Is the Inclusive Entrepreneurial Intention Among Women Ex-Prisoners a Perspective of Reintegration in Tunisia?

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Abstract

Inclusive entrepreneurship refers to the participation of marginalized groups in entrepreneurship to help them overcome social and economic challenges, which plays a very important role in poverty reduction. This study proposes that the main solution to this problem is to promote inclusive entrepreneurship through the production of inclusive and innovative services and goods. Among unconventional and marginalized entrepreneurs: women ex-prisoners. Planned Behavior Theory is used to predict inclusive entrepreneurial intention which may be the key to filling existing gaps in understanding the intention of female ex-prisoners to be inclusive entrepreneurs by also testing the moderating effect of Planned Behavior Theory to compare women’s behavioral traits to inclusive entrepreneurial intention. The results of the regression analysis show that attitude, subjective norms and perceived behavioral control are significant in relation to inclusive entrepreneurial intention among female ex-prisoners. In conclusion, this study suggests that “inclusive entrepreneurship” may be a viable solution to the problem observed in society and to unconventional female entrepreneurs, as entrepreneurship could be a more attractive option. Entrepreneurship can be like a solution for reintegration into society for women ex-prisoners.

Keywords: Inclusive entrepreneurship; entrepreneurial intention; TPB; female prisoners; reintegration

1. Introduction

Entrepreneurship has always been a key solution for economic growth, business growth and job creation. The focus has gradually shifted to global entrepreneurship and innovation in recent decades (Škare et al. 2022). As the World Bank declared in 2018, micro, small, and medium-size enterprises create 70% of all jobs. Entrepreneurship introduces solutions that apply new technologies as well as new business models under the umbrella of innovation to realize wealth creation. Entrepreneurship opens the doors to wealth creation for all, especially those who have limited access to investment capital or who cannot afford to start a large-scale business. This is important for solving social problems such as poverty as well as for increasing well-being. Moreover, entrepreneurship is a key solution to unemployment (O’Leary 2022), when jobseekers become job creators for themselves as well as others. Recent research has shown that young entrepreneurs have advanced social networking skills and learn new things (Chauhan and Aggarwal 2017).

With a narrower scope, women’s participation in entrepreneurial activities contributes in an innovative way to economic well-being as well as to personal development that improves the well-being of society and provides solutions to social problems. Women’s entrepreneurial activities create jobs for others as well as for themselves. This solves one of the greatest
economic problems by reducing unemployment rates and increasing the number of productive members in society. In line with innovation and well-being, the new area of inclusive innovation is an area for further exploration. Inclusive innovation aims to expand access to essential goods and services, thereby improving quality of life, strengthening economic empowerment through the creation, acquisition, adaptation and absorption of knowledge, and the deployment of efforts that directly target the needs of excluded populations.

Entrepreneurial intention among ex-prisoners is an emerging area of research that is attracting growing interest in the field of social entrepreneurship. This innovative approach aims to explore how entrepreneurship can act as a catalyst for the social and economic reintegration of individuals with a prison history. Recognising the untapped potential of this population, this study focuses on identifying the factors that influence the entrepreneurial intention of ex-prisoners, as well as the positive social and economic impacts that result.

Inclusive entrepreneurial intention is for ex-prisoners looking to start their own business or engage in entrepreneurial initiatives, providing an alternative to traditional employment. This approach helps to overcome the stigma and barriers that former prisoners face when reintegrating into society. By promoting autonomy, financial independence and reducing recidivism rates, inclusive entrepreneurship is positioning itself as a promising path to foster the social and economic reintegration of former prisoners.

Our research question is as follows: What are the key factors that influence inclusive entrepreneurial intention among women ex-prisoners? To answer this question, this study aims to examine the individual, social and environmental factors that influence inclusive entrepreneurial intention among ex-prisoners in Tunisia. Understanding this complex relationship through field studies, scientific research and government policies to understand factors such as motivation and barriers like entrepreneurial skills, social support, resources and access to finance will be analysed to understand their impact on the development of entrepreneurial intention in this specific population. A second part consists of an empirical study by quantitative exploratory research that used planned behaviour theory to predict inclusive entrepreneurial intention, including the three antecedents, namely attitude, subjective norms and perceived planned behaviour.

2. Literature review

2.1. Financial inclusion and inclusive entrepreneurship

Financial inclusion is seen as a driver of economic development. The definition of the concept of financial inclusion has taken several different versions. We quote the World Bank who defined it as the possibility for individuals and companies to access at lower cost a whole range of useful financial products and services adapted to their needs (transactions, payments, savings, credit and insurance) offered by reliable and responsible providers (The World Bank, 2018).

Financial inclusion is seen as a driver of poverty reduction, by helping people to start up activities generating income in order of shrink the unemployment rate (Akileng, 2018). Š. Jia et al 2021 showed that inclusive finance is about providing appropriate and effective financial services to all social strata and groups in need of financial services at an affordable cost. Kling et al 2022 found that inclusive finance worsens income inequality, while low-income
households would benefit from inclusive finance. Mushtaq & Bruneau (2019) used data from 62 countries to highlight that the availability and effectiveness of inclusive finance financing can help rural residents increase their incomes. Coulibaly and Yogo (2020) found in their research on developing countries that increasing the number of bank branches can effectively reduce the number of workers at the poverty line.

The 2021 G7 Šummit identified four key features of inclusive entrepreneurship. First, it requires deliberate engagement from below the pyramid (BOP). Targeting the 4.5 billion people who live on less than $8 a day, inclusive trade must consciously and sustainably include them in its activities. Their entry into the production chain provides them with a stable income, training and related goods and services. Second, financial viability, the ability of the inclusive company to be profitable and remain competitive in the long term, must be sought. Moreover, it requires commercial development, which translates into changes of scale. It is a vastly undervalued market, with many opportunities that inclusive businesses seek to digitise to seize. Finally, measuring and managing the balance-of-payments impact is necessary to facilitate these dynamics between markets and participants. With the help of assessment tools, inclusive businesses can maximise positive changes and correct negative impacts, and they can adjust their models and processes.

