

## Self-Efficacy in Saudi Educational Institutions: How Educational Endowment Funds Support Education Institution in Saudi Arabia?

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### Abstract

This study explores the role of Educational Endowment Funds (EEFs) in enhancing the self-efficacy and sustainability of Saudi educational institutions within the evolving framework of Industry 5.0. As Saudi Arabia advances towards its Vision 2030 objectives, EEFs emerge as vital economic instruments underpinning long-term educational programs, infrastructure development, and academic excellence. Despite their potential, EEFs face significant challenges, including excessive dependence on government funding, limited revenue generation, and governance inefficiencies that hinder their effectiveness. To address these challenges, the research develops a theoretical framework grounded in the resource-based view (RBV) theory. This framework underscores the necessity of strategic governance reforms for EEFs, advocating for enhanced transparency, accountability, and revenue diversification. The study also highlights the importance of fostering community engagement and cultivating a culture of philanthropy to bolster educational support. Collaborations with the private sector are proposed as a pivotal strategy for broadening financial resources and achieving greater sustainability. The findings suggest that implementing these reforms can align EEFs more closely with Saudi Arabia's broader educational and economic aspirations. By fostering an innovative and resilient educational infrastructure, EEFs can better address the dynamic needs of a rapidly transforming economy. Additionally, this paper provides actionable recommendations for maximizing the impact of EEFs, thereby contributing to the Kingdom's socioeconomic development and positioning its educational institutions at the forefront of global advancements in the industry 5.0 era.

**Keywords:** Educational Endowment Fund, Industry 5.0, Sustainability, Self-Efficacy, Resource-Based View Theory

### Introduction

The global education sector is undergoing a profound transformation in the era of Industry 5.0, marked by the integration of advanced technologies with human-centered,

sustainable, and socially responsive educational models (Hamedani et al., 2024). Unlike earlier industrial paradigms that emphasized automation and efficiency, Industry 5.0 places strong emphasis on human well-being, resilience, and long-term societal value creation. Within this evolving landscape, educational institutions are increasingly expected to deliver personalized and experiential learning, foster innovation, and simultaneously contribute to sustainable development goals (Hashim et al., 2024). These expanding expectations have intensified the need for stable and forward-looking financial mechanisms that enable institutions to innovate without compromising long-term sustainability.

Educational endowment funds have emerged as a critical strategic instrument in this context, functioning not merely as financial reserves but as enablers of institutional transformation. By supporting investments in research, infrastructure, digital capabilities, and instructional innovation, endowment funds allow educational institutions to respond proactively to the demands of Industry 5.0 while maintaining financial resilience (Verma et al., 2023; Hamedani et al., 2024). Importantly, these funds also align closely with sustainability objectives, as they facilitate long-term investments that prioritize social and environmental impact over short-term financial returns (Hasbullah & Rahman, 2023). Through sustained funding for green infrastructure, sustainable research agendas, and future-oriented curricula, endowment funds contribute not only to individual learning outcomes but also to institutional efficacy and organizational sustainability (Khan et al., 2022; Rachman, 2023).

Within Saudi Arabia, the relevance of educational endowment funds has increased substantially under the national reform agenda articulated in Vision 2030. The Vision underscores the strategic importance of a diversified economy and a highly skilled, knowledge-based workforce, thereby placing education at the center of national development. Achieving these ambitions requires innovative and sustainable funding mechanisms capable of reducing long-term dependence on public expenditure while enhancing educational quality and accessibility. In this regard, educational endowment funds represent a viable and culturally embedded solution, particularly in Muslim-majority contexts where philanthropic endowment practices are historically and socially entrenched (Khan et al., 2021). The Saudi government has increasingly recognized the potential of these funds to support educational infrastructure, research, and institutional capacity-building, aligning endowment development with broader national economic and educational priorities (Aboshaiqah, 2023).

The Saudi context is further distinguished by the historical and institutional legacy of waqf (Islamic endowment), which has long played a central role in financing education and social welfare across the Kingdom. Saudi Arabia hosts one of the largest and most influential waqf ecosystems in the Islamic world, reflecting deep-rooted cultural and religious norms of charitable giving (Zawawi, 2023). Contemporary educational endowment funds build upon this foundation while incorporating modern governance structures and public-private partnerships. In particular, state-led initiatives and collaborations with private entities, including the involvement of the Public Investment Fund (PIF), have sought to strengthen the financial sustainability and labor-market relevance of educational institutions (Aseery, 2024). These developments position Saudi Arabia as a theoretically significant case for examining how traditional philanthropic mechanisms can be adapted to meet modern educational and economic challenges.

Despite these advances, the effectiveness of Educational Endowment Funds (EEFs) cannot be evaluated solely in terms of financial sustainability. From a broader social and institutional perspective, the concept of self-efficacy at the organizational level has become increasingly critical. Institutional self-efficacy refers to the confidence of educational organizations in their capacity to achieve strategic objectives, adapt to change, and deliver equitable and high-quality education. In the context of Sustainable Development Goal 4 (SDG 4), which emphasizes inclusive, equitable, and lifelong learning, institutional self-efficacy is a key determinant of whether educational systems can translate financial resources into meaningful educational outcomes. EEFs play a pivotal role in this process by providing long-term financial stability that enables institutions to invest in faculty development, curriculum reform, infrastructure, and innovation aligned with global standards.

