Online Social Networks and Women’s Entrepreneurship: A Comparative Study between Iran and Hungary

Parisa Bouzari
Hungarian University of Agriculture and Life Sciences (MATE), Faculty of Economics and Social Sciences, Department of Supply Chain Management, Gödöllő, Hungary

Aidin Salamzadeh
University of Tehran, Faculty of Management, Department of Business Management, Tehran, Iran

Maryam Soleimani
Payame Noor University, Economics and Accounting, Department of Management, Tehran, Iran

Pejman Ebrahimi
Hungarian University of Agriculture and Life Sciences (MATE), Doctoral School of Economic and Regional Sciences, Gödöllő, Hungary

ABSTRACT

The present study aimed to investigate the effect of online social networks on women’s entrepreneurship in Hungary and Iran in a comparative study. The statistical population of the present study consists of women entrepreneurs active in the field of online businesses in Iran and Hungary. The questionnaire was distributed via online links on social networks (on the online business website,

1 E-mail: paaarrriiii.b@gmail.com
2 Corresponding author, e-mail: salamzadeh@ut.ac.ir
3 E-mail: M.soleimani@pnu.ac.ir
4 E-mail: Ebrahimi.Pejman@stud.uni-mate.hu
Twitter, Facebook, and Instagram), and respondents were asked to answer questions if they were women entrepreneurs. ANOVA test was used to examine the variable of online social networks on different platforms in Iran and Hungary. The results indicate that Facebook media in Hungary in women entrepreneurship is significantly different from other online social networks. Based on the data collected, more than 95% of women entrepreneurs in Hungary use Facebook. Conversely, in Iran, Instagram has a significant difference in women's entrepreneurship from other online social networks and is the most popular media in women's entrepreneurship. So that more than 92% of female respondents in Iran have a channel related to their online business in Instagram media. These important findings emphasize the importance and impact of social networks as entrepreneurial channels according to the atmosphere of each country.

**KEY WORDS:** Women’s entrepreneurship, Online social networks, Iran, Hungary, Comparative analysis

**Introduction**

Due to the importance of entrepreneurship in the economies both nationally and globally, it is the key driver of economic development and success (Roshandel-Arabatani et al., 2019). As of the early 2000s, women's entrepreneurship is believed to be the main source of innovation and development (Rosca, Agarwal, & Brem, 2020; Vučeković et al., 2021). The prevalence of men dominance in the business culture has led to a rising number of women entrepreneurs (Özsungur, 2019), which are thought to be a crucial asset for developing the global economy, playing a significant role in society (Kawamorita, Takahashi, & Demiryürek, 2020). The reason for the importance of women's entrepreneurship is that it is an employment route that part of women can probably furnish for themselves and, at the same time, open up the opportunity for other people as employers or employees (Bahramitash & Esfahani, 2016).

As of the start of 2020, the world has evidenced an unparalleled huge exogenic shocking event affecting society and economies worldwide to an extent unnoticed as of World War II (Kuckertz & Brändle, 2021). Alongside the terrific intimations on the health of people, COVID-19 has hitherto caused serious damage to the business sector and the general economic issues globally (Lazić, Jovanović, & Lazarević-Moravčević, 2021). Start-ups and minor initiatives, including women-directed businesses, account for the most susceptible actors in the economy (Koltai et al., 2020). Women-
possessed businesses are usually more susceptible to economic effects because they have less mean firm age and size, and their concentration is in the industrial sectors most strongly affected by blackouts in the economy (Manolova et al., 2020). Consequently, the COVID-19 pandemic has a negative impact on women-directed businesses (Koltai et al., 2020).

