

How to Cite:

Nathan, S. S. K., Jagadeesan, D., & Karthi, R. (2022). Does EHRM have induced better production and resources utilization in an educational institution: An exploratory study. *International Journal of Health Sciences*, 6(S5), 2279–2288. <https://doi.org/10.53730/ijhs.v6nS5.9135>

Does EHRM have induced better production and resources utilization in an educational institution: An exploratory study

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Abstract--The study aimed to investigate the important domains in production result and resource utilization where EHRM have contributed significantly to educational institutions. For the study, the descriptive research design was utilized. The data was collected from 66 administrative staff belonging to 28 colleges in Tamil Nadu which are using EHRM. From the analysis made it can be interpreted that, There is a significant difference in production results in administrative function at considered educational institutions due to EHRM as per the opinions of the respondents belonging level of experience. Also, it was identified that Ease in Programme (Conference, Workshop, Seminars) management, Effortlessness in student monitoring and Better Administration function of accounts is the important result produced by the EHRM. Similarly, it was found that there is a significant difference in resource utilization at considered educational institutions due to EHRM as per the opinions of the respondents belonging to different Age groups and Levels of Experience. It can be interpreted that; Reduced Paper Works and Reduction of members in organizational structure due to systemization are the important effect of EHRM on resource utilization.

Keywords--EHRM, Production Result in Administrative Functions, Resource Utilizations.

Introduction

Human resource management in the public and private sectors around the world faces tremendous problems as we enter the twenty-first century, which is distinguished by rapid and complex political, economic, social, technological, and cultural improvements (Wirtky, T., et., al., 2016). With the introduction of the Internet and the evolution of information technology and communication methods, as well as the transformation of marketing, accounting, and various operations into electronic business, and the rise in organisational digital transformation, it became necessary to transfer jobs and paper files to electronic files, and relations between government and business organisations, trade unions, employees, and customers are thinning (Al-Harazneh, et., al., 2021).

E-HRM, E-management, E-business, E-marketing, E-recruitment, E-learning, and E-government are among the new terminology. This progress has also resulted in a slew of new titles. The application of Web-based approaches in HR-related systems and procedures is referred to as e-HRM, or the use of technology in human resource management (Srivastava, P., et., al., 2018). Higher education institutions in Gaza were chosen to investigate the impact of technology on human resource management because they contribute primarily to the service and development of society, humans, taking into account creativity, innovation, and scientific progress based on equality and equality, and promoting it to the level of excellence (Nura, A. A., et., al., 2012). By looking at the higher education sector in Tamil Nadu, which is represented in traditional educational institutions, the researchers were able to identify the few institutions employing EHRM which is completely conventional, hereby the researcher had attempted to discover the important influence made by the EHRM over traditional HRM in administrative function in educational institutions.

Literature Review

Because of the advancement of modern technology and computer applications, electronic human resource management has become an unavoidable requirement in human resource departments across all industries, including higher education, to achieve positive results in improving employee performance and increasing efficiency (Barifaijo, M. K., 2016). Human resources management, as a modern management methodology, necessitates a high level of human resources, as well as a shift in management methods, organisational structures, and the development of electronic infrastructure, for enterprises to improve their services and staff efficiency (Masum, A. K. M., et., al., 2015).

The higher education sector, which comprises universities and colleges, is vital to society and the state's security (Gh, M., 2018). Universities are an important part of the state since they have a direct impact on Palestinian society and supply a variety of institutions and industries (Wijayadne, D. R., 2021). When it comes to integrating innovative approaches and concepts in a variety of industries to obtain a competitive advantage, universities are among the most forward-thinking institutions (Singh, A., 2020). Even up-to-date professionals can contribute to the growth of human resources and society, and the current study's goal is to address

the following question: What is the reality of human resources management in colleges adopting EHRM in Tamil Nadu?

Objectives of the Study

The study aimed to investigate the important domains in production result and resource utilization where EHRM have contributed significantly to educational institutions.

Methodology

For the study, a descriptive research design was utilized. The data was collected from 66 administrative staff belonging to 28 colleges in Tamil Nadu which are using EHRM.

Analysis and Interpretation

The purpose of this study was to see if there is a substantial difference in production results in administrative functions at regarded educational institutions based on the opinions of respondents of various genders.

