



Croatian
International
Relations
Review

CIRR

XXVIII (90) 2022,
332-347

DOI 10.2478/
CIRR-2022-0032

UDC 327 (4-6
EU:73:55)

Gender Differences in Leadership: Role of Gender Diversity, Leadership Style, Cultural Influence and Leadership Behavior

Sara Alhassan

*Department of Management, College of Business Administration,
King Faisal University, Al-Ahsa 31982, Saudi Arabia*
Email: 219005841@student.kfu.edu.sa

Mohammed A. Al Doghan

*Department of Management, College of Business Administration,
King Faisal University, Al-Ahsa 31982, Saudi Arabia*
Email: mdoghan@kfu.edu.sa
<https://orcid.org/0000-0001-6418-269X>

Abstract

Key words:

Gender differences, leadership style, Saudi organizations, gender diversity, leadership style, cultural influence.

This study investigates the impact of cultural influence, leadership style, leadership behavior, and gender diversity on a leadership position in the Kingdom of Saudi Arabia (KSA) business sector. Additionally, gender disparities were evaluated alongside the effect of cultural influence, leadership style, and leadership behavior on a leadership position in this study. The population of the study consisted of Saudi Arabian businesses. The questionnaire survey is used to collect data, and employees of business companies are deemed the study's respondents. 142 valid responses were considered throughout the formulation of the data analysis. A partial least square (PLS) was used to evaluate the variables' association. Cultural influence, leadership style, leadership conduct, and gender diversity have strong relationships with leadership style, according to the findings of the study. In addition, gender discrimination in the workplace has unquestionably decreased, but it is an evolving phenomenon that requires additional time to gain acceptability across various enterprises. Nevertheless, it has been observed that cultural influences, leadership styles and behavior, and the perception of gender diversity are altering people's management methods. It may be said that the situation for women in leadership in the KSA has changed and is on the rise, resulting in the countries achieving their intended progress and prosperity on both the economic and social levels.

Introduction

Vision 2030 of Saudi Arabia stresses equal business opportunities for men and women (Alessa et al., 2022). It also emphasizes the rise in women's labor force involvement. Vision 2030 intends to increase the proportion of women in the workforce from 22% to 30%. (Gazette, 2016). The Gulf area has implemented several measures to enhance Saudi Arabia's economy. The primary objective of the government of Saudi Arabia is to foster a creative mindset (KSA). The female members contribute positively to the region. The changed conduct and views of women in the Gulf region resulted in increased innovation and new restrictions. The globalization of the Gulf region has expanded women's economic engagement dramatically. However, a gap must be filled to maximize the benefits of female workforce participation.

In recent years, Saudi society has made significant strides in defining the social status of women. Despite the apparent increase in women's roles in Saudi society (Al-Qahtani et al., 2020), Saudi women's labor force participation remains among the lowest in the world. Additionally, women remain underrepresented in leadership positions (Al-Ahmadi, 2011). Compared to women in other Arab regions who have been the subject of much academic research on gender issues, Saudi women remain comparatively unexplored. According to previous studies, Saudi Arabia is the G20 country with the highest growth rate in female involvement. To enhance the country's reputation worldwide, the Saudi Arabian government has unveiled Vision 2030, a plan to improve all external and

internal aspects of the country to make it an attractive employer. According to the most recent strategy, the essential purpose is to eliminate obstacles to the growth of women (He et al., 2021).

The gender gap in leadership has been one of the most controversial topics for decades (Rawlley et al., 2023) due to the numerous elements that influence leadership qualities, such as leadership conduct, leadership style, and cultural influences. Men's leadership has been the primary focus of scholarly research on leadership for the past 80 years. However, the past 50 years have witnessed remarkable changes demonstrating women's leadership empowerment. Women continue to face pressure and obstacles while attempting to demonstrate their talents definitively. Today, women are underrepresented in leadership roles due to their numerous challenges in ascending the corporate ladder. Men are considered more authoritative, influential, and assertive than women. Cultural influence plays a significant role in the effect of gender on leadership (Akanji et al., 2020), as culture revolves around its secrets surrounding the concept of old male and female habits, highlighting one of the primary factors influencing the difference between the sexes in leadership. To optimize gender variations in leadership effectiveness, it is essential to account for biological gender. And describe the characters and characteristics that cultivate leadership traits. Furthermore, few research has examined the influence of gender disparities in the field of leadership (Yang et al., 2019). The proposed research intends to investigate the influence of gender differences in business leadership in Saudi culture based on various criteria, including cultural influence, leadership behavior, and leadership style, which will significantly contribute to the literature.

