

## FACTORS INFLUENCING WOMEN'S ENTREPRENEURIAL INTENTIONS: A CASE STUDY

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**Abstract.** Studying women's entrepreneurial intentions is critical not only for encouraging women's entrepreneurship but also for developing their entrepreneurial competencies. However, in the case of Lebanon, there is still a gap in the scientific studies related to identifying factors influencing women's entrepreneurial intentions. In order to fulfill this gap, this research analyzes the main factors influencing Lebanese women's entrepreneurial intentions: dominance, innovativeness, independence, and social encouragement. A scientific literature review was conducted to develop the research model and propose the research hypotheses. A survey questionnaire was prepared and distributed online to collect data from 620 Lebanese women. Then, the collected data was analyzed and presented employing descriptive statistics, inferential statistics, PLS structural equation modeling techniques, and importance-performance map analysis. The findings revealed significant relationships between the research variables except for women's independence. Also, the findings showed that social encouragement for women partially mediates the relationship between innovativeness and women's entrepreneurial intentions.

**Keywords:** women, entrepreneurship, intentions, Lebanon, independence, Middle East.

**JEL Classification:** I3, C1, C3, J1, M13.

### Introduction

Entrepreneurship is one of the essential contributors to searching for new ways to express creativity, leading to social change and advancements (Al Issa, 2020). It is also a powerful driver of economic growth and prosperity (Ramadani et al., 2022). It drives the critical innovations needed to seize opportunities, increase productivity, and create new jobs. Entrepreneurship can be defined as a practice that commences with action and the formation of a new organization (Diandra & Azmy, 2020). Scientists (Carrington, 2006; Almobaarek &

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Manolova, 2013; Mouselli & Khalifa, 2017; Linfang et al., 2021) over the past few years have focused on fostering women entrepreneurs and increasing their number globally and mainly in developing countries (Hisrich & Öztürk, 1999; Welsh et al., 2016a, 2016b). However, the scientific literature still lacks studies that handle the factors influencing women's entrepreneurial intentions in the Middle East, mainly in the Lebanese context. More research is needed in a critical time since one of the United Nations' sustainable goals is directed toward gender equality and women empowerment (Denoncourt, 2022). Therefore, the following research question was proposed to address these gaps in scientific studies: What are the main factors influencing Lebanese women's entrepreneurial intentions?

Furthermore, based on research results, males and females start a business differently (Stead, 2017; Raudeliūnienė et al., 2021), including their perceptions of the cognitive processes that contribute to developing intents to begin the venture (Huang et al., 2012). Based on Ajzen's theory of planned behavior (Manolova et al., 2008), behaviors were predicted by intentions. The theory of planned behavior posits three conceptually distinct intention-determining factors. The first is the attitude toward the behavior, which refers to the extent to which an individual has either a positive or negative assessment or appraisal of the conduct in question. The second predictor, subjective norm, is a social factor; it refers to the perceived social pressure to perform or refrain from performing the behavior. Perceived behavioral control, the perceived simplicity or difficulty by the individual of doing the behavior, is thought to reflect both previous experience and expected challenges and difficulties, making it the third antecedent of intention (Ajzen, 1991). Thus, studying the factors influencing women's entrepreneurial intentions and basing them on the intention-determining factors emphasized in Ajzen's theory of planned behavior that affect an individual's desire to perform conduct, which in this research context is to become an entrepreneur, would yield valuable information about motivating women entrepreneurs and supporting them to build high-growth businesses by developing their entrepreneurial competencies (knowledge, abilities, and skills).

