

Bridging Tradition and Technology: The Impact of Wasta, Asabiyyah, and Islamic Fintech Self-Efficacy on Women's Entrepreneurship

Muhammad Ovais, Khushal Khan Khattak University, Karak, Pakistan

Yeo Sook Fern, Faculty of Business (FoB), Multimedia University, Melaka, Malaysia

Afshan Ali, Management Science department, University of South Asia, Lahore, Pakistan

Keywords	Abstract
Women, Islamic Fintech, Self-Efficacy, Entrepreneurial Orientation.	<i>Women's entrepreneurial orientation is critical for inclusive economic development, yet in conservative contexts like Saudi Arabia, institutional and cultural constraints, such as patriarchal norms, social fragmentation, and limited financial access, pose significant barriers. This study examines how Wasta- and 'Asabiyyah-based collective entrepreneurship, combined with Islamic Fintech Self-Efficacy (IFSE), can serve as counter-institutional mechanisms to support women's entrepreneurial engagement. A composite questionnaire, refined through expert panel discussions, was administered to women entrepreneurs. Moderated serial mediation analysis using SPSS AMOS 28 revealed that Islamic fintech platforms rooted in community trust networks (e.g., crowdfunding, peer-to-peer lending, and Shariah-compliant digital finance) enhance women's confidence and financial access. IFSE emerged as a key mediator, enabling women to convert informal social capital into actionable, tech-enabled entrepreneurial behavior. Findings highlight the potential of integrating digital Islamic financial tools with culturally embedded support systems to overcome gendered institutional barriers. The study contributes to theories of gendered entrepreneurship and fintech inclusion, suggests managerial implications, and offers policy insights for building inclusive, gender-responsive financial ecosystems aligned with Saudi Arabia's Vision 2030 goals. Implications for future research are discussed, particularly concerning the scalability and sustainability of Islamic fintech as a development tool in similar socio-cultural environments.</i>

INTRODUCTION

Entrepreneurship is widely recognized as a key driver of sustainable economic growth across diverse socioeconomic and geopolitical settings (Teruel-Sanchez et al., 2025). As Dejardin (2000) asserts, "...the more entrepreneurs there are in an economy, the faster it will grow." In alignment with this, Saudi Arabia's Vision 2030 prioritizes women's empowerment through entrepreneurship as a pathway to inclusive growth (Khoirunnisa & Nurhaliza, 2024). Policy reforms have increased women's economic participation, autonomy, and leadership roles (Raimi & Bamiro, 2025). Yet, structural and sociocultural barriers persist, especially for rural and marginalized women, limiting their access to entrepreneurial resources and opportunities. Persistent challenges include a lack of entrepreneurial orientation and a disconnect between education and market-based skills, as well as entrenched sociocultural norms that suppress

women's entrepreneurial ambition (Al-Mamary, 2025). This study argues that integrating Islamic fintech into culturally rooted networks like Wasta and Asabiyyah enhances women's entrepreneurial orientation by strengthening their Islamic Fintech Self-Efficacy (IFSE). Shariah-compliant fintech tools such as crowdfunding and interest-free loans can transform informal trust into formal financial inclusion, while social networks provide legitimacy, confidence, and digital competence.

The study explores the serial mediation of the Wasta–Asabiyyah intersection and IFSE on women's entrepreneurial orientation, especially in resource-constrained environments. It draws on the Intersectional Resource Dependence Framework (IRDF) (Neergaard et al., 2005), Social Capital Theory (Bourdieu, 1986), and Islamic Risk Sharing Theory (IRST) (Al-Suhaibani and Naifar, 2014).

The paper presents three main arguments:

- a) Entrepreneurial Self-Efficacy (ESE) is dynamic and context-sensitive. Developing ESE as a form of social and cognitive capital enhances women's ability to navigate structural and institutional barriers (Qamariah et al., 2024).
- b) Intersectionality and resource dependence highlight the uneven distribution of access and opportunities, particularly in socio-culturally constrained ecosystems (Li & Liao, 2025). The IRDF provides a robust lens to understand why some women succeed in entrepreneurship while others are constrained. Formal and informal institutions, including cultural norms like Wasta and Asabiyyah, shape entrepreneurial access and must be addressed through inclusive, context-aware policies (Albihany & Aljarodi, 2024).
- c) Islamic fintech platforms, if integrated with community-based financial models, can foster trust and inclusion (Muneeza & Mustapha, 2021). However, effective participation requires adequate technological and financial literacy (Hassan et al., 2024; Koskelainen et al., 2023). Thus, the study emphasizes fintech self-efficacy as a distinct form of entrepreneurial capability necessary for enabling Saudi women (Kholidah et al., 2025) to align with Vision 2030 and lead sustainable SME development.

REVIEW OF LITERATURE

The literature review adopts a thematic approach to guide the development of hypotheses. Each hypothesis is derived within the context of the reviewed theme, aligned with identified gaps in the existing literature. The review begins by summarizing contemporary literature on the challenges and opportunities surrounding women's entrepreneurship in the Saudi Arabian context. Next, it explores the concept of collective entrepreneurship through the lens of Ibn e Khaldun's theory of social solidarity (Asabiyyah), outlining its potential and the associated challenges in fostering an inclusive entrepreneurial ecosystem. Third, the review provides a discussion from literature on the intersection of Wasta and Asabiyyah that may enable women entrepreneurs to navigate the social-cultural and access-related challenges (IRDF). Such that Wasta acts as initial social capital and credibility, and Asabiyyah's community-driven entrepreneurship fosters trust-based equitable networks. Finally, it summarizes key literature on the potential of Islamic fintech platforms for Wasta and Asabiyyah's integration and the significant role of IFSE in this regard.

KSA Institutions and Women Entrepreneurship: Saudi Arabia's Vision 2030 reforms have significantly advanced women's entrepreneurship, with female labor force participation rising from 23.2% in 2016 to 34.4% in 2022, surpassing the 30% target (World Bank, 2022). Women now lead 45% of SMEs, reflecting improved institutional support (Monsha'at, 2023). However, persistent barriers, limited legal backing, complex licensing, and restricted financial access continue to constrain women's entrepreneurial potential (Iqbal & Ahmad, 2025).