Even though the number of women in leadership positions has increased over the past few decades (Downs et al., 2014), women are still underrepresented in leadership roles, posing an ethical issue not just to society as a whole but also to business. The women confront the glass ceiling, a barrier for women attempting to attain leadership positions. Despite the increased representation of women in management, when people are asked for their preference, they generally prefer male managers over female managers due to institutional and cultural reasons that hinder leadership effectiveness. Problems faced by women workers include discrimination in appointment and practices of promotion (Hideg et al., 2020), male superior traditional attitude towards working women, sectors with male-dominating factors, male resistance towards women in management, absence of policies and legislation to guarantee women's participation in positions of management, and absence of professional management program of development for women (Kemp et al., 2015). This study seeks to explore and investigate the impact of cultural influence, gender differences, and leadership styles and behaviors on the role of women in the business industry in Saudi Arabia in light of the government's renewed emphasis on developing and supporting women in entrepreneurial endeavors. Consequently, a growing corpus of study has sought to identify the causes of this discrepancy. And based on the

research's preliminary literature analysis, it was determined that relatively few studies on this topic had been undertaken in the KSA.

Literature Review

Gender Differences and Leadership in the Kingdom of Saudi Arabia

According to [Lacheret \(2020\)](#), the growth in women's academic engagement has a favorable effect on the labor market. It is a well-established fact that the number of women holding high executive positions in politics and business is significantly lower than that of men ([Alan et al., 2020](#)). Despite the evidence showing no significant difference between the leadership styles and effectiveness of men and women in positions of authority, there are still differences between the sexes ([Eagly et al., 1992](#)). There are distinct variances in perspectives regarding gender and leadership characteristics ([Kolb, 1999](#)). The influence of cultural differences and beliefs on women's access to leadership positions and career opportunities, including managerial decisions, promotions, and receiving less favorable and biased evaluations, is evident in managerial decisions, promotions, and evaluations that are less favorable and biased ([Schein, 2007](#)). Even though the ratio of women in leadership positions has improved over the past few decades, women remain underrepresented in leadership positions, posing an ethical issue to society and the business sector. [Ridgeway \(2011\)](#) explains that the assumptions and arrangement of the evaluation for one group over another regarding the difference in competence in different genders, the position in the social hierarchy affect the level of leadership and influence, and that status beliefs about gender represent a series of obstacles that women face in their attempts to exercise leadership at the same level as men. Attitudes toward social responsibility can be a significant element underlying gender variations in leadership ([Alan et al., 2020](#)).

This study provides a critical analysis of the role of Saudi female entrepreneurs as innovators and the underlying gender segregation in the working population. It has been underlined that Saudi Vision 2030 has been innovative and has resulted in a better degree of female workforce engagement ([Kemppainen, 2019](#)). According to [Jizi et al. \(2022\)](#), female board involvement facilitates the implementation of successful change strategies to support business ethics and health and safety policies. Saudi Arabia publishes its cultural and traditional norms about Islamic Shaira law, which has resulted in restrictions on women's leadership roles. Moreover, [Alsubaie et al. \(2017\)](#) explained that higher education employment had been one of the emerging sectors in which women's participation has significantly contributed to new directions and opportunities for young Saudis to study in an environment where gender equality has been prioritized. No workplace discrimination occurs, resulting in the development of a positive perception towards the participation of different genders in different sectors. According to the most recent revision of the labor code, women are permitted to work and

own businesses. The literature demonstrates that Vision 2030's major objectives will be more effectively attained after adopting this new labor legislation update. [Figure 1](#) provides a framework for examining the interaction between cultural impact, leadership style, leadership behavior, and gender diversity in a leadership position in the face of gender differences.

