

Human Resource Accounting (HRA): A Study on Perception of HR Regarding their Economic Worth

Amar Jyoti Borah

M.Phil Research Scholar
Department of Commerce,
Assam University.

Abstract: The basic objective of the paper is to study the Human Resources Accounting practices, to identify the issues and challenges, to examine these issues and challenge.

Keywords: Human Resource, Human Resource Accounting, Perception, Economic Worth etc.

1.1.Introduction

HRA in present scenario is highly complex in the market to find well knowledge, coached, and highly motivated people. Human resource is one of the most important back office operations of any organization or business.

The 21st century has been referred as the century of the service sector. All major expansion scope is occurring in the service sector and expansion of manufacturing sector has become minimal. Now most of the researchers do lots of study on understanding the concepts and thoughts and fundamentals of human resource accounting as the part of their research work.

Human Resource Accounting (HRA) is a new branch of accounting. It is based on the traditional concept that all expenditure of human capital formation is treated as a charge against the revenue of the period as it does not create any physical asset. But now a day this concept has changed and the cost incurred on any asset (as human resources) should be capitalized as it yields benefits measurable in monetary terms. The purpose of human resource accounting is to depict the potential of the employees in monetary terms. This can be done in two forms such as: (1) cost calculation which will include the expenditure incurred for recruiting, staffing and training the quality of the employees and (2) value based calculation includes the return which the above investment can yield in future.

Objectives of The Study

The main objective of this paper is to explore the concept of Human Resource Accounting which focuses on human capital as an asset from the perspective of strategic human resource planning.

Research Methodology

This study is descriptive and conceptual in nature. This article is conducted on the basis of secondary data. This paper is aimed at searching the existing literatures on Human Resource Accounting (HRA). The secondary data have been collected from the journals, published books, newspaper articles and the internet sources are also used

1.2.Literature Review

(Shenbagavalli & Soni, 2017) are of the view that the human resource accounting provides the base for decision making and planning of physical assets of an organization. This system of accounting also provides valuable information to all the stakeholders and the investors who are planning for long term relationships with the concerned organizations.

(Jain, 2017) is of the view that it is required to give awareness to the employees and employers regarding the application and advantage arise from the HRA practices . Governmental and professional bodies should take steps to establish specific rules and regulations for valuing and reporting human resources.

(Rahaman, et. al, 2013) Revealed that the conceptualization of HRA, the ideas incorporated therein, and arguments are good for the accounting profession and corporate financial reporting. But the existing models proposed so far are not in a state to implement HRA practice worldwide.

(Islam & Sarker, 2016) Concluded that the in order to operate and manage a firm successfully and productively, Human Capital is needed. As HR is a very important and essential element of every firm, it is necessary to comprise every transactions associate with human capital under traditional accounting applications.

(Ramaya, 2017) Stated that the HRA provides benefits in terms of better performance, employee efficiency, better decision making, improved employer brand, true reporting of worth of firm and Governmental and professional bodies should take steps to establish specific rules and regulations for valuing and reporting human resources.

(Aggarwal, 2014) Given the view expressed by both academicians and policy makers that the traditional financial reporting system not makes the grade to provide investors with value-relevant information. It may well be that in the future, the reporting of information related to Human resource accounting in the financial statements may be mandatory.

(Islam, et. al, 2013) is of the view that the approach or procedure of recognition and calculation of figures and information relating to human assets and disclosing the details to the keen individuals is called as HRA. Accordingly, for estimating the value of human assets and communicating the information's of investment in human capital, there is a required to impose some particular laws.

Okpako, at al. (2014) attempts to ascertain the relationship among human resource accounting and performance of the organization. The researcher carried out a study on seven organizations quoted on the Nigeria Stock Exchange and they found that human resource accounting variables impacted positively to the level of firm performance.

