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Re-Engineering Approach on Human Resources Management Practices (HRMP) Towards Chinese Teaching System in Nursing Programs

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Abstract. The purpose of this study is to discuss the re-engineering strategies on human resource management practices in China's higher education system, particularly in Nursing institutes. The Lecturers in Chinese nursing higher education institutions have limited deliveries (sessions) on Human Resources Management (HRM) module, thus the nurses have a challenge while dealing with patients. Through this research, it has been highlighted with evidence to teach students practical HRM skills has numerous benefits and so that Chinese nursing students can match their academic understanding with their practical experience. By reviving this practice, it becomes a process of re-engineering in Chinese teaching systems. This applied research had 91 respondents collected through primary data. SPSS tool is used to analyse these datasets. ANOVA and Measurement model analysis were done based on the data collected.

Keywords. Human resource management, Practical teaching system, Experiential Learning, Staff development, nursing, HRM practice, teaching system

1. Introduction

The purpose of this study is to revive or retune the approaches to comprehend the value of HRM in the practical teaching system in order to help Chinese nursing students learn more. This re-engineering process in primary data gathering will yield quantitative output, which has been analysed using SPSS (Statistical Package for Social Science) tool version 26.0. China has 4.71 million registered nurses in 2021 [1]. Beijing University in China offers 85 clinical master's degrees, and the Chinese university offers regal practical training to nursing students [2]. The teachers in these institutions

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needs to motivate the students to participate in practical activities to understand the different challenges and opportunities in the HRM process [3].

Students learn through observing HRM operations in real time and gaining practical information on how to manage human resources in health care to improve the quality of diagnostic and treatment services [4]. Nurses need HRM practical knowledge to understand and apply the ethical and legal norms of the healthcare sector in real-time practise [5]

2. Research Objectives

 RO_1 - To comprehend the importance of a practical teaching system through reengineering approach in the nursing undergraduate programme on human resource management practices

 RO_2 - To evaluate the role of a practical teaching system in improving the human resource management practice of nurses

RO₃ - To identify factors affecting High Commitment Human Resources Management Practices in Chinese teaching system in Nursing programs

 RO_4 - To produce the significant strategy to improve the practical teaching system in the nursing program

 RO_5 – To propose a recommendation to overcome challenges in practical teaching system in China

3. Research Questions

 RQ_1 – What is the importance of practical teaching system through re-engineering approach in the nursing undergraduate programme on human resource management practices?

 RQ_2 – What is the role of a practical teaching system in improving the human resource management practice of nurses?

 RQ_3 – What are the factors affecting High Commitment Human Resources Management Practices in Chinese teaching system in Nursing programs?

RQ4 - How to improve the practical teaching system in the nursing program?

RQ₅ – How to overcome challenges in practical teaching system in China?

4. Literature Review

Re-engineering in Human resource management practises (HRMP) is fundamentally a process of rejuvenating the traditional practices with more focus to attain the effective output. There are a set of policies and procedures that are necessary for an organization's human resource routines to be performed and controlled. On the other hand, as mentioned by [6], a practical teaching method is considered "a learning method in which students are engaged in the learning process". Human Resources Management (HRM) skills have been studied in the light of composite or bundle approach, using different names as well as different practices. Largely, each bundle includes common HRM practices such as compensation, career development, staffing,

performance appraisal, training and development, and job design concerns with varying dimensions [5]. Now, this present study attempts to link these particular HRM practices and skills towards practical teaching system and process followed at nursing higher education institutions. Interestingly, prior studies identify these HRM skills related to staff development as priority among others [7]. Also, consistent with early findings, this present study looks into the impact of HRM skills within Chinese Nursing education institutions and the practical extent of these skills are adopted within the structures of higher education sector. Based on the extensive review of HRM skills literature and of existing HRM practices within higher education sectors in China, a research model (conceptual framework) is proposed (Fig.1) with Barron & Kenny type and propositions thereto are developed.