Cultural norms like *Wasta*, an informal system of leveraging connections, act as both enablers and barriers. While *Wasta* offers social capital, it reinforces gender inequality, favors the well-connected, and limits merit-based access (Tlaiss & McAdam, 2023). For women, its existence often means success is tied to privileged networks rather than capability, reducing motivation and inclusion (Albihany & Aljarodi, 2024). This research views *Wasta* as a double-edged sword, calling for inclusive mechanisms to reduce reliance on informal privilege.

H₁. The positive effect of *Wasta* as a form of social capital and source of credibility on women's entrepreneurial orientation is moderated by access to resources and privileged networks, such that the effect is stronger for individuals with greater access to these resources and networks.

Wasta operationalizes the role of personal networks and informal influence on entrepreneurial access to funding and resources and may therefore lead to women's entrepreneurial orientation. However, the deeply ingrained cultural norm may have multiple dark sides in this regard. First, the risk of rent seeking (Khalfan, 2024); second, the risk of social and gender divides by creating divergent entrepreneurial pathways (Ali et al., 2024); and third, the risk of reduced ambition and complacency with relatively more reliance on personal connections (Stefanidis et al., 2022). In addition, *Wasta*-based social capital is an asset deriving its value through social actions. This implies that people with low social influence, marginalized communities especially, and women may be relatively worse off in resource access (Abid & Alsarhan, 2025; Miralam et al., 2025). Thus, *Wasta* may have divergent entrepreneurial implications for the socio-economically privileged and otherwise marginalized women.

A Social Solidarity Perspective on Women Entrepreneurship: Ibn Khaldun's concept of social solidarity based on shared identity or purpose (*Asabiyyah*) offers a potential solution to challenges like inequality, complacency, and lack of transparency in *Wasta*-dominated markets (Sidani, 2025). *Asabiyyah* fosters cooperation, risk-sharing, and collective welfare, enabling communities to build institutions and pool resources for mutual benefit. However, its emphasis on kinship can restrict opportunities for those outside dominant familial or tribal networks, a dynamic especially visible in Saudi Arabia's fragmented, male-dominated entrepreneurial ecosystem.

Aligned with the Intersectional Resource Dependence Framework (IRDF) (Yamamura and Lassalle, 2025), this ecosystem is shaped by overlapping barriers—gender, education, and technology—that limit equitable access to resources. Despite Vision 2030 reforms and Monsha'at's support initiatives, women still face structural and cultural constraints, including restrictive mobility norms, under-representation in networks, and limited access to digital skills. These barriers continue to hinder women's full participation in high-growth entrepreneurial sectors. Therefore, this research formulates its second hypothesis as follows:

H₂. The positive effect of Asabiyyah's social cohesiveness and inclusion on women's entrepreneurial orientation is moderated by access to resources and privileged networks, such that the effect is stronger for individuals with greater access to these resources and networks.

Wasta and Asabiyyah for Building Bridges rather than Bonds: This paper explores how Wasta and 'Asabiyyah, despite differing social logics (individual pragmatism vs. communal solidarity), can be integrated to enhance women's entrepreneurial participation. Wasta facilitates informal access, while 'Asabiyyah promotes collective trust and inclusion. Viewed through an intersectional lens, their convergence can transform exclusionary traditions into inclusive, trust-based platforms. Drawing on RDF (Yamamura & Lassalle, 2025) and SCT (Bourdieu, 1986), the study argues that merit-based Wasta and nationally reframed 'Asabiyyah, supported by Islamic fintech, reduce corruption and promote equity. Shariah-compliant platforms like Ethis and Blossom Finance digitize Wasta-rooted practices into crowdfunding and zakat-based models, easing access to capital for women without male guarantors (Yasmeen et al., 2024). Research suggests (Koskelainen et al., 2023) that developing Islamic Fintech Self-Efficacy (IFSE) is vital to navigating these tools. Yet, challenges like digital illiteracy, structural exclusion, and limited MSME capacity persist. Despite efforts like Monsha'at and SheTech, policy gaps remain (Alomar & Alatawi, 2025; Aloulou et al., 2024). Bridging these divides requires culturally sensitive digital literacy programs, inclusive fintech design, and robust institutional frameworks.

Islamic Fintech and Empowerment Nexus: In Saudi Arabia, low digital literacy and restrictive norms hinder women's tech confidence (Yamani & Almazroa, 2024). Entrepreneurship demands dynamic capabilities and supportive institutions (Yusuf et al., 2024). Women's Islamic Fintech Self-Efficacy (IFSE), however, is shaped by sociocultural barriers often overlooked in conservative contexts (Azab & Elsherif, 2025). This paper conceptualizes IFSE as cognitive social capital that mediates the impact of Wasta–Asabiyyah networks on women's entrepreneurial orientation. While Wasta and Asabiyyah offer trust and community support, they don't ensure readiness. IFSE bridges this gap by enabling women to use Sharia-compliant fintech tools for actionable entrepreneurship.

Thus, IFSE may function as a cognitive enabler, transforming culturally rooted social capital into effective participation in modern financial ecosystems, particularly crucial for women navigating conservative and resource-constrained environments. Therefore, this research formulates its final hypothesis as

H₃. The effect of Wasta and Asabiyyah on women's entrepreneurial orientation is serially mediated by (1) the Wasta-Asabiyyah intersection and (2) Islamic Fintech Self-Efficacy (IFSE), such that Wasta enhances access to relational and structural capital through Asabiyyah networks, which fosters the development of IFSE, thereby increasing entrepreneurial orientation among women.

Islamic fintech platforms such as crowdfunding, zakat-based funding, mobile banking, and peer-to-peer lending can formalize capital access while leveraging informal networks like Wasta and Asabiyyah. These networks foster trust and social cohesion, but IFSE is key to converting them into actionable entrepreneurial behavior. IFSE reflects women's confidence in using fintech tools for entrepreneurship, enhancing trust and promoting inclusive financial participation. This study adapts the general entrepreneurial self-efficacy scale to a domain-specific IFSES, addressing

gaps in digital readiness. Many women may have high entrepreneurial intent but lack fintech confidence (Koskelainen et al., 2023; Hassan et al., 2024). Given digital skill gaps and gender constraints, especially in Saudi Arabia, integrating fintech with cultural networks can help overcome barriers (Azab & Elsherif, 2025) to a vibrant entrepreneurial ecosystem beyond oil dependency.

