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**ENTREPRENEURIAL INTENTION AND ENTREPRENEURIAL
ATTITUDES AMONG RURAL TUNISIAN WOMEN**

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Introduction and Objectives

Entrepreneurship has long been recognized as a crucial contributor to employment, innovation, and long-term economic growth and development (Langevang & Gough, 2012; Meyer & Meyer, 2017). However, during the 1980s period of global stagflation and severe unemployment, a fresh focus was placed on the importance of entrepreneurship and small enterprises. It has become clear that the primary drivers to economic growth are no longer giant corporations, but rather small and medium-sized firms (SMEs) that contribute significantly to the Gross Domestic Product (GDP) of specific nations. One area of research that has lately piqued the interest of both academics and policymakers is women's entrepreneurship, since some researchers have noticed that many of the challenges that impact entrepreneurship have a gender component to them (Pathak, Goltz, & Buche, 2013). For example, stereotyped conceptions of entrepreneurs are more male-oriented, while women are less likely to be entrepreneurs. Furthermore, women entrepreneurs have additional social identities such as spouses and mothers, which may contribute to the misconception that women's roles are to be caregivers or homemakers rather than business owners. The interconnections of multiple identities can either harm or help women's business endeavors (Chasserio, Pailot, & Poroli, 2014). Specifically focusing on how these characteristics impact women's enterprises may yield insights that might help us better understand not only women's entrepreneurship but entrepreneurship in general (De Bruin, Brush, & Welter, 2007).

In this study, Tunisian entrepreneurship is discussed with different dimensions. Tunisia, formally the Republic of Tunisia, is Africa's northernmost country. A focus on how various institutional and individual level variables influence entrepreneurial intentions was made. Further, we also seek to add to the body of knowledge on women's entrepreneurship through the emphasis on the main socio-cultural elements that either boost or discourage women's entrepreneurial goals. Furthermore, the research investigates if these characteristics are consistent across Tunisia (In urban and rural Tunisia), that is, whether these factors effect women differently depending on the area's level of economic development.

This study was conducted **(1)** to evaluate the role of identified factors on the EI of Tunisian population, **(2)** to assess the effects based on the gender of the respondents, **(3)** to assess the effects based on the residence of the respondents and **(4)** to compare the effects of all variable between

the rural and urban Tunisian women. These objectives lead to the development of following hypotheses.

H1 = Positive entrepreneurial attitudes will affect positively the entrepreneurial intentions of respondents

Considering the importance of attitude in the development of EI, this study will investigate the role of attitude in the development of EI among tunisian men and women keeping in view the underlying cultural, economic, and societal challenges (Movahedi & Yaghoubi-Farani, 2012).

H2 = Family Support of the respondents will have a positive effect on subjective norms

A family is reflected through an individual which is why the importance of subjective norms developed by an individual are subjected to familial support (Moussa & Kerkeni, 2021). To assess the dependency of young Tunisian population on their family and the effect of familial norms on individual thinking, this research will look into the effects of family support on subjective norms development among individuals .

H3 = Government Effectiveness will affect positively the entrepreneurial intention of the respondents

Government policies and interventions has a direct effect on domestic and international businesses, which in turns effects the development of EI among individuals (Van Horne, Huang, & Al Awad, 2011). This is why, this study assessed the role of government effectiveness on the development of EI among Tunisian population.

H4 = Perceived Behavioral Control of the respondents, will affect positively their entrepreneurial intention

Perceived behavioural control was found to be among the contributing variables having a substantial impact on the establishment of new businesses in the country (Ali & Jabeen, 2022) which is why, PBC was considered for its possible effects on EI.

H5 = Risk-taking way of behaving of respondents, will affect positively their entrepreneurial intention

The way of risk taking improve performance in business and the setup of new enterprises (Belanes & Hachana, 2009). However, limited opportunities hinder the process of risk taking making it a valuable factor in consideration for present research.

