

ISSN: 2617-6548

URL: www.ijirss.com



The social costs of leadership: Analyzing the impact of distributed leadership on women's work-life balance: mediating role of work-family and family-work conflict.

Dina Abdullah Dahlan

College of Business Administration, University of Business and Technology, Jeddah, Saudi Arabia.

(Email: dina.dahlan@hotmail.com)

Abstract

This paper investigates the impact of distrusted leadership on women's work-life balance, mediated by work-life and family-work conflict in Saudi Arabia. A purposive sampling technique was utilized to collect data from 260 women working in public and private institutions in Jeddah, Saudi Arabia. Partial least squares structural equation modeling was applied to test the hypothetical relationship between the key variables. Results reveal that distributed leadership significantly increases work-family and family-work conflicts, highlighting potential challenges in balancing work and personal responsibilities under shared leadership models. However, distributed leadership does not directly impact work-life balance, indicating the presence of other mediating factors. The study also confirms that work-family conflict and family-work conflict significantly affect work-life balance, emphasizing the adverse effects of these conflicts on overall well-being. Several limitations are acknowledged, including the study's cross-sectional nature, which limits the ability to infer causality, and the specific demographic focus on working women, which restricts the generalizability of the findings. The findings have practical implications, suggesting the need for clear role definitions and supportive organizational policies and social practices to relieve the negative impacts of distributed leadership on work-family dynamics, ultimately affecting women's work-life balance and social well-being.

Keywords: Family life, Social cost, Women leadership, Work life.

DOI: 10.53894/ijirss.v8i2.5829

Funding: This study received no specific financial support.

History: Received: 27 February 2025 / Revised: 28 March 2025 / Accepted: 31 March 2025 / Published: 1 April 2025

Copyright: © 2025 by the author. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

Competing Interests: The author declares that there are no conflicts of interests regarding the publication of this paper.

Transparency: The author confirms that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

Publisher: Innovative Research Publishing

1. Introduction

Work-life balance for women leaders is a multifaceted issue involving societal, personal, and organizational dimensions [1]. Women leaders often face challenges due to divided gender roles and empowerment, mainly in developing countries [2] (Liu e, significantly leading to stress and burnout among women leaders. In this regard, work-life balance is crucial for promoting gender equality and fostering productive, inclusive workplaces. Balancing personal and professional responsibilities is challenging for many women in leadership roles, often more acutely than their male counterparts [3]. This

highlighted disparity is due to gender roles, societal expectations, and organizational structural barriers. Thereby, understanding the dynamics of women leaders' work-life balance is essential, not only for promoting gender equity in organizational leadership but also for fostering organizational environments that support the well-being and productivity of all employees [2].

Empirically, studies on women leaders' work-life balance have evolved over the decades, highlighting various challenges and strategies women adopt to navigate their dual roles (work and family). For example, an Early study by Ganapathi, et al. [4] pointed out that women leaders encounter higher stress levels and discouragement than their male colleagues due to the double burden of professional and social responsibilities. Another study by Carlson, et al. [5] revealed that sustained organizational policies, such as flexible working hours and co-working support, enabled women to manage their professional and social responsibilities more effectively. In addition, recent studies have further expanded the scope of women's leadership by exploring the correspondence of gender with other factors such as race, socioeconomic status, and marital status. For instance, research by Ramirez [6] highlighted those women of color in leadership positions faced additional layers of complexity in achieving work-life balance due to intersecting identities and the accompanying societal and cultural stereotypes and biases. On the other hand, Moore [7] found that women leaders who adopt transformational leadership styles characterized by empathy and support for team members often find it easier to negotiate flexible arrangements and foster supportive environments. At the same time, women with such leadership responsibilities find it hard to balance work and family responsibilities [8]. Thereby, personal strategies by such women leaders, such as delegating tasks, seeking social support, and prioritizing self-care, have been identified as crucial for maintaining a balance between social and professional life [5].

However, work-life balance remains critical for many working women, mainly in developing countries, who frequently navigate the dual demands of professional and personal responsibilities. According to Aslam [9] work-family conflict arises when the demands of work and family roles are mutually incompatible, leading to stress and reduced overall well-being. Thus, family-work conflict occurs when the family (household) demands to impede work responsibilities, further complicating the pursuit of balance [5]. The conflict between work-family and family-work vastly affects women's job productivity and has broader implications for organizational effectiveness and employee well-being [2]. For instance, Harris [10] highlights that limited previous studies shed light on the women-distributed leadership style in leading flexible working arrangements and shared responsibilities, which are crucial for managing work-family and family-work conflicts. In addition, Brue [11] highlighted that the distributed leadership models have shown limitations in addressing these challenges, often exacerbating work-family and family-work conflicts. Despite the potential of distributed leadership to foster a more supportive and flexible work environment, there is limited empirical evidence on its impact on women's work-life balance in Saudi Arabia. Specifically, the mediating roles of work-family conflict and family-work conflict in this relationship remain underexplored [10, 12]. This gap in the literature necessitates a comprehensive investigation to understand how distributed leadership can mitigate these conflicts and improve women's work-life balance.

Therefore, this paper aims to delve into the intricate relationship between distributed leadership and women's work-life balance, focusing on the mediating roles of work-family and family-work conflict in Saudi Arabia, relying on the boundaries of boundary theory. Practically, this study aims to provide insights into the potential benefits of distributed leadership in mitigating these conflicts and promoting a healthier work-life equilibrium for women. By addressing these issues, the research contributes to the broader discourse on gender, leadership, and organizational practices, offering practical recommendations for fostering more supportive and equitable workplace environments, mainly in developing countries.