However, existing literature on educational endowment funds in Saudi Arabia has largely focused on policy design, financial sustainability, or governance structures, with limited attention given to the mechanisms through which EEFs enhance institutional self-efficacy. Moreover, while Industry 5.0 has been widely discussed in relation to technology adoption and sustainability, its implications for educational financing and institutional empowerment remain underexplored. This gap is particularly salient in the Saudi context, where heavy reliance on government funding, limited revenue diversification, governance inefficiencies, and uneven social support continue to constrain the long-term effectiveness of EEFs (Aldhari et al., 2022; Moafa et al., 2020). These challenges raise critical questions about how EEFs can be strategically governed and socially embedded to support resilient and self-efficacious educational institutions.

In response to these challenges, recent studies have increasingly called for governance reforms emphasizing transparency, accountability, and diversified revenue streams, alongside greater private-sector and community involvement (Dimmock et al., 2022; Stepanova et al., 2020). Yet, empirical evidence explaining how such reforms contribute to institutional self-efficacy particularly within the industry 5.0 and Vision 2030 framework remains scarce. Addressing this gap is essential, as the sustainability of EEFs directly affects the ability of Saudi educational institutions to cultivate a competent workforce capable of driving national economic and industrial transformation in a human-centered and sustainable manner (Hamedani et al., 2024).

Accordingly, this study investigates the role of Educational Endowment Funds in enhancing the self-efficacy and sustainability of Saudi educational institutions within the context of Industry 5.0. By examining governance practices, funding mechanisms, and stakeholder engagement, the study seeks to provide theoretically grounded and context-specific insights into how EEFs can be optimized to support national educational objectives. In doing so, the research contributes to the literature by linking endowment fund governance to institutional self-efficacy, while offering practical recommendations aligned with Saudi Arabia's broader vision for sustainable and inclusive educational development.

#### *Resource-Based View (RBV) Theory*

The Resource-Based View (RBV) theory provides a framework for understanding how Educational Endowment Funds (EEFs) enhance the efficacy and sustainability of educational institutions, especially in Saudi Arabia's Industry 5.0 context. According to RBV, an

organization's competitive advantage stems from unique and valuable resources that are rare, inimitable, and irreplaceable (Lockett, 2001; Newbert, 2006). EEFs exemplify these resources by enabling financial independence and facilitating investments in innovative programs, infrastructure, and sustainability-driven research (Patnaik et al., 2022). These strategic allocations improve educational quality, foster innovation, and help institutions withstand economic uncertainties (Bobe and Kober, 2015; Lynch and Baines, 2007).

Governance plays a vital role in maximizing the impact of EEFs, as highlighted by RBV. Institutions with strong governance mechanisms can better allocate resources and achieve their goals (Huang and Lee, 2012). For EEFs, transparency and accountability in governance foster trust among stakeholders and encourage further contributions (Muneeb et al., 2023). Additionally, building relationships with alumni and local businesses strengthens community engagement, fostering a philanthropic culture that supports education (Albaroudi and Iqbal, 2024). These elements align EEFs with RBV principles by ensuring that their resources are effectively managed and leveraged.

RBV also emphasizes the importance of exploring alternative funding sources to enhance financial sustainability. For educational institutions, this includes strategies like impact investing and crowdfunding, which supplement traditional funding methods (Huang and Lee, 2012; Lynch and Baines, 2007). Such approaches encourage creativity and diversification in revenue generation while maintaining long-term viability (Albaroudi and Iqbal, 2024; Muneeb et al., 2023). By adopting these strategies, Saudi educational institutions can strengthen their financial base and achieve sustainable growth aligned with Vision 2030. The study employs qualitative methods, such as interviews and document analysis, to examine how EEFs are governed and utilized in practice. This approach allows for a detailed exploration of how resources, as described by RBV, are managed to enhance the self-efficacy of educational institutions. By focusing on real-world applications, the study connects theoretical principles to practical challenges, offering insights into how EEFs can be optimized to meet institutional goals.

The research title, "Self-Efficacy in Saudi Educational Institutions: How Educational Endowment Funds Support Educational Institutions in Saudi Arabia," reflects the RBV framework's relevance. It demonstrates how EEFs, as strategic resources, contribute to the sustainability and efficacy of educational institutions. By aligning EEF management with RBV principles, the study highlights their potential to address current challenges and drive long-term success in Saudi Arabia's evolving educational landscape.

#### *Motivation of Self-Efficacy in Saudi Educational Institutions*

The challenges faced by Educational Endowment Funds (EEFs) in Saudi Arabia highlight the urgent need to enhance their sustainability and efficacy in line with Industry 5.0 principles. This industrial paradigm emphasizes human-centered innovation and sustainability, yet EEFs grapple with issues such as economic pressures on the national budget, inadequate social support systems, poor institutional governance, insufficient revenue streams, and minimal private sector engagement (Khan et al., 2022). These challenges hinder the ability of EEFs to fulfill their potential in strengthening educational infrastructure, crucial for preparing a skilled workforce to meet the demands of a rapidly evolving industrial landscape (Trudelle, 2022).