Hossain, at al. (2014) concluded that when human capitals are measured in quantitative terms and stated as assets and included in the financial statement of the companies, the numerous users will be rewarded with higher qualitative and quantitative data, leads to improve decision taking capabilities by exploring previous literature review with few recommendations regarding new ideas, approaches, imaginations and procedures of adopting HRA.

(Karimi, 2012) found out that the human capital, structural capital and relational capital influenced business performance of pharmaceutical firms in Kenya. Human capital and

structural capital relationship strongly existed among the studied pharmaceutical firms; and that the two positively and significantly influenced business performance.

Soetan, at al. (2018) recommended that the expenditure on human resources should be recognized and recorded in the statement of financial position as intangible assets and not as expenses.

Salajeghe, at al. (2015) showed the importance of human resources unit in the reduction cost, and increase employee and professors efficiency. And they recommended in addition of the importance and application awareness of human resource accounting in increasing the effectiveness of human resources, institutions can effectively take advantage from this powerful tool.

Johanson, at al. (1998) draws conclusions from literature whose goal was to put information on intangibles into financial and non-financial frameworks. Theoretical elaboration about possible effects is not rare, but investigations are scarce when it comes to financial attempts and almost non-existent with respect to nonfinancial models.

Mahmoodi, at al. (2013) their research seeks to delve into the significant impact of human resources on the advancement of the institution, the results substantiate that the impediments pertaining to the process of collecting human capital data for the report, the weak points and failings of the current accounting systems, and the absence of a comprehensive model for appraising human resources are the major influential factors obstructing the implementation of human resource accounting.

1.3. Conceptual Issues of HRA

1.3.1. About Human Resource

Human Resource refer to the individuals or personnel or workforce within an organization responsible for performing the tasks given to them for the purpose of achievement of goals and objectives of the organization which is possible only through proper recruitment and selection, providing proper orientation an induction, training, skill developments, proper assessment of employees (performance appraisal), providing appropriate compensation and benefits, maintaining proper labor relations and ultimately maintaining safety, welfare and health concern of employees, which is process of the human resource management(**Sukmaya**).

1.3.2. About Human Resource Management

Human resource management involves developing and administering programs that are designed to increase the effectiveness of an organization or business. It includes the entire spectrum of creating, managing, and cultivating the employer employee relationship (**Cappelli, 2010**).

For most organizations, agencies, and businesses, the human resources department is responsible for:

- Managing job recruitment, selection, and promotion
- Developing and overseeing employee benefits and wellness programs
- Developing, promoting, and enforcing personnel policies
- Promoting employee career development and job training
- Providing orientation programs for new hires
- Providing guidance regarding disciplinary actions

- Serving as a primary contact for work-site injuries or accidents

1.3.3. The Concept of Human Resource Accounting

In order to get more insights into the theory of HRA, one needs to look at the few important definitions stated by the some proficient researcher in the related area. In economics we find Men, materials, land, money and the entrepreneur is the main elements of production (**Tammaana, 2014**).

The financial statement or annual reports of every undertaking recorded land and capital however they did not give much importance to the men and entrepreneur and hence, they only represent a charge against the profit made by the organization (**Abubakar, 2006; Glautier, 1974**). The two factors, labor and entrepreneur, are the human assets or resources organizations have.

From another point of view, HRA is an expansion of the existing “Expense recognition principle” or “Matching Principles” that requires revenue to be matched with expenses incurred to earn that amount of revenue and of organizing data to communicate relevant information. This effort to quantify Human Assets value assists the management to deal with the changes in its quantity and standard in order to achieved balance between the needed resources and the benefit derived from such resources (**Rahaman, at al. 2013**).

The American Accounting Association in their report (**The Accounting Review, 1973**) defined Human Resource Accounting as the method of determining, quantifying and reporting information’s relating to human assets so as to promote productive management within a firm. Human capital can be Stated as the knowledge which the employees obtain during the course of their service life and use to manufacture services, goods, skills or ideas in different situations. This definition taken into consideration the HRA as the method of identifying and valuation of human capitals in order to help the firm for effective and efficient management. The concept is however incomplete because it is not distinct as to what constitute the Cost of Human Capital and how to identify it (**Rahaman, at al. 2013**).