H6 = Positive subjective norms of the respondents, will have a positive impact on their entrepreneurial intention

The established of subjective norms towards entrepreneurship can have a vital effect on deciding the fate of an entrepreneur especially in case of women (Eddleston & Powell, 2012). Identifying the effect of this important variable is another one of the characteristic features of our research.

Materials and Methods

The study was developed in a number of stages. In the first stage a literature review was conducted on different relevant topics. From the literature review a number of items created the main questions for the questionnaire. In the second stage the statistical model was built and tested on a small number of people to ensure that the quality of the questionnaire was of sufficient standard. In the third stage data was gathered with interviews. Thereafter the data from the questionnaire was analyzed with statistical analysis. This study was exploratory in nature and based on the research question, a causal study design was used. Various factors were assessed for their effect on the entrepreneurship in rural Tunisian women and these effects were measured. Further, the interlinking of these factors to one another was also studied to strengthen the basis of causality of change in the status of entrepreneurship among the rural Tunisian women. Based on the selection criteria, these respondents needed to be from the rural Tunisia and must had at least some sort of entrepreneurship activities going on.

A sample size of 500 was set for this study with the expectancy of attaining statistically sufficient results based on this sample size. For the selection of samples, simple random sampling was used which is also known as SRS. Field visits were made to different regions of Tunisia to collect data from random respondents falling within the selection criteria for this study. The primary data come straight from the people we study and are therefore the most direct kinds of information one can collect. We used primary data in which interview techniques were applied to get some information that has not been studied on. The researcher used secondary data that is generally taken from magazine, newspaper, textbooks, official documents, published reports, internet, statistics, bulletins and other documents will enable the researcher to get information that is not covered in Primary data methods such as literature on rural women entrepreneurs that was used in literature review.

Furthermore, this study employed PLS-SEM as the main objective of the research is to explore complex multi-item latent variable model and to extend the theory of planned behavior. In PLS-SEM the estimation and analysis of causal relationships is the main characteristic of this method. Assessment of the variables of interest were made and results were recorded, which were evaluated for the data trends and compared with available literature.

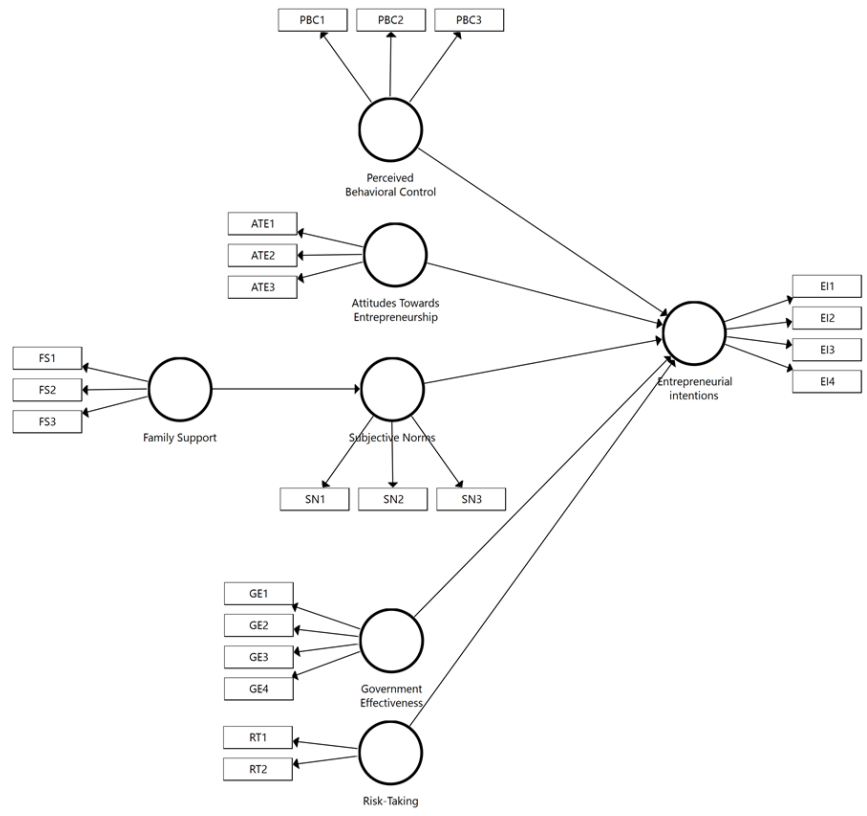


Figure 1: Complete model of study (Source: Own construction)