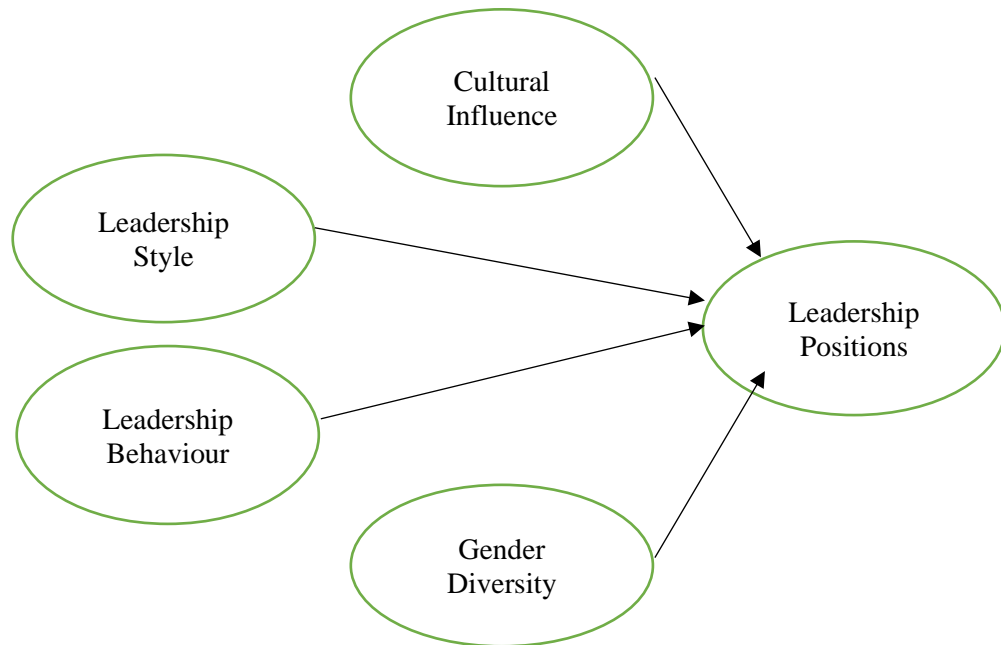


Figure 1. The Framework of the Study

Culture Influence, Gender Diversity, and Leadership Positions

The Global Gender Report 2020 of the World Economic Forum ranks Riyadh 146th out of 153 nations in terms of overall gender equality, 148th in economic involvement, and 136th in political empowerment. The fundamental cause for this is the cultural gap. Saudi Arabia has a distinctive culture that prohibits female participation in most cases. The increase in female involvement from 17% to 25% results from implementing attempts to modify the labor law. Consequently, a favorable impact on boosting total productivity and enhancing the country's global reputation is noted. Female members are unable to vote and serve as council members.

Consequently, following the implementation of vision 2030, 20% more seats have been earmarked for women, according to [Alrefai \(2021\)](#). The study demonstrates that leadership styles may vary by gender and may not be standardized or classified based on the culture of the leaders and their applied leadership styles. According to [Schünemann \(2020\)](#), there has been a rise in research on gender diversity and its effect on the various leadership positions held following overall leadership effectiveness and business efficiencies. [Al-Sada et al. \(2017\)](#) have demonstrated the impact of organizational culture and leadership styles on employee satisfaction, commitment, and motivation in Qatar's educational sector. According to the study's conclusions, there is a considerable positive association

between a supportive workplace culture, job satisfaction, and organizational commitment. Consequently, it may be underlined that supporting organizational culture has been the foremost need in the current changing business climate to ensure that gender equality has been preserved, along with optimal productivity, increased job satisfaction, and employee dedication. Lastly, it is suggested that;

Hypothesis 1. Cultural influence has a relationship with a leadership position.

Leadership Styles, Gender Diversity, and Leadership Positions

According to [Alshammari et al. \(2021\)](#)'s research, emotional intelligence is a precondition for leadership that enables leaders to implement effective leadership styles. Authentic leadership is another powerful leadership style that emotionally savvy leaders may demonstrate. The leaders can use their emotional intelligence to broaden the scope of their vision and the diversity of their ideas, allowing them to challenge deeply held views. Emotionally intelligent leaders can interpret their followers' feelings and identify their emotions' underlying causes. Therefore, they can engage in social interaction and cultivate close relationships with followers to impart their values to them. They can influence followers' emotions to generate warm, happy feelings that contribute to a view of the leader's sincerity. Different qualities have been connected with transformational and transactional leaders, including low uncertainty avoidance, femininity, collectivism, and low and high-power distance. In addition, the study suggests that, regardless of gender, executives should choose their leadership styles based on their beliefs, perspectives, and the organizational context to maximize commercial benefits and sustainability. Finally, it is proposed that;

Hypothesis 2. Leadership style has a relationship with a leadership position.