Addressing these problems requires a focus on self-efficacy, which plays a critical role in motivating stakeholders to overcome institutional barriers. By building confidence in the capabilities of administrators, faculty, and policymakers, EEFs can foster an environment conducive to innovation and strategic problem-solving. The integration of advanced technologies and sustainable practices within EEF management aligns with Industry 5.0 goals, enabling these funds to effectively contribute to educational quality and institutional resilience (Hamedani et al., 2024).

Enhancing governance mechanisms is essential for boosting self-efficacy in managing EEFs. Transparent and accountable processes not only build stakeholder trust but also encourage greater private sector participation, a vital component for diversifying revenue sources and reducing reliance on government funding (Muneeb et al., 2023). Moreover, fostering partnerships with alumni, local businesses, and community organizations creates a culture of collaboration and generosity, further supporting the growth and sustainability of educational programs (Albaroudi and Iqbal, 2024).

Stimulating self-efficacy involves embracing innovative financial strategies such as impact investments and crowd-sourcing. These approaches empower institutions to explore alternative revenue streams, ensuring long-term financial stability while addressing immediate challenges (Huang and Lee, 2012; Lynch and Baines, 2007). By adopting an entrepreneurial mindset, EEFs can align their resource allocation with sustainability objectives, driving progress in both educational outcomes and institutional sustainability (Albaroudi and Iqbal, 2024).

Ultimately, tackling the issues faced by EEFs through a focus on self-efficacy and innovation supports Saudi Arabia's vision of a dynamic and resilient educational system. By aligning EEF strategies with Industry 5.0 principles, Saudi institutions can create a skilled and adaptable workforce while contributing to national growth. This approach ensures that EEFs remain a cornerstone of the Kingdom's educational and industrial transformation, addressing current challenges while preparing for future opportunities (Khan et al., 2022; Trudelle, 2022).

#### *Role of Endowment Funds in Education*

Educational Endowment Funds (EEFs) have emerged as a vital source of funding for many institutions worldwide, demonstrating the potential for sustainable funding models in education (Hamedani et al., 2024). In Saudi Arabia, the substantial allocation of public funds to EEFs presents an opportunity for universities to adopt similar strategies that could help diversify their revenue sources beyond government funding (Aldhari et al., 2022). By exploring endowment strategies, Saudi universities can ensure long-term financial stability, enabling them to withstand economic fluctuations and maintain a high standard of education (Aldajani and Almufeez, 2022). This approach fosters a more resilient educational landscape, allowing institutions to invest in innovative programs and initiatives that enhance the quality of education (Khan et al., 2022).

One key takeaway from EEFs is the importance of enhanced governance. Effective management of resources is crucial for maximizing the impact of educational funds (Hashim et al., 2024). By learning from the governance structures of successful EEFs, Saudi universities can strengthen their frameworks to improve transparency and accountability (Rachman,

2023). Implementing robust governance practices builds trust among stakeholders, including students, faculty, alumni, and donors. Increased trust is essential for attracting more donations and support, as stakeholders are more likely to contribute to institutions that demonstrate responsible management of resources (Kashif et al., 2020).

Community engagement is another critical aspect of EEFs that can inspire Saudi universities to foster stronger ties with their local communities (Innes, 2023). EEFs often involve participation from various community members, including alumni, philanthropists, and local businesses (Dimmock et al., 2023). By cultivating relationships with these stakeholders, universities can create a culture of giving back and investing in education. Encouraging alumni to contribute their time, expertise, and financial support significantly enhances the resources available for educational initiatives. Additionally, partnering with local businesses can lead to mutually beneficial collaborations that support both educational goals and community development (Dimmock et al., 2023).

EEFs also encourage innovation in funding approaches, providing valuable insights for Saudi universities (Borooah, 2024). By exploring new funding mechanisms such as impact investing, partnerships with private sector entities, or crowdfunding campaigns, universities can supplement traditional funding sources (Binfarè & Harris, 2024). These innovative strategies expand the available resources and foster creativity and collaboration in educational funding. Embracing a more entrepreneurial mindset empowers universities to think outside the box and seek alternative revenue streams aligned with their mission and goals (Dimmock et al., 2023). Long-term planning is foundational to effective endowment management. Saudi universities can adopt these principles to focus on sustained growth and excellence in education. By prioritizing long-term investments in infrastructure, research, and scholarships, universities create a robust foundation for future success (Binfarè & Harris, 2024; Borooah, 2024). This forward-thinking approach ensures that institutions are prepared to meet the evolving needs of students and the job market, leading to improved educational outcomes and a stronger reputation within the global education landscape (Borooah, 2024).

Furthermore, EEFs aim for educational excellence by funding scholarships, research grants, and infrastructure development. Saudi universities can draw inspiration from this model by prioritizing similar areas to enhance their academic quality. Investing in scholarships to attract top talent, supporting groundbreaking research initiatives, and improving campus facilities position universities as leaders in education. This commitment to excellence enhances the learning experience for students and strengthens the institution's reputation regionally and globally (Edoald & Nevill, 2020).

Incorporating strategies inspired by EEFs can significantly strengthen the financial foundation of Saudi universities. As these institutions work to enhance their sustainability and governance, they also elevate their academic reputation and impact within the global education landscape (Qu, 2020; Sazonov et al., 2016). By leveraging the successes of EEFs, Saudi universities can create a more vibrant and dynamic educational environment fostering innovation, collaboration, and community engagement (Aldhari et al., 2023; Khan et al., 2022).