Compared to other Middle East countries, Lebanon is one where women could have more possibilities for entrepreneurship. However, women's engagement in entrepreneurship is discouraged due to rigid gender roles and the normalization of the male-entrepreneurial stereotype (Tlaiss & McAdam, 2021). Moreover, studies examining women entrepreneurs in Anglo-Saxon nations predominate in the scientific literature (Bastian et al., 2018), and studies on entrepreneurship are skewed toward the West and the developed nations, something that decontextualizes entrepreneurship research due to a lack of attention paid to women's entrepreneurial experiences outside of Western cultures (Tlaiss, 2019), which leads to a lack of knowledge and a research gap on women's entrepreneurship in Middle Eastern countries like Lebanon. Thus, more focus should be on women's entrepreneurship in the Middle East. It can provide women with new personal and professional development opportunities, leading to social changes (Hattab, 2012). Based on this conviction, and to fulfill this gap, this research analyzes the main factors influencing Lebanese women's entrepreneurial intentions.

To achieve the purpose of this research, a scientific literature review was carried out, a survey research method was used, and descriptive statistics, inferential statistics, partial least squares structural equation modeling (PLS-SEM) techniques, and importance-performance

map analysis were employed to present reliable results about the most influential factors affecting Lebanese women's entrepreneurial intentions.

This research's significance lies in its country-specific context approach and the way it relates the entrepreneurial antecedents analyzed in the study to the theory of planned behavior. The research theoretically contributes to the scientific studies on women's entrepreneurship by providing scientific insights on the most influential factors influencing women's entrepreneurship in a Middle Eastern country because neglecting contexts outside Western cultures will lead to continuous research gaps. Also, the research takes into consideration the role of subjective norm highlighted in the theory of planned behavior by analyzing the mediating influence of social encouragement between innovativeness and women's entrepreneurial intentions, as the importance of social encouragement was highlighted in studies on women's entrepreneurship. However, researchers did not provide empirical findings about its mediating influence in such a relationship.

This research was organized as follows: in section one, reviewed the scientific literature, proposed research hypotheses, and explained the conceptual research framework. In section two, were presented the research methodology employed in this research. In section three, were included the main research findings and discussion.

## 1. Theoretical background and hypotheses development

A necessary precondition for entrepreneurial actions is entrepreneurial intentions. That can be defined as a thoughtful and predetermined mental state before behavior and consent to directly considering specific activities, such as business establishment (Gomes et al., 2021). Therefore, individual entrepreneur characteristics must be examined to comprehend the full intricacy of any deliberate conduct (Contreras-barraza et al., 2021). Scientists and business practitioners (Braches & Elliott, 2017; Bruni et al., 2004; Handy et al., 2002) argue that a woman's decision to start a business might be attributed to various reasons (Table 1).

Table 1. Various reasons for business establishment (developed by the authors)

Author, year	Reasons
(Bruni et al., 2004)	Women motivated by cultural adversaries to traditional males' entrepreneurial values initiate the promotion of women's status in society.
(Braches & Elliott, 2017)	Women who want economic empowerment have to coordinate their work and family commitments.
(Ristovska & Blazheska, 2020)	Women started their businesses to escape unemployment.
(Webster & Haandrikman, 2020)	Women seek privilege through having the status of self-employed.
(Maritz et al., 2021)	It is a way to face financial challenges, especially for older women without external financial support.
(Franzke et al., 2022)	An opportunity to develop their knowledge, acquire new skills, and socialize.

Based on a scientific literature review on antecedents for women's entrepreneurial intentions (Anggadwita & Dhewanto, 2016; Chakraborty et al., 2019; Palmer et al., 2019; Ingalagi et al., 2021; Linfang et al., 2021), it has been found that dominance, independence, innovativeness, and social encouragement were considered the main antecedents for women's entrepreneurial behaviors. In this context, these antecedents will be further elaborated, and the research hypotheses will be proposed accordingly.

*Dominance.* Conservative social structures were incorporated into patriarchal norms with political, legal, and religious systems (Rao et al., 2019; Danish & Smith, 2012), emphasizing male domination and impeding entrepreneurial activity and women's empowerment. In this context, women might find entrepreneurship as an escape from conservative social structures, a way to success, and an opportunity to exercise their dominance. According to Palmer et al. (2021), an entrepreneur's desire for power, the capacity to control people and processes for one's own benefit, the ability to dominate others, and the capability to make decisions are considered significant determinants of success. Thus, the interest in establishing a business could be related to women's inner desires and beliefs that entrepreneurship provides an intrinsic benefit by achieving a set of personal goals that make it attractive for them to practice their power and dominance.

