3	My hospital minimizes psychological and physical work risks at workplace.	My hospital maximizes psychological and physical work risks at workplace.

2.3 Pilot Study (Reliability Test)

Pilot survey is the foremost and an indispensable step in the whole research study (Srinivasan & Lohith, 2017). Before conducting survey directly on the targeted sample size, it is necessary to find out the perception of respondents/participants on one end and the reliability of the research process on other end. A Pilot Survey is a mini survey where the researcher reaches out 10% of the actual sample size. Through this survey, the researcher can able to predict the pattern of responses, necessary changes required in the research, enhance the likelihood of success and also potentially avoid the unnecessary statements from the study. Similarly, in order to test the reliability of our research study, we have conducted a pilot survey in the hospitals of Hyderabad.

Through the pilot survey, the researchers can able to predict

- The pattern of responses,
- Necessary changes required in the research,
- Enhance the likelihood of success,
- Potentially avoid the unnecessary statements from the study.

The final SHRM instrument is made up of 34 questions across seven dimensions table (12). The developed instrument contains five questions related to gender, marital status, level of education, working hours, association with present hospital. It will take approximately 15

minutes to complete all the questions. Health care professionals (Nurses) are selected as respondents to our research study, as they are spending most of the time in the hospitals and are more in contact with patients and senior staff members. Items are placed on 5-point Likert's Scale reflecting level of agreement from "1 (Strongly Disagree)", "2 (Disagree)", "3 (Neutral)", "4 (Agree)" and "5 (Strongly Agree)". For the Data reliability and validity checks- Cronbach's Alpha test is performed on the fifty questionnaires or pilot study. Data collection was done through personal visits to the hospitals and through Google forms. Recently, the data collection was approached to fifteen hospitals out of which twelve hospitals have given permission to the researcher. Personal visits to hospitals helped in seeking authentic data from the health care professionals. After the collection of data for pilot survey, we have performed Cronbach's alpha test through the use of SPSS software. We have 34 statements in the questionnaire whose reliability comes to 0.919 (shown in table 14), which is considered Excellent in Lee Cronbach's table (13).

Table 13: Cronbach's Alpha is developed by Lee Cronbach in 1951

Cronbach' Alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Good and Acceptable
$0.7 > \alpha \geq 0.6$	Acceptable
$0.6 > \alpha \geq 0.5$	Unacceptable
$0.5 \geq \alpha$	Poor

Source: (Lee Cronbach, 1951)

The formula for Cronbach's alpha is:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N-1) \cdot \bar{c}}$$

Where:

- N = the number of items.
- $\bar{c}$ = average covariance between item-pairs.
- $\bar{v}$ = average variance

Table 14: Overall Reliability of the Instrument

Sr. No.	Variables under study	No. of Respondents	Cronbach's Alpha	Consistency
1	Sustainable Human Resource Management (SHRM)	50	0.919	Excellent

Source: SPSS> Reliability statistics> Scale

Table 15: Reliability of each Sub-variable of Sustainable Human Resource Management

Sr. No.	Sub- Variables under study	No. of Respondents	Cronbach's Alpha	Consistency

1	Sustainable Staffing (SS)	50	0.90	Excellent
2	Sustainable Training and Development (STD)	50	0.90	Excellent
3	Sustainable Performance (SP)	50	0.90	Excellent
4	Sustainable Compensation (SC)	50	0.91	Excellent
5	Sustainable Diversity (SD)	50	0.91	Excellent
6	Sustainable Work-life (SW)	50	0.91	Excellent
7	Sustainable Health and Safety (SHS)	50	0.90	Excellent

Source: SPSS> Reliability statistics> Scale

3. Data Analysis

The current study is compiled after the review of research articles.. Data were collected mainly through the secondary source. The study is conducted through quantitative approach (Noor, 2008) which is constantly expanding and maturing. The present study investigates the comparison between sustainable human resource management in public and private sector hospitals of Hyderabad. Data have been collected from 452 respondents belonging to hospital sector of north India through proportionate and convenience sampling technique.To fulfil the first objective of the study, data has been collected from hospitals of Hyderabad (Private and Government). The data has been collected through questionnaire method, questionnaire distributed among 'Nursing staff' through online and offline mode. After the data collection, data was interpreted through graphs, figures, and charts for the final results. This chapter shows the recent scenario of hospitals of Hyderabad, what kind of practices are followed by them and how far these practices will ensures well-being of healthcare professionals. The data collected from hospitals within the time frame December, 2021- August, 2022.

3.1 Objective 1: To study the Sustainable Human Resource Management practices followed and implemented by hospitals of Hyderabad.

INDEPENDENT T-TEST

For the achievement of first objective, seventh hypothesis is formulated. An independent sample t-test was conducted to test this hypothesis, which verified if there is considerable difference in Sustainable Human Resource Management practices followed at private and government hospitals of Hyderabad. This test will verify if there is considerable difference in the sustainable human resource management practices implemented by private sector and government sector hospitals. Following hypothesis is designed for this purpose.