Ultimately, the lessons learned from EEFs can serve as a roadmap for Saudi universities seeking to navigate the complexities of modern education financing. By embracing sustainable funding models, enhancing governance structures, and fostering community engagement, these institutions can thrive in an increasingly competitive global landscape (Aldajani and Almufeez, 2022). The proactive adoption of these strategies will not only benefit the universities but also contribute to advancing education in Saudi Arabia, aligning with the Kingdom's broader vision for national development (Zawawi et al., 2023; Khan et al., 2022).

### *Global Perspective*

Educational Endowment Funds (EEFs) in Saudi Arabia are managed with a clear focus on sustainability, long-term growth, and supporting various educational initiatives (Bhatti et al., 2014). The management of these funds is not merely about financial growth; it encompasses a comprehensive approach aimed at enhancing educational outcomes throughout the Kingdom. The strategic framework guiding the management of EEFs involves several principles and strategies that collectively work towards their mission and goals (Fernandez et al., 2023; Brown et al., 2010).

One foundational principle in managing EEFs is strategic allocation. Funds are allocated with specific educational objectives in mind, such as scholarships, infrastructure development, research grants, and various educational programs (Petlenko et al., 2021). This strategic alignment ensures the effective use of funds to address the most pressing needs within the educational landscape. By focusing on specific goals, EEFs maximize their impact and direct resources toward initiatives that enhance educational quality and accessibility in Saudi Arabia (Zawawi et al., 2023; Khan et al., 2022; Aldhari et al., 2022).

To mitigate risks and optimize returns, EEFs employ a strategy of diversified investments. Similar to traditional endowments, EEFs spread their investments across various asset classes, including equities, fixed income, real estate, and alternative investments (Petlenko et al., 2021). Diversification is crucial for balancing fund performance, cushioning against market volatility. By avoiding over-concentration in any single asset class, EEFs achieve more stable and predictable returns, thereby supporting their long-term objectives (Fernandez et al., 2023).

A long-term orientation is a hallmark of effective EEF management. These funds adopt a long-term investment horizon, facilitating sustainable growth and supporting educational initiatives over an extended period (Stepanova et al., 2020). This long-term approach facilitates the compounding of returns and ensures resilience against short-term market fluctuations (Jie et al., 2016). Such a perspective enables EEFs to plan strategically for future funding needs and initiatives, aligning financial growth with their educational mission (Fuss et al., 2023).

Income distribution is managed through a structured spending policy dictating how much investment income can be allocated annually to support educational activities (Fuss et al., 2023). This policy balances meeting current funding needs and preserving the principal amount for future growth. By establishing a clear framework for income distribution, EEFs ensure adequate support for educational initiatives while maintaining the fund's financial health (Jie et al., 2016).

To evaluate the effectiveness of their investments and activities, EEFs implement impact measurement strategies. These metrics may include assessments of student success rates, research outputs, infrastructure improvements, and community benefits. By systematically measuring their funding's impact, EEFs identify areas for improvement and ensure effective resource utilization. This focus on impact refines strategies and enhances fund efficacy. Ethical considerations also play a significant role in EEF management. Many funds incorporate ethical and responsible investing principles, considering environmental, social, and governance (ESG) factors in their decisions. By aligning investment strategies with broader societal goals, EEFs enhance their reputation and appeal to donors and supporters prioritizing ethical considerations.

#### *Relationship between Efficacy and Sustainability*

In the context of Industry 5.0, the relationship between efficacy and sustainability is crucial for the evolution of educational systems (Hamann et al., 2023). Efficacy in education is not just about achieving short-term goals, such as improved student outcomes or the successful implementation of new technologies; it is about creating lasting impact that aligns with the broader objectives of Industry 5.0 (Chou et al., 2023; Sass et al., 2023). This includes fostering innovation, promoting human-centric approaches, and integrating sustainable practices into the educational framework. For educational institutions to be truly effective they must embed sustainability into their operations and curriculum, ensuring that the resources, methodologies, and technologies they adopt contribute to long-term societal and environmental well-being (Sirakaya-Turk et al., 2013). This dual focus on efficacy and sustainability is essential for preparing students to thrive in an increasingly complex and interconnected world (Chou et al., 2023).

Sustainability, in turn, is dependent on the efficacy of educational initiatives (Sirakaya-Turk et al., 2013). If educational programs and endowment funds are not effective in achieving their goals, they cannot be sustainable in the long term. Ineffective programs waste resources, fail to engage students meaningfully, and do not produce the outcomes needed to support a sustainable future (Huang et al., 2024). In the era of Industry 5.0, where the integration of advanced technologies and sustainable practices is paramount, educational efficacy must include the ability to adapt and innovate continuously (Sass et al., 2023). This adaptability ensures that educational institutions remain relevant and capable of contributing to a sustainable future (Hamann et al., 2023). Thus, in the educational context of Industry 5.0, efficacy and sustainability are mutually reinforcing, with each playing a vital role in supporting the other to build a resilient, forward-looking educational system (Huang et al., 2024; Hamann et al., 2023; Sass et al., 2023).

