



A Study Of Employees Perception Towards Impact Of Human Resource Accounting Practices On Goodwill Of Higher Education Institutions

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ABSTRACT

In today's competitive world with high use of technology, human resource has become even more crucial and huge amount of fund is required to hire, develop and retain them. It's critical to justify whether these human resource are contributing to proportionate return to the organization. Human resource accounting (HRA) which means accounting for people as organizational resources that includes the recording and analyzing cost of recruiting, selecting, training and developing the human resources employed in any organization (Jeroh, 2013 and Abdullahi & Kirfi, 2012), plays important role here. Human Resource Accounting (HRA) involves accounting for expenditures related to human resources as assets as opposed to traditional accounting which treats these costs as expenses that reduce profit. HRA implementation is done for the long term benefit of the organization. The success of such implementation is more when the employees understand the concept well, perceive its usefulness in positive way and form a mindset of goodwill in favour of university.

This paper tries to identify the understanding of HRA by employees and their perception towards impact of HRA practices on goodwill of higher education institutions. The population for the current study includes all the faculty members working in three higher education institutions running separately in Madhya Pradesh and Chhattisgarh both. To carry on study first, objectives for current study are prepared and then hypotheses were formulated on the basis of these objectives. The questions are asked from sample drawn from this population to know the perception of respondents. The study is carried in two parts i.e. on the basis of designation and gender of faculty members. The data is collected on 5-point Likert scale with options strongly agree, agree, neutral, disagree and strongly disagree. The sampling technique used to draw sample is blend of quota and convenient sampling. MS excel is used to record the data initially and later transferred to SPSS for analysis taking 5% significance level. For testing the validity of instrument, factor analysis is performed and reliability test of data is measured by calculating Cronbach's Alpha value. Mean and average mean values are calculated and ANOVA is applied to test the hypothesis for its acceptance or rejection. The faculty members of all six institutions perceive that HRA implementation has impact on goodwill of higher education institutions. The faculty members of MP have stronger perception as compared to those from Chhattisgarh.

Keywords: Human Resource Accounting, Higher Education Institutions, Goodwill, Faculty Members, Madhya Pradesh, Chhattisgarh

Introduction

The success of the any organization, irrespective of its nature, size, ownership, etc., depends on how its human resources are managed. If human resources are managed well, it leads to effective utilization of its Physical assets, and in turn enhancing the productivity, profitability of an organization. In order to measure and reward the productive contributions of Human Resources the organizations began implementing Human Resources Accounting. The effectiveness of successful implementation of HRA in an organization depends on

the level of awareness and right perception of the employees. The creation of goodwill based on the practice of Human Resource Accounting is the highest benefit of the HRA implementation.

1.1 Definition of HRA

According to Likert (1967), HRA is "As an activity devoted to attaching monetary estimates to the value of a firm's human organization and its customer goodwill".

Davidson et.al (1975) defined HRA as, "a term used to describe variety of proposals that seeks to report and emphasize the importance of human resources - knowledgeable, trained and loyal employees in a company's earning process and total assets".

Flamholtz (1999) defined HRA as "accounting for people as an organizational resource. It involves measuring the costs by organizations to recruit, select, hire, train and develop human assets. It also involves measuring the economic value of people to the organization".

1.2 The Significance of This Study

The significance of this study is that the universities and more specifically the three universities located in MP and CG will have body of knowledge regarding the faculty member's perception towards HRA implementation and impact on goodwill for the higher education institutions (universities) which will help them in taking strategic decisions.

1.3 Scope of Study

This paper is prepared with a view to know the perception of employees on effect of HRA in their institutions on goodwill of higher education institutions (universities). The institutions taken for the current study are Amity University, ITM University and CV Raman University located in MP as well as CG thus, the total numbers of institutions are six in number. The population includes the faculty members working in these institutions and for study is divided on the basis of designation and gender. The perception is to be compared among the group of assistant professors, associate professors and professors and further between female faculty members and male faculty members. The study is restricted to the perception on faculty members on impact of HRA in their institutions and its impact on goodwill of higher education institutions (universities).