Table No. 1: Mann Whitney Test - EHRM Production Result with Gender

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Effortlessness in student monitoring, is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.260	Retain the null hypothesis.
2	The distribution of Better Administration function of accounts is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.491	Retain the null hypothesis.
3	The distribution of Scope for enlargement of Institution with new departments easily, is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.610	Retain the null hypothesis.
4	The distribution of Ease in Programme (Conference, Workshop, Seminars) management, is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.181	Retain the null hypothesis.
5	The distribution of Availability of sufficient data and information to plan for development, is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.069	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

For all situations, the estimated significance value is larger than 0.05, indicating that the null hypothesis is accepted. There is no significant difference in production results in administrative function at considered educational instructions due to EHRM as per the opinions of the respondents belonging to a different gender.

The purpose of this study was to determine whether there is a substantial difference in production results in administrative functions at regarded educational instructions based on the opinions of respondents from various age groups.

Table No. 2: Kruskal-Wallis Test - EHRM Production Result with Age

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Effortlessness in student monitoring. is the same across categories of Age.	Independent-Samples Kruskal-Wallis Test	.089	Retain the null hypothesis.
2	The distribution of Better Administration function of accounts is the same across categories of Age.	Independent-Samples Kruskal-Wallis Test	.105	Retain the null hypothesis.
3	The distribution of Scope for enlargement of Institution with new departments easily. is the same across categories of Age.	Independent-Samples Kruskal-Wallis Test	.053	Retain the null hypothesis.
4	The distribution of Ease in Programme (Conference, Workshop, Seminars) management. is the same across categories of Age.	Independent-Samples Kruskal-Wallis Test	.229	Retain the null hypothesis.
5	The distribution of Availability of sufficient data and information to plan for development. is the same across categories of Age.	Independent-Samples Kruskal-Wallis Test	.113	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

For all situations, the estimated significance value is larger than 0.05, indicating that the null hypothesis is accepted. There is no significant difference in production results in administrative function at considered educational instructions due to EHRM as per the opinions of the respondents belonging to different age groups.

The purpose of this investigation was to determine whether there is a significant difference in production results in administrative functions at considered

educational instructions based on the opinions of respondents with varying levels of experience.

Table No. 3: Kruskal-Wallis Test - EHRM Production Result with Experience

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Effortlessness in student monitoring. is the same across categories of Experience.	Independent-Samples Kruskal-Wallis Test	.026	Reject the null hypothesis.
2	The distribution of Better Administration function of accounts is the same across categories of Experience.	Independent-Samples Kruskal-Wallis Test	.022	Reject the null hypothesis.
3	The distribution of Scope for enlargement of Institution with new departments easily. is the same across categories of Experience.	Independent-Samples Kruskal-Wallis Test	.229	Retain the null hypothesis.
4	The distribution of Ease in Programme (Conference, Workshop, Seminars) management. is the same across categories of Experience.	Independent-Samples Kruskal-Wallis Test	.005	Reject the null hypothesis.
5	The distribution of Availability of sufficient data and information to plan for development. is the same across categories of Experience.	Independent-Samples Kruskal-Wallis Test	.374	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

In most circumstances, the estimated significance value is less than 0.05, indicating that the null hypothesis is rejected. There is a significant difference in production result in administrative function at considered educational instructions due to EHRM as per the opinions of the respondents belonging to different Level of Experience.

Here analysis was made to identify the important production result in administrative function at considered educational instructions brought by the EHRM.

Table No. 4: Rank Analysis - EHRM Production Result

Rank Analysis			
	N	Mean	Rank
Effortlessness in student monitoring.	66	4.1818	2
Better Administration function of accounts.	66	4.1515	3
Scope for enlargement of Institution with new departments easily.	66	4.1364	4

Ease in Programme (Conference, Workshop, Seminars) management.	66	4.1970	1
Availability of sufficient data and information to plan for development.	66	4.1212	5

From the rank analysis made using the mean score, it can be interpreted that Ease in Programme (Conference, Workshop, Seminars) management, Effortlessness in student monitoring and Better Administration function of accounts is the important result produced by the EHRM.

The purpose of this study was to see if there is a substantial difference in resource utilisation at the considered educational instructions as a result of EHRM based on the opinions of respondents of various genders.