Hence, the relationship between dominance and women's entrepreneurial intentions can be hypothesized as follows:

*H1. Dominance positively influences women's entrepreneurial intentions.*

*Innovation.* One of the critical economic development drivers is innovation. Markovic et al. (2012) stated that women were committed to entrepreneurship because of innovation and economic empowerment. It is essential to have a unique knowledge of innovation within that context and the role of women in producing and commercializing it. The fast growth of technology (Mivehchi, 2019; Venkatesh et al., 2012) and increased globalization have influenced the transformation of the economic structure during the previous two decades around the world, especially for women entrepreneurs (Ndinguri et al., 2015). This transformation has resulted in the rapid expansion of entrepreneurship, such as the rise of many entrepreneurs able to grasp opportunities and transform them through their creativity into innovativeness (Cooper et al., 2010; Ge et al., 2022). Thus, women's innovative entrepreneurship should be emphasized and supported by various stakeholders in a country, who in turn influence their decision to establish a business (Nair, 2020). For instance, in Saudi Arabia, where a high proportion of innovative women entrepreneurs exist (Danish & Smith, 2012), an unprecedented engagement of women in entrepreneurship occurred in response to the Kingdom's Vision 2030, which calls for Saudi women to play a significant role in the country's socioeconomic development and has also resulted since 2018 in significant progress in the social, economic, and political engagement of women in Saudi Arabia (Alhothali & Al-Dajani, 2022). Contrary to what one might expect, women in Saudi Arabia are more likely than males to start a business and are more likely to start a business than women in any other high-income country. Thus, perhaps women's innovativeness is one of the main drivers behind the social encouragement of Saudi women's entrepreneurship.

*Social encouragement.* In developing countries, women's entrepreneurship faces various obstacles, including the cultural and social context. Women's entrepreneurship is implicitly linked to devaluation when associated with the female gender due to a long history of men's dominance and stereotyping (Ristovska & Blazheska, 2020) of women as the weak sex (Ganesan et al., 2002). The traditional socio-cultural status of women determined the leading role of women in charge of family and housework. It reduced their self-confidence, as it was common in various cultures, but especially in Lebanon, for women to prioritize their duties as homemakers and carers of the family (Al-Qahtani et al., 2022). Hence, women were discouraged by their societies from establishing their businesses due to cultural and social aspects. Therefore, the social encouragement of women's entrepreneurship at home (Welsh et al., 2016a, 2016b) and country-level is critical (Ingalagi et al., 2021) to motivate women's entrepreneurial initiatives and change cultural and social stereotypes about women's societal role. According to Lladós-Masllorens and Ruiz-Dotras (2022), positive and motivating social environments may significantly impact women, who are typically less likely to establish their own businesses. Therefore, based on the scholar's scientific insights and theoretical findings discussed above about women's innovativeness and social encouragement, the following hypotheses were proposed:

*H2. Innovativeness positively influences social encouragement.*

*H3. Innovativeness positively influences women's entrepreneurial intentions.*

*H4. Social encouragement positively influences women's entrepreneurial intentions.*

*H5. Social encouragement mediates the relationship between innovativeness and women's entrepreneurial intentions.*

*Women's independence.* Due to the uneven distribution of family duties impeding the constant balance between family life and work, daily family life is frequently more challenging for women than men. Women entrepreneurs' responsibilities were greater because of the need to make the necessary balance between personal and professional life (Agarwal & Lenka, 2015). Women confronted unequal sharing of parenting responsibilities and other household tasks, which significantly impeded their work success. Adding to women entrepreneurs' family and personal problems (Rehman & Roomi, 2012), cultural norms and beliefs, especially in developing countries, also impeded women's progress. Therefore, due to the need for personal and social change leading to self-determination and independence, the willingness to take risks, and acquiring a higher level of control over their personal and professional lives, women have turned to self-employed to improve work-life balance. Ahmetaj et al. (2023), in their study on women's entrepreneurship, highlighted that independence provides female entrepreneurs a chance to have free time and, consequently, to perform their family duties with greater flexibility. According to Dickel and Eckardt (2021), entrepreneurship as a career for women is more likely than for men, and women are more likely to start their businesses because they want to work on their terms and not rely on others. Accordingly, it can be hypothesized that:

*H6. Independence positively influences women's entrepreneurial intentions.*

The conceptual research framework consists of the research's main constructs, such as dominance, innovativeness, independence, and social encouragement, influencing women's entrepreneurial intentions and exhibits the analyzed relationships in the research (Figure 1).

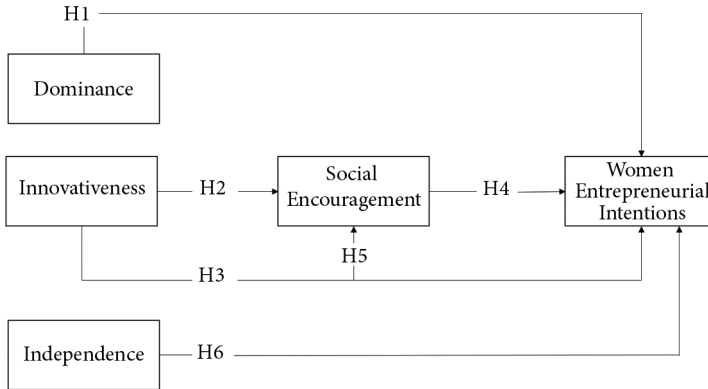


Figure 1. Conceptual research framework (developed by the authors)

## 2. Research methodology

After completing the scientific literature review, the next step is to test the proposed research hypotheses in order to provide an answer to the research question and validate the research hypotheses. A survey questionnaire was prepared, and a Likert scale was employed, ranging from 1 (strongly disagree) to 5 (strongly agree), to measure the questionnaire items. The survey questionnaire was composed of 2 sections: Section 1 explained the aim of the research to the respondents and included demographic aspects. Section two included questions related to the five constructs of the research that were allocated as follows: four items to measure independence construct, of which two items were adopted from Chakraborty et al. (2019) and modified to fit the research content, and two items were self-developed. Four items were used to measure dominance; three were adopted from Palmer et al. (2019), and one was self-developed. Four items for social encouragement, of which one item was self-developed, three items for innovativeness, and three items for women's entrepreneurial intentions, were all adopted from Anggadwita and Dhewanto (2016).

The content validity and the face validity of the questionnaire were confirmed by sending it to four professors with extensive knowledge of entrepreneurship to check the readability of the questionnaire and the suitability of each item to the construct it intends to measure. A few corrections were made in accordance with the reviewers' comments, and later, the questionnaire was proofread by a professional translator to translate into the local language of the respondents (Arabic) to ensure that the respondents who were not proficient in the English language would not face any language-related obstacles while filling the survey.

*Data analysis software.* Data analysis was performed using the 26 version of the statistical package software for social sciences (SPSS) and Smart PLS 3.

*Sampling and data collection.* In structural equational modeling, most scholars recommend a sample size greater than 200, and some scholars suggest five responses for each item or 10–20 responses for each variable (Al Ahabbi et al., 2019). In this context, it has been ensured in this research that the target sample, composed of Lebanese women currently working or with previous work experience, exceeds the recommended threshold of scholars. Data collection was initiated in January and ended in February 2023. The respondents were

reached through social media platforms, and 900 possible respondents were contacted, of which 620 returned the survey filled, representing a 68.8% response rate and the sample size of this research  $N = 620$ .

### 3. Results

*Common method variance and multicollinearity.* In order to avoid reporting biased results, common method variance/bias was analyzed by Harman's single factor method, having a result of 27.07% (<50%). To avoid multicollinearity, the variance inflation factor (VIF) was calculated, and the value for all the questionnaire items was below 5 (Akinwande et al., 2015).