1. Literature Review

2.1 HRA

Petty (1691) was of the opinion that labour are the father of wealth and it must be included in any estimate of national wealth. Engle (1883) highlighted that human resources accounting is an attempt to identify and report investments made in human resources of an organization that are currently not accounted in conventional accounting practice. Human resource accounting is seen as the wealth of the employees' knowledge and intellectual capabilities added to the organization thereby making it to earn profit and to succeed (Newman, 1999). Human resource accounting is an information system that tells management what changes are occurring overtime to the human resources of the business (Gupta, 1997). Rao (1954) remarked that human resource accounting is a method of measuring the cost and value of people. Burns (1970) pointed that human resource accounting is an attempt to identify and report investment made in resource of the organization that are not presently accounted for under conventional accounting practice. Flomholtz (1974) discussed that HRA involves measuring the costs incurred by business firms and other organizations to recruit, select, train and develop human assets.

2.2 Application of HRA

Sharma and Shukla (2012) concluded that there is difference in Human Resource Accounting practices in private and public organisations as there is no set uniformity in guidelines for the use of Human Resource Accounting.

Bose (1989) stated that only few firms in developed nations have established it in their respective organization. Sinha and Gahlot (2000) stated that human resource accounting today is being executed at companies like BHEL, SPIC, ONGC and NTPC. Joshi and Mahei (2012) found human resource accounting practices in CCI, HPCL, Infosys and Rolta India Limited. Chaturvedi (2012) tried to find the impact of investment in human resource training and development on employees' effectiveness in SAIL.

Rasikbhai and Makwana (2012) concluded that Human Resource Accounting is useful in providing the estimates of the cost of recruitment from outside and development from within the organization.

Murty (1995) in his study of "Human Resource Management and Accounting in Construction Industry" observed that the management accountants in construction companies should realize that it is the right time to introduce Human Resource Accounting.

2.3 Benefits of HRA

Dhaka and Mehta (2013) stated that estimation of true worth of human capital need quantification of qualities like knowledge, skill, motivation and processes like recruitment, selection, training and development etc.

Raghuwanshi (2014) highlighted that the educational institutions are run as charitable institutions and absence of profit motive does not encourage management to follow HRA and thus, the concept of HRA is not seen applicable for educational institutions so far.

A current trend in today's business world is to evaluate the value of intangible assets of the organizations like goodwill, brands, patents, and now human assets.

Singh (2022) Human resource accounting assists the firm to proclaim the value of Human Resources assertively. When the human resources accounts show a elevated value of the human resources, it facilitates the firm to earn goodwill in the firm.

2.4 Research Gap

Researcher was unable to find any literature on Human Resource Accounting implementation in educational institutions and more specifically in Amity, ITM and CV Raman Universities located in MP and CG more so in recent years.

2.5 Research Questions

The research questions relevant for current study is, what is the faculty members' perception regarding impact HRA on goodwill for higher education institutions i.e. universities.

2.6 Research Objectives

The research objective for the present study is:

- To analyze the perception of faculty members towards the impact of HRA on goodwill for higher education institutions i.e. universities.

2. Research Methodology

Research Methodology, keeping objectives as base, consists the methods used to analysis the data including research design and the tool applied to test the hypothesis. The research designs for the current study are the descriptive and causal. As per the objectives of the current study five (5) hypotheses are constructed.

3.1 Research Hypotheses

3.1.1 Between same universities and goodwill of higher education institutions i.e. universities-

- **ATH₀**: Between Amity Universities, there is no significant difference in faculty members' perception towards the impact of HRA practices on goodwill of higher education institutions i.e. universities.
- **ITH₀**: Between ITM Universities, there is no significant difference in faculty members' perception towards the impact of HRA practices on goodwill of higher education institutions i.e. universities..
- **CTH₀**: Between CV Raman Universities, there is no significant difference in faculty members' perception towards the impact of HRA practices on goodwill of higher education institutions i.e. universities.