In his view, (**Gupta, 1991**) Stated that Human Resource Accounting is primarily a reporting system which informs the administration about the fluctuation takes place to the human assets of the organization. The HRA performs accounting for the individuals in a firm i.e. for investment in employees and substitution expenses, and also the economic worth of HR. (**Rahaman, at al. 2013**)

From the above definitions, we therefore define the concept as the evaluation and quantifying procedure that report the cost and value of the individual in the annual reports and financial statements of an company as intangible asset, in order to present the real worth of the company thus helping the several users of the annual report in taking their personal decisions (**Rahaman, at al. 2013**).

Presentation the value of Human Assets in monetary nature in company’s financial statements is the main objective of HRA. From two different perspectives, the notion of HRA can be investigate i.e. 1. The amount of money invested in human assets; and 2. The value of human assets. The investment in human assets is the cost that suffered for recruitment, staffing, training, and developing the quality of the human assets (**Ojha, 2013**).

1.3.4. Origin and Historical Background of Human Resource Accounting

In 1961, Sir William Petty becomes first person to make an effort to measuring the value of a human being in monetary terms. Petty revealed that HR should be incorporated in any assessment of national wealth as he regarded the employees as the father of wealth. After that attempts were made by first William Far in 1853 and secondly Earnest Engle in 1883. The actual job begins only after the behavioral scientist vigorously criticized the traditional accounting methods for not measuring the human assets together with various other assets (Sonbhadra, 2010). RG Barry Corporation of Columbus made the first major attempt to value their HR in 1967. Their financial statements detailed the starting of HRA application developed by the corporation in order to report correct information's of value of the corporation's human resources. The aggregated expenditures of different categories such as recruitment and acquisition cost, training and development cost etc were considered. The expenditure for expected service lives of the employees was amortized and the unamortized expenditure i.e. when any employee quit the organization, were written down. Nowadays this concept is known as Historical Cost Approach to human resource valuation (Petty, 1899).

1.3.5. Development of the concept of Human Resource Accounting

The concept of HRA was first introduced by the Sir William Petty in 1961. But the actual research on HRA started from the year 1960 by the founder of the university of Michigan Institute of Social Science, R. Likert. He is popularly known for his research on management theory and styles (Likert R. , 1961; Likert R. , 1967). R. Likert, along with the teacher R Lee Brummetg and Ph.D. research scholars William C Pyle and Eric Flamholtz, developed some research projects which is designed to develop concepts and procedure of HRA (Darekar & Patil, 2017).

The behavioral scientists try to develop accurate and effective procedure for measuring the human assets value to the company. They were against the traditional accounting method as this did not considered valuation of human assets and reported in financial statements. As the HRA did not produce any animate assets; the conventional concept of accounting advocates the expenditure cost on human assets as a charge against the revenue. Currently the concept of HRA is changed and the expenditure on Human Assets must be treated as capital expenditure which is derived for a long time period and it can be valued in monetary terms (Bassey & Tapang, 2012).

1.3.6. Human Resource Accounting in India

After HRA was introduced by Neyveli Lignite Corporation and Bharat Heavy Electricals Limited it begins to earn popularity in India. Even though, the HRA was comes into existence prior to 1980. For including any important data regarding human capital in financial statement, the Indian Companies Act did not forward any regulations. Till now the HR aren't yet included as assets neither within the financial statement nor within the Annual Report of the various companies in India because HRA is not bring in any legislation. Also the Indian Companies Act 2013 doesn't have any particular guidelines considering the requirement of accounting and reporting of HR in financial statement and balance sheet of Indian Companies. The Institute of Chartered Accountants of India (ICAI) issued lots of Accounting Standards (AS) related to numerous aspects of accounting. However for valuation and reporting of HR of a firm, it is quite impossible for ICAI to

introduce any accounting standard. This was the biggest limitation concerning HRA (Soshite, 2017). The companies, who are presently reporting human assets valuation, includes

