

Scholarship Programs and University Performance: A Systematic Literature Review of the Mediating Role of Employee Development

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Abstract

The establishment of higher education institutions as an increasing strategic investment to improve the competitiveness of institutions, human resources, and long-term performance of the organization has been carried out by means of scholarship programs. Higher education institutions as an investment that is carried out to make an institution more competitive, improve human resources, and improve the long-term performance of an organization have been increasingly implemented through scholarship programs. Although there has been a growing literature on Scholarships and Educational outcomes, research is not yet synthesised and limited attention is given to the organizational mechanisms that engage in the impact scholarship initiatives could have on the performance of the university. In particular, little has been researched on the mediators in the context of reforms in higher education that are linked to the Saudi Arabia's Vision 2030, and employee development is one of these mediators that has received inadequate scholarly attention. The aim of the present study is to make a systematic literature review and synthesize the available evidence on the relationship between scholarship programs and employee development and university performance. Relevant studies published in peer-reviewed journals were identified, screened and analyzed using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to explore the current patterns, theoretical frameworks, methodologies, and research trends in the literature. From the review, it can be said that scholarship programs can not only improve academic qualifications and professional skills, but also work towards the enhancement of institutional abilities through continuous development of employees. But there is evidence in the literature that there are no integrated conceptual models that explain the relationship between scholarship investments and organizational performance, filtered through employee development. Moreover, empirical evidence from the developing world as well as from the Gulf region is limited, with a corresponding gap in research. This review suggests that employee development serves as an important mediating variable between the scholarship programs and the university performance, and that the following conceptual framework should be developed and tested in practice. The study adds to the higher education management literature by synthesizing the scattered evidence, highlighting critical gaps, and offering directions for future empirical studies in order to meet the goals of Saudi Arabia's Vision 2030.

Keywords: Scholarship programs; University performance; Employee development; Higher education; Systematic literature review; Saudi Arabia; Vision 2030.

1. Introduction

Higher education institutions (HEIs) have a crucial role in the development of human capital, innovation and national economy development. As a result of the growing international competition, and the shift to knowledge economies, Governments have been investing heavily to train highly skilled academics and professionals to improve institutional performance through scholarships. Scholarship programs are no longer treated as simply a means to provide financial support, but as a strategic investment to build the capacity of their organizations by investing in human capital (Becker, 1993). In higher education, however, university performance does not only refer to teaching and research, but also to innovation, internationalization, reputation and satisfaction of stakeholders (Marginson, 2018). Quality of academic and administrative staff will play a key role in making these outcomes a reality. Therefore, the development of staff members has become a crucial organizational strategy to increase the knowledge, skills, leadership ability and professional competence of employees, which in turn will increase the effectiveness of the institution (Aguinis & Kraiger, 2009; Noe et al., 2014). The significance of scholarship programs is even more apparent in Saudi Arabia, where Vision 2030 prioritizes education and the development of human capital as crucial elements for the nation's transformation. The Saudi government has invested in a wide-ranging scholarship programme to further raise the quality of their universities, boost their research capacity and increase their international competitiveness (Kingdom of Saudi Arabia, 2016). The investments are anticipated to make a contribution to institutional performance through continuous employee development and knowledge enhancement. Although the significance of scholarship programs has increased, prior studies have mainly been on student outcomes, educational access, and international mobility (Campbell & Neff, 2020). There has been relatively little focus on their organizational effect, especially on university performance as a result of scholarship programs, which focus on employee development. The examination of employee development also has been focused on its association with organizational performance rather than viewing it as a strategic antecedent, as in the case of scholarship programs. This has led to a disjointed understanding of the links between scholarship programs, employee development, and university performance in the available literature. This is particularly evident in Saudi Arabia's higher education system, where the

investments in higher education scholarships have grown considerably in the context of Vision 2030, and there is a lack of detailed evidence to explain the role of these investments in the performance of higher education institutions. Therefore, there is a need to synthesize the existing literature in a systematic way in order to build a solid theoretical base for empirical studies in the future and to close existing gaps. Therefore, a systematic literature review is carried out in this study using a guideline called the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). The intent of the review is to construct the evidence-based relationships between employee development, scholarship programs, and the performance of the university, pinpoint dominant research trends and gaps, and suggest a conceptual model in which employee development is a mediating variable between the scholarship programs and the university performance. The results are expected to benefit the higher education management literature and equip decision makers and university managers with insights on the effectiveness of the investment in scholarships to support Saudi Arabia's Vision 2030.