Leadership Behaviour, Gender Diversity, and Leadership Positions

Due to the rising number of women in positions of authority, there has recently been a resurgence of interest in literary studies investigating gender variations in human behavior ([Gibson, 1995](#)). The definition of leadership behavior is a person's behavioral ability to encourage and influence others to achieve future and present organizational goals. Numerous studies have examined stereotypes of sexual characteristics, which refer to behavioral or psychological features that are believed to characterize men with higher or less frequency than women ([Williams et al., 1990](#)). Gender stereotypes refer to ideas about the characteristics that differentiate men and women and stereotyped notions about male and female characteristics and behavior ([Broverman et al., 1994](#)). Regarding behavioral characteristics, women are typically viewed as communal and expressive, whereas men are usually considered active and assertive.

Cross-cultural research showed a correlation between male behavioral patterns and leadership characteristics. However, they detect little connection between women's behavioral and leadership characteristics. Other works exhibited gender bias in their absence of leadership characteristics, reflecting the general stereotype of women as emotional, sensitive, and vulnerable. In contrast, the male behavioral stereotype is aligned with leadership characteristics such as aggression and control. In the study of leadership and gender, academics were divided about whether gender differences influence leadership behavior (Pounder et al., 2002). It is therefore hypothesized that;

Hypothesis 3. Leadership behavior has a relationship with a leadership position.

Hypothesis 4. Gender diversity behavior has a relationship with a leadership position.

Hypothesis 5. Gender differences influence the relationship between cultural influence, leadership style, leadership behavior, and position.

Methodology

Through collecting and analyzing qualitative and quantitative data, the research design focuses on contemporary concerns and issues. Therefore, selecting a research design, primarily determined by the nature of the study, is of utmost importance. Given that this study examined the relationship between cultural influence, leadership style, leadership behavior, and gender diversity in a leadership position in the Saudi Arabian business sector, a cross-sectional research methodology is appropriate. This study chose a cross-sectional research strategy in which data are collected simultaneously. Quantitative data are collected as part of data collection and sampling to meet the study's objective. The research study analyzed and categorized the categories such as data collecting and analysis severely.

A questionnaire was developed to collect information regarding cultural influence, leadership style, leadership behavior, gender diversity, and leadership position. After that, a set of 300 questionnaires was given to the persons who intended to participate. The population of the study was the Saudi Arabian business sector. Consequently, data collection is conducted via a questionnaire survey, and employees of commercial companies are deemed the study's respondents. The surveys were sent to businesses by self-visits and an online survey. A 5-point Likert scale was utilized for data collection, which is most effective for obtaining original responses. During the formulation of the data analysis, only 142 valid responses were considered. The surveys were distributed to the employees of commercial enterprises using a stratified random selection technique. In addition, the collected responses from individuals were plotted onto an Excel sheet according to the different questions and then classified according to the created Likert scale for data analysis. All of the scale items were derived from prior research.

Data Analysis

There are a variety of statistical methods available for analyzing primary data. The current study utilized the most recent data analysis tool and methodology. Smart PLS is a popular data analysis tool. Previous research proposed using Smart PLS for primary data analysis (Cheah et al., 2020; Joe Hair et al., 2017; J. F. Hair et al., 2012; Hameed et al., 2018). This statistical instrument utilizes structural equation modeling (SEM), a well-known technique for analyzing primary data. In the initial phase of the analysis of Smart PLS, earlier research advised examining the dependability of each scale item using factor loadings (Hair Jr et al., 2019). Figure 2 and Table 1 reveal that several scale items have factor loadings less than 0.5, confirming their reliability. Earlier research also recommended utilizing composite reliability (CR) and average variance extracted (AVE) to ensure the convergent validity of variables (Ali et al., 2015; Joseph Hair et al., 2022; J. F. Hair et al., 2013). Table 1 reveals that all variables have CR values greater than 0.70 and AVE values greater than 0.50, confirming the convergent validity. In the final step of the first portion of the study, discriminant validity (Henseler et al., 2015) is confirmed by utilizing the AVE square root, as indicated in Table 2.

Multigroup Analysis

This study employed multigroup analysis to investigate the effect of gender differences. In this study section, gender disparities in cultural impact, leadership style, conduct, and position were explored. This is seen as a test of the hypothesis. The results are shown in Table 3. Using multigroup analysis, the effects of cultural influence, gender diversity, leadership style, and leadership behavior on male and female leadership positions are examined. For each association, the p-value was less than 0.05, indicating that the effect of cultural influence, gender diversity, leadership style, and leadership conduct on a leadership position differs for men and women. Thus, the fifth hypothesis is supported.