Results and Discussions

The collection of data followed by the analysis of data using PLS 3.1 was performed which yielded study results. Following a basic pattern of analysis, model validations were the very first analysis which was done through convergent validity, composite reliability and discriminant validity. Further, bootstrapping of the data was performed which determine the significance of data variables through p-values and t-values. This enabled us to accept or reject a hypothesis based on its set of p-value and t-value as compared to the standard critical values. Following are the results which were obtained through testing of different hypotheses:

Table 1: Bootstrapping results (Hypothesis testing)

Overall					
Hypotheses	Relationship	Std. Beta	Std. Error	T-value	P-Value
H1	ATE->EI	0.341	0.044	7.737	0.00***
H2	FS -> SN	0.279	0.04	6.92	0.00***
H3	GE -> EI	0.139	0.032	4.303	0.00***
H4	PBC -> EI	0.068	0.035	1.911	0.056 ^{NS}
H5	RT -> EI	0.261	0.041	6403	0.00***
H6	SN -> EI	0.177	0.045	3963	0.00***
Men					
H1	ATE->EI	0.25	0.252	3.653	0.00***
H2	FS -> SN	0.312	0.329	4.617	0.00***
H3	GE -> EI	0.188	0.192	3.547	0.00***
H4	PBC -> EI	-0.007	-0.005	0.121	0.90 ^{NS}
H5	RT -> EI	0.316	0.318	4.598	0.00***
H6	SN -> EI	0.244	0.243	3.511	0.00***
Women					
H1	ATE->EI	0.394	0.395	6.52	0.00***
H2	FS -> SN	0.274	0.285	5.698	0.00***
H3	GE -> EI	0.115	0.116	2.925	0.003***
H4	PBC -> EI	0.125	0.124	2.863	0.004***
H5	RT -> EI	0.244	0.247	4.436	0.00***
H6	SN -> EI	0.125	0.124	2.192	0.028**
Rural Area					
H1	ATE->EI	0.293	0.292	4.003	0.00***
H2	FS -> SN	0.28	0.296	4.296	0.00***

H3	GE -> EI	0.189	0.188	4.081	0.00***
H4	PBC -> EI	0.058	0.059	1.296	0.195 ^{NS}
H5	RT -> EI	0.394	0.398	6.698	0.00***
H6	SN -> EI	0.133	0.13	2.602	0.009***
Urban area					
H1	ATE->EI	0.344	0.345	6.022	0.00***
H2	FS -> SN	0.282	0.293	5.441	0.00***
H3	GE -> EI	0.161	0.165	3.365	0.001***
H4	PBC -> EI	0.08	0.082	1.582	0.114 ^{NS}
H5	RT -> EI	0.188	0.193	3.49	0.00***
H6	SN -> EI	0.193	0.192	3.026	0.002***
Rural women					
H1	ATE->EI	0.313	0.32	3.214	0.001***
H2	FS -> SN	0.292	0.311	3.555	0.00***
H3	GE -> EI	0.22	0.212	3.826	0.00***
H4	PBC -> EI	0.087	0.086	1.69	0.091 ^{NS}
H5	RT -> EI	0.406	0.404	5.441	0.00***
H6	SN -> EI	0.076	0.076	1.204	0.229 ^{NS}
Urban women					
H1	ATE->EI	0.406	0.404	5.211	0.00***
H2	FS -> SN	0.288	0.309	4.566	0.00***
H3	GE -> EI	0.106	0.117	1.691	0.091 ^{NS}
H4	PBC -> EI	0.157	0.158	2.487	0.013***
H5	RT -> EI	0.169	0.182	2.217	0.027**
H6	SN -> EI	0.145	0.138	1.738	0.082 ^{NS}