2. Underpinning Theory

2.1. Boundaries of Boundary Theory

Boundaries of boundary theory were coined by Zerubavel [13] to support predicate individuals' family and work balance and the ease and frequency of transitioning between these roles [14]. In contrast, the work-family border theory mainly focuses on the work and family domains. This theory is defined as "satisfaction and good functioning at work and home, with minimum role conflict" [13]. Practically, boundary theory considers psychological categories and tangible boundaries that divide the times, places, and people associated with work and family. Boundaries are mental constructs that individuals use to demarcate different life domains (e.g., separate locations for work and home) [15] temporal (e.g., specific work hours), or psychological (e.g., mindset shifts between roles) Geiger, et al. [16]. Gao and Zhao [17] stated that the degree to which boundaries allow elements from one domain to penetrate another is known as permeability. Prior studies highlighted that the boundaries theory supports predicting women's distributed leadership roles [11, 14]. Distributed leadership involves shared responsibilities and collaborative decision-making and can significantly impact boundary management [18]. This leadership style promotes interconnectedness and flexibility within organizations, influencing the permeability and flexibility of boundaries between work and family roles.

However, distributed leadership promotes a collaborative environment where employees practically engage in multiple roles and responsibilities for women, who often manage various roles, leading to work-family and family-work conflicts Brue [11]. Piszczek and Berg [19] highlighted that women may struggle to outline work-family boundaries, leading to disputes and reduced well-being and work-life balance. In this regard, several researchers demonstrated that clear and well-managed boundaries are essential for maintaining work-life balance. For example, individuals who successfully manage their work-life boundaries experience less role conflict and greater overall satisfaction in both work and home domains [1]. Another recent study by Kossek, et al. [20] suggested that organizations should focus on crafting sustainable working environments that support effective boundary management, mainly for women, which may include training on boundary-

setting techniques and fostering a culture that respects personal time. By doing so, organizations can enhance work-life balance, particularly for women who encounter several challenges managing multiple roles, including family and work life.

3. Literature Review and Hypothesis Development

3.1. Distributed Leadership and Women's Work-Life Balance

Distributed leadership, characterized by collaborative and shared leadership practices, has the potential to create a more supportive and flexible work environment, which is particularly beneficial for women striving to achieve work-life balance [2]. This leadership style involves distributing leadership roles among team members rather than centralizing them in a single individual [21] promoting a culture of collective responsibility and mutual support [12, 22]. Past empirical studies indicate that distributed leadership is essential in maintaining work-life balance by reducing stress and fostering a more inclusive and participatory work environment [21]. For women who often perform multiple roles at work and at home, this inclusive approach can alleviate the pressure of balancing these roles. Another study by Algan and Ummanel [23] pointed out that by distributing leadership responsibilities, women may experience comprehensive support and flexibility, empowering them to manage their family and work demands more effectively. Furthermore, Harris [10] investigated and concluded that distributed leadership significantly impacts work-life balance by encouraging a dynamic organizational culture that includes flexible work arrangements and collaborations. Another Syrek, et al. [24] study examined how distributed leadership is directly linked with work-life balance. It is crucial for women as it allows them to handle family responsibilities without compromising their professional commitments. Thus, the present study hypothesized that distributed leadership negatively impacts women's work-life balance by creating a supportive and flexible work environment.

Hypothesis 1 (H1): Distributed leadership negatively impacts women's work-life balance.

3.2. Distributed Leadership, Work-Family Conflict and Family-Work Conflict

Work-family conflict begins when work demands interfere with family responsibilities, causing stress and reducing overall well-being in social life [9]. Distributed leadership, characterized by shared leadership roles and collaborative decision-making support to alleviate work-family conflict by creating a more flexible and supportive work environment [2, 22]. Distributed leadership characteristics allow individuals to be self-sufficient and control work tasks, maintaining their work schedules with family needs [21]. Such leadership skills often involve team-based problem-solving and shared accountability, fostering a supportive culture that minimizes the stress of balancing work and family roles Bolden [12]. Hammond, et al. [25] examined how distributed leadership is essential in maintaining work-family conflict, mainly among individuals who often undergo a larger share of family responsibilities and found a positive influence. In another study, Harris, et al. [26] outlined that accommodating employees' family needs and promoting work-life balance, a distributed leadership approach, play an essential role in minimizing the instances where work demands encroach on family time [10]. Therefore, the present study hypothesized that distributed leadership negatively impacts work-family conflict significantly, influencing its occurrence and intensity.

Hypothesis 2 (H2): Distributed leadership negatively impacts work-family conflict.

3.3. Distributed Leadership and Family-Work Conflict

Family-work conflict occurs when family responsibilities impede work responsibilities, affecting job performance and satisfaction [27]. Individuals with distributed leadership skills considerably mitigate family-work conflict by fostering a work environment that values flexibility and understanding family obligations [10]. Empirically, Hammond, et al. [25] examined and confirmed that distributed leadership impacts family-work conflict, where leadership responsibilities are shared among team members, promoting a culture of mutual collaboration and supporting systems. Supportive culture leads to more flexible work arrangements, such as remote work and flexible hours, allowing employees to manage family responsibilities without compromising work performance [24]. Moreover, distributed leadership encourages empathy and consideration for employees' family needs, which can reduce the stress and conflict associated with juggling family and work roles. This leadership style can facilitate better integration of family and work responsibilities, thus reducing family-work conflict [21]. Consequently, the present study hypothesized that distributed leadership negatively impacts family-work conflict, influencing its occurrence and intensity.