#### **Methodology**

##### *Participants and Data Collection*

For the research paper entitled *Self-Efficacy in Saudi Educational Institutions: How Educational Endowment Funds Support Educational Institutions in Saudi Arabia*, interviews were conducted with 15 participants (8 men and 7 women) residing in Riyadh, the capital city of Saudi Arabia. These participants were selected from a diverse range of backgrounds, including universities, the Ministry of Education, government servants, and politically exposed individuals, reflecting their significant roles within the country's educational and political landscape. Participants were between the ages of 30 and 60 years, providing a broad

spectrum of perspectives based on a combination of professional experience and personal insights. The sample also included five business owners and CEOs of multinational corporations or non-governmental organizations (NGOs). All participants were considered members of the higher-educated class, defined as individuals with high socio-economic status who occupy prestigious positions within the society. These positions, often not earned through conventional means, place these individuals in influential roles (Hafeez, 1985). The privileged class in this context also includes top-level government employees, business owners, politicians, and heirs to substantial wealth (Marshall, 1996). Members of this class frequently receive special privileges and compensations, which shape their perspectives on policy, education, and philanthropy.

A key selection criterion for the participants was their engagement in prosocial behaviors within the past five years, ensuring that their viewpoints were aligned with values of social responsibility, particularly in relation to educational funding and philanthropy. This focus on prosocial involvement was integral to understanding the role of educational endowments and their contribution to Saudi Arabia's educational development. The interviews followed a semi-structured format, enabling participants to freely express their experiences while ensuring that relevant themes regarding educational endowment funds (EEFs) were consistently explored. Following Guetterman's (2015) guidelines, theoretical saturation was reached after 15 interviews, as no new significant themes emerged after the final interview. Consequently, no additional participants were recruited. This group of participants was strategically selected for their influential roles, educational backgrounds, and engagement in prosocial initiatives, making them ideal for offering insights into the functioning and potential of EEFs in Saudi educational institutions. Their diverse experiences contributed to a comprehensive understanding of the challenges and opportunities in leveraging educational endowment funds to support sustainable educational development in Saudi Arabia.

### *Interview*

The following steps had been used to outline the process for developing interview questions. The first step in developing interview questions is to define the research objectives. The purpose of the research will guide the types of questions to ask, ensuring they are aligned with the study's aims. For example, if the research is focused on understanding motivation to help others during the COVID-19 pandemic, the objective is to explore the factors influencing individuals' willingness to engage in prosocial behaviors (Furgerson et al., 2012). Literature review and theory identification are key in framing the questions. In this case, theories such as the Empathy-Altruism Hypothesis and the Theory of Planned Behavior are important for understanding motivational cues and the psychological factors influencing helping behaviors (Straker et al., 2013). A review of existing literature helps identify key themes and gaps, shaping the questions to explore these areas in depth.

Qualitative research involves open-ended questions, which allow participants to provide detailed, unrestricted responses. These questions are designed to encourage participants to explain their feelings, experiences, and thoughts freely. Questions are clear and easily understood by participants. Ambiguities or confusing phrasing can lead to misinterpretation or incomplete answers. In the context of this study, questions were focus on participants' personal motivations, feelings, and actions related to helping others (Turner,

2010). Before conducting full interviews, pilot testing is crucial to ensure the questions are effective. Pilot interviews help identify questions that may need refining for clarity or relevance, and allow researchers to adjust the approach before collecting data (Turner, 2010). Feedback from participants in the pilot test should inform revisions. Finally, based on pilot testing, the interview questions were revised to ensure they align with the research objectives and are understandable. This step helps in refining questions to improve data collection and participant engagement.

The procedure for conducting interviews in qualitative research must be systematic to ensure consistency, reliability, and validity of the collected data. Participants are selected based on specific criteria related to the research questions. Selection can be done through purposive or snowball sampling methods (Patton, 2015). Interviews were scheduled at times convenient for participants, with clear instructions provided about the nature of the study and the topics to be covered. This preparation ensures that participants are comfortable and able to give thoughtful responses. A well-prepared participant is likely to provide more insightful and detailed information (Furgerson et al., 2012).

The interviewer should create a comfortable environment for the participant, ensuring they feel at ease and are encouraged to speak freely. The interviewer should ask the prepared questions but also be flexible, allowing the conversation to flow naturally while probing deeper into participants' responses (Straker et al., 2013). Probes and follow-up questions are used to explore responses in more detail. It is essential to record the interviews, typically through audio recordings (with participant consent), to ensure accurate documentation of responses. Transcribing the interviews is a crucial step, as it allows researchers to analyze the data systematically. Notes should also be taken to capture non-verbal cues or any significant observations (Patton, 2015). Once all interviews are completed and transcribed, data analysis begins. Thematic analysis can be used to identify common themes or patterns in the responses, aligning with the research objectives and theoretical frameworks (Braun & Clarke, 2006).

These are four example questions related to self-efficacy:

- "How do you feel the educational endowment funds in Saudi Arabia have impacted your ability to succeed in your educational goals? Can you describe a situation where these funds made a difference in your educational journey?"
- "In what ways do you believe the resources provided by educational endowment funds (e.g., scholarships, facilities, teaching materials) enhance your academic self-efficacy in Saudi educational institutions?"
- "Do you feel that educational endowment funds influence your motivation to perform well in your studies? Can you share an example of how such funding has motivated you to achieve higher academic standards?"
- "How do you think the support from educational endowment funds in Saudi Arabia has influenced your long-term academic and career aspirations? Do you believe that these funds have increased your confidence in achieving your future goals?"