1. Bharat heavy Electrical Ltd (BHEL).
2. Steel Authority of India Ltd (SAIL).
3. Oil and Natural Gas Commissioning (ONGC).
4. Oil India Ltd
5. Project and Equipment corporation of India.(PEC).
6. Engineers India limited
7. Mineral and Metal trading Corporation of India.(MMTC).
8. Electrical India Ltd.
9. Hindustan Shipyard Ltd.
10. Cement corporation of India. (CCI).
11. Infosys Technologies Ltd.
12. Tata Engineering and Locomotive Works
13. Southern Petrochemicals Industries Corporation Ltd SPIC).
14. Associated Cement Company Ltd ACC).
15. National Thermal Power Corporation Ltd (NTPC).

1.3.7. Traditional Accounting Vs Human Resource Accounting

Wilson (2001), recommend consider a greater planned approach by using basic company performance measure of ROI however including HR costs like benefits, training, payroll taxes, salary, and administrative costs share as investments within the ROI estimation. In assess administrative and workers training and educational plan of actions, The investments in human capital will probably end in management as management's participation during a long term measurement procedure which examine these expenditures as investment in human capital. This may benefit the corporate, as against a short term expenditure reduces procedure to spice up short term gains at the cost of long period competitiveness and efficiency (UNECE, 2013).

1.3.8. Why we favor human resource accounting?

From the point of advertisement for a particular post to the point of departure, organizations do commit some financial resources to the employee. Many reasons culminated into the spending nature of organizations on their human resources. (Abubakar, 2006) identifies that getting the best human brain, achieving the pre-determined objectives of the organization, Commanding Respect in the Eyes of Stakeholders, gaining Competitive Advantage, Becoming the Pace Setter and Market Leader are some of the reasons why organizations do invest a lot of financial resources on their human capital (Abolfazi, at al. 2014). However, (Lau & Lau, 1978), (Steffy & Maurer, 1988), (Roslender & Fincham, 2001), and (Williams & Leffingwell, 2002) also revealed areas through which organizations invest money relative to their human resources. The identified areas are Advertisement, Recruitment and Selection, Familiarization and Training, Training and Development, Medical and Entertainment. (Sveiby, 2017), argued that organizations acquire Human Resources to generate future revenues, and therefore Human Resource must be take into consideration at the time of measuring a firm by taking advantage rather expensing them in the present financial year. According to him human capital, intellectual capital and structural capital concepts are similar to other assets. Human resources is largely seen as an integral part of the

firm's value – creating processes (**Pike, et al. 2000; Holland, 2003; Bukh, et al. 2005**) as well as creating and maintaining competitive advantage (**Holland, 2006**). In today's dynamic business environment, firms invest heavily in human capital assets. The problem however, is that these investments are either immediately expensed in the financial statement or arbitrarily amortized and therefore are not fully reflected in the balance sheet. Consequently, the book values of firms with significant amounts of human capital investments are unrelated to the market values (**Amir & Lev, 1996; Brennan, 2001; Lev, 2001; Holland, 2003**). The chartered institute of management accountants noted that all drivers of performance and value should be provided to investors including the non financial ones such as intangibles (**Starovic & Marr, 2003**). The financial Accounting Standard Board (FASB) addressed this issue by encouraging business to voluntarily disclose information regarding their intangibles and intellectual capital (**FASB, 2001**).

1.3.9. Argument against Human Resource Accounting

The following are the hurdles which make it hard to report and disclose the values of human assets by the organizations.

(a) The foremost barrier for reporting human assets outside of the company is that the data shared might be sympathetic to the organization and considered as anything which shouldn't be reported to the outside of the business because it may create a unfavorable image on the minds of the stakeholders or the data shared might provide significant information's to the rivals.