*Demographic aspects of Lebanese women.* The demographic distribution of the Lebanese women showed that 4% were under the age of 21, 32.9% were between the age of 21 and 25, 25.5% were 26 to 30 years, 18.1% were between the age of 31 and 35, 15% were 36 to 45 years, and 4.5% were above 45 years. Of the 620 Lebanese women, 51.1% were single, 8.55% were engaged, 36.3% were married, 3.54% were divorced, and 0.5% were widowed (Table 2).

Table 2. Overview of demographic characteristics of Lebanese women (developed by the authors)

Category	Frequency	Percentage (%)
Age	620	100
Under 21	25	4.0
21–25	204	32.9
26–30	158	25.5
31–35	112	18.1
36–45	93	15.0
45+	28	4.5
Marital status	620	100
Single	317	51.1
Engaged	53	8.55
Married	225	36.3
Divorced	22	3.54
Widowed	3	0.5
Educational level	620	100
No academic qualifications	1	0.2
Technical degree	51	8.2
Diploma	64	10.3
Bachelor	276	44.5
Master	183	29.5
PhD	24	3.9
Other	21	3.4

The educational level distribution of the Lebanese women exhibited that 0.2% had no academic qualifications, 8.2% had a technical degree, 10.3% held a diploma, 44.5% held a bachelor's degree, 29.5% had master's degree, 3.9% had a Ph.D., and 3.4% responded that they received other forms of education.

The occupational distribution of Lebanese women showed that 67.6% work in the private sector, 13.7% work in the public sector, and 18.7% run their businesses. 0.3% work in agriculture, 0.8% work in construction, 4.5% in financial services, 8.9% in healthcare, 6.5% in hospitality and tourism, 3.2% in industrial fields, 0.6% in logistics, 6.5% in the media, 0.8% in real estate, 37.9% in teaching, 6.8% in information and communication technology-related fields, 6.8% work in trade, 0.8% in transportation, and 15.6% indicated that they work in other occupations.

Table 3. Occupational background of the respondents and work experience (developed by the authors)

Category	Frequency	Percentage (%)
Sector	620	100
Private sector	419	67.6
Public sector	85	13.7
Personal business	116	18.7
Work field	620	100
Agriculture	2	0.3
Construction	5	0.8
Financial services	28	4.5
Healthcare	55	8.9
Hospitality and tourism	40	6.5
Industrial	20	3.2
Logistics	4	0.6
Media	40	6.5
Real estate	5	0.8
Teaching	235	37.9
Information and communication technology	42	6.8
Trade	42	6.8
Transportation	5	0.8
Other	97	15.6
Years of professional experience	620	100
Less than 3 years	207	33.4
3–5 years	188	30.3
6–10 years	147	23.7
10+ years	78	12.6

The work experience distribution of the Lebanese women showed that 33.4% had less than three years of professional experience, 30.3% had 3 to 5 years, 23.7% had 6 to 10 years, and 12.6% had more than ten years of professional experience (Table 3).



### 3.1. Measurement model

The items' allocations of the questionnaire were also empirically confirmed by running a confirmatory factor analysis using Smart PLS software, and a rotated factor loading matrix was created (Table 4). The results of the matrix reveal that no cross-loading value is greater than 0.6 for any indicator with any other dimension than its original one. The left side of the table shows all the cross-loadings and the right side demonstrates the cleansed matrix.