Discussion and Conclusion

The Saudi Arabian economy offers profound changes to various persons by stressing gender equality, fostering justice and transparency in working mechanisms, and contributing to building a sustainable economic infrastructure per vision 2030. However, it has been demonstrated that gender equality regulations are frequently ineffective in the workplace, particularly for women. Despite efforts to promote gender equality in the workplace, discrimination against women has been relatively high, as demonstrated by past research. This study has also highlighted several variables that significantly impact the unequal treatment of women in various leadership roles. The study's findings reveal a strong association between cultural impact, leadership style, leadership conduct, gender diversity, and leadership position in the Saudi Arabian corporate sector.

Table 1. AVE Square Root

	Cultural Influence	Gender Diversity	Leadership Behavior	Leadership Position	Leadership Style
Cultural Influence	0.842				
Gender Diversity	0.345	0.858			
Leadership Behavior	0.356	0.729	0.809		
Leadership Position	0.395	0.682	0.737	0.732	
Leadership Style	0.654	0.26	0.251	0.328	0.781

Table 2. Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Cultural Influence -> Leadership Position	0.067	0.063	0.018	3.69	0
Gender Diversity -> Leadership Position	0.282	0.285	0.073	3.857	0
Leadership Behaviour -> Leadership Position	0.485	0.484	0.069	7.036	0
Leadership Style -> Leadership Position	0.09	0.097	0.018	4.99	0
	Original Sample (O)	Sample Mean (M)	2.50%	97.50%	
Cultural Influence -> Leadership Position	0.067	0.063	0.081	0.205	
Gender Diversity -> Leadership Position	0.282	0.285	0.132	0.422	
Leadership Behaviour -> Leadership Position	0.485	0.484	0.36	0.616	
Leadership Style -> Leadership Position	0.09	0.097	0.073	0.265	

Table 3. Multi Group Analysis

	Difference (Male-Female)	2-tailed (Male vs. Female) p-value
Cultural Influence -> Leadership Position	0.211	0.021
Gender Diversity -> Leadership Position	0.154	0.04
Leadership Behaviour -> Leadership Position	0.452	0.001
Leadership Style -> Leadership Position	0.155	0.049

The survey findings indicate that most respondents had observed gender discrimination in companies (Topal, 2019). However, managerial leadership positions have considered various benefits for encouraging diversity and fairness to maintain a changing workplace brand. According to the secondary data evidence, gender-based difficulties have been among the most prominent. Moreover, cultural influences and gender attitudes have played a significant role in influencing discrimination. Consequently, the moral code of conduct of the organization should be established in such a way as to promote positive and open leadership while dealing with people. In addition to promoting gender equality and adhering to the requirements set by regulatory authorities that have been at the core of people practice policies, these policies also contribute to the development of employer brand and employer of choice status within the target market. It has been demonstrated through studies and primary data that cultural influence has a significant effect on gender differences and has a profound impact on leadership positions in various sectors (Abdellatif et al., 2019; Rawley et al., 2023; Yang et al., 2019). In addition, the survey revealed a higher degree of female participation in various corporate brands, resulting in a rise in the proportion of women serving on various representative boards. Thus, it can be asserted that changes now taking place in various sectors to provide equal participation chances for both sexes have altered the situation of women in corporate organizations. Therefore, it can be asserted that the general leadership behavior and style have shifted toward employee-centered and sustainable policies that support the elimination of gender-based discrimination in the workplace. This has increased the general engagement of women, which has considerably contributed to the overall economic growth.

To affect a cultural transition, education programs can serve as elemental forces contributing to an increase in the region's general literacy rate. Leadership is the key to people management and a significant influence on leadership behavior (Syam et al., 2023), and it is noted that sustainable workplace regulations are now in place to eliminate any prejudice. As far as behavior is concerned, it has been predicted in the testing of the hypothesis that cultural influences are changing, which swiftly supports equal participation, and that the role of women in leadership roles is

expanding to promote gender equality in the workplace. In addition, the testing of hypotheses revealed that leadership style plays a crucial role in establishing sustainable workplace regulations (Ntayi, 2013). The leaders' policies and practices for the workforce reflect the perception of leadership behavior and the presence of gender parity. Importantly, it has also been seen that professionals are building sustainable workplaces that mix diversity and core management activities to a level where prejudice in the workplace is intolerable.