(b) As stated by **Gates (2002)** the businesses did not give initial preference to the interpretation of the value of the human resources instead they give more importance to the crucial matters like HR requirement and allocation.

(C) Further from **Gates (2002)** point of view about the acceptance of HRA practices is the absence of generally accepted method to measure and reporting the same accordingly outlining the norms that might agree to valuable, significant and relevant comparisons. As presently there is a lack of generally accepted definition of HRA, the businesses that are sufficiently provident to calculate, accomplished it in their own method.

From another perspective, (**Josrotia, 2004**) focused at the recent trends in the HRA area and developed few element which discourage the progression in the field and the implementation of the concept are low level of awareness and acceptance of HRA, absence of an industry standard, Extensiveness of the Research Involved, Strength and passion of few businesses like the IT is extremely dynamic because of repeated invention and technological development. On another viewpoint, human resources, according to (**Kodwani & Tiwari, 2007; Abubakar, 2006; Josrotia, 2004; Flamholtz, 1974; Roslender R. , 2004**), have certain notable quality, which leads to construct their measurement very different. These qualities include the uncertainty of the service life because the free movement of the human assets at any time they accordingly want. An HR can leave his work for a different job at any moment without any intimation. (**Rahaman, et al. 2013**).

Conclusion

Human resource accounting helps the company to ascertain the investment made on its employees and how much return can be expected from this investment. The ratio of human

capital is calculated as per accounting concept which indicated the degree of labor intensity of an organization. The human resources accounting provides the base for decision making and planning of physical assets of an organization. This system of accounting also provides valuable information to all the stakeholders and the investors who are planning for long term relationships with the concerned organizations.

Overall, even valuing human resources appear to be important to Indian organizations, most organizations do not value their human resources and plans to implement valuation of human resources are at a very early stage. Despite the interest in valuation there will be little or moderate progress in the area over the next five to ten years. In order to show greater progress, more needs to be done at both the theoretical and practical level. More search into valuation methods and models, and the practical implication of these, is needed together with the engagement of both human resource and accounting professionals in the debate on valuation and its implementation in practice.

References

- [1] Abolfazi, D., Hossain, A., Hushang, M., & Majjid, B. (2014). Human Resource Accounting and Financial Reporting . *Indian Journal of Fundamental and Applied Life Sciences*, 4 (S1), 1565-1570.
- [2] Abubakar, A. E. (2006). Effects of supplementing urea or untreated rice straw with sundried or ensiled poultry litter on the performance of growing Yankasa rams. *Bulletin of Animal Health and Production in Africa*, 54 (3), 210-216.
- [3] (1973). *Accounting for Human Resources, The Accounting Review*. American Accounting Association, Accounting and Finance. America: American Accounting Association.
- [4] Amir, E., & Lev, B. (1996). Value-Relevance of Nonfinancial Information: The Wireless Communications Industry. *Journal of Accounting and Economics*, 22 (1-3), 3-30.
- [5] *ataanalytiq*. (n.d.). Retrieved June 11, 2019, from www.ataanalytiq.com: <https://www.ataanalytiq.com/job/human-resources#:~:text=Human%20resources%20are%20the%20people,individuals%20embody%20and%20economic%20growth>).
- [6] Biswas, S. K. (2013). Human Resource Accounting: An Effective Analysis & Future Aspect. *International Journal of Research in Commerce & Management*, 3 (5).
- [7] Brennan, N. (2001). Reporting intellectual capital in annual reports: Evidence from Ireland. *Accounting, Auditing & Accountability Journal*, 14 (4), 423.
- [8] Bukh, P. N., Nielsen, C., Gormse, P., & Mouritsen, J. (2005). Disclosure of Information on Intellectual Capital in Danish IPO Prospectuses. *Accounting, Auditing & Accountability Journal*, 18 (6), 713-732.
- [9] *cleverism.com/financial-statement-analysis-introduction*. (n.d.). Retrieved April 23, 2019, from cleverism.com: cleverism.com/financial-statement-analysis-introduction/
- [10] Darekar, D. R., & Patil, M. V. (2017). Human Resource Accounting: Global Need. *10th International Conference on Science, Technology and Management*.8. Bengaluru; India: Institution of Electronics and Telecommunication Engineers.