Entrepreneurship can be inclusive if the consideration of a unified and unique whole is used to employ innovative methods that create values from a social, societal, economic, technological and ecological point of view. Entrepreneurship is a tool to create new businesses (Dees, JG (2001)), to identify market needs and opportunities (Hatten, TŠ (2009)), to describe economic activities undertaken by individuals (McKenzie, BB (2002)). According to the study of Berkowitz, H. (2018), exclusivity in innovation should be recognised and practised by businessmen to ensure the sustainability of the economy. Inclusive entrepreneurship refers to the participation of under-represented groups in entrepreneurship to help them overcome social and economic challenges (Pilkova’, A., et al (2016). Essougong et al (2019) consider that a key feature of inclusive entrepreneurship is the achievement of equal opportunities. Inclusive entrepreneurial opportunities are different from entrepreneurial opportunities in the general sense. Opportunities emerge in specific areas and are strongly influenced by contextual factors, such as the regional cluster environment and government. Previous research has claimed that inclusive entrepreneurship supports the incorporation of the BoP group (base of the pyramid) and is able to reduce poverty (Prahalad, CK & Ramaswamy, V. (2004). “Inclusive business involves creating development impacts using economically viable business models that lead to positive ecological impacts in the short and long term” Wach, E. (2012). From a development perspective, inclusive business model, low-income populations can provide markets, labour and small producers can strengthen the supply chain for enterprises” UNDP, (2010).

Therefore, engaging the poor as producers, distributors, suppliers, or consumers triggers the realisation of socioeconomic value as well as livelihood opportunities for BoP communities in a commercially viable way. Most inclusive business models in the participating communities focus on the inclusion of BoP as employees, producers, business owners and/or consumers of affordable goods and services (Naguib, J., et al (2013). Inclusive entrepreneurship aims to ensure that everyone has equal opportunities to create and run a sustainable business, regardless of their social group, personal characteristics or background (Blackburn et al., 2018). Inclusive entrepreneurship initiatives target groups that lack equitable representation.
in the entrepreneurial ecosystem, face many more barriers to starting a business or accessing self-employment opportunities. These groups typically include women, youth, immigrants and ethnic minority groups, the unemployed, the elderly and people with disabilities. According to Fraisse et al 2017, inclusive entrepreneurship refers to the creation of enterprises that actively and fairly integrate people who are often excluded from the labour market, such as people with disabilities, people from disadvantaged backgrounds, women, ethnic minorities, etc. It aims to promote the autonomy and social inclusion of these individuals by offering them opportunities to undertake and develop their own economic activities.

Inclusive entrepreneurship policies aim to ensure that people of all backgrounds and personal characteristics have an equal opportunity to start and run their own businesses. Policymakers at the national, regional, and local levels can support this goal with programmes that raise awareness and motivate all segments of the population. Thus, pursuing entrepreneurship as a career path can address the market and institutional flaws which affect some people more than others.

Ajide (2020) used a sample of 13 African countries to demonstrate how financial inclusion can foster entrepreneurship development. Financial inclusion can foster entrepreneurial activity through a variety of channels, including reducing start-up costs for those who are not self-financing, enabling established companies to take advantage of expansion opportunities and providing them with greater capacity to innovate. Kolome (2021) argued that financial inclusion has the same beneficial effect on the level of entrepreneurial intention among young people, while noting three main barriers to financial inclusion for young people: the cost of financial services, lack of money, and the perception that financial services such as saving are not a necessity. Wang and Tan (2017) highlighted the positive impact of financial inclusion on farmers’ entrepreneurial development. The conclusions of Fareed et al. (2017) from a study conducted in Mexico suggest that financial inclusion is positively linked to entrepreneurship and can create economic opportunities for women entrepreneurs.

2.2. The importance of financial inclusion for women

Among the challenges related to financial inclusion in women’s entrepreneurship is the lack of understanding of how individuals manage their finances, leading women to access formal financial services and choose the best services for their businesses. Formal financial institutions cannot easily lend to women because most of their businesses are poorly capitalised, unknown, and tend to operate from home. Lack of sufficient managerial experience, less time spent in business, and less commercial orientation limit women’s economic income relative to men in business, regardless of their level of education.

Women’s access to secure personal (private) savings accounts can foster economic resilience and give them greater control over their economic resources, including those with less decision-making power within the household (Karlan et al. 2016). Financial tools have the potential to empower women in the household to make decisions and have greater control over resource allocation (Karlan et al. 2016).

Unfettered access to the formal financial system can lead to greater asset ownership, wealth creation, and women’s economic empowerment. Reform of the inclusive financial system will lead to an efficient economy with greater financial inclusion for women (Bayero, 2015). The barriers women face in accessing formal financial services demonstrate the need to develop
innovative models that engage women and protect their privacy while improving financial literacy is having the knowledge, skills and self-confidence to make responsible financial decisions.

KedeNdouna and Zogning (2022) analysed the effect of access to financial products on reducing income inequality between men and women working in the informal sector in Cameroon. Women’s financial inclusion can translate into better outcomes for children, household nutrition and the wider community. Digital provision of cash transfers to women through mobile money has improved food diversity compared to traditional cash distribution and girls living in poor households with female pension recipients have demonstrated better nutrition than those who had only male recipients (Duflo2003).

