# Creation of a Structural Equation Model of Human Resource Management to Be Applied to High-Performance Educational Organizations

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Abstract—This research focused on creating a structural equation model of human resource management (HRM). The study sought to synthesize this conceptual framework and design the model so that it can be applied to high-performance education organizations. The findings include refined conceptualizations of independent variables from HRM theory and dependent variables from the core mission of higher education institutions in Thailand.

Index Terms—high-performance educational organization, human resource management, structural equation model

## I. INTRODUCTION

Educational institutions are widely regarded as important organizations that help individuals develop, which in turn leads to the improvement of economies, societies, and countries. Higher educational institutions in Thailand have, therefore, sought to evolve into high-performance educational organizations eventually, world-class universities. High-performance organizations (HPOs) have more sustainable and higher performance and achievement levels than their competitors do. According to Katzenbach and Smith [1], "a high performance organization is...[an] organization that has been [more] successful... [than its] competitors for approximately 10 years." The concept of HPOs is quite popular in the United States, in both the public and private sector. Most HPOs have an extremely good public image and a quite high turnover [2].

In Thailand, one organization that has realized the significance and necessity of becoming a HPO—and has tried to make this a reality—is the PTT Public Company Limited. Currently, PTT is clearly highly successful in

terms of its low turnover and organizational achievements, both within and outside the country. Thailand's higher education institutes similarly need to seek to become HPOs and have their public image and reputation for excellence widely accepted nationally and globally [3]. As a result, the Office of the Public Sector Development Commission has established a format and process for controlling and developing HPOs. This is called the Public Management Quality Award, which was based on the Malcolm Baldrige National Quality Award.

One of the most important factors that indicates success in terms of organizational development in both the public and private sector, including educational organizations, is human resource management (HRM). This can be clearly seen in Saudi Arabia, which is the largest country in the Middle East and which stands out in terms of competitive marketing and economic practices. In 2014–2015, however, Saudi Arabia was seriously affected by negative economic and social trends [4].

Researchers in that country have thus recognized the significance of HRM in this crisis, so they have studied the role of strategic HRM with regard to Saudi Arabian universities. These scholars believe that good HRM is the main element needed to achieve competitive advantages in higher education [4]. This has been confirmed by Kropsu-Vehkapera and Kess [5], who report that "human resource management has an effect on... operation quality in universities." In addition, Omebe [6] asserts, "personnel in the field of education are regarded as important tools to meet the targets of education and national development."

Researchers have, therefore, long been interested in the study of causal relationships in terms of how HRM can contribute to the development of high-performance educational organizations. Given this context, the present

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study sought to create a structural equation model (SEM) developed from a conceptual framework, in order to test the research hypotheses based on a review of the relevant literature, as discussed below.

## II. RESEARCH OBJECTIVES

- 1) To synthesize a conceptual framework for an SEM of HRM out of the existing literature on research in relevant fields
- 2) To design a conceptual framework for an SEM of HRM to be applied to high-performance educational organizations

## III. RESEARCH QUESTION

What is the most appropriate conceptual framework for an SEM of HRM that can be applied to high-performance educational organizations?

## IV. LITERATURE REVIEW

#### A. SEM

SEM is a method used to represent, estimate, and test a network of relationships between variables (exogenous and endogenous variables) [7], for example, those that determine the impact of HRM practices on attitudinal and behavioral HR outcomes, as well as on organizational performance [8].

## B. HRM

HRM is extremely important in corporate management because HRM is the key to any organization's success. HRM in higher education involves six practices [4]. These are described (illustrated in Fig. 1) in the following subsections.

## 1) Strategic HRM alignment

Strategic planning of HRM is closely related to the idea of organizational strategy, namely, the rules guiding appointments, recruitment, and selection of personnel. Organizations' strategic planning involves the goals set to meet each organization's needs [9].

## 2) Recruitment and selection

Organizations must plan ahead to ensure they have qualified personnel to carry out their operations. The main question is how to access the right workforce and use tools to attract human resources for selection processes. This includes the necessary communication and personnel planning, which in turn involves the measurement and evaluation of various individuals' qualifications to select the appropriate staff according to staffing plans for the organization in question. Getting the right person for the right job is important to enable each organization to perform efficiently and effectively.

## 3) Performance appraisal

Performance appraisal is the process of assessing the behavior of personnel by measuring and comparing individual workers' performance with set standards. This involves both management and staff. Good assessments must be reliable, accurate, and unbiased. Performance measurement and evaluation is part of this process, which are also indicators that help employees to understand

whether their performance is good enough to meet their organization's needs. In addition, performance appraisals also address workplace issues and errors and relate back to performance evaluations [10]. This process is thus the assessment of employee practices for their organizations' benefit.

## 4) Compensation and reward

Compensation is one of the most important means by which organizations can motivate their employees to be more loyal. Compensation is the total reward that individuals receive in exchange for doing their job, including salary, bonuses, and incentives. Other benefits can be awarded or added according to employees' quality of work [11]. Compensation also encourages qualified personnel to remain with the organization in question.