3.1.2 Among universities of MP and among universities of CG and goodwill of higher education institutions i.e. universities-

- **MPTH₀**: Among universities in MP, there is no significant difference in faculty members' perception towards the impact of HRA practices on goodwill of higher education institutions i.e. universities.

3.1.3 Among universities of CG and goodwill of higher education institutions i.e. universities-

- **CGTH₀**: Among universities in CG, there is no significant difference in faculty members' perception towards the impact of HRA practices on goodwill of higher education institutions i.e. universities.

3.2 Sampling Details

The research is primary research and thus the data is directly collected from the respondents for this study only. The population is 1504 for this study and consists of the faculty members working in the selected education institutions while samples are drawn using quota and convenient sampling technique. This sample is collected as per designation and gender. Omniconvert (2024) has suggested 20% sample for population size of 1000 while St. Olaf College (2024) highlighted that the sample size of 30% is proper for the population of 1200-1500. Final sample from whom proper filled questionnaire is received are 454 which is little higher than 30% of current population size.

Table 3.1: Sample details: As per Universities/Sample Categories/States

Universities	Sample Category	MP	CG	Total
Amity University	Professor	10	7	17
	Associate Professor	17	14	31
	Assistant Professor	40	38	78
	Total	67	59	126
	Male Teacher	43	38	81

	Female Teacher	24	21	45
	Total	67	59	126
ITM University	Professor	8	6	14
	Associate Professor	14	14	28
	Assistant Professor	36	34	70
	Total	58	54	112
	Male Teacher	39	36	75
	Female Teacher	19	18	37
	Total	58	54	112
CVRaman University	Professor	15	11	26
	Associate Professor	26	23	49
	Assistant Professor	73	68	141
	Total	99	87	216
	Male Teacher	72	62	134
	Female Teacher	42	40	82
	Total	114	102	216

Table 3.2: Sample details: As per States/Sample Category/Universities

States	Sample Category	Amity	ITM	CV Raman	Total
Madhya Pradesh	Professor	10	8	15	33
	Associate Professor	17	14	26	57
	Assistant Professor	40	36	73	149
	Total	67	58	114	239
	Male Teacher	43	39	72	154
	Female Teacher	24	19	42	85
	Total	52	43	99	239
Chhattisgarh	Professor	7	6	11	24
	Associate Professor	14	14	23	51
	Assistant Professor	38	34	68	140
	Total	59	39	87	215
	Male Teacher	38	26	52	136
	Female Teacher	21	13	35	79
	Total	59	39	87	215

3.3. Data Collection

As per the hypotheses the 18 questions/statements are prepared and responses are recorded in 5-point Likert scale with option strongly agree (5), agree (4), neutral (3), disagree (2) and strongly disagree (1).

3.3.1 Questions/statements included in questionnaire are as follows

1. HRA, due to goodwill, made institution a good place to work for existing faculty members
2. HRA, due to goodwill, made institution a good place to work for potential faculty members
3. HRA improved teaching qualities of institutional faculty members and thus positively impact goodwill
4. HRA made happy existing students with teaching-learning services leading to enhanced goodwill
5. HRA improved faculty performance has brought goodwill to the institution
6. HRA improved student performance has brought goodwill to the institution
7. HRA policies have uplifted the overall goodwill of the institution
8. Efficient faculty due to HRA practice has improved quality of education and thus improved goodwill
9. Institution has full enrolment due to goodwill created by HRA
10. Institution has higher enquiry for admission due to goodwill generated by HRA
11. HRA placed value to faculty thus better goodwill leading to attract people to work with institution
12. HRA consider faculty members as an asset which automatically increase goodwill through word of mouth
13. HRA evaluate of performance of faculty members thus increasing goodwill later help to retain best faculty
14. Well planned HRA generates more revenue for institution
15. Sound designed HRA bring higher profit to institution

16. HRA is broader view caters to all aspect of teacher's contribution leading to better goodwill
17. HRA through new concept implementation get fame to the institution resulting to higher goodwill
18. HRA approach making better teaching help in overall development of the students and thus, increases Goodwill.