2.3. Entrepreneurship for ex-prisoners

When people are affected by the justice system, they find it harder and harder to find a job. They are usually relegated to lower-quality jobs. Individuals with a criminal history are punished by 10 to 30% for loss of earnings (Wright, 2013) and are often classified in jobs with high turnover, poor working conditions, irregular hours and lower wage growth (Harding, Morenoff and Wyse, 2019; Western, 2002; Bushway, 1998). Hwang and Phillips (2020) theories and empirically test employment barriers as a key mechanism that pushes citizens back to entrepreneurship, taking into account differences at the individual level. The study uses geographic differences in the severity of employer discrimination against people with criminal records - as evidenced by the implementation of the unfair practices prohibition policy - to show that former detainees are more likely to become independent business owners as the severity of discrimination in the labor market increases. Scientific research on this topic shows that the main factors behind these negative employment outcomes are that criminal histories expose those affected by the justice system to employer discrimination. Employers view criminal records as “negative credentials”, reflecting low worker quality, lack of trust and lack of honesty. Moreover, these barriers to labor market integration, entrepreneurship is another way to find work and income for those affected by the justice system. Hwang and Phillips (2020) find that while the income gap between formerly incarcerated and never-incarcerated entrepreneurs is significantly reduced, formerly incarcerated entrepreneurs still earn 6.1% less per year than never-incarcerated entrepreneurs.

Entrepreneurship has helped other marginalized groups in the market overcome poverty and achieve economic and social mobility. This suggests that entrepreneurship could provide a legitimate pathway for those affected by justice to obtain employment and successfully re-enter the labor market, particularly in the context of limited and viable labor market opportunities (Baskaran 2019; Hwang and Phillips 2020). The positive outcomes of entrepreneurship for those affected by justice, in terms of income, economic mobility and recidivism, advance entrepreneurship as an attractive way forward for this population. Yet, the opportunities to become a successful entrepreneur are not evenly distributed across population groups. Factors that are critical to the success of starting and sustaining a business, such as financial, human, social or cultural capital, are disproportionately accessible to those who already have an advantage and create barriers to entrepreneurship for those who do not (Kim, Aldrich and Keister, 2006). The researchers also hypothesized that disadvantaged and marginalized groups in employment generally face barriers to accessing these necessary resources, which also leads to marginalization of entrepreneurship (The´baud and Šharkey,
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Therefore, it is imperative to address the potential barriers and challenges to entrepreneurship faced by those involved in justice, in order to assess the sustainability of entrepreneurship and define sound policy implications. Recent research shows that people with criminal records face significant barriers to entrepreneurship, in terms of financial challenges as well as lack of human or social capital (Barr 2015; Baskaran 2019). Women are less likely to become entrepreneurs, especially those who succeed, due to barriers to acquiring human capital, such as previous management or start-up experience (Jennings and Cash 2006); social capital, such as business networks (Renzulli et al., 2000); and financial capital, such as equity and debt financing by venture capitalists, angel investors and banks (Thebaud and Sharkey 2016). The lack of formal education can prevent those involved in justice from launching a successful business, especially in knowledge-based industries. Instead, individuals with criminal records have few opportunities to acquire essential business skills, such as economic knowledge, financial and accounting skills, and business planning skills needed to run a business in order to survive and grow (Baskaran 2019; Rieple 1998). Previous research reveals that work experience, particularly full-time work experience and management experience, is one of the most important components of human capital for entrepreneurs (Kim et al., 2006; Shane, 2003). Limited education and work experience, as well as time spent in prison, mean that those involved in the justice system often lack access to appropriate role models or business networks for peer support, investment and business opportunities (Barr 2015; Rieple 1998).

In addition to expanding reintegration training programs for aspiring entrepreneurs, organizations, together with government agencies and program partners, must all respond to the unique needs and challenges of the justice-affected population (The Council of State Governments, 2005). In addition to the ongoing challenges faced by disadvantaged populations, returning citizens often face challenges in the areas of health care, housing, transportation, substance abuse and childcare. The best entrepreneurship training programs are likely to be those that also offer comprehensive services to ensure successful reintegration.

2.4. Planned Behavior Theory

TPB is an intention/behavior model that has been widely used in entrepreneurship surveys, in which the effectiveness and ability to envision entrepreneurial intention have already been demonstrated in several studies on entrepreneurship (see Karimi et al. (2016)). Ajzen’s (1991) model sheds light on how the social and cultural environment disrupts human behavior. According to this model, the intentions of the individual are the result of three determinants: personal attitude, perceived behavioral control and social norms. Attitudes to behavior are thought about: to what extent does someone prefer a certain behavior or conduct, or vice versa? Meanwhile, perceived behavioral control can be defined as the self-perception of one’s own competence or ability to adopt the behavior. Subjective norms are socially anticipated demands or pressures for behavior. Behavioral, normative and control beliefs would underpin entrepreneurial intention (Ajzen 2012)

In the context of entrepreneurship, entrepreneurial intention can be considered a “self-recognized belief” by any individual wishing to start a new business, becoming a crucial element in understanding the process of starting a new business (Farrukh et al. 2018; Ridha
et al. 2017). Entrepreneurial intention can also be understood as a mindset that leads an individual to choose his or her job rather than work for others (Karimi et al. 2016). However, the determinants of inclusive entrepreneurial behavior and intention remain to be explored. Therefore, this research applies the theory of planned behavior TPB (Ajzen, I. (1991)), to shape the behavioral intention of being an inclusive entrepreneur and test the variables that predict this intention. According to Bird, B. (1988), entrepreneurial intention is a conscious state of the mind before actions that direct attention to specific objects. In addition, Thompson, ER (2009) stated that entrepreneurial intention is when a person has a self-proclaimed conviction of consciously planning to start a new business. Inclusive entrepreneurial intention is a dependent variable in this research and refers to entrepreneurial intention in order to produce inclusive innovative products or services that unleash their innovation and creativity towards a self-efficient economy and benefit society.