Bootstrapping was performed on the data from different dimensions, starting with an overall data trend it was eminent from results that all the variables tested in H1 (Attitude towards entrepreneurship -> Entrepreneurial intentions), H2 (Family support -> Subjective norms), H3 (Government effectiveness -> Entrepreneurial intentions), H5 (Risk taking -> Entrepreneurial intentions) and H6 (Subjective norms -> Entrepreneurial intentions) had a significant association among the tested variables. Only H4 (Perceived behavioral control -> Entrepreneurial intentions) showed a non-significant association between the tested variables which was evident by the T-value and p-value of bootstrapping results. For men model, similar data trends were followed where only H4 was non-significant while the other hypotheses were significant for the tested

variables. Model for women data showed that all the hypotheses from H1 to H6 had a significant association between the tested variables in each of the hypothesis. It was revealed from this results that unlike the prior two models (overall and men's), women model found a relation between PBC and EI.

Further, assessment based on the residence of the respondents was also performed by constructing a rural and urban model. Rural model showed a similar result to that of the overall results revealing a non-significant T-value and p-value for H4 while the rest of the hypotheses were highly significant based on their T-value and p-value. Urban model followed exactly the same pattern with same results. It means that the overall results were not affected by the residence of the respondents where perceived behavioural control remained non-significantly associated with entrepreneurial intentions while attitude towards entrepreneurship, government effectiveness, risk taking and subjective norms remained highly significantly associated with entrepreneurial intentions and didn't deviated with the residence of the respondents.

Moreover, a division of data based on the rural and urban women was also performed and developed model were assessed. Similar to the rest of the data, rural women model showed a significant association between the variables of H1, H2, H3 and H5. However, the variables in H4 and H6 were found to be non-significantly associated with the tested variables in said hypotheses. A revelation from this was the non-significance of perceived behavioral control and subjective norms in relation to entrepreneurial intention development among rural Tunisian women. Urban women model revealed that H1, H2, H4 and H5 were having significant T and p scores which indicate a significance relation between the tested variables in each hypothesis. Government effectiveness and subjective norms were non-significantly associated with EI among urban women of Tunisia.

Table 2: Summary of hypothesis results

Overall		
Hypotheses		Results
H1	Positive attitude towards entrepreneurship has a significant positive relation with the development of EI	Accepted
H2	Family support has a positive significant association with subjective norms	Accepted
H3	Government effectiveness has a positive influence on the development of EI	Accepted
H4	Perceived behaviour control has a positive association with EI	Rejected
H5	Risk taking behaviour has a positive association with the development of EI	Accepted
H6	Subjective norms has a positive significant association with EI	Accepted
Men		
H1	Positive attitude towards entrepreneurship has a significant positive relation with the development of EI	Accepted
H2	Family support has a positive significant association with subjective norms	Accepted
H3	Government effectiveness has a positive influence on the development of EI	Accepted
H4	Perceived behaviour control has a positive association with EI	Rejected
H5	Risk taking behaviour has a positive association with the development of EI	Accepted
H6	Subjective norms has a positive significant association with EI	Accepted
Women		
H1	Positive attitude towards entrepreneurship has a significant positive relation with the development of EI	Accepted
H2	Family support has a positive significant association with subjective norms	Accepted
H3	Government effectiveness has a positive influence on the development of EI	Accepted
H4	Perceived behaviour control has a positive association with EI	Accepted
H5	Risk taking behaviour has a positive association with the development of EI	Accepted
H6	Subjective norms has a positive significant association with EI	Accepted
Rural Area		
H1	Positive attitude towards entrepreneurship has a significant positive relation with the development of EI	Accepted
H2	Family support has a positive significant association with subjective norms	Accepted
H3	Government effectiveness has a positive influence on the development of EI	Accepted
H4	Perceived behaviour control has a positive association with EI	Rejected
H5	Risk taking behaviour has a positive association with the development of EI	Accepted
H6	Subjective norms has a positive significant association with EI	Accepted
Urban Area		
H1	Positive attitude towards entrepreneurship has a significant positive relation with the development of EI	Accepted
H2	Family support has a positive significant association with subjective norms	Accepted
H3	Government effectiveness has a positive influence on the development of EI	Accepted
H4	Perceived behaviour control has a positive association with EI	Rejected
H5	Risk taking behaviour has a positive association with the development of EI	Accepted