1. Problem Statement

Scholarship programs are increasingly being utilized as a key instrument to boost human resources and enhance institutional competitiveness by both governments and higher education institutions. Previous research has been carried out on the effects of scholarships on access to education, student mobility, academic performance and graduate employability (Campbell & Neff, 2020). Likewise, significant research has identified a positive link between employee development and increased knowledge, skills, innovation, and productivity in the organization (Aguinis & Kraiger, 2009; Noe et al., 2014). But these two approaches have evolved more or less separately. Although strategic investments in scholarships have enormous value, there has been little study of the impact of scholarship programs on university performance by building employees. Research on individual-level outcomes has been the main focus of most studies, with few examining the organizational processes through which scholarship programs are related to institutional performance. Hence, no systematic reviews of the literature have been found that provide a unified conceptual framework of the literature that brings together scholarship programs, employee development and university performance. The gap is especially important in light of Saudi

Arabia's Saudi Vision 2030, as scholarship initiatives are a critical human capital development investment to increase the quality and international competitiveness of higher education institutions (Kingdom of Saudi Arabia, 2016). Policymakers and university administrators can struggle to extract the best strategic benefit from the invested scholarship dollars if they lack a holistic view of the current evidence. Hence, it is important to carry out a systematic literature review to summarize the existing and scattered knowledge, to detect the dominant research ideas and gaps, as well as to create a conceptual basis for further empirical research on the mediating role of employee development in the relationship between scholarship programs and the performance of universities.

2. Research Objective

The main aim of this study is to review and synthesize the current knowledge on the link between scholarship programs, employee development and universities' performance in the field of higher education.

RO 1: To review literature systematically on scholarship programs and the impact on university performance.

RO 2: To analyse the contribution of employee development to improving the performance of a university from the literature.

RO 3: To understand and integrate the present evidence of the mediating effects of employee development between scholarship programs and university performance.

RO 4: To recognize the key research gaps and to formulate a conceptual framework that will facilitate future empirical studies especially in the context of Saudi Arabia's Vision 2030.

3. Systematic Literature Review

The method used in this study was a systematic literature review (SLR) to synthesize the existing knowledge in the field of scholarship and employee development to university performance. To maintain transparency, rigor and reproducibility along the review process, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were followed (Page et al., 2021). Two large academic databases, Scopus and Web of Science (WoS), were used to carry out comprehensive search, as they cover high quality peer-reviewed journals from education, management and social sciences. Google Scholar was used only as a tool to find further relevant studies and to check the completeness of the citations, in order to expand the coverage.

3.1 Scholarship Programs in Higher Education

According to the systematic review, the scholarship program has taken a strategic character and has been transformed from a mere financial support instrument to a tool for the development of human capital and strengthening the competitiveness of institutions. In the literature reviewed, scholarship programs are becoming an effective long-term strategy to ensure academic excellence, research productivity, capacity building of faculty, international cooperation, and organizational sustainability. This change demonstrates the increasing focus on knowledge-based economies in which universities are expected to be producing highly skilled academics who are able to innovate and contribute to national development (Campbell & Neff, 2020). Recent research consistently shows that scholarship programs have value in addition to the value of education for the individual. These are not the programs for the betterment of just the students who receive the scholarship, but are designed to have spillover effects for the organization, including enhanced institutional memory, extended research networks, better teaching, and international connections. The faculty members who come back from the sponsored postgraduate studies are expected to bring back new pedagogical approaches, research techniques, and professional methods that enhance the performance and quality of the institution. This means that scholarships are becoming more than just an educational initiative, but rather a strategic investment in human capital (Smagina & Stich, 2025).

The review also demonstrates that the scholarship programs have an impact on institutional development on several interconnected paths. They first enrich the academic qualifications of universities and faculty members through the accumulation of advanced discipline knowledge and special skills. Second, students who receive scholarships are often able to transfer knowledge by teaching, mentoring, collaborative research and curriculum development upon their return to their institutions. Third, international scholarship experiences foster institutional internationalisation and facilitate international research networks and internationalization in research participation. Together they reinforce the ability of universities to adapt to the rapidly evolving context for learning and technology (Campbell & Neff, 2020). The reviewed literature, however, also shows that the institutional support systems have a large impact on the outcomes of an organization. Scholarship investments are not enough to ensure better performance in universities without providing means to ensure that the knowledge acquired can be effectively utilized by the scholar. Structured

reintegration policies, mentoring programs, career advancement programs, research funding and ongoing professional development are all factors that are consistently mentioned as key to achieving sustainable organizational gains from scholarship investments. Institutions without these complementary practices may find that they achieve less organizational return on large amounts of financial investments in scholarship schemes.