Table 4. Rotated factor loadings matrix (developed by the authors)

Item	Cross loadings					Outer loadings				
	INDP	DMN	INVTS	SE	WENI	INDP	DMN	INVTS	SE	WENI
INDP1	0.805	0.007	0.26	0.041	0.186	0.805				
INDP 2	0.774	0.089	0.207	0.071	0.159	0.774				
INDP 3	0.799	0.123	0.287	0.116	0.179	0.799				
INDP 4	0.792	0.051	0.3	0.109	0.181	0.792				
DMN1	0.089	0.889	0.098	0.239	0.277		0.889			
DMN2	0.024	0.9	0.09	0.244	0.261		0.9			
DMN3	0.067	0.918	0.062	0.258	0.294		0.918			
DMN4	0.116	0.812	0.102	0.265	0.252		0.812			
INVTS1	0.298	0.003	0.802	0.223	0.346			0.802		
INVTS2	0.249	0.133	0.828	0.287	0.355			0.828		
INVTS3	0.276	0.105	0.829	0.237	0.358			0.829		
SE1	0.136	0.136	0.32	0.776	0.227				0.776	
SE2	0.048	0.233	0.245	0.86	0.268				0.86	
SE3	0.087	0.266	0.249	0.865	0.242				0.865	
SE4	0.085	0.297	0.188	0.78	0.236				0.78	
WENI1	0.173	0.303	0.392	0.271	0.881					0.881
WENI2	0.223	0.254	0.354	0.224	0.84					0.84
WENI3	0.148	0.182	0.299	0.23	0.712					0.712

The measurement model was evaluated by assessing Cronbach's alpha and the composite reliability to ensure the reliability and consistency of constructs (Ahmad et al., 2016) and also by evaluating the average variance extracted to ensure convergent validity.

The Cronbach alpha and composite reliability values were all above 0.7 for all the constructs, supporting the reliability and the internal consistency of the research items. Also, the value of the AVE was in accordance with the recommended threshold by scholars (Hair et al., 2012), which is greater than 0.5 (Table 5) for all the constructs, and all the indicator loadings were above 0.7, supporting convergent validity (Figure 2).

Table 5. Measurement model (developed by the authors)

Construct	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
INDP	0.803	0.871	0.628
DMN	0.903	0.932	0.776
INVT	0.755	0.86	0.672
SE	0.838	0.892	0.675
WENI	0.744	0.854	0.663

Note: INDP = Independence, DMN = Dominance, INVT = Innovativeness, SE = Social encouragement, WENI = Women entrepreneurial intentions.

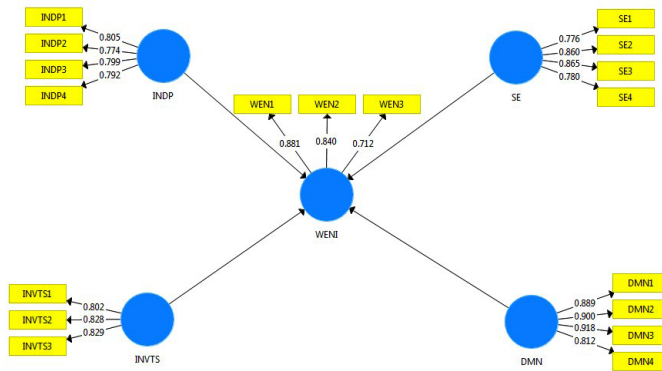


Figure 2. Indicator loadings (developed by the authors, 2023)

Utilizing the Fornell and Larcker criterion, the discriminant validity of the constructs has been confirmed where all the square root of the AVE italicized is greater than the inter-construct correlations (Table 6).

Table 6. Discriminant validity, according to Fornell and Larcker (developed by the authors)

Construct	1	2	3	4	5
1. INDP	0.792				
2. DMN	0.083	0.881			
3. INVT	0.335	0.099	0.819		
4. SE	0.106	0.285	0.304	0.821	
5. WENI	0.223	0.308	0.431	0.297	0.814

The above-mentioned criterion ensures that the construct is distinct to the dimension it aims to measure (Ab Hamid et al., 2017).

The discriminant validity of the constructs has also been confirmed using the Heterotrait-Monotrait Ratio (HTMT).

Table 7. Heterotrait-Monotrait Ratio (developed by the authors)

	INDP	DMN	INVTS	SE	WENI
INDP					
DMN	0.114				
INVTS	0.427	0.131			
SE	0.135	0.327	0.384		
WENI	0.288	0.37	0.572	0.376	

The HTMT result also confirmed the construct discriminant validity (Table 7), having a ratio of less than 0.9 (Ab Hamid et al., 2017).