Table No. 5: Mann-Whitney U Test – Resource Utilization With Gender

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Reduced Paper Works. is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.705	Retain the null hypothesis.
2	The distribution of Reduced reworks in Administrative functions. is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.461	Retain the null hypothesis.
3	The distribution of The reduced workload of the faculty in administrative functions. is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	1.000	Retain the null hypothesis.
4	The distribution of Reduction of members in organizational structure due to systemization. is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.691	Retain the null hypothesis.
5	The distribution of Reduction in overall expenses in administrative functions of the institution. is the same across categories of Gender.	Independent-Samples Mann-Whitney U Test	.141	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

For all situations, the estimated significance value is larger than 0.05, indicating that the null hypothesis is accepted. There is no significant difference in resource utilization at considered educational instructions due to EHRM as per the opinions of the respondents belonging to a different gender.

The purpose of this study was to see if there is a substantial difference in resource consumption at the considered educational instructions as a result of EHRM, based on the opinions of respondents of various ages.

Table No. 6: Kruskal-Wallis Test – Resource Utilization with Age

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Reduced Paper Works. is the same across categories of Age.	Independent-Samples Kruskal-Wallis Test	.058	Retain the null hypothesis.
2	The distribution of Reduced reworks in Administrative functions. is the same across categories of Age.	Independent-Samples Kruskal-Wallis Test	.018	Reject the null hypothesis.
3	The distribution of The reduced workload of the faculty in administrative functions. is the same across categories of Age.	Independent-Samples Kruskal-Wallis Test	.031	Reject the null hypothesis.
4	The distribution of Reduction of members in organizational structure due to systemization. is the same across categories of Age.	Independent-Samples Kruskal-Wallis Test	.305	Retain the null hypothesis.
5	The distribution of Reduction in overall expenses in administrative functions of the institution. is the same across categories of Age.	Independent-Samples Kruskal-Wallis Test	.567	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

In some circumstances, the estimated significance value is less than 0.05, indicating that the null hypothesis is rejected. There is a significant difference in resource utilization at considered educational instructions due to EHRM as per the opinions of the respondents belonging to Different Age Groups.

The purpose of this analysis was to determine whether there is a substantial difference in resource consumption at the considered instructional instructions as a result of EHRM, based on the opinions of respondents with varying levels of experience.

Table No. 7: Kruskal-Wallis Test – Resource Utilization with Experience

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The distribution of Reduced Paper Works. is the same across categories of Experience.	Independent-Samples Kruskal-Wallis Test	.107	Retain the null hypothesis.
2	The distribution of Reduced reworks in Administrative functions. is the same across categories of Experience.	Independent-Samples Kruskal-Wallis Test	.097	Retain the null hypothesis.
3	The distribution of The reduced workload of the faculty in administrative functions. is the same across categories of Experience.	Independent-Samples Kruskal-Wallis Test	.008	Reject the null hypothesis.
4	The distribution of Reduction of members in organizational structure due to systemization. is the same across categories of Experience.	Independent-Samples Kruskal-Wallis Test	.886	Retain the null hypothesis.
5	The distribution of Reduction in overall expenses in administrative functions of the institution. is the same across categories of Experience.	Independent-Samples Kruskal-Wallis Test	.058	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

In some circumstances, the estimated significance value is less than 0.05, indicating that the null hypothesis is rejected. There is a significant difference in resource utilization at considered educational instructions due to EHRM as per the opinions of the respondents belonging to different Levels of Experience.

Herein analysis was carried out to identify the important production result in administrative function at considered educational instructions brought by the EHRM.

Table No. 8: Rank Analysis – Resource Utilization

Rank Analysis			
	N	Mean	Rank
Reduced Paper Works.	66	4.2879	1
Reduced reworks in Administrative functions.	66	4.2121	3
The reduced workload of the faculty in administrative functions.	66	4.2121	3
Reduction of members in organizational structure due to systemization.	66	4.2576	2
Reduction in overall expenses in administrative functions	66	4.1515	5

of the institution.			
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From the rank analysis made using the mean score, it can be interpreted that; Reduced Paper Works and Reduction of members in organizational structure due to systemization are the important effect of EHRM on resource utilization.

Findings and Conclusion

From the analysis made it can be interpreted that, There is a significant difference in production results in administrative function at considered educational institutions due to EHRM as per the opinions of the respondents belonging level of experience. Also, it was identified that Ease in Programme (Conference, Workshop, Seminars) management, Effortlessness in student monitoring and Better Administration function of accounts is the important result produced by the EHRM. Similarly, it was found that there is a significant difference in resource utilization at considered educational institutions due to EHRM as per the opinions of the respondents belonging to different Age groups and Levels of Experience. It can be interpreted that; Reduced Paper Works and Reduction of members in organizational structure due to systemization are the important effect of EHRM on resource utilization.

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