Figure 1 - Conceptual Framework based on Baron and Kenny's Method

Furthermore, human resource practices can be duly classified as "control" or "commitment" practices [8]. On one hand, practical teaching system seeks to increase efficiency. Thus, it is obvious that this approach concerns itself fundamentally with relationship between higher education institution, practical teaching system and HRM skills. Human beings are indeed the most difficult resources to manage, which brings about the relevance of High Commitment Human Resource Management; a Human Resource (HR) tool utilized to correctly direct and motivate humans to bring about objectivity in the attainment of goals in any organization

4.1 Hypothesis

H₁: There is a significant impact between practical teaching system and human resource management skills

 H_2 : There is a significant impact between higher education (nursing programs) and practical teaching system

 H_3 : There is a significant impact between higher education (nursing programs) and human resource management skills

5. Research Methodology

The study employed a quantitative methodology that included primary data collection along with reviewing secondary data. Measurement model was executed with collected data. Secondary data from online resources such as ResearchGate and ProQuest were used to compile the results. Due to non-availability of open-access articles in Scopus, Web of Science and CNKI authors were retrieving from ResearchGate and ProQuest. Based on the study objectives, all topics have been constructed to conduct a measurement model in order to answer the research question. As mentioned by [9], the advantages of measurement model are that it helps in relating the research context with real-time context and meets the research objectives. Moreover, descriptive design and inductive approach have been followed in this research. The primary research, on the other hand, was conducted through an online poll of 91 Chinese nursing school teachers. To perform the survey, ten questions on study aims and hypotheses were written, and the questionnaire was placed into Google Form. Interviews and surveys are the two most effective data collection methods in primary research, according to [10]. To get to the point answer of the respondents, all of the survey questions were closed-ended and multiple-choice questions were used. The survey's sample size is 91 people, and the respondents were picked using a random sampling technique. The sample size was calculated using the G-Power formula, which is one of the methods used for sample-size calculation process according to [8]. In this research, G-Power sample size calculation was based on Power analysis for one-sample T-test

6. Findings and Analysis

6.1 Descriptive test

		1. What is your age?	2. Do you have nursing skills?	3. Are you a teacher of a nursing undergraduate programme?	4. Do you think that nurses need training on human resource management practices (HRMP)?
N	Valid	91	91	91	91
IN	Missing	0	0	0	0
Mean	1.73	1.40	1.70	1.77	Mean
Median	1.00	1.00	1.00	3.00	Median
Mode	2	1	1	5	Mode
Std. Deviation	.587	.000	.000	.000	Std. Deviation

Table 1: Descriptive test (Source: SPSS file)

The above table represents demographic profile of respondents. This descriptive test has aided to comprehend the fundamental statistical values such as mean, median, mode and standard deviation. As a result of the mean value, it can be concluded that the majority of respondents are older; all respondents have nursing experience; the respondents are Chinese nursing school teachers, and that they agree that "nurses need training on human resource management methods.

6.2 Reliability and Validity

	Cronbach' s Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Practical Teaching Systems	0.629	0.640	0.799	0.571
Higher Education System	0.680	0.685	0.742	0.591
Human Resources Management (HRM) Skills	0.669	0.670	0.820	0.603

Table 2: Reliability and Validity (Source: SPSS file)

Threshold for reliability is 0.6 [11] and above. Pertaining to this, all three constructs are having higher value that 0.6 Cronbach's Alpha thus they are reliable. Similarly, if the AVE is above 0.5, they are considered to be valid [11]. In the above table it could be found that AVE is above 0.5 thus they are valid.

6.3 Model Test Summary

Table 3: Model Test Summary	(Source:	SPSS	file)
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Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change St	Change Statistics			
					R Square Change	F Change	df1	df2	Sig. F Change
1	.717 ^a	.350	.332	.770	.378	42.681	1	63	.000

Model Test indicates the significance value between each construct. In this research there are three constructs, and they are deemed to be significant as the Sig.F Change value is 0.000. This proves that the model is neutral. Moreover, this research has adopted Baron and Kenny model to determine the relationship between the constructs.

6.4 ANOVA

 Table 4: ANOVA (Source: SPSS file)

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	34.000	1	34.000	42.681	.000 ^b
	Residual	61.178	64	.884		
	Total	94.744	64			

ANOVA is the abbreviation of Analysis of Variance. This statistical test developed by Ronald Fisher in the year 1918, has been in use ever since. In simple terms, ANOVA indicates whether there are any statistical differences between the means of three or more groups or latent variables. Here the mean square is .884 and significance is 0.000, which indicates that variables are significant.