H6	Subjective norms has a positive significant association with EI	Accepted
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Rural Women

H1	Positive attitude towards entrepreneurship has a significant positive relation with the development of EI	Accepted
H2	Family support has a positive significant association with subjective norms	Accepted
H3	Government effectiveness has a positive influence on the development of EI	Accepted
H4	Perceived behaviour control has a positive association with EI	Rejected
H5	Risk taking behaviour has a positive association with the development of EI	Accepted
H6	Subjective norms has a positive significant association with EI	Rejected

Urban Women

H1	Positive attitude towards entrepreneurship has a significant positive relation with the development of EI	Accepted
H2	Family support has a positive significant association with subjective norms	Accepted
H3	Government effectiveness has a positive influence on the development of EI	Rejected
H4	Perceived behaviour control has a positive association with EI	Accepted
H5	Risk taking behaviour has a positive association with the development of EI	Accepted
H6	Subjective norms has a positive significant association with EI	Rejected

As, the previous table already explained the data classification and bootstrapping results, it is made clear that the hypothesis testing followed the same pattern. H1 (positive attitude towards entrepreneurship has a significant positive relation with the development of EI), H2 (family support has a positive significant association with subjective norms), H3 (government effectiveness has a positive influence on the development of EI), H4 (perceived behaviour control has a positive association with EI), H5 (risk taking behaviour has a positive association with the development of EI) and H6 (subjective norms has a positive significant association with EI) Overall results revealed that H1, H2, H3, H5 and H6 were accepted while H4 were rejected. Data model for men also showed the similar findings (Table 2). All the hypotheses associated with women model were accepted.

Area models based on rural and urban classification of data revealed similar findings to that of the overall results. H4 were rejected both in the rural and urban model which indicated that perceived behavioural control did not had a significant positive association with the development of EI. Rural and urban women model revealed different results. H4 and H6 in rural women while H3 and H6 in urban women model were rejected. Perceived behavioural control and subjective norms didn't had a significant positive association with the development of EI among rural Tunisian women.

Government effectiveness and subjective norms didn't had a significant positive association with the development of EI among urban Tunisian women.

New Scientific Findings

New scientific findings are an important part of a research which may challenge past scientific conclusions and propose new approaches, or they reinforce previous findings in various ways. In the Tunisian context, our research is the first one with the three extended factors (risk-taking, family support, governance) of the theory of planned behavior. In addition, the findings of this study will help in the development of more precise and effective strategies to target EI intentions of Tunisian population (especially females). The gap between the facilitation of rural and urban Tunisia can also be bridged using the study findings most relevant to the topic. Some of the key findings of this study are as follows:

1. Subjective norms of the Tunisians (both male and female) were found to be influenced by the family support of the individual. This showed that the more a person in Tunisia is supported by the family, the more there will be an influence on subjective norms which can be positive or negative depending on the type of family support a person receives. These effects of subjective norms and familial support are also proven from previous researches and will add up to the body of literature.
2. The important role of government in the improvement of entrepreneurship was recognized by rural women of Tunisia. However, urban women model showed a non-significant association with the government effectiveness of Tunisia. This finding revealed that urban Tunisian women receive a better support and more furnished policies and resources from the government which is why the effectiveness seems negligible to them but for the rural women, they are highly dependent on effective government policies for an improvement in entrepreneurial intentions.
3. A novel research finding is that perceived behavioral control among the women of both rural and urban areas of Tunisia was found to be effecting entrepreneurial intentions among them. A body of research support our finding but some researches also shows a non-significant association of perceived behavioral control and intentions of entrepreneurship in different regions of the world.