3.4 Analysis Details

The data so collected through the questionnaire are put in SPSS for data analysis. For evaluating validity of instrument i.e. questionnaire, factor analysis was conducted while for checking reliability of data Cronbach's Alpha value is calculated. For forming perception of faculty members mean values and then average mean values are calculated. The hypothesis is tested by applying ANOVA. Later, after discussion, conclusion is drawn and further, recommendation is provided along with highlighting the scope of future research. Singh, Chandra & Sharma (2018) carried on their study in same way.

3. Discussion and Findings

This includes the validity and reliability verification and later creation of faculty members' perception on impact of HRA practices on goodwill of higher education institutions i.e. universities. Later, hypothesis testing is carried on.

4.1 Validity

Factor analysis is carried on to test the validity of the questionnaire.

Table 4.1: Rotated Component Matrix^a

Factor No.	Components		
	1	2	3
4	.745		
5	.733		
1	.729		
6	.713		
3	.705		
2	.693		
7	.685		
12	.679		
8	.665		
16	.653		
13	.642		
18	.631		
11	.616		
17	.601		
10		.357	
9		.332	
14			.345
15			.326
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. ^a			

As a rule of thumb, your variable should have a rotated factor loading of at least 0.4 (meaning $\geq +.4$ or $\leq -.4$) onto one of the factors in order to be considered important. From above table it can be concluded that all the variables are acceptable as their factor scores is greater than 0.4. The factor scores greater than 0.4 are considered stable (Guadagnoli and Velicer, 1988).

From above the one factor (1st) is considered valid with lowest value 0.601 and values are higher than 0.40. The statements of second factor with values 0.357 and 0.332 (10 and 9) and the statements of third factor with values 0.345 and 0.326 (14 and 15) are omitted due to its unstable value i.e. less than standard value 0.40. Singh, Chandra & Sharma (2017) used the same criteria for testing validity.

The first factor collectively can be called as 'HRA impact on goodwill'.

4.2 Reliability

Reliability test is carried on by calculating Cronbach's Alpha value for the HRA impact of goodwill factors derived after factor analysis.

Table 4.2: Cronbach's Alpha Value for HRA impact on goodwill

Factors	Cronbach's Alpha	N of Items
HRA impact on goodwill	0.767	14

A thumb rule states that the value of 0.7 is considered reliable (Nunnally, 1978). The Cronbach's Alpha value 0.767 for HRA impact on goodwill being more than 0.70, shows that the data is reliable.

4.3 Analysis: HRA impact on Goodwill- University Wise

4.3.1. Perception formation

The perception of faculty members is related to impact of HRA practices on goodwill of higher education institutions i.e. universities. The perception can be negative, neutral or positive. If positive then whether it is of low level, moderate level or high level.

The perception is derived separately on basis of university and state. The average of mean value is calculated and then evaluated to form perception. This perception forms the base for testing of hypotheses. Singh, Chandra & Sharma (2018) used the same method for this.