Personal attitude is linked to the individual’s appreciation of a certain behavior or an action described as beneficial, indicating a favorable or unfavorable personal assessment of the intention to become an entrepreneur (Ajzen 1991). Several studies (Fayolle et al. 2014; Ruiz-Rosa et al. 2020) have found a positive relationship between personal attitude and the entrepreneurial intention of the individual. Perceived behavioral control characterizes the tendency to perform and the perceived probability of exhibiting a particular behavior explained as the self-efficacy of the individual (Krueger and Carsrud 1993). This is revealed in the greater or lesser difficulty that an individual feel in performing an action, linked to the ability to control his behavior (Ruiz-Rosa et al. 2020). It is considered that the self-perception of an individual’s ability to perform a certain action will significantly influence the intention to perform such an action, which can result in a positive relationship between the perceived behavioral control and the entrepreneurial intention of the individual (Linan and Chen 2009; Ruiz-Rosa et al. 2020). Social norms refer to community pressure exerted by individuals’ opinions on the projected behavior, based on anticipation of support from other important people (Lortie et al. 2017). In addition, it refers to the perception that “reference persons” may or may not approve the individual’s decision to become an entrepreneur (Ajzen 2002).

Some authors consider it reasonable to assume a positive relationship between this variable and entrepreneurial intention because they understand that entrepreneurs are affected by feedback from people related to their contiguous environment and related to their entrepreneurial intentions (Ruiz-Rosa et al. 2020). However, according to Linan and Chen 2009, the study did not find a meaningful relationship between social norms and individuals’ entrepreneurial intention.

The investigation of Wang and Wong (2004) concluded that gender, experience, and education levels are significant factors in explaining people’s entrepreneurial intentions. According to Ferry et al. (2018) generally, women face gender-related barriers to gaining trust and resources in the business world. This is not because of a lack of skills, but for reasons related to their personal and professional lives, such as difficulty in obtaining loans and less capital to invest.

A detailed analysis of TPB factors reveals that the study by Karimi et al. (2013) shows that men are motivated by instrumental factors (since personal attitude is very important for men), while women are more motivated by social factors (social norms are important for women).
In this study, perceived behavioral control was the most important factor in predicting entrepreneurial intentions of both sexes.

Several studies have shown that personal attitude is positively linked to entrepreneurial intentions, both among women (Ferri et al. 2018) and men (Karimi et al. 2013). The perceived behavioral control factor also has a positive effect on women’s entrepreneurial intentions, as it explains that they will translate their intentions into actions (Ferri et al. 2018). Yang’s study (2013) found that, compared to men, women are negatively correlated with personal attitude, perceived behavioral control, and social norms.

Regarding social norms, and since the role of women in entrepreneurial intentions is inconclusive, Linán and Chen (2009) proposed that social norms exert their influence on entrepreneurial intentions through personal attitude and perceived behavioral control. Maes et al. (2014) also verified that social norms indirectly influence the entrepreneurial behavior of individuals, through personal attitude and perceived behavioral control. The study of these authors showed that women are less attracted to entrepreneurial careers and consider themselves less suited to entrepreneurship, concluding that the mediating role of personal attitude and perceived behavioral control factors may explain the fact that women have fewer entrepreneurial intentions than men.

So the hypotheses that we can extract from what we have presented are the following:

- **H1a**: Attitudes have a significant effect on Inclusive Entrepreneurial Intention
- **H1b**: Subjective standards have a significant effect on Inclusive Entrepreneurial Intention
- **H1c**: Perceived Control behaviors have a significant effect on inclusive entrepreneurial intention
- **H2**: Ex-prisoner women have a significant impact on Inclusive Entrepreneurial Intention
- **H3a**: Ex-prisoner women and behavioral attitude have both a significant effect on inclusive entrepreneurial intention
- **H3b**: Ex-prisoner women and the subjective norms have both a significant effect on inclusive entrepreneurial intention
- **H3c**: Ex-prisoner women and perceived perceptions of control have a significant effect on inclusive entrepreneurial intention
3. Methodology

3.1. Research Questions

This study demonstrates the predictability of planned behavior theory to fill existing gaps to better understand ex-prisoner women’s intention to be inclusive entrepreneurs. Our research question is as follows: What are the key factors that influence inclusive entrepreneurial intention among women ex-prisoners? We try to answer this question in order to have a better understanding and a profound knowledge of the phenomenon.

3.2. Purpose of the Study

Faced with the problems of income inequality, poverty, unemployment and discrimination of women ex-prisoners as being unconventional entrepreneurs, this study aims to show that the main solution is to promote inclusive entrepreneurship. Indeed, the inclusive entrepreneur is anyone capable of creating inclusive and innovative goods and services.

3.3. Theoretical framework

This research aims to examine inclusive entrepreneurial intention among female ex-prisoners, using planned behavior theory to explore the determinants that influence the aforementioned dependent variable.

The independent variable which is female ex-prisoners influences the dependent variable (the inclusive entrepreneurial intention) and it is explained by 7 items. Inclusive entrepreneurial intentions for ex-prisoners can help create equitable opportunities for people with criminal backgrounds by offering them ways to become successful. The items are as follows: equitable access to finance, human and social capital, training and skills development, awareness and stigma reduction and the creation of a community support network. There are several studies that explain the items of women ex-prisoners. In fact, women are less likely to become entrepreneurs, especially successful ones, due to barriers to acquiring human capital, such as previous management or start-up experience (Jennings and Cash 2006); social capital, such as...
business networks (Renzulli et al., 2000); and financial capital, such as equity and debt financing by venture capitalists, angel investors and banks (The`baud and Sharkey 2016). Racial minorities are also underrepresented in entrepreneurship due to marginalization and discrimination in the entrepreneurial process and particularly access to wealth (Fairlie and Robb 2007; Lofstrom et al. 2014). While the three antecedents of Ajzen’s (1991) theory of planned behavior namely attitude 6 items, subjective norms 4 items and perceived behavior control items are proposed moderating variables which are commonly used to predict behavioral intention.