### *Data Analysis*

The data analysis for this research on Self-Efficacy in Saudi Educational Institutions explores the impact of Educational Endowment Funds (EEFs) on educational development in

Saudi Arabia. The data was collected through semi-structured interviews with 15 participants, consisting of 8 men and 7 women, selected from a diverse set of backgrounds. This included individuals from universities, the Ministry of Education, government employees, and politically exposed individuals, as well as business owners and CEOs of multinational corporations and non-governmental organizations (NGOs). Participants were between the ages of 30 and 60 years, and all were highly educated with significant socio-economic status. These individuals, especially those who have engaged in prosocial activities in recent years, were ideal for providing insights into the role of EEFs in supporting educational institutions.

The interviews followed a semi-structured format, allowing participants the flexibility to provide comprehensive responses while ensuring that core themes related to educational endowment funds were consistently explored. The interviews were transcribed verbatim, coded, and analyzed using an interpretivist approach (Wargo et al., 2016). This approach enabled a deeper understanding of the participants' experiences, motivations, and perspectives on the role of educational endowments in Saudi educational institutions. Following the guidelines of Guetterman (2015), theoretical saturation was reached after 15 interviews, as no new significant themes emerged from the final participant. This indicates that the sample size was appropriate for the research objectives, ensuring a comprehensive understanding of the subject matter.

Thematic analysis was conducted by first coding the interview responses into 87 raw themes, derived from 1,008 units of text (Wargo et al., 2016). These raw themes were then further grouped into 21 broader themes, which were analyzed to uncover latent themes (Braun & Clarke, 2006). This process helped identify key patterns and insights related to self-efficacy, prosocial behaviors, and the role of educational endowment funds. The analysis revealed several recurring themes about how EEFs contribute to self-efficacy among students, faculty, and educational institutions. These themes were categorized under broader themes of motivation, empowerment, social responsibility, and institutional support.

To validate the findings of the initial interviews, a pilot study was conducted with 10% of the interviewees. This small sample was reviewed by external experts with significant experience in social work and education. These experts, holding PhDs and over a decade of field experience, reviewed the interview responses to ensure the authenticity and applicability of the findings (Sim et al., 2018). The experts agreed that the results from the pilot study could be generalized to a broader population, given the contextual similarities between Saudi Arabia and other regions with active philanthropic educational endowments (Sousa, 2014). This validation process reinforced the reliability and validity of the findings. The analysis of the interview data reveals that educational endowment funds play a crucial role in enhancing self-efficacy among both students and educational institutions in Saudi Arabia. By providing financial resources, fostering social responsibility, and creating opportunities for educational empowerment, these funds contribute to the development of a more robust and sustainable educational environment. Participants' experiences and insights underscore the importance of EEFs in supporting academic success and encouraging prosocial behaviors that align with Saudi Arabia's broader educational and philanthropic goals.

**Discussion**

The research on Educational Endowment Funds (EEFs) in Saudi Arabia has garnered significant attention in recent years due to their pivotal role in enhancing educational infrastructure and supporting universities. A critical focus of this body of work revolves around understanding how EEFs impact the country's education sector, especially considering its heavy reliance on government funding, their financial sustainability, and the overall governance mechanisms that underpin these funds.

EEFs in Saudi Arabia are primarily designed to support educational institutions by providing financial resources that can alleviate some of the fiscal burdens on the government. These funds are a part of the broader strategy to improve education through investments, scholarships, and infrastructure development. The findings from recent studies emphasize the growing prominence of EEFs as a channel for public funding aimed at education, with a large portion of the funds allocated to enhance university programs and research initiatives. However, there are emerging concerns about the sustainability of these funds due to their reliance on public sector allocations and the fiscal constraints faced by the government. One of the primary challenges highlighted in the studies is the fiscal implications of EEF allocations. Given the scale of the financial commitments involved, there are concerns about how these allocations could potentially affect funding for other critical sectors, such as healthcare and social services. To address this issue, researchers recommend a balanced approach that ensures adequate funding for both EEFs and other sectors without compromising the overall fiscal stability of the country.

Another crucial finding relates to the public perception and awareness of EEFs. Many studies have pointed out that the public often lacks a clear understanding of the purpose and benefits of EEFs, leading to lower levels of support compared to more traditional charitable initiatives. This is partly due to the opacity in the operations of some EEFs and the limited outreach efforts aimed at informing the public about their goals. Cultural factors also influence public support, with donors being more motivated to contribute to causes that align with their religious or cultural values. To increase societal support for EEFs, studies suggest employing targeted outreach strategies, such as engaging community leaders, alumni, and influencers to raise awareness about the role of EEFs in enhancing educational opportunities. By educating the public on the long-term impact of these funds, institutions can build stronger community support and increase donor contributions.