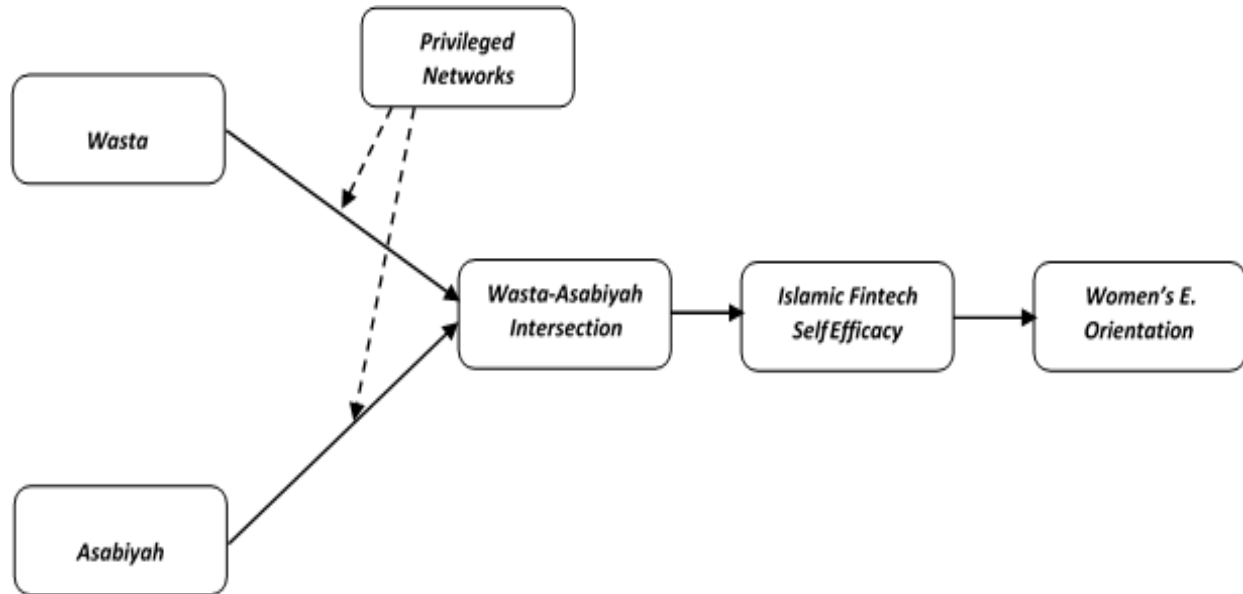


Figure 1 gives a comprehensive view of the conceptual framework.

METHODOLOGY

Sampling: The study targeted women entrepreneurs in Saudi Arabia using fintech and traditional business networks. Stratified purposive sampling was applied (e.g., fintech users, SME owners, informal entrepreneurs), starting with profiles from the Ministry of Commerce (KSA Ministry of Commerce, 2021), followed by snowball sampling. Respondents were also drawn from the KSA SME Survey (2021), with informed online consent. Priority was given to those with knowledge of innovation, Islamic finance, Wasta, 'Asabiyyah, and fintech. Data ($n = 576$) came from small, family-run businesses, collected over two months (21% response rate). The response rate is sufficient for data generalizability, especially in a physical snowball sampling technique (Hindra and Hill, 2008; Wu et al., 2022). The KMO value (0.786) confirmed adequacy, and Armstrong and Overton's (1977) test showed no nonresponse bias, meeting SEM criteria (Haier et al., 2011).

Measurement Scales: Adopting the relevant constructs from available literature, the paper developed a composite questionnaire integrating the constructs of Islamic fintech efficacy (Avdukić and Smolo, 2024; De Anca, 2019), Wasta and Asabiya (for example, Sidani, 2025; Palaiologos, 2024; Hashim et al., 2024), and entrepreneurial orientation (for example, Clark et al., 2024; Löffel and Gmür, 2024). The items for the Islamic financial literacy scale from Sucmana and Trianto (2025) were integrated with a set of items from the financial self-efficacy scales by Lown (2011), Farrell et al. (2016), and Islam and Khan (2024). Thus, the IFSE scale assessed digital competencies like navigating mobile banking apps, conducting secure digital

transactions, and adopting emerging fintech trends (e.g., Islamic fintech, DeFi, and blockchain-based finance). Thus, a general ESE scale might ask, "I am confident in handling difficult situations." An IFSE scale would, however, ask, "I am confident in securing my fintech transactions from fraud and phishing attempts."

Contextualizing the Composite Scale: Given the sociocultural context, the composite questionnaire underwent expert review by 2 academicians, 1 religious scholar, and 5 professionals from Islamic financial institutions (banks and Takaful). The panel refined items across constructs to ensure nomological and content validity. A pilot test on 100 respondents followed, with iterative revisions consistent with prior research (Le et al., 2024; Ortega-Quevedo et al., 2024). The final questionnaire included 52 items: 4 demographic questions, 25 for IFSE (across five dimensions), 5 each for Wasta and 'Asabiyyah, and 13 for women's entrepreneurial orientation (risk-taking, proactiveness, and autonomy). Confirmatory factor analysis was conducted to validate convergent and discriminant validity prior to hypothesis testing.

RESULTS

Data analysis involved a series of steps in mainly two phases. In addition to the descriptive analysis of the demographic statistics, the author tested the reliability and validity of the measurement scales using confirmatory factor analysis in the first phase. Later, they performed structural model analysis using SPSS Amos 21 for hypothesis testing.

Excluding the four demographic questions, all 48 items in the composite questionnaire were subjected to descriptive statistical analysis, including calculations of mean, standard deviation, skewness, and kurtosis. The majority of items yielded mean scores above 4, indicating a generally positive response across the measured scales. The data demonstrated limited dispersion, with standard deviations ranging from 1.03 to 1.54, suggesting a relatively consistent pattern of responses. With skewness and kurtosis values of 2 and 9, respectively, the data also showed reasonable distribution and normality (Kline, 2015).