Hypothesis 3 (H3): Distributed leadership negatively impacts family-work conflict.

3.4. Work-Family Conflict and Work-Life Balance

Work-family conflict occurs when work demands interfere with fulfilling family responsibilities, leading to stress and diminished well-being [5]. When employees experience high levels of work-family conflict, they often struggle to allocate sufficient time and energy to family roles, exacerbating feelings of imbalance between their professional and personal lives [27]. Research has consistently shown that work-family conflict predicts poor work-life balance [28]. For women, who often face higher expectations regarding family caregiving responsibilities, the negative impact of work-family conflict can be particularly pronounced. An empirical study by Al-Alawi, et al. [29] found that the work-family conflict negatively influences work-life balance. The authors stated that the conflict could lead to reduced quality time with family, increased stress, and overall dissatisfaction with life roles, making it difficult to achieve a harmonious balance between work and personal life [30]. Thus, in this study, the present study hypothesized that work-family conflict negatively impacts work-life balance.

Hypothesis 4 (H4): Work-family conflict negatively impacts work-life balance.

3.5. Family-Work Conflict and Work-Life Balance

Family-work conflict happens when family responsibilities interfere with work-job responsibilities, leading to decreased job performance, higher stress levels, and reduced well-being [5, 27]. When employees experience high levels of family-work conflict, they often find it challenging to meet work demands effectively, which can contribute to feelings of imbalance and frustration Netemeyer, et al. [31]. Sheikh, et al. [32] highlighted that the family-work conflict negatively influences work-life balance, mainly those working in senior positions. Family responsibilities, mainly for women, such as childcare, eldercare, or household management, can spill over into work time, causing interruptions, fatigue, and divided attention [5]. For women, who traditionally take on a larger share of family responsibilities, family-work conflict disrupts their ability to balance their professional and personal lives [5]. This disruption can lead to increased stress and decreased overall satisfaction with their ability to balance work and life roles. Therefore, present study hypothesized that family-work conflict negatively impacts work-life balance.

Hypothesis 4 (H4): Family-work conflict negatively impacts work-life balance.

3.6. Mediating Role of Work-Family Conflict and Family-Work Conflict

Hypothesis 5 (H5): Work-family conflict mediates the relationship between distributed leadership and women's work-life balance.

Hypothesis 6 (H6): Family-work conflict mediates the relationship between distributed leadership and women's work-life balance.

4. Research Method

4.1. Research Design

This study employs a quantitative research approach to investigate the impact of distributed leadership on work-family and family-work conflicts and how these conflicts affect women's work-life balance. A cross-sectional approach was used, which involves collecting data simultaneously to examine the relationships between the variables. This design is appropriate for identifying and analyzing patterns and correlations within the collected data.

4.2. Sampling Method

A non-probability sampling technique, specifically purposive sampling, was utilized to collect data from 260 women working in public and private institutions in Jeddah, Saudi Arabia. Purposive sampling allows the researcher to select participants based on specific characteristics that align with the study's objectives, ensuring the sample is relevant and informative [33]. In this case, the participants were only women employed in various organizations where distributed leadership practices are implemented. Importantly, this study targeted women working in mid-sized to large organizations across multiple industries in Jeddah, Saudi Arabia. The inclusion criteria include (i) women aged 25-55 years, (ii) employed in organizations practicing distributed leadership, and (iii) holding full-time job positions.

4.3. Ethical Considerations

The study adheres to ethical guidelines to protect participants' rights and well-being. First, key considerations include informed consent, where participants were provided detailed information about the study's purpose, procedures, and rights. Consent was obtained before participation. Second, participants' responses were kept confidential, and data was anonymized to protect their identities. Third, participation in the study was entirely voluntary, and participants were allowed to withdraw at any time without any consequences. Finally, all collected data was securely stored and accessible only to the research team.

4.4. Data Collection

Data was collected using a structured online survey, which included validated questionnaires to measure the key constructs. Measurement items for the distributed leadership were adapted from [2] work-family conflict and family-work conflict items were adapted from [5] and work-life balance measurement items were adapted from [1]. Therefore, all the measurement items are presented in Table 1.

4.5. Measurement Model

A research model was developed using four constructs (i.e., distributed leadership, work-family conflict, family-work conflict, and work-life balance) to obtain the objectives of this study. The reliability of all constructs was assessed using Cronbach's alpha (α) and composite reliability (CR). Convergent validity was evaluated through the average variance extracted (AVE). All reflective items exhibited loadings above the threshold value of 0.6. thus, α and CR values confirmed the constructs' reliability exceeding 0.07 [34] while α values range from 0.0600 to 803 and CR values ranged from 0.755 to 0.780. Convergent validity was demonstrated by AVE values ranging from 0.505 to 0.529, exceeding 0.5 [35]. Therefore, discriminant validity is confirmed when the square root of the AVE is higher than the correlation [36] presented in Tables 1–3 and Figure 1.

Table 1. Measurement items.