- [11] FASB. (2001). Retrieved May 11, 2019, from Improving business reporting: Insights unto enhancing voluntary disclosures.:
<https://www.fasb.org/cs/BlobServer?blobcol=urldata&blobtable>
- [12] Flamholtz, E. (1974). Human Resource Accounting: A Review of theory and research. *Journal of Management Studies*, 11, 44-61.
- [13] Gates, S. (2002, February 1). Value at work: The risks and opportunities of human measurement and reporting. USA: The Conference Board USA.
- [14] Glautier, M. (1974, November 28-29). Human Resource Accounting: A Critique of Research Objectives for the Development of Human Resource Accounting Models. *A Paper Presented at a Seminar on Human Resource Accounting held at the European Institute for Advanced Studies in Management* . Brussels, Belgium.
- [15] Gupta, D. (1991). Human Resource Accounting in India: A Perspective. *Administrative Staff College of India Journal of Management*, 20 (1), 9-10.
- [16] Holland, J. (2006). Fund management, intellectual capital, intangibles and private disclosure. *Managerial Finance*, 32 (4), 277-316.
- [17] Holland, J. (2003). Intellectual Capital and the Capital Market-Organization and Competence. *Accounting, Auditing & Accountability Journal*, 16 (1), 39-48.
- [18] *Human-Resource-Accounting/Pondicherry University*. (n.d.). Retrieved April 22, 2019, from pondiuni.edu.in: pondiuni.edu.in/sites/default/files/Human-resource-Accounting-260214.pdf
- [19] *humanresourcesedu/what-is-human-resource/*. (n.d.). Retrieved April 21, 2019, from HumanResourcesEdu: <https://www.humanresourcesedu.org/what-is-human-resources/>
- [20] Josrotia, P. (2004). *The Need of Human Resource Accounting*. Retrieved May 25, 2019, from [itpeopleindia](http://www.itpeopleindia.com): <http://www.itpeopleindia.com/20021216/cover.html>
- [21] Kodwani, A., & Tiwari, R. (2007, January). Human Resource Accounting: A New Dimension. *A Paper Presented at the Candian Accounting Association (CAAA) Annual Conference* . Canada.
- [22] Kumar, S., & Awasthi, P. (2018). Human Resource Accounting and Organizational Performance. *Indian Journal of Accounting*, 50 (1), 21-27.
- [23] Larabee, D. R. (Ed.). (n.d.). *Libguides*. Retrieved May 13, 2019, from <https://libguides.usc.edu>: <https://libguides.usc.edu/c.php?g=234974&p=1559473>
- [24] Lau, A., & Lau, H. (1978, April). A General Approach to Stochastic Management Planning Models: An Overview. *Accounting Review* , 389-401.
- [25] Lev, B. (2001, January). Intangibles Management: Measurement and Reporting. *Booking Institution Press* , 113-122.
- [26] Likert, R. (1961). New Patterens of Management. *Journal of Business and Management Sciences* .
- [27] Likert, R. (1967). *The Human Organisation: Its management and Value*. New York: McGraw-Hill Book Company.
- [28] Pandurangarao, D., Basha, D. S., & Rajsekhar, D. (2013). A Study on Human Resource Accounting Methods and Practices in India. *International Journal of Social Science and Interdisciplinary Research*, 2 (4).