Effective governance and institutional oversight remain critical challenges for the management of EEFs in Saudi Arabia. The studies emphasize that many of these funds lack robust regulatory frameworks, which leads to discrepancies in governance practices. In some cases, the absence of clear operational guidelines has contributed to concerns about the potential mismanagement of funds. This has highlighted the need for stronger oversight mechanisms, including regular audits and transparent reporting structures. Researchers recommend the establishment of comprehensive governance frameworks that include clear regulations for fund management, accountability, and stakeholder engagement. Such frameworks would help mitigate concerns about mismanagement and enhance the trust of donors and other stakeholders in the integrity of the system. This could also pave the way for better collaboration with private sector donors, as greater transparency might reassure potential contributors.

The sustainability of EEFs has been another central theme in the research. Many EEFs in Saudi Arabia face challenges in generating consistent revenue due to their limited size and reliance on government allocations. Although some EEFs have diversified their investments, many continue to depend on public funding, which makes them vulnerable to economic fluctuations and changes in government priorities. To address this issue, the studies advocate for the adoption of innovative fundraising strategies, such as forming partnerships with private sector entities, launching targeted campaigns, and creating tax incentives for private donors. Furthermore, improving investment strategies to enhance returns while managing risk is essential to ensure the long-term sustainability of EEFs. Diversifying revenue streams could make these funds more resilient in the face of changing economic conditions.

The role of the private sector in funding EEFs is another important aspect discussed in the literature. While the Saudi government has provided substantial resources to support the education sector, this has led to a perception that private sector involvement is unnecessary. This has resulted in limited collaboration between the public and private sectors, hindering the potential for innovative solutions and additional funding for education. The studies suggest incentivizing private sector participation through tax breaks, recognition programs, and fostering a culture of corporate social responsibility (CSR). By doing so, Saudi EEFs could leverage additional funding sources and expertise, which would not only enhance their financial stability but also broaden their impact on educational outcomes.

When comparing Saudi EEFs to those in other countries, the research highlights both similarities and differences. Many EEFs globally, such as those in the United States and Canada, successfully utilize alumni networks and philanthropic foundations to generate financial support. Saudi EEFs could benefit from adopting similar models, particularly focusing on alumni engagement and building relationships with private sector stakeholders. However, the studies also point out that Saudi EEFs face unique challenges due to cultural and religious factors that influence fund management. The principles of Waqf, which emphasize the charitable use of resources for community benefit, play a significant role in shaping the governance of EEFs in Saudi Arabia. This contrasts with more secular or market-driven approaches seen in other countries, where philanthropic goals are often driven by economic or social impact rather than religious considerations.

Based on these findings, the research offers a range of policy recommendations aimed at improving the effectiveness and sustainability of Saudi EEFs. These recommendations include enhancing governance structures, fostering collaboration between public and private sectors, diversifying funding sources, and improving public awareness and donor engagement. By adopting these strategies, EEFs in Saudi Arabia could achieve greater financial independence and effectiveness, ultimately leading to better educational outcomes.

Despite the significant progress made, several challenges remain in the way of optimizing EEFs in Saudi Arabia. Chief among them are the sustainability of funding, governance issues, and the need for greater private sector involvement. However, there are also numerous opportunities to enhance the impact of EEFs. By learning from successful international models and tailoring strategies to the unique cultural, economic, and religious context of Saudi Arabia, stakeholders can overcome these challenges and create a more robust and effective educational financing landscape. In conclusion, the research underscores

the potential of Educational Endowment Funds to play a transformative role in Saudi Arabia's educational sector. With careful planning, improved governance, and increased private sector participation, these funds can continue to enhance educational outcomes and contribute to the broader goals of economic development and social welfare in the country.

### *Self-efficacy in Saudi Educational Institutions: The Role of Educational Endowment Funds in Supporting Education*

The role of Educational Endowment Funds (EEFs) in Saudi Arabia has gained significant attention as these funds have emerged as key instruments to enhance educational infrastructure and support universities. In the context of self-efficacy in Saudi educational institutions, EEFs represent a pivotal mechanism through which financial stability and growth are promoted, thereby empowering educational institutions to achieve their goals. This discussion synthesizes findings from past research, compares them with the current study, and highlights the critical contributions of EEFs.

### *Past Literature Insights on EEFs*

Research underscores the critical role EEFs play in reducing the reliance on government funding for education in Saudi Arabia. Albaroudi and Iqbal (2024) highlight the importance of leadership styles in fostering a quality culture within universities, a dynamic that EEFs can support through strategic investments in faculty development and infrastructure. Similarly, Allmnakrah and Evers (2019) emphasize the need for a fundamental shift in Saudi education to align with Vision 2030, a transformation heavily reliant on alternative funding mechanisms like EEFs to address budget constraints and foster innovation.

Internationally, Bhatti et al. (2014) provide a technical overview of endowment funds, highlighting their potential to generate stable returns and fund critical initiatives. Binfarè and Harris (2024) add to this discourse by exploring portfolio management strategies that maximize EEF performance, insights that are directly applicable to improving fund sustainability in Saudi Arabia. These studies collectively frame EEFs as essential tools for educational development, both globally and within the Saudi context.

### *Comparative Analysis with the Current Study*

The current study expands on these insights by examining how EEFs specifically support self-efficacy within Saudi educational institutions. It highlights that while past studies have focused on financial sustainability and governance, there is a need to connect these aspects to the broader goal of institutional empowerment. For instance, the findings emphasize the role of EEFs in funding programs that directly enhance institutional self-efficacy, such as research grants, scholarships, and faculty training.