Inclusive entrepreneurial intention refers to the entrepreneurial intention of female ex-prisoners to produce inclusive innovative products or services to unleash their innovation, creativity, achieve a self-efficient economy and benefit society. According to Oiseau, B. (1988), entrepreneurial intention is a conscious state of mind that focuses attention on a specific object before acting. Thompson, E.R. (2009) asserts that entrepreneurial intention refers to a person having a recognized belief with a conscious plan to start a new business.

3.4. Data Collection

This study aims to study the marginalized population of ex-prisoner women. We opted for a quantitative approach in order to validate our conceptual model by administering a questionnaire. We took a population of 100 women ex-prisoners in Tunisia and an age range that varies between 20 and 50 years. We used a questionnaire with 5-point Likert scales: Not everyone agrees until they completely agree. A Likert scale or a respondent must position themselves. According to Florence (1988), the scales of Likert are easier to manipulate for the respondent than the scales of the semantic different type of Os.

3.5. Results Found

The KMO index: According to Evard and al. (2003), this index is used to indicate to what extent the set of selected elements is a coherent set. In other words, to what extent the elements explain the construction. It is an index which is judged when it has a value equal to 0.9 and average when the value is 0.7 and unacceptable when it is less than 0.5. A high KMO indicates that there is a statistically acceptable factor solution that represents the relationships between the variables.

Bartlett’s sphericity test: According to Evard et al. (2003), this test validates the use of PCR and it tests the null hypothesis of sphericity of the data. That is to say, the correlation matrix is a unitary matrix (matrix in which all the terms of the diagonals are equal to 1 and all the others to 0). A result that rejects the null hypothesis at a significance level of 0.05 indicates that the correlations are different from zero because the variables are correlated and their factorization is appropriate.

Cronbach’s alpha is a reliability test developed by Cronbach (1951) and used to measure the internal consistency of a set of dichotomous or scale questions in a survey. In other words, the Cronbach alpha coefficient tells us how much the scale elements vary together as a group. Cronbach’s alpha is most likely the first analysis you’ll do to test whether your questionnaire’s scale elements are intercorrelated. Cronbach’s alpha is used to calculate the reliability coefficients of survey instruments that use Likert response sets. The Cronbach alpha coefficient ranges from 0 to 1.0 with higher values indicating increased reliability. The criterion
of an acceptable Cronbach alpha coefficient is discussed in the literature, but to be cautious, any alpha coefficient less than 0.75 is a cause for concern.

4. Analysis of results

Multiple regression analysis was used to test the proposed hypotheses. If the value of beta has a p-value less than 0.05, there are significant and therefore accepted relationships.

Table 1. Reliability and validity source SPSS

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Beta</th>
<th>R2</th>
<th>Standard Deviation</th>
<th>T Statistics</th>
<th>P-values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Att → IEI</td>
<td>0.988</td>
<td>0.977</td>
<td>0.023</td>
<td>14.373</td>
<td>0.00</td>
</tr>
<tr>
<td>SN → IEI</td>
<td>0.987</td>
<td>0.974</td>
<td>0.027</td>
<td>12.079</td>
<td>0.00</td>
</tr>
<tr>
<td>PBC → IEI</td>
<td>0.977</td>
<td>0.954</td>
<td>0.047</td>
<td>7.079</td>
<td>0.00</td>
</tr>
<tr>
<td>FP → IEI</td>
<td>-0.969</td>
<td>0.938</td>
<td>0.062</td>
<td>9.599</td>
<td>0.00</td>
</tr>
<tr>
<td>Att * FP * IEI → IEI</td>
<td>0.476</td>
<td>0.978</td>
<td>0.023</td>
<td>4.752</td>
<td>0.00</td>
</tr>
<tr>
<td>SN * FP * IEI → IEI</td>
<td>0.316</td>
<td>0.982</td>
<td>0.020</td>
<td>3.170</td>
<td>0.002</td>
</tr>
<tr>
<td>PBC * FP * IEI → IEI</td>
<td>0.204</td>
<td>0.980</td>
<td>0.018</td>
<td>3.209</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Source SPSS

These indicators are used to assess the reliability and validity of the measurement scales used in the research. A high value of the Cronbach Alpha indicates good internal consistency of the items of the scale. The values indicated here indicate that the items used to measure the variables are strongly correlated with each other, which is considered to be a good reliability. This suggests that the results obtained from these variables are reliable. The KMO index is used to evaluate the adequacy of data for a factor analysis, and a high value indicates that the data are appropriate for that analysis. The Barlette test is also used to evaluate the adequacy of the data for a factor analysis, and a value close to zero indicates a good adequacy so there is a significant correlation between the variables measured. Finally, the ETA measures the extracted mean variance, which is an indicator of the convergent validity of the scale.

Overall, the scales appear to have good reliability and validity, which enhances the robustness of the research study results. However, it is important to take into account other methodological and contextual factors to fully interpret the results of the study.