- [29] Pike, S., Rylander, A., & Roos, G. (2000). Intellectual Capital Management and Disclosure. In C. Choo, & N. Bontis (Eds.), *The strategic management of intellectual capital and organizational knowledge* (pp. 657-672). Oxford University Press.
- [30] Rahaman, m. M., Hossain, M. A., & Akter, T. (2013). Problem With Human Resource Accounting and a Possible Solution. *Research Journal of Finance and Accounting*, 4 (18).
- [31] Roslender, R. (2004). The Prospects for Satisfactory Measuring and Reporting Intangibles: Time to embrace a new model of accounting? *Journal of Human Resource Costing and Accounting*, 13 (4), 338-359.
- [32] Roslender, R., & Fincham, R. (2001). Thinking Critically about Intellectual Capital Accounting. *Accounting, Auditing & Accountability Journal*, 14 (4), 383-399.
- [33] Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review*, 51 (1), 1-17.
- [34] *Shodhganga/Chapter-1*. (n.d.). Retrieved April 25, 2019, from Shodhganga.inflibnet: shodhganga.inflibnet.ac.in/bitstream/10603/134231/3/02_%chapter-1.pdf
- [35] Sonbhadra, S. B. (2010). A Study on Accounting of Human Resources Verses Physical Assets. 392-414. Bodh Gaya, Bihar, India.
- [36] Soshte, D. R. (2017). Human Resource Accounting (HRA) in India: A New Dimension. *International Journal of Research in Economics and Social Sciences*, 7 (9), 287-296.
- [37] Starovic, D., & Marr, B. (2003). Understanding Corporate Value: Managing and Reporting Intellectual Capital. *Chartered Institute of Management Accountants*.
- [38] Steffy, B. D., & Maurer, S. D. (1988). Conceptualizing and Measuring the Economic Effectiveness of Human Resource Activities. *Academy of Management Review*, 13 (2), 271-288.
- [39] Sveiby, K. E. (2017). The Intangible Assets Monitor. *Journal of Human Resource Costing and Accounting*, 2 (1), 73-97.
- [40] Teixeira, P. N. (2014). Gary Becker's early work on human capital – collaborations and distinctiveness. *IZA Journal of Labor Economics*, 12.
- [41] UNECE. (2013). *Human Resources Management and Training: Compilation of good practices in statistical offices*. New York and Geneva: United Nations.
- [42] *whatishumanresource*. (n.d.). Retrieved June 13, 2019, from www.whatishumanresource.com: <https://www.whatishumanresource.com>
- [43] Williams, J., & Leffingwell, T. (2002). *Cognitive Strategies in Sport and Exercise Psychology*. Washington DC: American Psychological Association.
- [44] Wilson, P. (2001, October). The Human Investment: What's your ROI on people? *CMA Management Journal*, 27-29.
- [45] Danh, L. D. (2014, April 8). *How does one determine the sample size for a given confidence level?* Retrieved May 21, 2019, from [researchgate.net: https://www.researchgate.net/post/How_does_one_determine_the_sample_size_for_a_given_confidence_level](https://www.researchgate.net/post/How_does_one_determine_the_sample_size_for_a_given_confidence_level)
- [46] *hrmiv_hra.pdf*. (n.d.). Retrieved April 20, 2019, from [pondiuni.edu.in: http://www.pondiuni.edu.in/storage/dde/downloads/hrmiv_hra.pdf](http://www.pondiuni.edu.in/storage/dde/downloads/hrmiv_hra.pdf)