One last important result is related to the geographical distribution of the research site. Most research related to scholarships has been carried out in North America, Europe and Australia, with some limited research in the Middle East, specifically Saudi Arabia and the Gulf Cooperation Council (GCC) countries. While Saudi Arabia has made significant investments in scholarship initiatives as part of Vision 2030, few studies have specifically addressed student mobility, employability of graduates and internationalization, and more could reasonably be expected to have investigated scholarship programs as organizational strategies to enhance the performance of universities. This imbalance hinders the generalizability of the evidence gained to the dynamic higher education systems of the fast-changing developing economies. Moreover, the review shows a significant methodologic weakness in the existing literature. The majority of studies include qualitative case studies, descriptive surveys or policy analyses around individual scholarship experiences. Relatively few studies rely on a comprehensive theoretical framework or quantitatively analyze the organizational processes by which investments in scholarships affect institutional performance. Also, employee development is generally excluded from the list of explanatory variables, although theoretically it is relevant in the Human Capital Theory and Strategic Human Resource Management. Consequently, current studies on scholarship are still scattered and inconclusive, and there is a lack of linkages between educational investment, human resource development, and organizational performance.

In general, literature reviewed prove that there is a high level of consensus that scholarship programs could be considered as strategic investments that can strengthen higher education institutions. However, current evidence is largely limited to the direct educational and individual outcomes, and the organizational processes between the investments in scholarships and the performance of universities are not well understood. The discovery highlights the need to adopt a more holistic view to address employee development as a means to create sustainable institutional performance, especially in

the context of the Saudi Arabia's Vision 2030 through scholarship programs.

3.2 Employee Development in Higher Education

Employee development is at the forefront of the thinking in higher education around strategic factors of organizational effectiveness. It is defined as activities that include professional training, continuing education, mentoring, leadership development, and career advancement for improving employees' knowledge, skills and competencies (Noe et al, 2014). Numerous recent studies have found that universities that invest in employee development have greater teaching quality, research productivity, innovation and employee engagement (Budhwar et al., 2020; Salas et al., 2023). The reviewed literature indicates that employee development does not only involve enhancing the individual performance but also the strengthening of the institutional capabilities. The continuous professional development approach supports academic and administrative staff to keep up with the developments of technology, modification of educational policies, and international quality standards. Thus, universities that have a development programme are more likely to be more successful in delivering sustainable organisational performance and competitive advantage (Aguinis & Kraiger, 2009). Although the employee development-strategic organizational performance relationship has been well established, very few studies have looked at scholarship programs as a strategic antecedent of employee development. The majority of the research focuses on training/PD without linking it to the return of investments for improving employee skills and institutions. This is especially true in the higher education context of Saudi Arabia, where the promotion of scholarships has grown with the Vision 2030, but is underutilized in the current literature in relation to employee development. The findings indicate that employee development is an important process for converting educational investments into institutional performance for universities. But more studies are required to explore its mediation between scholarship programs and their effect on university performance.

3.3 University Performance

Today, university performance is understood as a multi-dimensional phenomenon which goes beyond academic achievement to encompass research productivity, teaching quality, innovation, internationalisation, graduate employability and institutional reputation (Marginson, 2018). In the context of more competitive and performance-oriented higher education system, enhancing institutional performance has become a key priority

for the design of policy and management. Increasing institutional performance has become a matter of great interest for policy and management in more competitive and performance-oriented higher education system. The literature reviewed clearly shows that, in addition to the tangible resources, the intangible resources especially human capital also affects the performance of a university. Universities that focus on nurturing the knowledge and skills, and capabilities of their academic and administrative staff, tend to be more successful in a variety of institutional outcomes such as output of research, effectiveness of teaching, satisfaction of stakeholders and global competitiveness (Budhwar et al., 2020; Salmi, 2020). The results support Human Capital Theory which states that investing in individual people leads to the long-term performance in an organization (Becker, 1993). Recent research has mainly focused on the determinants of university performance separately, and little attention has been paid to the indirect contribution of scholarship programs on university performance via employee development. This implies that a more holistic view is needed that captures how investments in scholarships can lead to lasting enhancements in university performance.