Table 2. Trajectory coefficients Source SPSS

<table>
<thead>
<tr>
<th>Scale</th>
<th>Alpha Cronbach</th>
<th>Items</th>
<th>KMO</th>
<th>Barrel</th>
<th>ETA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusive Entrepreneurial Intention</td>
<td>0.886</td>
<td>7</td>
<td>0.75</td>
<td>0.00</td>
<td>4.735</td>
</tr>
<tr>
<td>Female prisoners</td>
<td>0.875</td>
<td>7</td>
<td>0.854</td>
<td>0.00</td>
<td>4.494</td>
</tr>
<tr>
<td>Attitude</td>
<td>0.839</td>
<td>6</td>
<td>0.651</td>
<td>0.00</td>
<td>3.759</td>
</tr>
<tr>
<td>Subjective norm</td>
<td>0.795</td>
<td>4</td>
<td>0.697</td>
<td>0.00</td>
<td>2.847</td>
</tr>
<tr>
<td>Perceived Behavior Control</td>
<td>0.806</td>
<td>4</td>
<td>0.821</td>
<td>0.00</td>
<td>2.929</td>
</tr>
</tbody>
</table>

These Path coefficients refer to the results of a regression analysis that assesses the relationships between different variables in our study. The main indicators for each hypothesis tested are in the table above. The results are strongly correlated for the direct relationships of attitudes, subjective norms and perceived behavioral control with a p 0.000 where all hypotheses are significant.

The results show that the attitude explains beta of 0.988 of the inclusive entrepreneurial intention of women ex-prisoners in Tunisia, which indicates a strong positive relationship between the two variables. In comparison with research that has studied the attitude towards
entrepreneurship in general, the result is consistent with La Barbera and Ajzen (2020) and Ambad and Damit (2016). A woman’s attitude, or degree of favor in helping and supporting these groups to have a better life, is an important factor that influences the intention to serve them with inclusive goods or services. This is an internal decision to be made. This explains the significant relationship between Inclusive Entrepreneurial Attitude and Intention. This suggests that ex-prisoner women have a positive attitude towards inclusive entrepreneurship more than they are likely to intend to engage in inclusive entrepreneurial practices.

SPSS results indicate a strong positive correlation between subjective norms and inclusive entrepreneurial intention with a beta coefficient of 0.987. This correlation is statistically significant with a p-value of 0.000. These results therefore suggest that subjective norms are the beliefs and expectations of individuals in their social environment can play an important role in the formation of inclusive entrepreneurial intention. These findings may have implications for promoting inclusive entrepreneurship by focusing on creating a supportive social environment and positive norms around this form of entrepreneurship. The results are consistent with the work of Zakaria, et al. 2023, Šadgui et al. (2016) and Kolvereid (1996) who affirm the significant impact of subjective norms on entrepreneurial intentions. We align ourselves with the model of Ajzen’s theory of planned behavior where social norms act directly on intention. Women ex-prisoners with inclusive entrepreneurial intention perceive social norms favorable to inclusive entrepreneurship, which reinforces their intention.

Perceived behavioral control explains beta of 0.977 and p 0.000 of the inclusive entrepreneurial intention of female ex-prisoners in Tunisia. The result is consistent with previous studies that used TPB, namely La Barbera and Ajzen (2020), Ambad and Damit (2016), Aloulou (2016), and Malebana (2014). The importance of this relationship refers to the degree of support received from the community and external groups, which is essential in creating the intention to be an inclusive entrepreneur. Indeed, women ex-prisoners will not be able to work alone to help an entire community or a marginalized group if support has not been provided. This explains the significant relationship between perceived behavioral control and intention to be an inclusive female entrepreneur. Perceived behavioral control refers to the belief in one’s ability to perform a given behavior. Women ex-prisoners with an inclusive entrepreneurial intention have confidence in their entrepreneurial capacity, which motivates them to pursue this intention.

The results obtained where the high beta coefficient (0.969) indicates a positive and strong association between female ex-prisoners and their inclusive entrepreneurial intention. A significant value (p=0.000): A low p-value indicates a high probability that the relationship between female ex-prisoners and their inclusive entrepreneurial intention. In other words, there is a strong correlation between these two variables. The results suggest that there is a strong positive correlation between being a female ex-prisoner and inclusive entrepreneurial intention. This may indicate that women with prison experience are more inclined to develop inclusive businesses. This is consistent with studies showing that African-American or Hispanic people affected by justice and women are more likely to become self-directed business owners (Finlay et al., 2022; Hwang and Phillips, 2020), suggesting the intersectionality of justice, race, and gender involvement in entrepreneurial engagement. Finlay et al. (2022) reveal similar findings that around 24% of people with criminal records reported being independent business owners.
The trajectory coefficients (Beta) measure the strength and direction of the relationship between each independent variable and dependent variable (Inclusive Entrepreneurial Intention). The higher the absolute value of Beta, the greater the effect of the independent variable on the dependent variable. The values of R2 represent the proportion of the variance of the dependent variable explained by the independent variables. All P values are close to zero (0.00 or 0.002), indicating that the relationships between the variables are statistically significant.

Interaction between Attitude, Female Ex-Prisoners and Inclusive Entrepreneurial Intention towards Inclusive Entrepreneurial Intention gives the following results Beta: 0.476 and P-value: 0.00. This suggests that there is a significant relationship between these variables. The high T-statistic indicates a significant correlation between attitude, female ex-prisoner status and inclusive entrepreneurial intention, as indicated by the P value of zero (0.00). The results of this analysis suggest that there is a significant positive relationship between female ex-prisoners and inclusive entrepreneurial intention. Moreover, attitudes play an important role in moderating this relationship such that positive attitudes reinforce the effect of female ex-prisoners on their intention to create an inclusive business.