Constructs and items	Loading	α	CR	AVE
Distributed leadership		0.760	0.780	0.505
My organization provides staff with opportunities to participate in organizational decisions actively	0.653			
My organization provides staff with opportunities to participate in organizational decisions actively	0.642			
My organization has a culture of shared responsibility for organizational issues.	0.639			
My organization's staff share a common set of beliefs about training and learning.	0.677			
My organization's top management consistently enforces rules for staff behavior throughout the organization.	0.607			
Work-Family Conflict		0.703	0.766	0.526
My work keeps me from my family activities more than I would like.	0.770			
The time I must devote to my job keeps me from participating equally in household responsibilities and activities.	0.600			
I have to miss family activities due to the amount of time I must spend on work responsibilities.	0.803			
Family-Work Conflict		0.719	0.755	0.507
The time I spend on family responsibilities often interfere with my work responsibilities.	0.698			
The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career.	0.722			
I have to miss work activities due to the amount of time I must spend on family responsibilities.	0.716			
Work-life balance		0.751	0.770	0.529
I am able to balance between time at work and time at other activities.	0.781			
I have difficulty balancing my work and other activities.	0.745			
I feel that the job and other activities are currently balanced.	0.651			

Note: Cronbach's alpha (α), Composite Reliability (CR), Average Variance Extracted (AVE).

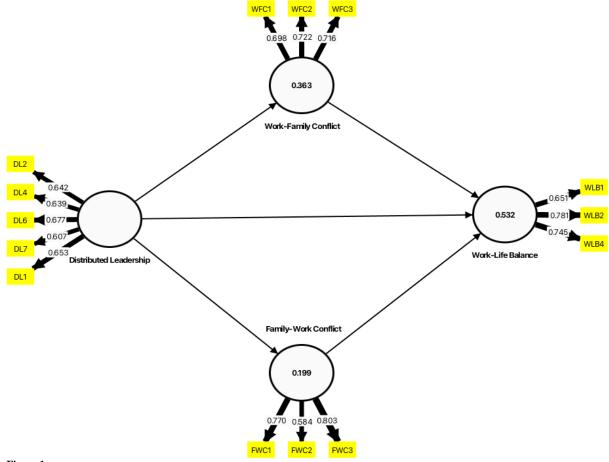


Figure 1. Measurement Model.

Table 2. Fronell-Larcker Criterion Discriminant Validity.

		1	2	3	4	5	6	7
1	Age	1.000						
2	distributed leadership	0.157	0.644					
3	family-work conflict	0.117	0.446	0.726				
4	Marital status	-0.010	0.083	0.059	1.000			
5	Number of households	0.113	-0.158	-0.121	-0.078	1.000		
6	work-family conflict	0.175	0.602	0.580	0.083	-0.117	0.712	
7	work-life balance	0.140	0.605	0.540	0.021	-0.146	0.585	0.728

Table 3. HTMT Discriminant Validity.

		1	2	3	4	5	6	7
1	Age	1						
2	distributed leadership	0.190	1					
3	family-work conflict	0.160	0.715	1				
4	Marital status	0.010	0.090	0.175	1			
	Number of households	0.113	0.190	0.167	0.078	1		
	work-family conflict	0.253	0.906	0.805	0.112	0.167	1	
	work-life balance	0.195	0.833	0.802	0.028	0.193	0.891	1

4.6. Control Variable

Differences in perceptions of women leaders towards work-life balance, few studies have explored work-life balance between genders [5]. Work-life balance is often viewed as more suitable for men, influenced by strong associations with self-employment and low engagement with the household [37]. Based on previous research, this study used age, marital status, and the number of households as a dummy variable to examine differences in work-life balance [38]. Several past studies have observed the gap in the work-life balance between different age groups, married/single individuals, and the number of households.

5. Data Analysis

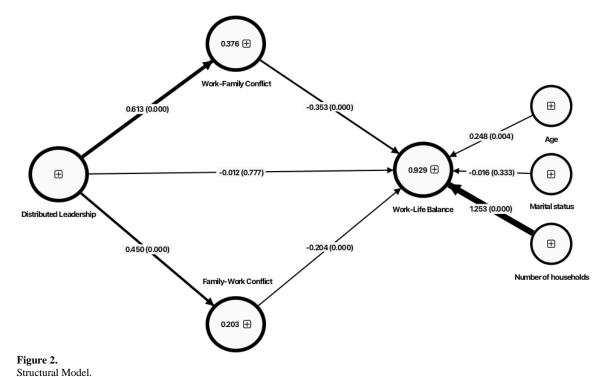
The data for this study were analyzed using Smart PLS (4), a well-known software package that employs a partial least squares approach to structural equation modeling (PLS-SEM). Prior researchers have used the SEM method to assess model fit and consistency with the data set, mainly in social sciences studies Saleem, et al. [34] and Arham, et al. [35]. Afthanorhan [39] reported two standard methods in SEM: (i) covariance-based (CB-SEM) and (ii) partial least squares (PLS-SEM). PLS-SEM offers a broader range of statistical analysis capabilities and is better suited for calculating latent variables' direct and indirect effects, making it ideal for measuring the strength of model paths [35]. This study adopted the PLS-SEM method because it effectively highlights complex relationships between distributed leadership, work-family conflict, family-work conflict, and work-life balance, identifying the relative values of path coefficients. PLS-SEM ensures theory validation and helps predict mediating or direct relationships among constructs [39]. In addition, several researchers have employed PLS-SEM to explore complex or direct relationships between variables, particularly in studies investigating the influence of distributed leadership on work-life balance [5, 9].