4. Risk taking behavior was directly associated with entrepreneurial intentions of Tunisian individuals. This finding was also consistent with available research which determine that the risk taking of an individual can be used as a predictor of entrepreneurial intentions development among the individual. The presence of risk taking with an entrepreneur can build a better suited individual for starting and managing firms which has been reported in a number of studies. The more focus made on the development of risk taking among Tunisians, the better intentions towards entrepreneurship can be achieved.
5. Although the men's data showed a significant association, the role of subjective norms in the development of entrepreneurial intentions among women of Tunisia (both rural and urban) was found to be non-significant. Literature available on the subject supports the effect of subjective norms on entrepreneurial intentions for most of the cases however, the non-significant association between the two among Tunisian women can be explained by the lower awareness of subjective norms among Tunisian women due to lower family support. This finding is vital for developmental strategies in the field of entrepreneurship, yet, more strengthen evidence is required through more research on the subject in Tunisia.

Conclusion

Entrepreneurial intentions are proven to have an important part in the development of entrepreneurship in Tunisian society. Different social, psychological and environmental factors including entrepreneurial attitude, family support, perceived behavioral control, subjective norms, government effectiveness and risk-taking behavior were all affecting the status of EI among Tunisian population. This effect was either direct or was indirectly affected by another factor such as in case of family support and subjective norms. Urban areas are fairly supported by the government due to a higher level of education and greater access to available resources yet the rural areas are struggling continuously for a better survival.

Men being in dominant possession has greater opportunities for becoming entrepreneurs but women especially the rural women of Tunisia lack the eminent resources to become an entrepreneur. EA tested in H1 showed a highly significant association with EI at 95% CI. This effect was consistent for the overall and categorical data. Family support affected subjective norms which in turns showed to have an effect on EI of the respondents. The effects of FS on PBC were also found to be highly significant based on the overall model. A similar repetition of this significance was found for each of the categorical model as well. Government effectiveness also affected the EI of Tunisian population at a higher significance as observed in overall model ($p < 0.01$). In addition, this effect stayed mostly the same for each categorical model except the urban women. Which meant that urban women didn't consider government effectiveness to be a factor that affected their EI. GS was found to be significantly associated in all of the tested models except the urban women model which can conclude that rural Tunisian women considered GS important due to the lack of access to government facilities. Interestingly, PBC was significantly associated with the overall women and urban women models while it was non-significant for the rest of the models. This give rise to an explanation that urban women considered PBC important whereas this factor was non-significant for rural women of Tunisia. RT was strongly associated ($p < 0.01$) with EI at 95% CI for all of the models except the urban women model which showed a p-value less than 0.05.

The effects of SN were significant for the overall, rural and urban models but it remained non-significant for the separate categorized model of rural and urban women. The effects of studied factors varied based on the gender and residence of the respondents. Based on gender differences,

men were showed to be affected by almost each studied factor except for perceived behavioral control. Women, who were the most important population of this study showed variant results based on the analysis conducted for their residences. Residential women of urban areas of Tunisia showed to have an effect of attitude, risk taking behavior and perceived behavioral control on their EI. However, women living in the rural areas of Tunisia reported an effect of attitude, risk taking behavior and government effectiveness on their EI. Although, subjective norms of the women (both rural and urban) were affected by the family support, it had a little effect on the EI of women. Perceived behavioral control affected the urban women's EI yet it didn't affect the rural women's EI which provides a clear image of the lack of resources in the rural Tunisia. With this it can be said that women of the rural area of Tunisia face unique challenges as compared to the women of urban Tunisian society due to the lack of facilities in the rural Tunisia. Government and other private authorities who has the responsibility of providing support to this rural Tunisia should focus on the development of a unique strategic plan for improving the EI of rural Tunisian population especially women, which in terms can produce better livelihood through sustainable entrepreneurship.

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