Further equality and fairness promotion have been the immediate actions to provide a diverse workplace with the appropriate capabilities. The hypothesis's testing has demonstrated a favorable association between gender diversity and leadership roles for women in various commercial organizations. Consequently, fostering diversity and inclusion has significant advantages for the company and its people, as it provides the required capabilities to establish a comparative advantage in the target market.

Implications of the Study

Consideration of the relationship between cultural influence, leadership style, leadership behavior, gender diversity, and leadership position in the Saudi Arabian business sector contributed considerably to the current study. In companies, gender gaps in leadership have been a notable concern. Still, the emergence of a code of conduct connected to equal participation has broken down the barriers of gender differences at lower levels. This study's findings would aid in comprehending issues such as adopting leadership style and conduct and how it can influence the perception of a diversely gendered and culturally varied workforce. Women can be favored for every job in society, but the culture and beliefs must be altered first. Women cannot attain top leadership positions due to their inferior academic qualifications and knowledge. Therefore, the country's education system should be established so that women can pursue a higher degree and support leadership positions. Organizational rules and culture must adapt, so all genders have equal access to resources and opportunities. Finally, Saudi women should be allowed to demonstrate their qualifications for high-level executive positions. The Saudi Arabian organization culture is conservative; hence, unwritten regulations exist to limit women's participation in senior positions.

They felt that women's place was in the home and that they should not be given priority in the professional realm. Academicians and practitioners should address this issue at a higher level. Considering this study's findings, practitioners should develop measures to eliminate workplace prejudice because men are favored while providing responsible and high-quality work. Therefore, women are considered less competent professionals. In the context of high-level executive positions or significant responsibilities, men are favored over women. In Saudi Arabian culture, the gender gap is a formidable obstacle. Due to this uneven consideration of Saudi culture,

women cannot demonstrate their knowledge and abilities in the job, despite having them. The gender-related organizations should analyze the present study's findings and consider these issues. Individuals should not be assessed based on their gender and should receive equal opportunity in a professional context. In terms of quality and innovation, the constant challenges faced by the industrial sector are a lack of teamwork competencies, ineffective teamwork, and the absence of change management. The impediments associated with the skills and abilities of the workers may be reduced with the aid of an appropriate training and development process, which would increase the workers' overall skills and competencies, as well as their grasp of the process and their job roles.

Study Limitations and Future Directions

This study conducted the quantitative analysis based on the 142 replies collected within the specified time limit. In contrast, qualitative research is not considered in this study, which compiled the managerial perspective on gender differences that could have been the key to altering the overall impression of gender disparities in various firms. Thus, the study may have produced a more significant or in-depth understanding of the multiple aspects, such as cultural influences, leadership styles, and behavior, in addition to promoting equality and fairness. The relationship between gender diversity and gender differences at a broader level may result in a framework with a more extensive scope that could be useful for managers and leaders to adopt such practices to ensure equal participation and optimal productivity generation, as well as to promote gender diversity in the workplace to develop desired competencies.

Acknowledgment

This work was supported by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia [Grant No. 2577]'.

References

- Abdellatif, W., Ding, J., Jalal, S., et al. (2019). Leadership gender disparity within research-intensive medical schools: a transcontinental thematic analysis. *Journal of Continuing Education in the Health Professions*, 39(4), 243-250. doi: <https://doi.org/10.1097/CEH.0000000000000270>
- Akanji, B., Mordi, C., Ituma, A., Adisa, T. A., & Ajonbadi, H. (2020). The influence of organisational culture on leadership style in higher education institutions. *Personnel Review*, 49(3), 709-732. doi: <https://doi.org/10.1108/PR-08-2018-0280>
- Al-Ahmadi, H. (2011). Challenges facing women leaders in Saudi Arabia. *Human Resource Development International*, 14(2), 149-166. doi: <https://doi.org/10.1080/13678868.2011.558311>