Moreover, the study reveals gaps in public awareness and perception, echoing past concerns about the lack of transparency and outreach in EEF operations (Aseery, 2024). However, it goes further by proposing targeted strategies, such as engaging alumni and leveraging cultural values to build donor trust and increase contributions.

### *Governance and Sustainability*

Governance and sustainability remain critical challenges for Saudi EEFs, a theme consistent with the findings of Bobe and Kober (2015), who emphasize the importance of

organizational capabilities in higher education. The current study highlights the lack of robust regulatory frameworks and suggests adopting comprehensive governance models, including transparent reporting and regular audits. This aligns with Binfarè and Harris's (2024) call for professional management practices to enhance fund performance. In terms of sustainability, the study mirrors Bhatti et al.'s (2014) observations on diversifying revenue streams to mitigate dependence on public funding. It advocates for innovative fundraising approaches, such as forming private-sector partnerships and offering tax incentives, to ensure long-term stability.

### *Cultural and Religious Contexts*

A unique contribution of this study is its emphasis on the cultural and religious dimensions of EEF governance. Unlike secular approaches prevalent in Western models, Saudi EEFs are deeply influenced by the principles of Waqf, which prioritize community benefit over profit. This distinction highlights the need for tailored strategies that align with Saudi Arabia's socio-religious context while adopting best practices from international models.

### **Conclusion**

This research reinforces the transformative potential of Educational Endowment Funds in fostering self-efficacy within Saudi educational institutions. By addressing challenges in governance, sustainability, and public engagement, and learning from international best practices, Saudi EEFs can play a central role in achieving Vision 2030's educational goals. The findings underscore the need for continued investment in these funds to empower institutions, enhance educational outcomes, and drive broader socio-economic development in the Kingdom.

### **Theoretical Contributions**

This study offers three key theoretical contributions rooted in the Resource-Based View (RBV). First, the RBV highlights the importance of identifying unique resources, positioning Educational Endowment Funds (EEFs) as critical assets that empower educational institutions with financial autonomy. This autonomy enables institutions to invest in innovative programs and sustainable initiatives, thereby enhancing their operational efficiency and instructional quality.

Second, the RBV underscores the strategic allocation of resources and the significance of accountability. Effective management practices, including transparency and accountability, are pivotal in maximizing the impact of EEFs. Institutions adopting robust governance frameworks can strengthen stakeholder confidence, attract additional funding, and ensure that resources are utilized efficiently to address pressing educational challenges.

Finally, the RBV emphasizes the necessity of long-term planning and community engagement for sustainable growth. EEFs encourage educational institutions to cultivate partnerships with alumni and local businesses, fostering a philanthropic culture that bolsters financial support. This community-driven approach strengthens the bond between institutions and their communities, aligning educational objectives with societal needs. Consequently, this alignment creates a resilient and innovative educational ecosystem that aligns with the principles of Industry 5.0.

**Practical Implications**

The implementation of Educational Endowment Funds (EEFs) offers significant practical implications for administrators, policymakers, and society, particularly within the context of Industry 5.0. First, educational administrators should adopt enhanced governance practices emphasizing transparency and accountability in managing EEFs. Such practices build stakeholder trust, attract additional contributions, and ensure funds are effectively utilized to enhance educational quality and foster innovation.

Second, policymakers have a pivotal role in establishing a supportive regulatory framework that encourages private sector engagement in educational initiatives. This approach can diversify funding sources and foster partnerships that drive innovation and allocate resources toward sustainability-aligned activities consistent with Industry 5.0 goals.

Finally, for society, fostering a culture of social responsibility is essential. Encouraging contributions from local businesses and alumni can create a sense of shared ownership in educational outcomes, strengthening connections between educational institutions and the broader community. This engagement not only supports financial sustainability but also reinforces the alignment of educational objectives with local economic needs.

By addressing these implications, stakeholders can collaborate to enhance the effectiveness and sustainability of Saudi Arabia's education sector, advancing the nation's development objectives and aligning with Industry 5.0 principles.

**Limitation and Future Research Directions**

This study on Educational Endowment Funds (EEFs) in Saudi Arabia acknowledges several limitations that future research can address. Firstly, the research primarily examines the current state of EEFs without incorporating longitudinal data to assess their long-term impact and sustainability. Future studies could adopt a longitudinal approach to evaluate the performance and effectiveness of EEFs over time, providing valuable insights into their adaptability to changing educational demands and economic conditions.

Secondly, while this study highlights governance and oversight issues, it does not delve into specific governance models that could enhance EEF efficiency. Future research should explore various governance frameworks and global best practices from successful EEFs, offering tailored recommendations for the Saudi context to maximize their effectiveness.

Lastly, although the study underscores the importance of community engagement, it does not thoroughly examine the strategies that facilitate such involvement. Future research should focus on identifying and analyzing methods to strengthen partnerships between educational institutions and their communities, as well as ways to effectively mobilize community support for EEF initiatives. Addressing these limitations will enable future research to provide a more comprehensive understanding of the role of EEFs in improving educational outcomes and fostering sustainable development in Saudi Arabia.

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