Each scale underwent reliability testing, with all Cronbach's alpha values ≥ 0.72 after removing three low-performing items: Item 2 (Technological Competence), Item 3 (Security and Privacy), and Item 3 (Risk-Taking), improving internal consistency (Nunnally & Bernstein, 1994). The final 45-item scale showed strong reliability. Composite reliability was also assessed, yielding 0.79 (Hair et al., 1998). Model fit was evaluated using Hu and Bentler's (1999) criteria, including RMR, RMSEA, GFI, and CFI, alongside chi-square. All indices indicated good model fit, as detailed in Table 2, validating both the measurement and structural models used in the analysis.

Table 1: Reliability and Validity Analysis

<i>Wasta</i>			<i>Islamic Fintech Self-efficacy</i>			<i>Women EOrient.</i>		
Scale/Items	S. Loadings	P-value	Scales/Items	S. Loadings	P-values	Scales/Items	S. Loadings	P-values
			IFawareness			Risk Taking		
Wasta1	0.79	***	IFAware1	0.76	***	RT1	0.84	***
Wasta2	0.63	***	IFAware2	0.84	***	RT 2	0.62	***

Wasta3	0.82	***	IFAware3	0.67	***	RT 3	0.73	***
Wasta4	0.74	***	IFAware4	0.68	***	RT 4	0.75	***
Wasta5	0.86	***	IFAware5	0.77	***	RT 5	0.66	***
AVE	0.60	***	IFAware6	0.82	***	AVE	0.53	
Chronbach's Alpha	0.78		AVE	0.58		Chronbach's Alpha	0.71	
			Chronbach's Alpha	0.82				
Asabiyyah			Tech Competence			Pro-activeness		
Asab1	0.76	***				Proact1	0.72	***
Asab2	0.89	***	TC1	0.75	***	Proact2	0.84	***
Asab3	0.65	***	TC2	0.87	***	Proact3	0.72	***
Asab4	0.78	***	TC3	0.67	***	Proact4	0.82	***
Asab5	0.82	***	TC4	0.59	***	Proact5	0.78	***
AVE	0.61	***	TC5	0.67	***	AVE	0.60	
Chronbach's Alpha	0.72		AVE	0.51		Chronbach's Alpha	0.88	
			Chronbach's Alpha	0.70				
Wasta-Asabiyyah Intersection			Trust in Shariah Compliance			Autonomy		
WAsab1	0.70	***				Auto1	0.84	***
WAsab2	0.82	***	Trust1	0.55	***	Auto2	0.92	***
WAsab3	0.68	***	Trust2	0.89	***	Auto3	0.77	***
WAsab4	0.64	***	Trust3	0.92	***	AVE	0.71	
WAsab5	0.80	***	Trust4	0.65	***	Chronbach's Alpha	0.85	
AVE	0.53		AVE	0.59				
Chronbach's Alpha	0.74		Chronbach's Alpha	0.80				
			Engagement IFS					
			IFEngage1	0.62	***			
			IFEngage2	0.79	***			
			IFEngage3	0.83	***			
			IFEngage4	0.76	***			
			AVE	0.57				
			Chronbach's Alpha	0.79				
			Problem Solving					
			Probsolv1	0.82	***			
			Probsolv2	0.78	***			
			Probsolv3	0.82	***			
			AVE	0.65				
			Chronbach's Alpha	0.71				

The value of chi-square, slightly higher and significant, was ignored due to the sensitivity of the test to sample size (De Berg, 2015). However, the ratio of chi-square to degree of freedom was slightly above 1, hence suggesting a reasonable fit. Both convergent and discriminant validity of the scales were established through Confirmatory Factor Analysis (CFA). Values of Average Variance Extracted (AVE) and a comparison of the AVE with the squared correlations between dimensions for each construct, as illustrated in Table 1 above and Figures 2 and 3 below, respectively.