3.4 The Mediating Role of Employee Development

The literature reviewed indicates that employee development is a key mechanism through which the performance of universities can be improved by implementing scholarship programs. According to Human Capital Theory, the investment in education raises the knowledge, skills and competencies of employees and, in turn, organization performance (Becker, 1993). Scholarships are another type of education that can benefit the academic or administrative personnel in higher education institutions, which allows them to gain advanced qualifications, international experience, and specialized expertise. These enhanced capabilities are then converted to quality learning, research output, innovation, and effectiveness of the institution through continuous employee development. While many studies have independently found that a connection exists between scholarship programs and human capital development (Campbell & Neff, 2020), and between employee development and university performance (Aguinis & Kraiger, 2009; Noe et al., 2014), few studies have looked at employee development as a mediator between scholarship programs and university performance. This means that there is a great gap in the literature, including in higher education institutions in Saudi Arabia. In the context of Saudi Arabia's Vision 2030, investments in scholarships will be responsible for improving the competitiveness of the institutions through the development of qualified human resources.

Effectiveness of these investments, however, largely hinges on the capacity of universities to translate the knowledge and skills gained by their employees into better institutional performance via structured development programs. Hence, employee development offers an appropriate theoretical framework that can explain how scholarship programs aid the sustainable performance of universities. In summary, the evidence reviewed shows promise that employee development could be a mediator between scholarship programs and university performance. However, empirical evidence on this mediation variable is still limited, and further research is required to explore this mediation in higher education institutions, especially in Saudi Arabia.

4. Conceptual Framework

The conceptual framework that has been proposed after the systematic literature review and based on Human Capital Theory (1993) adapted by Becker is presented in Figure 1. The framework posits that scholarship programs can aid employee development by augmenting employees' knowledge, skills and professional competence. Greater employee development then leads to increased university performance in terms of quality of teaching, research productivity, innovation, and effectiveness of the university. Therefore, the proposed employee development is used as a mediator between the scholarship programs and the university performance, which will serve as a basis for future empirical studies, in light of the context of Saudi Arabia's Vision 2030.

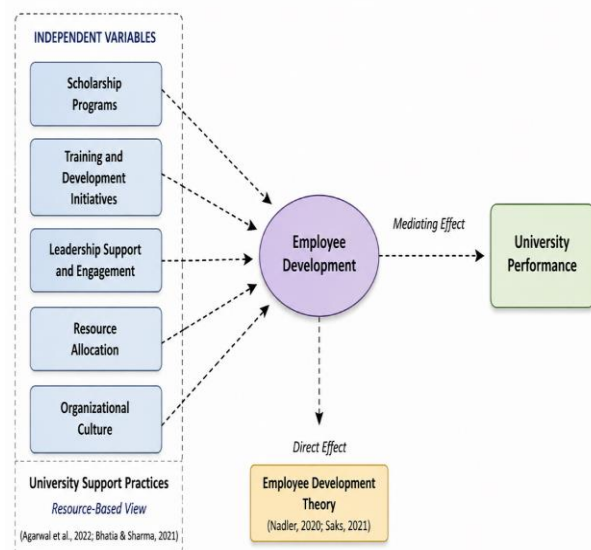


Figure.1 Proposed conceptual framework

5. Hypothesis Development

This study is based on the Human Capital Theory (HCT) which suggests that the support practices that a university provides have a direct and indirect impact on the University Performance because of Employee Development. According to the conceptual framework, the hypotheses should clearly explain the positive relationships between the five independent variables, the mediating variable (Employee Development), and the dependent variable (University Performance).

Direct Effects (University Support Practices → University Performance)

H2: Higher education institutions can improve their performance through implementing scholarship programs. H3: Scholarship programs improve the performances of universities.

There is a positive relationship between training and development programs and the performance of the university.

H3: The engagement and leadership support positively affect the performance of the university.

H4: Allocation of resources positively affects university performance.

H5: Organizational culture positively influences university performance.

Employment Practices that Support University Practices

H6: Employee development is positively influenced by university support practices.

Employee Development Learning Outcomes → University Performance Outcomes.

H7: Employee development positively influences university performance.