H7: There is significant difference between sustainable human resource management adopted by private and government hospitals of Hyderabad.

H7a: There is significant difference between the Sustainable Staffing practices adopted by the government hospitals and the private hospitals of Hyderabad.

H7b: There is significant difference between the Sustainable Training and Development practices adopted by the government hospitals and the private hospitals of Hyderabad.

H7c: There is significant difference between the Sustainable Performance Evaluation practices adopted by the government hospitals and the private hospitals of Hyderabad.

H7d: There is significant difference between the Sustainable Compensation practices adopted by the government hospitals and the private hospitals of Hyderabad.

H7e: There is significant difference between the Sustainable Diversity Management practices adopted by the government hospitals and the private hospitals of Hyderabad.
H7f: There is significant difference between the Sustainable Work-Life Balance practices adopted by the government hospitals and the private hospitals of Hyderabad.
H7g: There is significant difference between the Sustainable Occupational Health and Safety practices adopted by the government hospitals and the private hospitals of Hyderabad.
In order to test the first hypothesis of the study, Independent sample T-test was applied to compare Sustainable HRM practices for both (private and government hospitals) of Hyderabad. In this study, it was examined that both types of hospitals are implementing sustainable human resource management practices but private hospitals following these types of practices more prominently for securing well-being of health care professionals. The total SHRM score for public sector hospitals and private sector hospitals taken together were sufficiently normal for conducting t-test (Kolmogorov-Smirnov p value < 0.05) and (Shapiro-Wilk test p value < 0.05).

Kolmogorov-Smirnov and Shapiro-Wilk test of normality

There are various tests available to determine whether a sample comes from a normally distributed population. Kolmogorov-Smirnov test is the most known test for normality (Hanusz & Tarasińska, 2015), (Drezner, Turel, & Zerom, 2010). If the values are less than 0.05, then it means that data is normally distributed.

Table 17: Normality test (Kolmogorov-Smirnov and Shapiro-Wilk)

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
SS	0.113	452	0.000	0.940	452	0.000
STD	0.169	452	0.000	0.897	452	0.000
SPE	0.137	452	0.000	0.929	452	0.000
SC	0.132	452	0.000	0.932	452	0.000
SDM	0.127	452	0.000	0.934	452	0.000
SWLB	0.135	452	0.000	0.907	452	0.000
SOH	0.131	452	0.000	0.923	452	0.000
a. Lilliefors Significance Correction						

Source: (SPSS > Analyze > Descriptive Statistics > Explore > Select 95% confidence interval > Select normality plots from plots)

Table 18: Independent Samples Test

Independent Samples Test		
	Levene's Test for Equality of Variances	t-test for Equality of Means

		F	**Sig.**	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SS	Equal variances assumed	6.842	**0.009**	8.341	450	.000	.50	.060	.3862	.6242
	Equal variances not assumed			8.09	351.5	.000	0.50	.062	.3824	.6280
STD	Equal variances assumed	6.101	**0.014**	6.609	450	.000	.446	.067	.31	.579
	Equal variances not assumed			6.448	359.9	.000	.446	.069	.310	.582
SPE	Equal variances assumed	9.357	**0.002**	7.156	450	.000	.4814	.067	.34921	.61361
	Equal variances not assumed			6.967	356.840	.000	.481	.06910	.34552	.61730
SC	Equal variances assumed	11.861	**0.001**	7.214	450	.000	.346	.047	.251	.440
	Equal variances not assumed			6.961	343.6	.000	.346	.049	.24	.44
SDM	Equal variances assumed	12.152	**0.001**	8.124	450	.000	.4952	.0610	.3754	.6150
	Equal variances not assumed			7.796	335.532	.000	.4952	.0635	.3703	.6202

SWLB	Equal variances assumed	2.848	**0.092**	6.199	450	.000	.34120	.05504	.23303	.44937
	Equal variances not assumed			5.991	345.986	.000	.34120	.05695	.22919	.45322
SOH	Equal variances assumed	3.241	**0.072**	6.504	450	.000	.324	.049	.226	.422
	Equal variances not assumed	6.842		6.381	368.2	.000	.324	.050	.224	.424

Source: Obtained from SPSS Analyze compare means Independent sample T-test

In further analysis it has been also observed that there exists a significant difference exists between implementation of Sustainable HRM in both types of hospitals. There is significant difference of these five constructs (Sustainable staffing, sustainable training & development, sustainable performance evaluation, sustainable compensation, sustainable diversity management) in private and govt. hospitals of Hyderabad (t-values less than p value 0.05) There is no significant difference among the last two constructs (sustainable work-life balance, sustainable health & safety) in private and govt. hospitals of Hyderabad (t-values more than p value 0.05).