- Al-Qahtani, M. M. Z., Alkhateeb, T. T. Y., Mahmood, H., Abdalla, M. A. Z., & Qaralleh, T. J. O. T. (2020). The role of the academic and political empowerment of women in economic, social and managerial empowerment: The case of Saudi Arabia. *Economies*, 8(2), 45. doi: <https://doi.org/10.3390/economies8020045>
- Al-Sada, M., Al-Esmael, B., & Faisal, M. N. (2017). Influence of organizational culture and leadership style on employee satisfaction, commitment and motivation in the educational sector in Qatar. *EuroMed Journal of Business*, 12(2), 163-188. doi: <https://doi.org/10.1108/EMJB-02-2016-0003>
- Alan, S., Ertac, S., Kubilay, E., & Loranth, G. (2020). Understanding gender differences in leadership. *The Economic Journal*, 130(626), 263-289. doi: <https://doi.org/10.1093/ej/uez050>
- Alessa, N. A., Shalhoob, H. S., & Almugarry, H. A. (2022). Saudi Women's Economic Empowerment in Light of Saudi Vision 2030: Perception, Challenges and Opportunities. *Journal of Educational and Social Research*, 12(1), 316-316. doi: <https://doi.org/10.36941/jesr-2022-0025>
- Ali, F., & Kim, W. G. (2015). A comparative study of CB-SEM and PLS-SEM for theory development in hospitality research. *3rd World Research Summit for Tourism and Hospitality, Orlando, FL*.
- Alrefai, A. H. (2021). Is the Saudi gender gap narrowing? *Middle East Quarterly*. Retrieved from <https://www.meforum.org/61824/is-the-saudi-gender-gap-narrowing?goal>
- Alshammari, A. M. A., & Daud, W. M. N. W. (2021). The Effect of Microfinance Bank Services on Women Empowerment: The case for Women Entrepreneurs in Irbid, Jordan (SMEs). *Journal of Entrepreneurship and Business*, 9(1), 38-49. doi: <https://doi.org/10.17687/jeb.v9i1.415>
- Alsubaie, A., & Jones, K. (2017). An overview of the current state of women's leadership in higher education in Saudi Arabia and a proposal for future research directions. *Administrative Sciences*, 7(4), 36. doi: <https://doi.org/10.3390/admsci7040036>
- Broverman, I. K., Vogel, S. R., Broverman, D., Clarkson, F., & Rosenkrantz, P. (1994). Sex-role stereotypes: A current appraisal. *Caring voices and women's moral frames: Gilligan's view*, 28, 191-210. Retrieved from <https://books.google.ae/books?hl=en&lr=&id=OBjzzmUS2oC&oi=fnd&pg=PA191&dq=Broverman>
- Cheah, J.-H., Thurasamy, R., Memon, M. A., Chuah, F., & Ting, H. (2020). Multigroup analysis using smartpls: step-by-step guidelines for business research. *Asian Journal of Business Research*, 10(3), I-XIX. doi: <https://doi.org/10.14707/ajbr.200087>
- Downs, J. A., Reif, M. L. K., Hokororo, A., & Fitzgerald, D. W. (2014). Increasing women in leadership in global health. *Academic medicine: journal of the Association of American Medical Colleges*, 89(8), 1103. doi: <https://doi.org/10.1097%2FACM.0000000000000369>

- Eagly, A. H., Makhijani, M. G., & Klonsky, B. G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin*, 111(1), 3. doi: <https://psycnet.apa.org/buy/1992-16290-001>
- Gazette, S. (2016). Full text of Saudi Arabia's vision 2030. *Saudi Gazette*, 26. Retrieved from <https://english.alarabiya.net/perspective/features/2016/04/26/>
- Gibson, C. B. (1995). An investigation of gender differences in leadership across four countries. *Journal of International Business Studies*, 26(2), 255-279. doi: <https://doi.org/10.1057/palgrave.jibs.8490847>
- Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), 100027. doi: <https://doi.org/10.1016/j.rmal.2022.100027>
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management & Data Systems*, 117(3), 442-458. doi: <https://doi.org/10.1108/IMDS-04-2016-0130>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1-2), 1-12. Retrieved from <https://ssrn.com/abstract=2233795>
- Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications. *Long Range Planning*, 45(5-6), 320-340. doi: <https://doi.org/10.1016/j.lrp.2012.09.008>
- Hair Jr, J. F., & Sarstedt, M. (2019). Factors versus composites: Guidelines for choosing the right structural equation modeling method. *Project Management Journal*, 50(6), 619-624. doi: <https://doi.org/10.1177/8756972819882132>
- Hameed, W. U., Basheer, M. F., Iqbal, J., Anwar, A., & Ahmad, H. K. (2018). Determinants of Firm's open innovation performance and the role of R & D department: an empirical evidence from Malaysian SME's. *Journal of Global Entrepreneurship Research*, 8(1), 1-20. doi: <https://doi.org/10.1186/s40497-018-0112-8>
- He, L.-H., Leng, Y.-K., & Pan, S.-N. (2021). Decisions of Low Carbon Supply Chain with Corporate Social Responsibility and Fairness Concerns. *International J. of Oper. and Quant. Management*, 27(4), 337-360. doi: <https://doi.org/10.46970/2021.27.4.3>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135. doi: <https://doi.org/10.1007/s11747-014-0403-8>
- Hideg, I., & Wilson, A. E. (2020). History backfires: Reminders of past injustices against women undermine support for workplace policies promoting women. *Organizational Behavior and Human Decision*