5.1. Hypothesis Testing

The SmartPLS analysis provided values representing the relationships, variance explained (R2) for the model, and significance levels. Bootstrapping analysis with 1000 sub-samples was conducted to understand the relationships among distributed leadership, work-family conflict, family-work conflict, and work-life balance. The direct relationships were significant for hypotheses H2 to H5, while the result for H1 was not supported. Distributed leadership does not directly impact work-life balance (t-value=0.284); thus, H1 was rejected. Overall findings suggest that distributed leadership practices alone do not directly enhance work-life balance. On the other hand, distributed leadership has a significant positive effect on workfamily conflict (t-value=8.082) and family-work conflict (t-statistics=4.945); thus, H2 and H3 were accepted. The statistical results indicate that distributed leadership contributes to conflicts between work and family roles. Therefore, work-family conflict and family-work conflict significantly impact work-life balance (t-value=7.917) and (t-value=4.44); thereby, H4 and H5 were accepted. This is predicated as high levels of work-family conflict leads to poorer work-life balance. However, the present study also investigated the direct impact of control variables on the work-life balance. First, age significantly impacts work-life balance (t-value=2.911); this indicates that as individuals age, their ability to balance work and life improves. Second, marital status does not significantly impact work-life balance (t-value=0.967). Findings suggest that being married or single does not notably affect an individual's work-life balance. Third, the number of households significantly positively impacts work-life balance (t-value= 18.291). This implies that the more households are involved, the better the work-life balance will be, potentially due to shared responsibilities and support systems. Therefore, significant and non-significant results are presented in Table 4 and Figure 2.

Table 4. Direct Hypotheses.

Direct 11 postesses.						
Path	β	t-value	p-values	Hypotheses		
Age → Work-Life Balance	0.248	2.911	0.004	Control Variable		
Marital status → Work-Life Balance	-0.016	0.967	0.333	Control Variable		
Number of households → Work-Life Balance	1.253	18.291	0.000	Control Variable		
Distributed Leadership → Work-Life Balance	-0.012	0.284	0.777	H1		
Distributed Leadership → Work-Family Conflict	0.613	8.082	0.000	H2		
Distributed Leadership → Family-Work Conflict	0.450	4.945	0.000	Н3		
Work-Family Conflict → Work-Life Balance	0.353	7.917	0.000	H4		
Family-Work Conflict → Work-Life Balance	0.204	4.44	0.000	H5		



Work-family conflict mediates the relationship between distributed leadership and work-life balance (t-value=5.209), demonstrating that distributed leadership indirectly reduces work-life balance through increasing work-family conflict. Therefore, family-work conflict mediates the relationship between distributed leadership and work-life balance (t-value=2.676), indicating that distributed leadership indirectly reduces work-life balance through increasing family-work conflict. Therefore, H6 and H7 were accepted. Furthermore, the overall results are presented in Table 5.

Table 5. Mediating Hypotheses.

			р-	Hypotheses
Path	β	t-value	values	
Distributed Leadership → Work-Family Conflict → Work-Life				Н6
Balance	0.216	5.209	0.000	
Distributed Leadership → Family-Work Conflict → Work-Life				H7
Balance	0.092	2.676	0.007	

6. Discussion

This study aimed to measure the work-life balance of women leaders in Saudi Arabia using boundaries of boundary theory, thus, this study investigated the relationship between distributed leadership, work-family conflict, family-work conflict, and work-life balance. In addition, this study examined the mediation role of work-family conflict and family-work conflict

The first hypothesis showed that distributed leadership insignificantly influences work-life balance. This finding suggests that implementing distributed leadership practices does not automatically enhance employees' ability to balance their work and personal lives. However, empirical studies have shown mixed results regarding the impact of distributed leadership on work-life balance. While some research suggests that shared leadership can lead to better engagement and job satisfaction [40] other studies highlight potential downsides, such as role ambiguity and increased stress [41]. This study's lack of direct

impact aligns with the notion that distributed leadership's benefits may be offset by the challenges it introduces, primarily if not appropriately managed.

The second hypothesis was supported, illustrating that distributed leadership increases work-family conflict. This indicates that distributed leadership has the potential to lead to higher levels of conflict where work demands interfere with family responsibilities. This finding is consistent with the literature suggesting that distributed leadership while fostering collaboration and innovation, leads to increased work demands and role overlap [42]. Such increased demands may spill over into personal life, exacerbating work-family conflict [1].

The third hypothesis, which shows that distributed leadership increases family-work conflict, was also supported. This suggests that distributed leadership practices can lead to disputes where family responsibilities interfere with work duties. Findings of this hypothesis align with findings that distributed leadership can create a more demanding work environment, which may clash with family responsibilities [42]. The additional coordination and communication required in distributed leadership settings can spill over into personal time, leading to family-work conflict [41].

Overall, the findings of this study indicate that distributed leadership, while beneficial for organizational flexibility and decision-making, can exacerbate work-family and family-work conflicts. This is supported by empirical research highlighting the complex dynamics of distributed leadership. For example, Pearce and Sims Jr [41] noted that distributed leadership could lead to role ambiguity and increased stress, negatively impacting work-life balance. Additionally, Wang, et al. [40] found that while distributed leadership promotes innovation and engagement, it can also create challenges in role coordination, contributing to work-family conflicts.

The fourth hypothesis indicates that the work-family conflict significantly impacts work-life balance. This suggests that higher levels of conflict from work interfering with family life significantly deteriorate an individual's work-life balance. Extensive previous research supports this relationship. Work-family conflict is well-documented as a significant barrier to achieving work-life balance [5]. The stress and strain from work-family conflict reduce overall well-being and hinder the ability to effectively balance work and personal responsibilities.