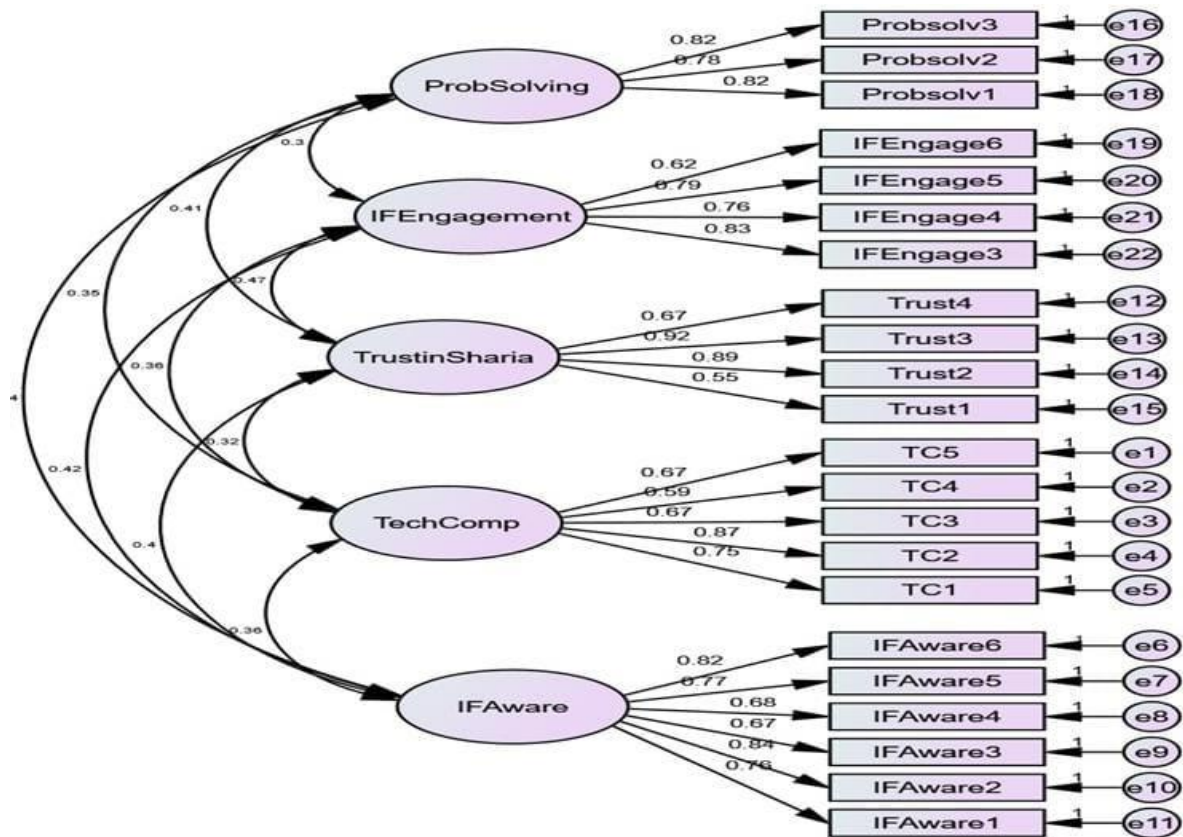


Figure 2: CFA IFSE

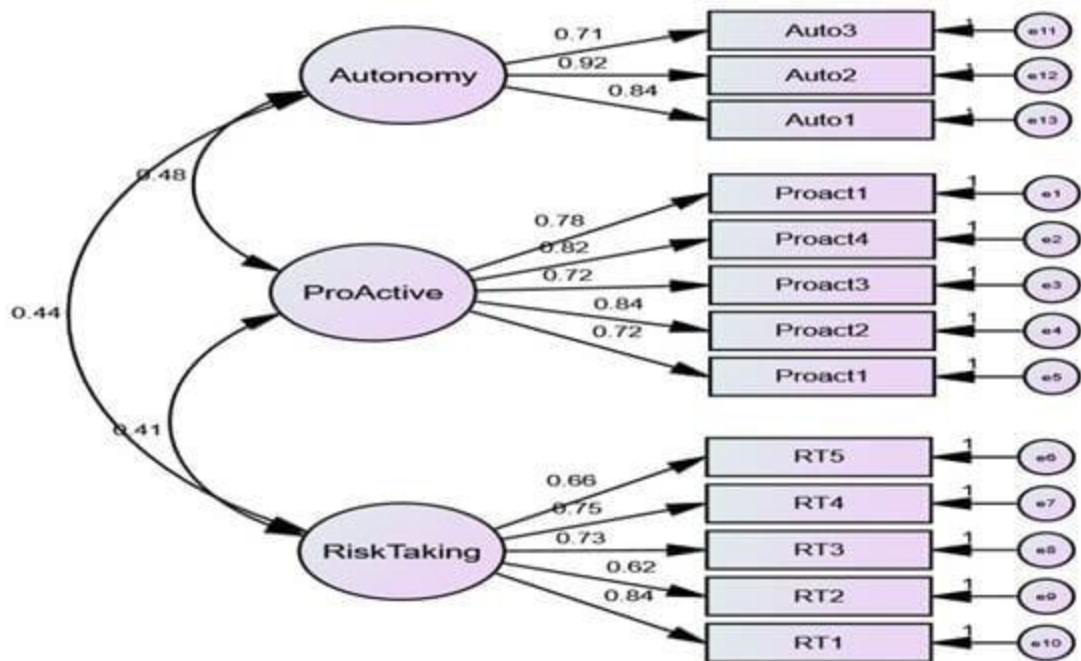


Figure 3: CFA WEO

All items for Wasta, Asabiyyah, and their intersection showed high standardized loadings (>0.70), exceeding inter-construct correlations, confirming discriminant validity via AVE (Fornell & Larcker, 1981). Convergent validity was also supported, with all t-values significant at the 1% level (Anderson & Gerbing, 1981). Model fit indices (Table 2) reflect final adjustments using AMOS modification indices, where select item error terms were covaried to address measurement error and improve fit.

Table 2: Goodness of fit Indices

Index Name	Cut off	Finding	Interpretation
χ^2 - Chi-Square		768.65 (p= 0.00)	Unfit
χ^2/df	> 2 and < 5	768.65/177	Fit
RMR	Closer to 1	0.921	Fit
GFI	Closer to 1	0.904	Fit
NFI	≥ 0.90	0.960	Fit
CFI	≥ 0.90	0.94	Fit
RMSEA	≤ 0.08	0.059	Fit

These outcomes are not theoretically surprising, as previously noted, given that scale items are inherently influenced by dynamic cultural contexts (Greenholtz, 2005). Furthermore, the error terms of certain items across constructs exhibited moderate correlations due to their underlying theoretical alignment—for instance, items pertaining to Wasta and Asabiyyah—which may have marginally influenced the model’s fit indices. Nevertheless, the overall fit remained within acceptable thresholds.

Hypotheses Testing

The proposed model was tested using Structural Equation Modelling (SEM) in AMOS 28.0, employing a structured two-phase analytical strategy. To reduce multicollinearity, interaction terms (Wasta \times Access; Asabiyyah \times Access) were created using mean-centered variables. Maximum Likelihood Estimation (MLE) was used to evaluate the hypothesized serial mediation model. Data were collected from 450 women entrepreneurs across urban and suburban regions of Saudi Arabia. Missing data (<2%) were addressed using Full Information Maximum Likelihood (FIML). The analysis revealed non-significant direct effects but statistically significant and strong indirect effects, affirming the theoretical argument that culturally embedded social capital (Wasta and Asabiyyah) influences women’s entrepreneurial orientation only when mediated by domain-specific psychological constructs like Islamic Fintech Self-Efficacy (IFSE).

The structural model fit was strong, with the following indices: $\chi^2 = 36.32$; GFI = .972; CFI = .968; RMSEA = .012; RMR = .094. These results were enhanced by removing low-performing items and using scale means instead of latent constructs. Table 3 presents standardized path coefficients (β), with statistical significance reported via z-values and *p*-values, confirming the model's robustness.