Interaction between Subjective Norms, Female Ex-Prisoners and Inclusive Entrepreneurial Intention towards Inclusive Entrepreneurial Intention give the following results: Beta: 0.316; P-value: 0.002. This suggests that there is a positive and significant relationship between these variables. The high T-statistic suggests a significant correlation between the interaction between subjective norms, female ex-prisoner status and inclusive entrepreneurial intention, as indicated by the low P value (0.002). We can conclude that female ex-prisoners have a significant influence on subjective norms which in turn have a very strong influence on inclusive entrepreneurial intention. This implies that women ex-prisoners perceive social norms favorable to inclusive entrepreneurship. They are more likely to intend to engage in inclusive entrepreneurial activities. These results highlight the importance of social norms and their influence on the entrepreneurial aspirations of female ex-prisoners. Subjective norms can play a crucial role in encouraging female ex-prisoners to engage in inclusive entrepreneurial activities that aim to promote social and economic inclusion.

Interaction between Control Perceived Behavior, Female Ex-Prisoners and Inclusive Entrepreneurial Intention towards Inclusive Entrepreneurial Intention give the following results: Beta: 0.204; T-stats: 3.209; P-value: 0.002. This suggests that there is a significant relationship between these variables. The high T-statistic suggests a significant correlation between the interaction between perceived behavioral control, female ex-prisoner status and inclusive entrepreneurial intention, as indicated by the low P-value (0.002). Female ex-prisoners have higher inclusive entrepreneurial intention than their counterparts who did not experience prison. In addition, women ex-prisoners with an inclusive entrepreneurial intention are likely to perceive a great deal of control over their behavior, which can potentially facilitate their entrepreneurial success. These results suggest that programs and initiatives aimed at supporting female ex-prisoners in their entrepreneurial journey could be beneficial in promoting the economic and social integration of this group.

Findings drawn from the analysis suggest that attitudes, subjective norms and perceived behavioral control have a significant and positive influence on inclusive entrepreneurial
intention. Moreover, it was observed that the interactions between attitude, subjective norms, perceived control of behavior and female prisoner status also play a crucial role in predicting inclusive entrepreneurial. These discoveries contribute significantly to our overall understanding of the factors that motivate and influence entrepreneurship in an inclusive way. These findings underscore the importance of these variables in the context of inclusive entrepreneurship and offer valuable perspectives for policy-makers and researchers interested in supporting and promoting a diverse and inclusive entrepreneurial intention.

5. Interpretation of results

5.1 Summary of research hypotheses and discussion of results

H1a: Attitudes have a significant effect on Inclusive Entrepreneurial Intention: Confirmed

H1b: Subjective standards have a significant effect on Inclusive Entrepreneurial Intention: Confirmed

H1c: Perceived Control behaviors have a significant effect on inclusive entrepreneurial intention: Confirmed

H2: Women prisoners have a significant impact on Inclusive Entrepreneurial Intention: Confirmed

H3a: Female prisoners and behavioral attitudes have a significant effect on inclusive entrepreneurial intention: Confirmed

H3b: Women who are prisoners and subjective norms have a significant effect on inclusive entrepreneurial intention: Confirmed

H3c: Women who are prisoners and perceived control have a significant effect on inclusive entrepreneurial intention: Confirmed

According to the theory of Ajzen, 1991, these three factors are supposed to be the main predictors of behavioral intention. In the business context, a positive attitude towards entrepreneurship, a favorable social pressure (subjective norms) and belief in one’s own ability to succeed (perceived control) are often associated with strong entrepreneurial intention (Krueger et al., 2000). The results confirm the significant influence of attitudes, subjective norms and perceived control on inclusive entrepreneurial intention. This is consistent with plan behavior theory, which suggests that these three elements are key predictors of inclusive entrepreneurial intention. The results show that attitudes have a significant effect on inclusive entrepreneurial intention. This suggests that former prisoners who have a favorable view of entrepreneurship are more likely want to become entrepreneurs. Moreover, the confirmation of the effect of subjective norms indicates that social pressure or the opinion of important people (family, friends) can influence the decision of former prisoners to pursue a commercial career. Former prisoners who believe that they have the skills and resources to succeed as entrepreneurs have higher entrepreneurial intention, as the results suggest. In the literature, Ajzen’s theory has been widely used to study entrepreneurial intention. Its application to ex-convict women is novel, but the results are consistent with other studies that have found positive links between attitudes, subjective norms, perceived control, and entrepreneurial
intention (Liñán & Chen, 2009). However, it is important to note that former prisoners may face unique challenges, such as stigma, which may influence their perception of control. Previous studies have shown that social and cultural barriers can influence entrepreneurial intention (Maes et al., 2014). It is particularly interesting that the reclusive condition significantly influences inclusive entrepreneurial intention. This could suggest that entrepreneurship is seen as a potential means of rehabilitation and reintegration for these women, who often face multiple challenges as they seek to reintegrate into society (Smith & Tang, 2012). These results display that not only the status of recluse has an impact, but also this status combined with favorable attitudes, norms and perceptions amplifies entrepreneurial intention. This highlights the importance of cultivating positive attitudes and an enabling environment to encourage entrepreneurship among female prisoners (Jones et al., 2015). Regarding the impact of inmates on entrepreneurial intention, few studies have focused on this specific group. However, previous research has highlighted the reintegration challenges faced by ex-offenders and how entrepreneurship can provide opportunities for rehabilitation (Deakins et al., 2000). Inclusive entrepreneurship approaches aim to harness the entrepreneurial potential of people who are often overlooked or marginalized by traditional approaches (Dacin et al., 2011). Ex-prisoners often face additional barriers when reentering, such as stigma, discrimination in the job market or lack of job skills (Hackett, 2014). These challenges can include stigma from their past, difficulty accessing financial resources, and lack of a professional network (Larson & Bell, 2013). Entrepreneurship can offer an alternative to traditional employment, allowing flexibility and independence. As with other groups, factors such as social support, access to resources and training play a crucial role (Smith and Tang, 2012). Self-confidence and the perception of control may also be key in encouraging these women to consider entrepreneurship as a viable option. Entrepreneurship has often been identified as a vector of rehabilitation for prisoners, allowing them to acquire essential skills and a new outlook on life. The focus on inclusive entrepreneurship provides an avenue for ex-prisoners, an often marginalized group, to find new direction and meaning in post-incarceration society (Bosma and Harding, 2007). Programs and initiatives that require a positive view of entrepreneurship can increase this intention (Minniti & Nardone, 2007).