The fifth hypothesis presented that the family-work conflict significantly impacts work-life balance, which indicates that disputes arising from family responsibilities interfering with work duties significantly reduce work-life balance. This finding is consistent with studies that show family-work conflict can be just as detrimental as work-family conflict to achieving work-life balance [5]. When family demands intrude into work time, it creates stress and reduces productivity, making it harder to maintain a healthy balance between work and personal life [9].

Finally, the significant indirect effects of distributed leadership on work-life balance through work-family and family-work conflicts highlight the importance of addressing these conflicts to improve overall well-being. Empirical studies have long established the detrimental effects of work-family conflict on personal well-being and job performance, reinforcing the current study's findings [27].

6.1. Discussion on Control Variables

First, the present study found that age significantly impacts work-life balance. Empirical studies support the finding that age positively impacts work-life balance. As people age, they often develop better-coping strategies and time management skills, enabling them to balance work and personal life more effectively. For instance, Ng and Feldman [43] found that older employees report higher job satisfaction and better work-life balance than their younger counterparts. This aligns with the current study's finding that age contributes positively to achieving work-life balance.

Second, in the present study, marital status insignificantly impacts work-life balance. Findings are aligned with past studies. For instance, studies by Grzywacz and Marks [44] suggested that married individuals often report better work-life balance due to shared domestic responsibilities and emotional support. However, the current study's findings might indicate changing dynamics in marital roles or varying cultural contexts, where the impact of marital status on work-life balance is less pronounced.

Third, the present study confirmed the significant impact of the number of households on work-life balance. The findings of the present study attributed to the availability of additional support networks, such as extended family members or shared caregiving responsibilities, which can alleviate individual burdens. Empirical evidence from studies like Berkman, et al. [45] supports this, showing that social support networks are crucial in enhancing work-life balance.

6.2. Practical Implications

The present study's findings suggest that organizations should carefully consider the implementation of distributed leadership. While it can enhance decision-making and innovation, it also increases work-family and family-work conflicts. Organizations should develop clear role definitions, communication channels, and conflict resolution strategies to mitigate these conflicts. Empirical studies Carter, et al. [42] support the idea that well-defined roles and effective communication can alleviate the negative impacts of distributed leadership. In addition, flexible work arrangements, such as telecommuting and flexible hours, can help employees manage work-family and family-work conflicts. These arrangements have improved job satisfaction and work-life balance [28]. Organizations can benefit from empirical evidence that flexibility reduces stress and increases productivity among employees managing multiple responsibilities [26]. Finally, training on conflict management and stress reduction techniques can equip employees with skills to handle the challenges posed by distributed leadership [2]. The effectiveness of training programs in enhancing employees' ability to cope with work-family conflicts and improving overall well-being [27].

6.3. Social Implications

Distributed leadership may inadvertently affect gender equality in the workplace by exacerbating work-family conflicts, which predominantly impact women. Frone [27] indicate that women often bear a disproportionate burden in managing family responsibilities alongside their careers. Addressing these conflicts through supportive policies can promote gender equality by enabling men and women to balance work and family roles more effectively. Enhancing work-life balance through effective management practices benefits organizational outcomes and improves employees' overall quality of life. The importance of reducing work-family conflicts in fostering greater job satisfaction, mental well-being, and retention rates within organizations [27]. Therefore, by promoting work-life balance, organizations can enhance economic productivity by reducing absenteeism, turnover rates, and healthcare costs associated with stress-related illnesses. Empirical studies Harris, et al. [26] suggest that supportive work environments contribute to higher employee morale and productivity, ultimately benefiting both employees and employers.

6.4. Limitations

This study was limited to specific limitations, opening new avenues for researchers. First, the present study adopts a cross-sectional design, which limits its ability to establish causal relationships between variables. While it examines the relationships between distributed leadership, work-family conflict, family-work conflict, and work-life balance, it cannot precisely determine the direction of causality. For instance, it remains unclear whether distributed leadership practices directly influence work-life balance or if other factors mediate these relationships over time. Longitudinal studies are needed to elucidate these variables' temporal dynamics and causal pathways. Second, the study's sample primarily comprises participants from specific demographic groups (e.g., working women), which restricts the generalizability of findings to broader populations and contexts. The findings may not apply universally to other occupational groups or diverse cultural settings, limiting the study's external validity. Future research should include more diverse samples to enhance the robustness and applicability of the findings across different sectors and geographical regions.

Third, given the study's focus on developing countries, the cultural and contextual factors influencing the relationships between distributed leadership, work-family conflict, family-work conflict, and work-life balance may not be fully captured. Cultural norms, organizational practices, and socio-economic conditions vary significantly across countries, influencing how leadership styles and work-family dynamics interact. Comparative studies across cultural and economic contexts are necessary to discern universal patterns versus context-specific influences on these relationships.

Fourth, the study integrates theoretical frameworks such as distributed leadership and work-family conflict theory to explore their impacts on work-life balance. However, the operationalization and measurement of these constructs may introduce limitations. For example, the precise definition and measurement of distributed leadership practices and their perceived impacts on work-family dynamics could affect the validity and reliability of the findings. Future studies should refine measurement tools and theoretical frameworks to capture these relationships' complexity better.