Table 3: Standardized Path Coefficients (Direct and Moderation Effects)

<i>Path</i>	<i>B</i>	<i>SE</i>	<i>z</i>	<i>*p*</i>
-------------	----------	-----------	----------	------------

Wasta → WEO	0.07	0.1	1.1	<.14
Asabiyyah → WEO	0.08	0.07	0.41	0.17
Wasta → Intersection	0.39	0.04	5.21	<.001
Asabiyyah → Intersection	0.26	0.05	3.45	0.004
Access → Intersection	0.21	0.03	2.65	0.008
Wasta × Access → Intersection	0.18	0.02	2.98	0.002
Asabiyyah × Access → Intersection	0.14	0.02	2.51	0.012
Intersection → IFSE	0.63	0.04	8.12	<.001
IFSE → Entrepreneurial Orientation	0.58	0.05	7.33	<.001

Table 4: Indirect Effect

<i>Mediation Path</i>	<i>Low Access (-1 SD)</i>	<i>Mean</i>	<i>High Access (+1 SD)</i>	<i>95% CI (High Access)</i>
Wasta → Intersection → IFSE → EO	$\beta = .11$	$\beta = .20$	$\beta = .29$	[.22, .36]
Asabiyyah → Intersection → IFSE → EO	$\beta = .08$	$\beta = .14$	$\beta = .20$	[.14, .26]

Notes: Bootstrapping with 5,000 resamples (bias-corrected CI). Low/High Access = ± 1 SD from the mean. CIs exclude zero for high-access groups, confirming significant moderated mediation.

The serial moderation model (Figure 4) was tested following Bollen's (1989) recommendations about the use and modelling of moderation via interaction terms in SEM for a better understanding. The core assumption is that the initial model (excluding interaction terms) is nested within the more comprehensive model that includes both all variables and their interaction effects. A significant difference in chi-square values between the two models indicates the presence of interaction effects. Additionally, the study employed Ping's (1996) two-step method for estimating structural models with latent interactions. This involved computing the scale means for each construct and then mean-centering them by converting to z-scores to minimize multicollinearity among items and their associated errors.

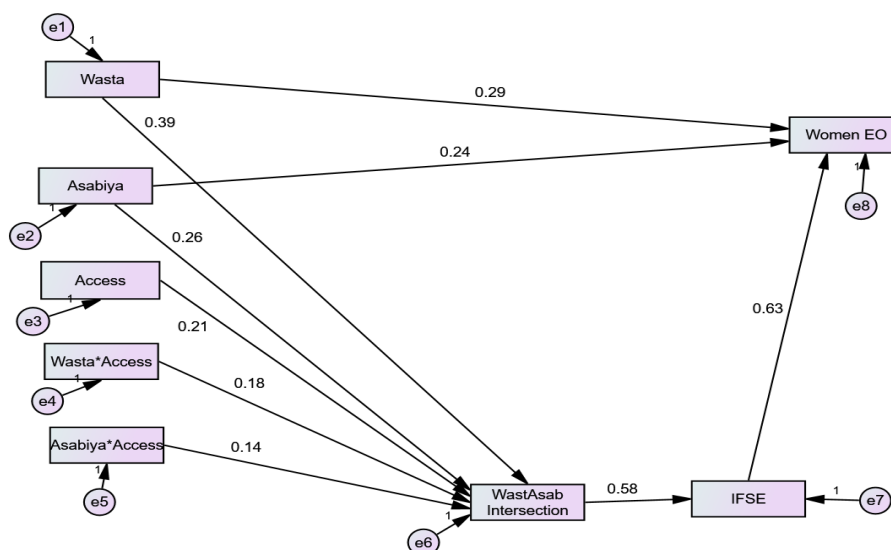


Figure 4: The Structural Model

The results support hypotheses one and two that access to resources and privileged networks moderates the positive effects of Wasta and Asabiyyah on women's entrepreneurial orientation (EO). The significant interaction terms (Wasta \times Access: $\beta = .18$; Asabiyyah \times Access: $\beta = .14$) indicate that the synergistic role of Wasta (relational capital) and Asabiyyah (structural solidarity) in forming intersectional capital is amplified when women have greater access to institutional resources. This aligns with resource dependency theory, which posits that social capital's utility depends on complementary structural opportunities. For instance, Wasta's informal influence is more potent when paired with formal networks (e.g., Islamic Fintech platforms), enabling women to convert social ties into entrepreneurial action.

The conditional indirect effects (Table 4) reveal that the serial mediation effect (Wasta/Asabiyyah \rightarrow Intersection \rightarrow IFSE \rightarrow EO) strengthens significantly as access increases. For example, the indirect effect of Wasta on EO rises from $\beta = .11$ (low access) to $\beta = .29$ (high access). This underscores moderated mediation, where privileged networks act as a catalyst, enhancing the translation of cultural capital into self-efficacy (IFSE) and, ultimately, entrepreneurial outcomes.

DISCUSSION

The intersection of Wasta, 'Asabiyyah, and Islamic fintech offers a culturally grounded yet digitally scalable model for women's financial inclusion. Wasta and 'Asabiyyah provide trust and informal access, while Islamic fintech formalizes these through ethical tools. a) Models like Mudarabah, Musharakah, and Qard Hasan align with Islamic risk-sharing principles—e.g., Amwal Credit Union exemplifies faith-based credit access. b) Crowdfunding platforms such as Ethis, Kapital Boost, and LaunchGood reflect 'Asabiyyah via equity partnerships and community lending (Raimi & Bamiro, 2025). c) AlHuda CIBE and community Sukuk projects in Senegal and Jordan bypass male guarantors and support communal infrastructure. d) Blossom Finance and Ethis digitize microfinance, linking ethical investors to women-led ventures. e) Platforms like Oraan scale ROSCAs, reaching 170 cities with 84% female users. These tools combine financial education, peer networks, and access. Thus, Islamic fintech transforms social capital into inclusive entrepreneurial action, especially in conservative, resource-limited environments.

CONCLUSION

This study links Islamic fintech with Wasta and Asabiya, introducing IFSE to explore culturally rooted and gender-inclusive entrepreneurial pathways and policy insights for women's empowerment in conservative MENA contexts. The findings elucidate how culturally rooted social capitals (Wasta/Asabiyyah) serially empower women via Fintech self-efficacy. It advocates for policy frameworks that leverage traditional networks to modernize entrepreneurial ecosystems in Islamic economies. The results validate the hypothesis that Wasta and Asabiyyah operate through a dual-stage mediation process to influence women's entrepreneurial orientation (EO). Social capital theory is extended by illustrating how Wasta (informal networks) and Asabiyyah (group solidarity) synergize to form a unique intersectional resource. This intersection facilitates access to Islamic Fintech tools, fostering self-efficacy (IFSE) that directly drives EO. The absence of direct effects underscores the necessity of mediators, aligning with

Bandura's self-efficacy theory, where competence in domain-specific tools (e.g., Fintech) is critical for action.