Table 4.3: Group-wise Average Mean Value for HRA impact on Goodwill

Group Statistics		
	Amity MP	Amity CG
Designation(D): Average Mean	3.59	3.56
Gender(G): Average Mean	3.58	3.50
Average Mean Value (D&G)	3.585	3.530
	ITM MP	ITM CG
Designation(D): Average Mean	3.57	3.55
Gender(G): Average Mean	3.53	3.49
Average Mean Value (D&G)	3.550	3.520
	CV Raman MP	CV Raman CG
Designation(D): Average Mean	3.56	3.52
Gender(G): Average Mean	3.51	3.45
Average Mean Value (D&G)	3.535	3.485

Zaidatol & Bagheri (2009) suggested that the mean value of responses given in five point likert scale with strongly agree=5, agree=4, neutral=3, disagree=2 and strongly agree=1 if comes under 3.39 then it is taken as low, from 3.40 to 3.79 as moderate and more than 3.8 as high. This criterion is used by Zaidatol and Bagheri (2011) and Wogari (2016) in their study.

Singh, Dixit & Chandra (2017) followed the same criteria in their research work.

Amity University

The average mean value for Amity University of MP is 3.585 which mean the perception of faculty members of Amity University of MP is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The average mean value for Amity University of CG is 3.530 which mean the perception of faculty members of Amity University of CG is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The perception of Amity University of MP is little stronger than the Amity University of CG.

ITM University

The average mean value for ITM University of MP is 3.550 which mean the perception of faculty members of ITM University of MP is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The average mean value for ITM University of CG is 3.520 which mean the perception of faculty members of ITM University of CG is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The perception of ITM University of MP is little stronger than the ITM University of CG. **CV Raman University**

The average mean value for CV Raman University of MP is 3.535 which mean the perception of faculty members of CV Raman University of MP is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The average mean value for CV Raman University of CG is 3.485 which mean the perception of faculty members of CV Raman University of CG is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The perception of CV Raman University of MP is little stronger than the CV Raman University of CG.

4.3.2 Hypothesis testing

As the comparison among two and three categories in each group is to be done so the hypothesis testing applicable is the ANOVA test. The p value for each group is calculated to be compared with the significance value (α) i.e. 0.05 (5% significance level) in current study. If the calculated table value i.e. p value is greater than the ' α ' value i.e. 0.05 then null hypothesis is accepted but if it is opposite then null hypothesis is rejected. The calculated p value related to impact on teaching efficiency for two groups i.e. group as per Amity University, MP & CG; group as per ITM University, MP & CG; group as per CV Raman University, MP & CG are given below in table.

Table 4.4: Calculated p value related to university wise HRA impact on Goodwill

S. No.	Category	Sig. Value (p – Value)
1	As per Amity University (MP & CG)	0.56
2	As per ITM University (MP & CG)	0.47
3	As per CV Raman University (MP & CG)	0.33

Table 4.5: Status of Hypothesis- Accepted or Rejected

S. No.	Hypothesis	Accepted/Rejected
1	ATH ₀	Accepted
2	ITH ₀	Accepted
3	CTH ₀	Accepted

4.4 Analysis: HRA impact on goodwill- State Wise

4.4.1 Perception formation

Perception is formed for teaching efficiency.

Table 4.6: Group-wise Average Mean Value for Teaching Efficiency (State)

Group Statistics			
	MP		
	Amity	ITM	CV Raman
Designation(D): Average Mean	3.60	3.58	3.57
Gender(G): Average Mean	3.59	3.54	3.52
Average Mean Value (D&G)	3.595	3.560	3.545
	CG		
	Amity	ITM	CV Raman
Designation(D): Average Mean	3.57	3.54	3.53
Gender(G): Average Mean	3.51	3.48	3.46
Average Mean Value (D&G)	3.540	3.510	3.495

MP

The average mean value for Amity University of MP is 3.595 which mean the perception of faculty members of Amity University of MP is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The average mean value for ITM University of MP is 3.560 which mean the perception of faculty members of ITM University of MP is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The average mean value for CV Raman University of MP is 3.545 which mean the perception of faculty members of CV Raman University of MP is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The perception of Amity University of MP is strongest followed by ITM University of MP and then of CV Raman University of MP.