References

- [1] A. Shukla and R. Srivastava, "Development of short questionnaire to measure an extended set of role expectation conflict, coworker support and work-life balance: The new job stress scale," *Cogent Business & Management*, vol. 3, no. 1, p. 1, 2016. https://doi.org/10.1080/23311975.2015.1134034
- [2] J. Liu, F. Qiang, and H. Kang, "Distributed leadership, self-efficacy and wellbeing in schools: A study of relations among teachers in Shanghai," *Humanities and Social Sciences Communications*, vol. 10, no. 1, pp. 1-9, 2023. https://doi.org/10.1057/s41599-023-01696-w
- [3] C. Schueller-Weidekamm and A. Kautzky-Willer, "Challenges of work-life balance for women physicians/mothers working in leadership positions," *Gender Medicine*, vol. 9, no. 4, pp. 244-250, 2012. https://doi.org/10.1016/j.genm.2012.04.002
- [4] P. Ganapathi, P. S. Aithal, and D. Kanchana, "Impact of work-life balance and stress management on job satisfaction among the working women in higher educational institutions in Namakkal District," *International Journal of Case Studies in Business, IT and Education*, vol. 7, no. 4, pp. 281-293, 2023.
- [5] D. S. Carlson, K. M. Kacmar, and L. J. Williams, "Construction and initial validation of a multidimensional measure of work–family conflict," *Journal of Vocational Behavior*, vol. 56, no. 2, pp. 249-276, 2000. https://doi.org/10.1006/jvbe.1999.1713
- [6] L. A. Ramirez, "Obstacles to leadership among women of color in nonprofit organizations: A descriptive study," Doctoral Dissertation, St. Thomas University, 2023.
- [7] T. R. Moore, "Mental health challenges, triple jeopardy, and work-life balance for African American mothers attaining leadership positions: A qualitative phenomenological study," Doctoral Dissertation, Northcentral University, 2021.
- [8] N. M. Nehemia and N. M. Lenkoe, "The impact of South African culture on the work-life balance of women in leadership positions," International Journal of Innovative Research and Scientific Studies, vol. 6, no. 2, pp. 212-226, 2023. https://doi.org/10.53894/ijirss.v6i2.1218
- [9] M. Aslam, "Influence of work life balance on employees performance: Moderated by transactional leadership," *Journal of Resources Development and Management*, vol. 10, no. 4, pp. 24-29, 2015.
- [10] A. Harris, "Distributed leadership: According to the evidence," *Journal of educational Administration*, vol. 46, no. 2, pp. 172-188, 2008. https://doi.org/10.1108/09578230810863253
- [11] K. L. Brue, "Harmony and help: Recognizing the impact of work-life balance for women leaders," *Journal of Leadership Education*, vol. 17, no. 4, pp. 219-243, 2018. https://doi.org/10.12806/v17/i4/c2
- [12] R. Bolden, "Distributed leadership in organizations: A review of theory and research," *International Journal of Management Reviews*, vol. 13, no. 3, pp. 251-269, 2011.
- [13] E. Zerubavel, *The fine line*. New York: Free Press, 1991.
- [14] H. Shaked and P. S. Benoliel, "Instructional boundary management: The complementarity of instructional leadership and boundary management," *Educational Management Administration & Leadership*, vol. 48, no. 5, pp. 821-839, 2020. https://doi.org/10.1177/1741143219846905