This research uniquely integrates IRDF and IFSE with culturally bounded constructs (Wasta and Asabiyyah) to explore the possibilities for women's empowerment and inclusion in a social digital context. The attempt to shift the narrative of Wasta as a cultural barrier to a potential enabler for women's empowerment through Asabiyyah-based collective entrepreneurial networks and fintech-based financial inclusion. The culturally grounded moderated serial mediation model is a novel approach towards exploring women's entrepreneurship in a conservative context.

Managerial Implications

Decision-makers in this regard should focus on using Wasta- and Asabiyyah-based hybrid informal networks for formalizing social trust and legitimacy into productive financial engagement. Developing training programs to enhance IFSE through fintech literacy. Foster women-led Asabiyyah networks (e.g., cooperatives) to amplify women's empowerment for greater economic participation, resource sharing, and inclusive growth within the accepted cultural and religious frameworks. Managers may incentivize Islamic financial institutions to integrate a Wasta-Asabiyyah-informed mentorship ecosystem, free of structural, religious and cultural constraints.

This research has several limitations too, including: A) Endogeneity: Access to resources may correlate with unobserved confounders (e.g., family wealth). Future studies should employ instrumental variable techniques. B) Regional Specificity: The moderation effects may differ in non-Gulf Arab contexts (e.g., Southeast Asia). Cross-cultural comparisons are needed. And C) Measurement Bias: Self-reported "access" metrics may lack objectivity; future work should integrate archival data (e.g., number of network contacts, funding received).

Acknowledgement: The researchers would like to pay thanks to all the research participants who cooperated in conducting this research and drafting the research paper. The support obtained from the respondents for their kind time in facilitating data collection is also commendable.

Author's Contributions: Author one contributed to this publication by helping with the review of literature and performing data collection, preparation and analysis. The second and third co-authors contributed to the review of literature and drafting of the manuscript.

Conflict of Interests: On behalf of all coauthors, the corresponding author declares that no competing interests exist.

Funding Information: This research received no funding from any public or private agency.

REFERENCES

Abid, K., & Alsarhan, F. (2025). Decoding Informal Networks in Small and Medium-Sized Enterprises: The Dynamics of Wasta. *Employee Relations: The International Journal*, (Ahead-of-Print).

- Albihany, N. A., & Aljarodi, A. M. (2024). The Role of Personal Connections Wasta on Early-Stage Entrepreneurial Orientations: Empirical Evidence from Saudi Arabia. *Humanities and Social Sciences Communications*, 11(1), 1-12.
- Ali, S. A., Alqahtani, M., & Mrabet, M. (2024). Unlocking Opportunities: How Women Navigate Informal Networks in Saudi Arabia's Evolving Workplace. *Thunderbird International Business Review*.
- Al-Mamary, Y. H. (2025). Factors Shaping Green Entrepreneurial Intentions towards Green Innovation: An Integrated Model. *Future Business Journal*, 11(1), 1-26.
- Alomar, J. A., & Alatawi, F. M. (2025). Evaluating the Challenges of Metaverse-Enabled Digital Entrepreneurship: Evidence from Saudi Arabia as an Emerging Economy. *Journal of Entrepreneurship in Emerging Economies*.
- Aloulou, W., Ayadi, F., Ramadani, V., & Dana, L. P. (2024). Dreaming Digital or Chasing New Real Pathways? Unveiling the Determinants Shaping Saudi Youth's Digital Entrepreneurial Intention. *International Journal of Entrepreneurial Behavior & Research*, 30(2/3), 709-734.
- Al-Suhaibani, M., & Naifar, N. (2014). Islamic Corporate Governance: Risk-Sharing and Islamic Preferred Shares. *Journal of Business Ethics*, 124, 623-632.
- Avdukić, A., & Smolo, E. (2024). Promoting Sustainable Development through Islamic Social Finance. In *The Future of Islamic Finance: From Shari'ah Law to Fintech* (pp. 121-139). Emerald Publishing Limited.
- Azab, N., & Elsherif, M. (2025). Towards a Framework for the Adoption and Use of Information and Communication Technology for Empowering Women Entrepreneurs: Case of Egypt. *The Electronic Journal of Information Systems in Developing Countries*, 91(2), E70006.
- Clark, D. R., Covin, J. G., & Pidduck, R. J. (2024). Individual Entrepreneurial Orientation: Scale Development and Validation. *Entrepreneurship Theory and Practice*, 10422587241279900.
- De Anca, C. (2019). Fintech in Islamic Finance: From Collaborative Finance to Community-Based Finance. In *Fintech in Islamic Finance* (pp. 47-61). Routledge.
- Farrell, L., Fry, T. R., & Risse, L. (2016). The Significance of Financial Self-Efficacy in Explaining Women's Personal Finance Behaviour. *Journal of Economic Psychology*, 54, 85-99.
- Greenholtz, J. F. (2005). Does Intercultural Sensitivity Cross Cultures? Validity Issues in Porting Instruments across Languages and Cultures. *International Journal of Intercultural Relations*, 29(1), 73-89.