### 3.2. Structural model assessment and hypotheses testing

The hypotheses were tested (Table 8) by applying the bootstrapping technique, which is a non-parametric technique through which sub-samples  $N = 5000$  cases are generated from the original sample size by applying sampling with a replacement that tests the model several times and ensures that all the model parameters are tested (Gallego Sánchez et al., 2021). The hypotheses are supported if they have a t-value greater than 1.96 and a p-value less than 0.05.

Table 8. Structural model test results (developed by the authors)

Hypotheses	Path	Coefficient ( $\beta$ )	T Statistics	P	Result
H1	DMN -> WENI	0.234	6.347	<0.001	Supported
H2	INVTS -> SE	0.311	6.117	<0.001	Supported
H3	INVTS -> WENI	0.347	7.14	<0.001	Supported
H4	SE -> WENI	0.117	2.693	0.007	Supported
H5	INVTS -> SE -> WENI	0.056	2.999	0.003	Supported
H6	INDP -> WENI	0.075	1.812	0.070	Not supported

The research results revealed that all the research variables have a positive influence on women's entrepreneurial intentions except for women's independence: DMN -> WENI ( $\beta = 0.234$ ,  $t = 6.347$ ,  $p = <0.001$ ), INVTS -> SE ( $\beta = 0.311$ ,  $t = 6.117$ ,  $p = <0.001$ ), INVTS -> WENI ( $\beta = 0.347$ ,  $t = 7.14$ ,  $p = <0.001$ ), SE -> WENI ( $\beta = 0.117$ ,  $t = 2.693$ ,  $p = 0.007$ ), INDP -> WENI ( $\beta = 0.075$ ,  $t = 1.812$ ,  $p = 0.070$ ).

The coefficient of determination ( $R^2$ ) and the Standardized Root Mean Square Residual (SRMR) were also calculated to support the predictive power of the model.

The model's  $R^2$  is 0.273 (Figure 3), and the SRMR is 0.06 (<0.08), which indicates this research's model fit is acceptable, as suggested by scholars in previous studies (Jilani et al., 2020; Matar & Raudeliuniene, 2021; Raudeliuniene & Matar, 2022).

Concerning the mediation analysis (INVTS -> SE -> WENI), a bootstrapping was re-run in order to test this relationship (Figure 4). Since the bootstrapping technique applies

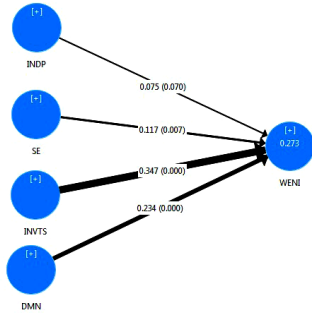


Figure 3. Structural model (developed by the authors)

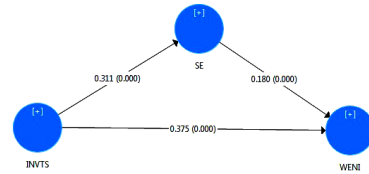


Figure 4. Mediation analysis (developed by the authors)

sampling with replacement, it is natural to have a changing value of the beta coefficient but without drastically influencing the results.

The mediation analysis revealed that social encouragement partially mediates the relationship between innovativeness and women’s entrepreneurial intention ( $\beta = 0.056, t = 2.999, p = 0.003$ ).

### 3.3. Importance-performance map analysis

In order to provide valuable managerial implications, the results of PLS-SEM were then subjected to an analysis known as the importance-performance map analysis (IPMA), in which the performance of each construct (Ringle & Sarstedt, 2016) was also considered (Figure 5). The focus was on women’s entrepreneurial intentions to know the most important constructs in terms of their explanation of women’s entrepreneurial intentions while at the same time having little effect.