5.2. Discussion

This quantitative study probed and tested the inclusive entrepreneurial intention of 100 Tunisian female ex-prisoners. The theory of planned behavior was used to better understand and explore the mentioned intention. The results obtained answered the research questions namely the significant relationships between attitude and perceived behavioral control, as well as the significant relationship of the subjective norm towards inclusive entrepreneurial intention.

Based on adjustment theory (Ajzen) which is a model explaining how attitudes, social norms and perceived control influence behavior. In this context, it suggests that female ex-prisoners with inclusive entrepreneurial intention have positive attitudes towards inclusive entrepreneurship, perceive favorable social norms, and have confidence in their entrepreneurial ability.

This research demonstrates that ex-prisoners often have a strong motivation to succeed as entrepreneurs, mainly due to the difficulties encountered in finding a job after their release. Entrepreneurship offers an opportunity for financial autonomy, social reintegration and the
construction of a positive identity. In addition, it allows women ex-prisoners to use their skills and experience acquired in detention.

However, substantial challenges persist for female ex-prisoners who wish to become entrepreneurs. Factors such as limited entrepreneurial skills, lack of financial resources, lack of professional networks and social stigma limit their chances of success. Our research therefore highlights the need for training and assistance programs for ex-convict entrepreneurs, as well as measures aimed at breaking society’s prejudices against them.

In sum, scientific research on entrepreneurial intention including ex-prisoner women highlights the importance of supporting their reintegration into society through entrepreneurship. It highlights the challenges they face, but also their potential and motivation to succeed. These findings point to the need for inclusive policies and programs that foster entrepreneurship among ex-prisoners, in order to turn their negative experience into positive opportunities for themselves and for society as a whole.

In conclusion, inclusive entrepreneurial intention among female ex-prisoners highlights the untapped potential of this marginalized population to become successful entrepreneurs and highlights the importance of supporting and fostering their reintegration into society through entrepreneurship. Despite the challenges they face, such as limited skills, lack of financial resources, and societal prejudices, ex-convicts show strong motivation and a drive to succeed as entrepreneurs. Hence, inclusive policies and programs by governments to support the entrepreneurial intention of women ex-prisoners are indispensable. The prison entrepreneurship program has a positive and significant effect on increasing inmates’ self-efficacy and entrepreneurial resilience, which ultimately encourages the emergence of entrepreneurial intentions. It is essential to put in place initiatives that promote their social and professional reintegration, breaking down stereotypes and combating the discrimination to which they are subjected.

Like any research work, this study has limitations. Indeed, the number of respondents to the questionnaires is low. We considered a marginalized population of only 100 women where the results are always verifiable.

Furthermore, this research used the theory of planned behavior to explain inclusive entrepreneurial intention among female ex-prisoners. Indeed, there are other theories to consider in order exploring inclusive entrepreneurship such as the diffusion of innovation.

Other topics can be addressed through more specific studies such as the integration of immigrants who constitute an important flow in society through social and inclusive entrepreneurship.

6. Conclusion

Tunisia, like other countries, faces challenges related to the reintegration of ex-prisoners into society. This article examines whether inclusive entrepreneurship could be an effective way to ease this transition, especially for ex-convict women. Our objectives consist on examining the impact of inclusive entrepreneurial intention and Ajzen’s theory on the reintegration prospects of female ex-prisoners in Tunisia. A qualitative study was conducted with former prisoners in Tunisia. A questionnaire was used to collect the data. The results reveal a positive relationship between inclusive entrepreneurial intention and Theory of Planned Behavior (TCP) (attitude, subjective norm, and perceived behavioral control) in ex-convict women.
Inclusive businesses targeting female ex-prisoners in Tunisia have significant potential as a means of reintegration. The socio-economic challenges faced by ex-prisoners, especially women, can be daunting, often resulting in recidivism or marginalization. By nurturing the entrepreneurial intentions of this population, we are not only giving them a lifeline to rebuild their lives, but we are also capitalizing on untapped economic potential.

Bibliography


Bakker, 2022 R.M. Bakker Businesses must focus on ability, not disability Financial Times, September 9 (2022) https://www.ft.com/content/5f46cb63-087e-46e0-b82f-f5b22724a8d1 retrieved 10-24-2022


Is the Inclusive Entrepreneurial Intention Among Women Ex-Prisoners a Perspective of Reintegration in Tunisia?


Finlay, K., M. Mueller-Smith et B. Street. 2022. La participation à la justice pénale, le travail indépendant et les obstacles dans les politiques publiques récentes. Manuscrit soumis pour publication.


Is the Inclusive Entrepreneurial Intention Among Women Ex-Prisoners a Perspective of Reintegration in Tunisia?


Naguib, J., Oppermann, A., & Rosendahl, C. (2013). Options de modèles commerciaux inclusifs pour le soutien par le biais de programmes PSD. Allemand Société pour Int. Coopération..


R.M. Bakker Businesses must focus on ability, not disability Financial Times, September 9 (2022)


Šadgui et al. (2016), L’impact des caractéristiques individuelles et contextuelles sur l’intention entrepreneuriale des étudiants : cas de l’Université Moulay Ismail de Meknès.


Is the Inclusive Entrepreneurial Intention Among Women Ex-Prisoners a Perspective of Reintegration in Tunisia?


Taber, 2012 L. Taber Bootstrapping it: growing number of ‘vetrepreneur’ programs help soldiers create start-ups Retrieved from New York Post (2012)