CG

The average mean value for Amity University of CG is 3.540 which mean the perception of faculty members of Amity University of CG is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The average mean value for ITM University of CG is 3.510 which mean the perception of faculty members of ITM University of CG is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The average mean value for CV Raman University of CG is 3.495 which mean the perception of faculty members of CV Raman University of CG is positive towards impact of HRA practices on goodwill of higher education institutions while the perception is of moderate level.

The perception of Amity University of CG is strongest followed by ITM University of CG and then of CV Raman University of CG.

4.4.2 Hypothesis testing

The calculated p value related to impact HRA practices on goodwill of higher education institutions for three groups i.e. group as per Amity, ITM and CV Raman Universities of MP; group as per Amity, ITM and CV Raman Universities of CG are given below in table.

Table 4.7: Calculated p value related to state wise teaching efficiency

S. No.	Category	Sig. Value (p – Value)
1	As per MP (Amity, ITM, CV Raman)	0.68
2	As per CG (Amity, ITM, CV Raman)	0.61

Table 4.8: Status of Hypothesis- Accepted or Rejected

S. No.	Hypothesis	Accepted/Rejected
1	MPTH₀	Accepted
2	CGTH₀	Accepted

4. Conclusions

The current study is related to the Human Resource Accounting and objective of the study was to find the impact of HRA on efficiency of faculty members of various universities. The conclusion is as follows.

5.1 Objective

To analyze the perception of faculty members towards the impact of HRA practices on goodwill of higher education institutions i.e. universities

5.1.1 Between Same Universities of Two States

When compared the perception between same universities, it was found that there is no significant difference of perception of faculty members on impact of HRA practices on goodwill of higher education institutions i.e. universities. Faculty members of both universities have positive perception of moderate level. However, the faculty members of Amity University of MP have stronger positive perception as compared to those of Amity University of CG.

In similar pattern, the faculty members of ITM University of MP have stronger positive perception as compared to those of ITM University of CG.

Again, the faculty members of CV Raman University of MP have stronger positive perception as compared to those of CV Raman University of CG.

5.1.2 Among Universities of Same State

When compared the perception among universities of same state, it was found that there is no significant difference of perception of faculty members on impact of HRA practices on goodwill of higher education institutions. Faculty members of three universities of same state have positive perception of moderate level.

However, the faculty members of Amity University of MP have strongest positive perception as compared to those of ITM University of MP followed by CV Raman University of MP.

In similar pattern, the faculty members of Amity University of CG have strongest positive perception as compared to those of ITM University of CG followed by CV Raman University of CG.

5. Recommendations

The universities need to make the staff specifically the faculty member more aware about the Human Resource Accounting practices and one of its benefits as goodwill creation.

The awareness through training programme, conferences, workshops regarding HRA and its impact on goodwill creation will help the faculty members to know more and bring efficiency in universities.

6. Scope of Future Study

In future, empirical study can be made various other benefits of HRA. The similar study can be carried on in various industries.