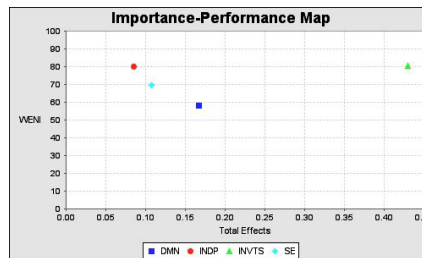


Figure 5. Importance-performance map (developed by the authors)

In order of importance, innovativeness was found to be the most important, followed by dominance, social encouragement, and independence. Furthermore, in relation to the performance on a scale from 0 to 100, innovativeness had the highest score of 80.353, followed by independence at 80.172, social encouragement with a score of 69.688, and the lowest was dominance with 57.97. Therefore, regarding importance (total effect), independence and innovativeness are the most important group and social encouragement and dominance are the less important group.

## Conclusions

This research analyzed the antecedents of women's entrepreneurial intentions. Four antecedents for entrepreneurial intentions composed of women's independence, social encouragement, innovativeness, and dominance were analyzed in this research, and their influence on women's entrepreneurial intentions was examined. Also, the mediating influence of social encouragement between innovativeness and women's entrepreneurial intentions was analyzed.

620 Lebanese women participated in the survey, and descriptive statistics, inferential statistics, and PLS-SEM techniques were employed to analyze the research results. All the research variables had a significant influence on Lebanese women's entrepreneurial intentions except for women's independence; innovativeness had the most significant influence on women's entrepreneurial intentions  $INVTS \rightarrow WENI$  ( $\beta = 0.347$ ,  $t = 7.14$ ,  $p = <0.001$ ).

In accordance with previous studies, innovativeness remains one of the main contributors to the ever-growing entrepreneurial activities and one of the most critical indicators of entrepreneurial intentions. Therefore, enhancing the level of innovativeness for Lebanese women should be highly important.

The challenge remains about women's independence variable that did not significantly influence Lebanese women's entrepreneurial intentions. Perhaps this could be attributed to social and cultural gender roles in Lebanon, where women were not as independent as men because of men's dominant societal role.

This research's theoretical implications are related to women's entrepreneurship perspective by filling a critical gap in Lebanon related to the studies focusing on factors influencing Lebanese women's entrepreneurial intentions and the way it considered the role of the subjective norm from the theory of planned behavior through considering the influence of social encouragement in the research. The research revealed the mediating influence of social encouragement between innovativeness and women's entrepreneurial intentions. Accordingly, this research enriched the scientific studies on women's entrepreneurship by expanding the current knowledge on the factors influencing women's entrepreneurial intentions in Lebanon and acknowledging the importance of women's innovativeness. Also, the research brought a new scientific insight about women's independence, as the research results revealed that it did not have a significant influence on women's entrepreneurial intentions. Further research on why women's independence did not significantly affect Lebanese entrepreneurial intentions can be the research object for future studies in areas based on similar cultural, social, and economic aspects.

Researchers and decision-makers concerned with entrepreneurship can use the research results to focus on the most influential factors affecting Lebanese women's entrepreneurial intentions. Also, scientists and business practitioners can systematically apply the correlation matrix to analyze the relationships between the research variables. Furthermore, Lebanese policymakers should consider the factors influencing women's entrepreneurship to facilitate women's entrepreneurial intentions by developing personal and professional growth and socially supporting women's participation in various entrepreneurship initiatives.

The main limitations of this research are that it was limited to one Middle Eastern country (Lebanon) and the limited number of variables used to explain women's entrepreneurial intentions. Therefore, future research should consider including more variables and carrying the research in a wider geographical region to enhance the generalizability of the findings.

## Author contributions

Jurgita Raudeliūnienė (JR) and Ibrahim Matar (IM) conceived the research and were responsible for the design and development of the research methodology. JR and IM were responsible for writing the original draft and editing and reviewing it. IM was responsible for data collection and for formal data analysis. JR and IM were responsible for visualization. JR supervised the research.

## Disclosure statement

The authors declare no conflict of interest.

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