- Processes*, 156, 176-189. doi: <https://doi.org/10.1016/j.obhdp.2019.10.001>
- Jizi, M., Nehme, R., & Melhem, C. (2022). Board gender diversity and firms' social engagement in the Gulf Cooperation Council (GCC) countries. *Equality, Diversity and Inclusion: An International Journal*, 41(2), 186-206. doi: <https://doi.org/10.1108/EDI-02-2021-0041>
- Kemp, L. J., Madsen, S. R., & Davis, J. (2015). Women in business leadership: A comparative study of countries in the Gulf Arab states. *International Journal of Cross Cultural Management*, 15(2), 215-233. doi: <https://doi.org/10.1177/1470595815594819>
- Kemppainen, R. P. (2019). Saudi female innovators as entrepreneurs – theoretical underpinnings. *International Journal of Gender and Entrepreneurship*, 11(2), 166-185. doi: <https://doi.org/10.1108/IJGE-12-2017-0081>
- Kolb, J. A. (1999). The effect of gender role, attitude toward leadership, and self-confidence on leader emergence: Implications for leadership development. *Human Resource Development Quarterly*, 10(4), 305-320. doi: <https://doi.org/10.1002/hrdq.3920100403>
- Lacheret, A. (2020). Innovation policies and values of female managers from the Gulf: a qualitative study. *Journal of Strategic Innovation and Sustainability*, 5(15), 1-21. Retrieved from <https://shs.hal.science/halshs-02540855/>
- Ntayi, J. M. (2013). Leadership styles, workplace politics and moral identity of Ugandan public procurement staff. *International Journal of Public Administration*, 36(1), 35-44. doi: <https://doi.org/10.1080/01900692.2012.713288>
- Pounder, J. S., & Coleman, M. (2002). Women – better leaders than men? In general and educational management it still “all depends”. *Leadership & Organization Development Journal*, 23(3), 122-133. doi: <https://doi.org/10.1108/01437730210424066>
- Rawlley, B., Marchina, S., Cappucci, S. P., et al. (2023). Investigation on Gender Differences in Leadership of Stroke-Related Clinical Trials. *Stroke*. doi: <https://doi.org/10.1161/STROKEAHA.122.039173>
- Ridgeway, C. L. (2011). *Framed by gender: How gender inequality persists in the modern world*: Oxford University Press. Retrieved from <https://books.google.ae/books?hl=en&lr=&id=NqoWmrAoQn0C&oi=fnd&pg=PP6&dq=Ridgeway>
- Schein, V. E. (2007). Women in management: reflections and projections. *Women in Management Review*, 22(1), 6-18. doi: <https://doi.org/10.1108/09649420710726193>
- Schünemann, A. (2020). The Effect of Culture on Female Leadership: Towards Equality Everywhere? , 1-39. Retrieved from <http://hdl.handle.net/2445/172129>
- Syam, A. R., Wiyono, B. B., & Imron, A. (2023). Leadership behaviour of a boarding school in Indonesia. *Pegem Journal of Education and Instruction*, 13(1), 100-108. doi: <https://doi.org/10.47750/pegegog.13.01.12>
- Topal, A. (2019). *Economic reforms and women's empowerment in Saudi Arabia*. Paper presented at the Women's Studies International

- Forum: Elsevier 76, 102253. doi:
<https://doi.org/10.1016/j.wsif.2019.102253>
- Williams, J. E., & Best, D. L. (1990). *Measuring sex stereotypes: A multination study*. Rev: Sage Publications, Inc. Retrieved from
<https://psycnet.apa.org/record/1990-97701-000>
- Yang, H. Y., Rhee, G., Xuan, L., Silver, J. K., Jalal, S., & Khosa, F. (2019). Analysis of H-index in assessing gender differences in academic rank and leadership in physical medicine and rehabilitation in the United States and Canada. *American Journal of Physical Medicine & Rehabilitation*, 98(6), 479-483. doi:
<https://doi.org/10.1097/PHM.0000000000001129>