## 5) Training and Development

Training and development is based on organizations' need to increase the quality of their personnel. After employees are selected, they should have opportunities to learn and develop in order to improve their performance [12]. The process may involve preparing personnel to take on greater responsibilities or new jobs that require specialized knowledge. This is a systematic way to change employees' behaviors in order to achieve their organizations' goals [13].

## 6) Retention culture and plans

All HRM processes—whether they are regular practices or innovative procedures—have the same goal. This is to develop human resources to make use of specialized skills in the workplace in such a way as to ensure good quality. Employees are thus encouraged to stay with their organization for a long time, which contributes to these organizations' chances of success.



Figure 1. HRM practices

## C. High-Performance Educational Organizations or HPOs

This section relates to HPOs or organizations with a reputation for excellence. A study group formed by Thailand's Office of the Higher Education Commission has adopted an internationally recognized quality assurance tool called the Education Criteria for Performance Excellence [14]. This is a powerful tool for

developing excellence in educational organizations. The core mission of higher education institutions in Thailand [15] includes the following four items.

## 1) Learning, teaching, and producing quality graduates

Higher education institutions are committed to accepting students who are qualified [16]. These criteria are set out in the student enrollment plan and are in line with these organizations' goal of producing high quality graduates.

## 2) Research

Higher education institutions are committed to quality, efficiency, and focus in research. Plans have been made to implement policies, budget development, and management practices that promote and support faculty, researchers, and personnel who have the capacity to conduct research and get the required results. Good strategies such as these promote Thailand's development, meet the needs of wider society, and benefit the public.

## 3) Academic services

Higher education institutions provide academic services that need to cover the entire target population. These organizations have both wide ranging and specific goals at the domestic and international level. Their objectives can be met by using resources at the institutional and individual level to provide academic services. These can be offered in the form of free or commercial services that support revenue-generating or informational facilities. They require going back to basics to develop and improve ways to create new knowledge.

## 4) Integration of local and universal wisdom

Higher education institutions are responsible for maintaining national arts and cultural activities. Systems and mechanisms already exist to promote and encourage arts and cultures as part of teaching and learning involving both students and staff. In addition, national cultural programs can be used to maintain citizens' good quality of life and careers. Thailand's people need to have beneficial lifestyles and learn how to manage undesirable cultural and lifestyle trends.

## V. RESEARCH METHODOLOGY

This research was conducted in two stages:

- 1) The synthesis of a conceptual framework for an SEM of HRM
- 2) The development of a proposed design of a SEM of HRM to be applied to high-performance educational organizations.

## VI. STUDY RESULTS

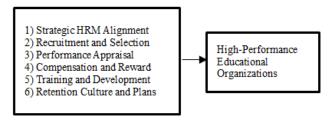


Figure 2. Conceptual framework

The research's results in terms of its objectives were two-fold, as discussed below. First, a conceptual framework was created for an SEM of HRM to be applied to high-performance educational organizations. The resulting conceptual framework for an SEM are shown in Fig. 2.

The conceptual framework for the model consisted of the following independent variables: 1) strategic HRM alignment, 2) recruitment and selection, 3) performance appraisal, 4) compensation and reward, 5) training and development, and 6) retention culture and plans. The dependent variables were the high-performance education organizations.

The second result of the research was a proposed design of an SEM of HRM to be applied to high-performance educational organizations. The proposed model is presented in Fig. 3. For this study's purposes, strategic HRM alignment, recruitment and selection, performance appraisal, compensation and reward, training and development and retention culture and plans were considered latent independent (i.e., exogenous) variables. High-performance education organizations were used as the latent dependent (i.e., endogenous) variables.

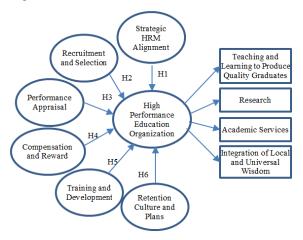


Figure 3. Research model—SEM

This study was based on the following hypotheses:

- H1: Strategic HRM alignment has a positive impact on high-performance educational organizations.
- H2: Recruitment and selection have a positive impact on high-performance educational organizations.
- H3: Performance appraisal has a positive impact on high-performance educational organizations.
- H4: Compensation and reward have a positive impact on high-performance educational organizations.
- H5: Training and development have a positive impact on high-performance educational organizations.
- H6: Retention culture and plans have a positive impact on high-performance educational organizations.

## VII. CONCLUSION

The proposed conceptual framework for an SEM of HRM to be applied to high-performance educational organizations includes six exogenous variables. These are

1) strategic HRM alignment, 2) recruitment and selection, 3) performance appraisal, 4) compensation and reward, 5) training and development, and 6) retention culture and plans. The endogenous variables are 1) teaching and learning to produce quality graduates, 2) research, 3) academic services, and 4) integration of local and universal wisdom.

## VIII. RECOMMENDATIONS

Case studies of higher education institutions that develop or implement this model effectively and efficiently, if any, need to be conducted to test the model's applicability in this context.

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