7. References

1. Adbullahi, A & Kirfi, M. M (2012). Human Capital Accounting: Assessing Possibilities for Domestication of Practice in Nigeria. *Research Journal of Finance and Accounting*, 3(10), 57-63.
2. Anonymous (n.d.) Human resource accounting. *Hrmiv_hra.pdf*, https://backup.pondiuni.edu.in/storage/dde/downloads/hrmiv_hra.pdf
3. Anonymous. (2024). Sample Size. ST.OLAF COLLEGE. <https://wp.stolaf.edu/iea/sample-size>
4. Anonymous. (2024) Omniconvert. [https://www.omniconvert.com/Sample size](https://www.omniconvert.com/Sample%20size)
5. Bose, Rathindra Nath, "Human Resource Accounting With Special Reference to India", *Management Accountant*, September, 1989.
6. Burns, T.J., "Behavioural Aspects of Accounting Data For Performance Evaluation", Ohio State University, Columbia College of Administrative Science, 1970.
7. CheckMarket Medallia How to determine population and survey sample size? 2013
8. Flamholtz, E. G. (1974). Human resource accounting. Dickenson Publishing Company, Inc., California.
9. Flamholtz, E. G. (1999). Human Resource Accounting: Advances, Concepts, Methods and Applications. Boston, MA: Kluwer Academic Publishers.
10. Guadagnoli, E., & Velicer, W. F. (1988). Relation of sample size to the stability of component patterns. *Psychological Bulletin*, 103(2), 265-275.
11. Gupta, D. K. (1997). Valuation of intellectual assets and human resource accounting. *The Management Accountant*, 32.
12. Anonymous (n.d.) Sample size. <https://www.checkmarket.com/blog/how-to-estimate-your-population-and-survey-sample-size/>
13. Jeroh, E. (2013). Human capital accounting and the comparability of financial statements in Nigeria. *Journal of Accounting and Management, JAM*, 3(2).
14. Joshi, U. & Mahei, R. (2012). Human resource accounting system in selected Indian companies. *Journal of Social and Development Sciences*, 3(2), 69-76.
15. Likert, R. M. (1967). *The human organization: its management and value*. New York: McGraw-Hill Book Company.
16. Murty, S. B. (1995). Human resource management and accounting in construction industry. *The Management Accountant*, 30(10).
17. Newman, B. H. (1999). *Accounting recognition of human capital assets*. New York: Pace University Press.
18. Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw-Hill
19. Raghuwanshi, D. B. (2014). Human resource valuation in education sector (need, challenges and possible solutions). *Journal of management outlook*, 4 (2).
20. Rao, D. P. (1954). *Human resource accounting*. InterIndia Publications, New Delhi.
21. Rasikbhai, R. N. & Makwana, P. (2012). A survey of managerial uses of human resource accounting. *Indian Journal of Applied Research*, 2 (3), 114 - 115.
22. Sharma, N. & Shukla, H. (2012). An evaluation of human resource accounting disclosure practices in Indian companies. *Indian Journal of Applied Research*, 1 (10).
23. Singh, C. M., Chandra, A. and Sharma, S. (2017). Opinion difference of teachers on existing performance appraisal practices in private engineering institutions. *International Journal Research in Commerce, IT, Management*, 7 (7), 22 – 34, UGC No. 579.
24. Singh, C. M., Chandra, A. and Sharma, S. (2018). A study on status of employability skills among fresh engineers in Chhattisgarh. *IMPACT: International Journal of Research in Humanities, Arts and Literature*, 6 (6), 81 – 92, UGC No. 40893.
25. Singh, C. M., Chandra, A. and Sharma, S. (2018). A teachers' opinion on current knowledge management practices in private engineering institutions. *IJRAR - International Journal of Research and Analytical Reviews*, 5 (4), 123 - 130, Paper ID – 191229, UGC No. 43602.
26. Singh, C. M., Chandra, A. and Sharma, S. (2018). Opinion difference of teachers on existing training and development practices in private engineering institutions. *International Journal of Academic Research and Development*, 3 (1), 359 – 367, UGC No. 48808, New Added Journal on 12/05/2017.
27. Singh, C. M., Dixit, I. and Chandra, A. (2017). A study of quality aspects in teachers of engineering institutions in Chhattisgarh. *IOSR Journal of Business and Management (IOSR-JBM)*, 19 (9), 67 - 71, UGC No. 46879.
28. Singh D. (2022) Human resource accounting. GetUpLearn, <https://getuplearn.com/blog/human-resource-accounting/>

29. Wogari, M. (2016). Employee's perception of performance based incentive schemes and its influence on employee productivity: the case of Africa village financial services S.C. Ph.D. Thesis: Addis Ababa University.
30. Zaidatol, A. L. & Bagheri. A. (2011). Teachers' and students' entrepreneurial self efficacy: implication for effective teaching. *Procedia - Social and Behavioral Sciences*, 29, 1071 - 1080.