- [15] N. Selim and D. Hassan, "Negotiating identities online: A quantitative exploration of Egyptian women's social media gratifications, challenges, and perceived portrayals," *International Journal of Innovative Research and Scientific Studies*, vol. 8, no. 1, p. 10.53894, 2025. https://doi.org/10.53894/jjirss.v8i1.4715
- [16] D. Geiger, A. Danner-Schröder, and W. Kremser, "Getting ahead of time—Performing temporal boundaries to coordinate routines under temporal uncertainty," *Administrative Science Quarterly*, vol. 66, no. 1, pp. 220-264, 2021. https://doi.org/10.1177/0001839220941010
- [17] Z. Gao and C. Zhao, "Why is it difficult to balance work and family? An analysis based on work-family boundary theory," *Acta Psychologica Sinica*, 2014.
- [18] S. Desrochers and L. D. Sargent, "Boundary/border theory and work-family Integration1," *Organization Management Journal*, vol. 1, no. 1, pp. 40-48, 2004. https://doi.org/10.1057/omj.2004.11
- [19] M. M. Piszczek and P. Berg, "Expanding the boundaries of boundary theory: Regulative institutions and work–family role management," Human Relations, vol. 67, no. 12, pp. 1491-1512, 2014. https://doi.org/10.1177/0018726714524241
- [20] E. E. Kossek, M. B. Perrigino, and B. A. Lautsch, "Work-life flexibility policies from a boundary control and implementation perspective: A review and research framework," *Journal of Management*, vol. 49, no. 6, pp. 2062-2108, 2023.
- [21] P. Gronn, "Distributed leadership as a unit of analysis," *The Leadership Quarterly*, vol. 13, no. 4, pp. 423-451, 2002.
- [22] J. P. Spillane, "Distributed leadership. In The educational forum," Taylor & Francis Group, vol. 69, no. 2, pp. 143-150, 2006.
- [23] E. K. Algan and A. Ummanel, "Toward sustainable schools: a mixed methods approach to investigating distributed leadership, organizational happiness, and quality of work life in preschools," *Sustainability*, vol. 11, no. 19, p. 5489, 2019.
- [24] C. J. Syrek, E. Apostel, and C. H. Antoni, "Stress in highly demanding IT jobs: Transformational leadership moderates the impact of time pressure on exhaustion and work–life balance," *Journal of Occupational Health Psychology*, vol. 18, no. 3, p. 252, 2013.
- [25] M. Hammond, J. N. Cleveland, J. W. O'Neill, R. S. Stawski, and A. Jones Tate, "Mediators of transformational leadership and the work-family relationship," *Journal of Managerial Psychology*, vol. 30, no. 4, pp. 454-469, 2015.
- [26] K. J. Harris, R. B. Harris, J. R. Carlson, and D. S. Carlson, "Resource loss from technology overload and its impact on work-family conflict: Can leaders help?," *Computers in Human Behavior*, vol. 50, pp. 411-417, 2015.
- [27] M. R. Frone, Work-family balance. In J. C. Quick & L. E. Tetrick (Eds.), Handbook of Occupational Health Psychology. Washington, DC: American Psychological Association, 2003.
- [28] T. D. Allen, D. E. Herst, C. S. Bruck, and M. Sutton, "Consequences associated with work-to-family conflict: a review and agenda for future research," *Journal of Occupational Health Psychology*, vol. 5, no. 2, p. 278, 2000.
- [29] A. I. Al-Alawi, E. Al-Saffar, Z. H. AlmohammedSaleh, H. Alotaibi, and E. I. Al-Alawi, "A study of the effects of work-family conflict, family-work conflict, and work-life balance on Saudi female teachers' performance in the public education sector with job satisfaction as a moderator," *Journal of International Women's Studies*, vol. 22, no. 1, pp. 486-503, 2021.
- [30] S. J. Ahmadi, B. Ayubi, and Z. Musavi, "Effectiveness of quality of life therapy on subjective well-being of Afghan women," *Int J Innov Res Sci Stud*, vol. 3, no. 4, pp. 106-12, 2020.
- [31] R. G. Netemeyer, J. S. Boles, and R. McMurrian, "Development and validation of work–family conflict and family–work conflict scales," *Journal of Applied Psychology*, vol. 81, no. 4, p. 400, 1996.
- [32] M. A. Sheikh, A. Ashiq, M. R. Mehar, A. Hasan, and M. Khalid, "Impact of work and home demands on work life balance: Mediating role of work family conflicts," *Pyrex Journal of Business and Finance Management Research*, vol. 4, no. 5, pp. 48-57, 2018.
- [33] S. Campbell *et al.*, "Purposive sampling: complex or simple? Research case examples," *Journal of Research in Nursing*, vol. 25, no. 8, pp. 652-661, 2020.
- [34] M. Saleem, S. Kamarudin, H. M. Shoaib, and A. Nasar, "Retail consumers' behavioral intention to use augmented reality mobile apps in Pakistan," *Journal of Internet Commerce*, vol. 21, no. 4, pp. 497-525, 2022.
- [35] A. F. Arham, N. S. Norizan, M. N. Norizan, A. F. Arham, and S. N. Ibrahim, "A SmartPLS visiting to knowledge retention: A study among SMEs in Peninsular Malaysia," *Journal of Educational and Social Research*, vol. 11, no. 4, pp. 84-84, 2021.
- [36] M. Saleem, S. Kamarudin, H. M. Shoaib, and A. Nasar, "Influence of augmented reality app on intention towards e-learning amidst COVID-19 pandemic," *Interactive Learning Environments*, vol. 31, no. 5, pp. 3083-3097, 2023.
- [37] M. H. Khail and K. M. Ahmadzai, "The participation of rural Afghan women in small-scale dairy farming," *International Journal of Innovative Research and Scientific Studies*, vol. 5, no. 2, pp. 59-66, 2022.
- [38] I. Verheul, R. Thurik, I. Grilo, and P. Van der Zwan, "Explaining preferences and actual involvement in self-employment: Gender and the entrepreneurial personality," *Journal of Economic Psychology*, vol. 33, no. 2, pp. 325-341, 2012.
- [39] W. Afthanorhan, "A comparison of partial least square structural equation modeling (PLS-SEM) and covariance based structural equation modeling (CB-SEM) for confirmatory factor analysis," *International Journal of Engineering Science and Innovative Technology*, vol. 2, no. 5, pp. 198-205, 2013.
- [40] D. Wang, D. A. Waldman, and Z. Zhang, "A meta-analysis of shared leadership and team effectiveness," *Journal of Applied Psychology*, vol. 99, no. 2, p. 181, 2014.
- [41] C. L. Pearce and H. P. Sims Jr, "Vertical versus shared leadership as predictors of the effectiveness of change management teams: An examination of aversive, directive, transactional, transformational, and empowering leader behaviors," *Group dynamics: Theory, Research, and Practice,* vol. 6, no. 2, p. 172, 2002.
- [42] D. R. Carter, P. W. Seely, J. Dagosta, L. A. DeChurch, and S. J. Zaccaro, "Leadership for global virtual teams: Facilitating teamwork processes," *Leading global teams: Translating Multidisciplinary Science to Practice*, pp. 225-252, 2015. https://doi.org/10.1007/978-1-4939-2050-1_10
- T. W. Ng and D. C. Feldman, "The relationships of age with job attitudes: A meta-analysis," *Personnel Psychology*, vol. 63, no. 3, pp. 677-718, 2010
- [44] J. G. Grzywacz and N. F. Marks, "Reconceptualizing the work–family interface: An ecological perspective on the correlates of positive and negative spillover between work and family," *Journal of Occupational Health Psychology*, vol. 5, no. 1, p. 111, 2000.
- [45] L. F. Berkman, T. Glass, I. Brissette, and T. E. Seeman, "From social integration to health: Durkheim in the new millennium," *Social Science & Medicine*, vol. 51, no. 6, pp. 843-857, 2000. https://doi.org/10.1016/s0277-9536(00)00065-4