6.5 Regression

Table 5: Regression (Source: SPSS file)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	1.222	.370		2.758	.000
1	Nurses should have good HRM skill to have good team leading capability in health care	.581	.114	.677	6.743	.000

The regression test has helped to clarify the relationship between a dependent variable and the research's independent variable [12]. The dependent variable in this study is the Chinese nursing colleges' practical teaching system, while the independent variable is human resource management practise. "Sig value more than 0.05 suggests acceptance of the null hypothesis, whereas Sig value less than 0.05 indicates acceptance of the alternative hypothesis," according to [8]The Sig value in this regression test is 0.00, demonstrating that "there is a significant correlation between human resource management skill and practical teaching system [12]. "The R-value demonstrates the dependency of a dependent factor on a dependent factor," according to [13]. For instance, an R-value less than 0.3 represent a weak relationship and an R-value more than 0.5 indicates a strong relationship. In this case, the R square value is 0.381 which represents a direct relation between nursing teaching and HRM practice [9]. The R square value is 0.247 in the second regression test, and the Sig. value is 0.00. As a result, the alternative hypothesis is accepted in this situation, implying that Chinese nursing teachers have difficulty teaching HRM to nurses in the classroom. The R square value, on the other hand, implies a weak association between nursing practical teaching systems and theoretical content alignment with the practical environment [9].

6.6 Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Practical Teaching System - > HRM Skills	0.349	0.349	0.041	8.511	0.000
Higher Education System -	0.129	0.128	0.031	4.229	0.000
Higher Education System - > HRM Skills	0.193	0.190	0.053	3.634	0.000

 Table 6: Hypothesis Testing (Source: SPSS file)

If p-value is less than 0.05, the construct is said to have positive relationship with the measured item. It is either p-value or t-statistics. For T-Statistics it has be more than 1.96. In this research all hypothesis has less than 0.05 p-value, thus the hypothesis is been proved.

7. Conclusion

Staff maintenance, development, relationships, team leadership, and training are some of the HRM methods used in China's practical teaching system [8]). This reengineering approach by replacing the existing procedural process has befitted the entire mechanism. Staffing challenges, poor working conditions, funding, and "constant transfer of teachers, among other things" are some of the issues encountered in China's practical teaching system, according to the report [9]. HRM policy, rules, and regulations, as well as their impact on managing stars and the organization's work, are tickets for students in a realistic context [14]. As a result, rather than memorising HRM policies, the students learnt how to put those policies into reality [13]. In this research, the maximum responders have agreed that HRM practice and its practical experiment are very much needed to improve the HRM knowledge of the students and to implement that the school needs to employ teachers who have good experience and knowledge of HRM [15].

7.1 Limitation and Future Scope

Every research in social sciences and humanities has a scope of improvement as it is not fully accurate [15]. This respective research is no exception. The secondary data has been sourced from ResearchGate and ProQuest as addressed in earlier sections due to non-availability of open-access articles in high ranking journals. This could be a major setback or shortcoming of this research. Authors agree that Scopus or Web of Sciences or CNKI indexed articles should have also been considered. While this can be carried out by future researchers, it has been admitted that ResearchGate and ProQuest has stupendous and wide collection of research manuscripts. And more advanced statistical tools could have been more suitable to analyse and interpret the numerical facts.

7.2 Innovation and Contribution

Any re-engineering study is a noteworthy topic and particularly in the topic of human resource management whereby it evolves around Chinese higher education sector has numerous learning which can be implemented gradually. In the future, researchers might look at the various practical techniques used in Chinese education to increase students' HRM knowledge and skills. Furthermore, future research might look into the function of various technologies utilised in practical instruction to increase the quality of HRM practise in institutions. The practical implication of this research is, there could be a strategical policy in curriculum development for practical teaching system henceforth in Chinese Higher Education institutions [7]. This could blatantly improve the mechanism of teaching pedagogy and implementing HRM skills in the programs (particularly in nursing programs).

Theoretically, through this research there has been a conclusive framework that highlights the linkages between practical teaching system, higher education institutions and HRM skills. The conceptual framework with Baron and Kenny method illustrates how the linkages has been established. There has been nil or limited study pertaining to this, and thus this novelty would escalate the merits and outcomes of this research [9]. By testing the hypothesis, it still assures the potentiality and credibility of the model. Hence, this particular research's contribution could be prospective for any future

researches in Education and / or HRM and /or innovation. Based on the primary and secondary data analysis, it can be concluded that practical training is essential for providing proper guidance on human resource management in order to manage healthcare activity. The practical instruction provides nurses with practical guidance and expertise based on HRM practise in order to empower them to govern HRM and use the skill to manage patients, staff, and healthcare teams.

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