Table 19: Overall Testing of Hypothesis

Hypothesis framed	**P value**	**Table values**	**Hypothesis (A/ R)**
There is significant difference between the Sustainable human resource management practices (SS) adopted by the government hospitals and the private hospitals of Hyderabad.	0.05	0.009	Accepted
There is significant difference between the Sustainable human resource management practices (STD) adopted by the government hospitals and the private hospitals of Hyderabad.	0.05	0.014	Accepted
There is significant difference between the Sustainable human resource management practices (SPE) adopted by the government hospitals and the private hospitals of Hyderabad.	0.05	0.002	Accepted
There is significant difference between the Sustainable human resource management practices (SC) adopted by the government hospitals and the private hospitals of Hyderabad.	0.05	0.001	Accepted

There is significant difference between the Sustainable human resource management practices (SDM) adopted by the government hospitals and the private hospitals of Hyderabad.	0.05	0.001	Accepted
There exists significant difference between the Sustainable human resource management practices (SWLB) adopted by the government hospitals and the private hospitals of Hyderabad.	0.05	0.092	Rejected
There exists significant difference between the Sustainable human resource management practices (SOH) adopted by the government hospitals and the private hospitals of Hyderabad.	0.05	0.072	Rejected

Source: Calculated from analysis

4. Discussion

The results pertaining to incorporation of sustainable human resource management practices in public sector hospitals and private sector hospitals imitate certain prior research findings while adding new information primarily through analysis of relationships. In our study, it was explored that there exists significant difference in SHRM in public and private sector hospitals with respect to five major practices; sustainable staffing, training and development, performance evaluation, compensation, diversity management. Previous studies supported the findings compensation plans are superior in public hospitals than private hospitals (Saxena, N., & Rai, H. 2016), (Ramatu, A. et al., 2015). Moreover, employees who are satisfied with their compensation benefits were also found to be satisfied with their jobs. Our study shows insignificant results with respect to sustainable work-life balance. Research hypothesis fails to get accepted (there exists significant difference among SHRM practices at public and private hospitals) which means that there exists no significant difference among the incorporation of SHRM practices at public and private hospitals. Our results imitate the findings from earlier studies also work life balance practices are followed similarly in both types of hospitals (Lakshmi, K. S. et al., 2012). Additionally, with the availability of good work-life balances it will lead to skill enhancement, reduces turnover, increased job satisfaction level, commitment, dedication and positive healthcare provisions ate large. Our findings are not in line with the findings of earlier studies where authors highlighted that work-life balances practices are associated with certain other factors such as age, experience, burnout and work stress (Ningthoujam, S., et al., 2021). Employee feels satisfied with good work-life balances but there may be a case where experienced feels balanced at their life then a new comer at training level.

5. Benefits of implementing Sustainable practices

Employee engagement in corporate social responsibility is necessary to become successful (Giovanni et al., 2013). The table below (16) shows benefits enjoyed by the organizations engaged in Sustainable human resource management practices (Pfeffer, 2010). Human Resource managers should inspire future leaders to support sustainability and CSR initiatives and actively engage themselves in them (Pless & Maak, 2012). This study shows that the companies adopting green practices enjoy reputational benefits, brand image, and retaining employees (Indiparambil, 2019). The dimensions under sustainable human resource management and corporate social are generally the same. The three P's (Profit, People, and

Planet) of CSR and three building blocks (economic, social, and ecological) have similar dimensions. In one of the later studies, one more researcher had also explored that human resources are the most invaluable resource in the organization. So, there is a need to value human resources and bring back the respect for humanity back that became possible through sustainable human resource management practices (Cleveland et al., 2015). So, we explored that sustainable human resource management is more inclined towards the well-being of employees at the workplace also.

6. Conclusion

The main goal of this study was to determine the validity and reliability of the sustainable human resource management instrument for the hospital sector. The validation of instrument provides the result that 22 statements have been reported to have CVR less than 0.62 (value taken from Lawshe, 1975 table against 10 numbers of experts. The CVR method had potentially a strong measure to confirm the validity of an instrument on the basis of expert's opinions. The decisions made on retaining, modifying and deleting a particular item could be made purely based on this method solely. But, however, the next step in order to fully develop the instrument, pilot study has been performed for the reliability test also. All the selected 34 statements have used for pilot study to study the reliability of each and every item of the instrument. The findings showed that instrument is suitable to study the sustainable human resource management practices in the hospital sector. In further analysis it has been also observed that there exists a significant difference exists between implementation of Sustainable HRM in both types of hospitals. There is significant difference of these five constructs (Sustainable staffing, sustainable training & development, sustainable performance evaluation, sustainable compensation, sustainable diversity management) in private and govt. hospitals of Hyderabad (t-values less than p value 0.05). There is no significant difference among the last two constructs (sustainable work-life balance, sustainable health & safety) in private and govt. hospitals of Hyderabad (t-values more than p value 0.05). Lastly, the study also contributed towards the knowledge base of this concept and how to interpret sustainable development through sustainable human resource management practices. Through these practices, ultimate goal of making India sustainable will cherish in one way.

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