- [47] Kapoor, N. (2012). A study on impact of HRA in educational institutions - with special reference to colleges from Ulhasnagar to Badlapur. *Epidteme, 1* (2).
- [48] N Ijeoma, A. O. (2013). Determining The Contribution Of HRA on Financial Statements of Nigerian Banks Using the Mental Test Analysis. *International Journal of Scientific & Technology Research, 2* (10).
- [49] Padmavathy, V. (2018). Human resource Accounting and its impact on Educational Institutions. *International Journal of Innovative research in Management Studies (IJIRMS), 3* (1), 8-13.
- [50] Basse, B. E., & Tapang, A. T. (2012). Capitalized Human Resources Cost and its Influence on Corporate Productivity: A Study of selected Companies in Nigeria. *International Journal of Financial Research, 3* (2).
- [51] Biswas, S. K. (2013). Human Resource Accounting: An Effective Analysis & Future Aspect. *International Journal of Research in Commerce & Management, 3* (5).
- [52] Cappelli, P. (2010, March 29). HR Implications of Healthcare Reform . *Human Resource Executive Online* .
- [53] Frese, M., & Rauch, A. (2001). *Human Capital Theory*, 1. Retrieved July 23, 2020, from Science Direct: <https://www.sciencedirect.com/topics/social-sciences/human-capital-theory>
- [54] Islam, M. A., Kamruzzaman, M., & Redwanuzzaman, M. (2013). Human Resource Accounting: Recognition and Disclosure of Accounting Methods & Techniques. *Global Journal of Management and Business Research Accounting and Auditing, 13* (3 Version 1.0), 1-10.
- [55] Jahan, S. (2021). *Human Resource Management Practice*. Retrieved February 21, 2021, from <http://hrmpractice.com/human-resources/>
- [56] Mohiuddin, M., & Banu, M. N. (2017). Human Resource Accounting (HRA): A Conceptual Study on Human Capital. *OSR Journal of Business and Management (IOSR - JBM), 19* (4 Version I), 33-37.
- [57] Ogbodo, C. O., & Egbunike, F. C. (2016). The Relationship between Human Resource Performance Ratios and Financial Performance of Nigerian Firms. *Journal of Resources Development and Management, 18*, 70-85.
- [58] Ojha, S. (2013). Prevailing Practices of Human resource Accounting: A Case study of IT Industries of India. *Journal of Business and Economics, 4* (12), 1291-1297.
- [59] Petty, S. W. (1899). *Economics Writings of Sir William Petty, together with the Observations upon Bills of Mortality, more probably by Captain John Graunt* (Vol. 2). (C. H. Hull, Ed.) London, England: Cambridge University Press.
- [60] Sherje, N. P., Agrawal, S. A., Umbarkar, A. M., Kharche, P. P., & Dhabliya, D. (2021). Machinability study and optimization of CNC drilling process parameters for HSLA steel with coated and uncoated drill bit. *Materials Today: Proceedings*, doi:10.1016/j.matpr.2020.12.1070
- [61] Rahaman, M. M., Hossain, M. A., & Akter, T. (2013). Problem with Human Resource Accounting and A Possible Solution. *Research Journal of Finance and Accounting, 4* (18), 1-10.

- [62] Ramdhani, A., Ramdhani, M. A., & Amin, A. S. (2014, July). Writing a Literature review research Paper; A Step-by-step approach. *International Journal of Basics and applied science* .
- [63] Sharma, R., & Dhabliya, D. (2019). Attacks on transport layer and multi-layer attacks on manet. *International Journal of Control and Automation*, 12(6 Special Issue), 5-11. Retrieved from www.scopus.com
- [64] Sukmaya, S. (n.d.). *Meaning of HRM*. Retrieved May 29, 2020, from Economics Discussion: <https://www.economicsdiscussion.net/human-resource-management/meaning-of-hrm/32218>
- [65] Tammana, S. (2014). *Human Resource Accounting (HRA): Meaning, Purpose, Approach and Limitations*. Retrieved June 20, 2020, from Business Manangement Ideas: <https://www.businessmanagementideas.com/human-resource-accounting/human-resource-accounting-hra-meaning-purpose-approach-and-limitation/19219>
- [66] Ulf Jhonson, G. E. (1998). Human Resource Costing and Accounting Versus the Balanced Scoreboard: A Literature Survey of Experience with the Concepts. *MERITUM Project* .