- Hashim, S., Mcadam, M., & Nordqvist, M. (2024). An Exploration of Women Entrepreneurs “Doing Context” in Family Business In the Gulf States. *International Journal of Gender and Entrepreneurship*, 16(2), 227-255.
- Hendra, R., & Hill, A. (2019). Rethinking Response Rates: New Evidence of Little Relationship between Survey Response Rates and Nonresponse Bias. *Evaluation Review*, 43(5), 307-330.
- Iqbal, T., & Ahmad, S. (2025). Women Entrepreneurs in Emerging Saudi Arabia: Exploring the Impact of Innovation, Risk and Perseverance. *Journal of Entrepreneurship and Public Policy*.
- Islam, K. A., & Khan, M. S. (2024). The Role of Financial Literacy, Digital Literacy, and Financial Self-Efficacy in Fintech Adoption. *Investment Management & Financial Innovations*, 21(2), 370.
- Khalfan, S. (2024). Wasta in Business Management: A Critical Review of Recent Developments and Future Trends in the Tourism Sector. *Humanities and Social Sciences Communications*, 11(1), 1-10.
- Khoirunnisa, K., & Nurhaliza, S. A. (2024). Saudi Vision 2030: Economic Reforms and Sustainable Development in the Kingdom. *Jurnal Public Policy*, 10(1), 10-16.
- Kholidah, H., Fianto, B. A., Herianingrum, S., Ismail, S., & Mohd Hidzir, P. A. (2025). Do Islamic Fintech Lending Promote Microenterprises Performance in Indonesia? Evidence of Difference-in-Difference Model. *International Journal of Islamic and Middle Eastern Finance and Management*, 18(1), 224-246.
- Kingdom of Saudi Arabia Ministry of Commerce. (2021). Open Access Data. Ministry of Commerce. <https://m.mci.gov.sa/en/mediacenter/open-data/pages/default.aspx>
- Kingdom of Saudi Arabia Statistics. (2021). Survey of Small and Medium Sized Enterprises. https://www.stats.gov.sa/sites/default/files/survey_of_small_and_medium-sized_enterprises_2017_en.pdf
- Koskelainen, T., Kalmi, P., Scornavacca, E., & Vartiainen, T. (2023). Financial Literacy in the Digital Age—A Research Agenda. *Journal of Consumer Affairs*, 57(1), 507-528.
- Le, T. T., Behl, A., & Pereira, V. (2024). Establishing Linkages between Circular Economy Practices and Sustainable Performance: The Moderating Role of Circular Economy Entrepreneurship. *Management Decision*, 62(8), 2340-2363.
- Li, H., & Liao, J. (2025). Cultural Diversity and Mass Entrepreneurship: Evidence from China Household Finance Survey and Dialect Data. *Journal of the Knowledge Economy*, 1-33.
- Löffel, U., & Gmür, M. (2024). Entrepreneurial Cooperatives: The Impact of Entrepreneurial Orientation on Economic and Social Performance. *Journal of Co-Operative Organization and Management*, 12(1), 100234.

- Miralam, M. S., Qazi, S., Ali, I. S., & Arafat, M. Y. (2025). Exploring the Factors Influencing Women Entrepreneurship in Saudi Arabia: A Strategic Plan for Sustainable Entrepreneurial Growth. *Sustainability*, 17(3), 1221.
- Monsha'at. (2023). SME Monitor - Q4 2023. Small and Medium Enterprises General Authority. https://www.monshaat.gov.sa/sites/default/files/2024-02/sme%20monitor%20-%20q4%202023%20en_0.pdf
- Muneeza, A., & Mustapha, Z. (2021). Islamic Fintech and Financial Inclusion. *Islamic Fintech: Insights and Solutions*, 173-190.
- Ortega-Quevedo, V., López-Luengo, M. A., Ferrari, E., & Ruiz, C. (2024). Evaluating Climate Change Competence in Pre-Teens: Instrument Development and Validation. *Journal of Environmental Psychology*, 96, 102329.
- Palaiologos, G. (2024). Asabiyyah and Ummah-The Social & Religious Embeddedness of Arab Family Business. *IFBRF 2024*, 351.
- Qamariah, I., Fadli, Astuti, W., & Nasution, M. D. T. P. (2024). Empowering Women in Entrepreneurship: Unraveling the Nexus of Technological Capital, Self-Efficacy, and the Role of Perception. In *Anticipating Future Business Trends: Navigating Artificial Intelligence Innovations: Volume 2* (pp. 167-179). Cham: Springer Nature Switzerland.
- Raimi, L., & Bamiro, N. B. (2025). Role of Islamic Sustainable Finance in Promoting Green Entrepreneurship and Sustainable Development Goals in Emerging Muslim Economies. *International Journal of Social Economics*.
- Sidani, Y. (2025). Business and Management in Mena Countries. In *Routledge Handbook on Business and Management in the Middle East* (pp. 1-8). Routledge.
- Stefanidis, A., Banai, M., & Dagher, G. K. (2022). Socio-Cultural Capital in the Arab Workplace: Wasta as a Moderator of Ethical Idealism and Work Engagement. *Employee Relations: The International Journal*, 45(1), 21-44.
- Teruel-Sanchez, R., Briones-Peñalver, A. J., Bernal-Conesa, J. A., & De Nieves-Nieto, C. (2025). Values of the Entrepreneur as a Driver of Sustainable Tourism Entrepreneurship. *Journal of International Entrepreneurship*, 1-29.
- World Bank. (2022). Gender Data Portal: Saudi Arabia. World Bank. Group. <https://genderdata.worldbank.org/en/economies/saudi-arabia#:~:text=in%20saudi%20arabia%2c%20the%20labor,labor%20force%20participation%20has%20increased.>
- Wu, M. J., Zhao, K., & Fils-Aime, F. (2022). Response Rates of Online Surveys in Published Research: A Meta-Analysis. *Computers in Human Behavior Reports*, 7, 100206.)
- Yamamura, S., & Lassalle, P. (2025). Intersectional Entrepreneurship: The Burden of Contextual Embeddedness beyond the Business. *International Journal of Entrepreneurial Behavior & Research*, 31(1), 197-218.

- Yamani, N., & Almazroa, H. (2024). Exploring Career Interest and Stem Self-Efficacy: Implications for Promoting Gender Equity. *Frontiers in Psychology*, 15, 1402933.
- Yasmeen, K., Yasmin, K., & Al Abri, S. (2024). Islamic Framework for Sustainable Development: Islamic Framework for Sustainable Development. *International Journal of Islamic Finance and Sustainable Development*, 16(4), 136-160.
- Yusuf, N., Jamjoom, Y., & Saci, K. (2024). Entrepreneurial Orientation across Gender in Saudi Arabia: Evidence from the Adult Population Survey (APS) of Global Entrepreneurship Monitor (GEM). *Journal of Entrepreneurship in Emerging Economies*, 16(1), 134-158.