Mediating Effect

H8: University employee development is a mediator between university support practices and university performance.

6. Methodology

In this study, Systematic Literature Review (SLR) will be used as a systematic method to identify, assess and synthesize the existing literature related to the relationship between Scholarship Programs and University Performance, while focusing on the Mediating variable of Employee Development. The

review was conducted following the guidelines of PRISMA 2020 to ensure that it was conducted in a transparent and reproducible way in the identification, screening, eligibility assessment and study selection process (Page et al., 2021). The keywords of interest are combinations of “scholarship programs,” “employee development,” “university performance,” and “higher education performance,” which are searched in the primary databases of Scopus, Web of Science and Google Scholar, with relevant peer-reviewed studies being identified. Studies are included if they are peer-reviewed papers, they are relevant to the field of higher education, and they supply conceptual or empirical evidence for the study variables, and excluded if they are duplicate, irrelevant, non-academic, or not well documented. Information gathered from the selected research studies consists of the year of publication, research setting, methodology, key variables, theoretical views and main results. The results are then combined thematically to uncover themes, theoretical and methodological connections, discrepancies or missing research linkages in the field of scholarship and its relationship to employee development and ultimately, university performance. This systematic approach enhances the transparency, reliability and evidence base of the review (Tranfield et al., 2003; Snyder, 2019).

7. Findings and discussion

The systematic review suggests that scholarship programs can play a positive role in the performance of the University by fostering employee development in the form of improved qualifications, knowledge, professional competences, research skills and teaching skills. There is some existing evidence that employee development is a key pathway for institutional investment in people to drive performance benefits. For instance, in the context of Malaysian higher education, training, such as induction training, technical training and soft skills training was found to positively affect employee performance (Lee et al., 2023), and in the Malaysian private universities' context, training and development practices positively influenced the employee performance, and employee engagement was partially explained for the relationships between the training and development practices with the employee performance. The results of this research substantiate the concept that education investment isn't just about money, but also about investing in human capital. The review also notes, however, that scholarship programmes do not automatically lead to improved universities; their success relies on the quality of transferring knowledge and skills into the university and using them in a way that leads to improved performance. Employee development can

be understood as the intermediate variable that helps to improve the university performance when implementing the scholarship program. However, the literature is lacking as little research has studied the integrated path of Scholarship Programs → Employee Development → University Performance directly. This should be studied in more detail in the future, especially within higher education institutions, to gain a clearer picture of the role of employee development in this relationship.

8. Future research

Future studies should test the suggested relationships between the implementation of scholarship programs and employee development and the performance of the university in an empirical study, especially as employee development is considered a mediating variable. Further research should go beyond the commonly descriptive and fragmented studies and be longitudinal and comparative to the different universities, countries and higher education systems to determine if the investments in scholarships result in lasting improvements in performance. Contextual factors, including institutional support, leadership, organizational culture, knowledge transfer, and the matching of competencies acquired by scholarship recipients in institutional strategic goals could also be explored in future research. The absence of systematic and more multi-dimensional approaches to talent development and lack of consideration of contextual and institutional factors has been highlighted in recent research (Smagina & Stich, 2025). Further studies could also benefit from the use of mixed-methods, bibliometric, meta-analytic, and longitudinal designs to yield more solid evidence of the mechanisms by which employee development translates investment in scholarships into enhanced university performance.

9. Recommendation

The systematic literature review indicates that universities should view the scholarship programs as strategic investments in employee development, instead of simply financial aid. Scholarship schemes must be organized in a coherent and systematic way to ensure that they are aligned with institutional priorities, including support for qualifications and skills which have a direct impact on the quality of teaching, research output, innovation and administrative performance. In addition, universities should provide mechanisms for the transfer and application of the new knowledge gained by the scholarship holders in the form of research projects, mentoring, professional development and knowledge sharing. This aligns with the recent evidence that higher-education talent development is more effective when supported by the institution,

aligned with the needs of the institution, and systematically implemented (Smagina & Stich, 2025). Moreover, universities need to use measurable criteria, such as employee competencies, research publications, teaching performance, promotion, innovation and institutional performance, to assess the outcomes of scholarship. The studies in higher education in Malaysia also show that employee training and development has a positive impact on performance (Lee et al., 2023). Thus, there is a need to increase the linkage between the scholarship programs and employee development and in turn the University's performance so that investment in employee education creates sustained institutional benefits.

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