Throughout the COVID-19 spread, digitalization or digital transformation is helpful for firms in gaining and sustaining competitive advantages by the improvement of their organizational flexibility and resilience (Guo et al., 2020). The utilization of digital technological innovations in entrepreneurship, or digital entrepreneurship, has a major contribution to propelling innovation and the entrepreneurial activities of people, contemporary businesses, and government organizations (Leong, Tan, Tan, & Faisal, 2020). Information Technology has supplied wide-ranging opportunities for developing women. As such, women now adopt IT for various business-linked activities, including making letters, preparing a report, storing data, online translation and type tasks, programming, content production, sales, and marketing (Mivehchi, 2019). Accordingly, applying digital technological innovations throughout the COVID-19 outbreak is becoming of higher importance for women-directed businesses.

As announced by the Global Entrepreneurship Monitor (GEM) in 2020/2021, the National Entrepreneurship Context Index (NECI), which provides summaries of the mean state of an economy’s environment for entrepreneurship, is 4.0 for Iran, meaning the lower than the adequate status of entrepreneurial environments. Additionally, in Iran, a drop in the Total early-stage Entrepreneurial Activity (TEA) rate from 10.7% in 2019 to 8% in 2020 (Salamzadeh & Dana, 2021). Comparing TEA rates by women for 2019 and 2020 reveals that women’s entrepreneurship rates have dropped greater than males in the same period in Iran. From another viewpoint, based on statistics publicized by the OECD, Hungary indicators of female entrepreneurship display that the share of females self-employed in the industrial sector from 2018 to 2019 has altered from 4.6 to 5.5 %, and from 7.1 to 7.2 % in services.

Conducting comparative studies and considering the similarities and differences of diverse economies in the field of entrepreneurship can help to realize appropriate strategies to improve the entrepreneurial situation in countries. Given the importance of women’s entrepreneurship for the economic development of countries and the need to strengthen it in the context of the Covid-19 crisis, as well as the potential and unique capacities
of digital technologies to improve women’s entrepreneurship, this study aimed to investigate the effect of online media on women’s entrepreneurship in Iran and Hungary and the comparison of these two countries from this perspective. Accordingly, the main question of this research is:

**RQ:** How online social networks can affect women’s entrepreneurship in Iran and Hungary?

**Literature Review**

Entrepreneurship is believed to be the key driver to develop any growing economy (Mathew, 2010). Females’ entrepreneurship was introduced into academic issues in the early 1980s (Pettersson et al., 2017). According to investigations on females’ entrepreneurship, the number of females' entrepreneurs is very variable worldwide (Gimenez-Jimenez, Calabrò, & Urbano, 2020). Throughout the past decade, employment opportunities have been provided for females worldwide more than ever formerly, breaking numerous rules and changing the restrictions forced on these people (De Silva et al., 2021). Females' entrepreneurship is under the management and influence of the psychological, social, economic, physical, technical, and legal environments (Özsungur, 2019).

As an exclusive entrepreneurial atmosphere, the digital environment has been represented in public media in recent years (Dy, Marlow, & Martin, 2017; Bradić-Martinović, Zdravković, & Mišić, 2020). The diverse types of digital media, including social media, mobile applications, and web-based services, have established a background for entrepreneurial undertakings of people, novel ventures, and conventional businesses for the delivery of the value proposition to current and novel customers (Ebrahimii et al., 2019).

An increasing number of entrepreneurs are nowadays accepting social media, including Facebook, Instagram, and Twitter, for more competitiveness of their businesses since these media can present more tools for entrepreneurs to expand social interplays and sustain those relations (Redd & Wu, 2020). A digital entrepreneur is a person who is involved in creating and delivering main business undertakings and tasks, including production, marketing, distribution, and stakeholder management, using information and communication technologies (ICTs) (Ngoasong, 2018). The application of social media and other digital means is crucial for
underprivileged groups, including females, who are considered low-status people who receive restricted resources (Kawamorita et al., 2020).

Assumedly, digital entrepreneurship facilitates the involvement of marginalized groups (e.g. females), as online platforms are engaged in developing and implementing their own social and contractual frameworks that are oftentimes self-reliant (McAdam, Crowley, & Harrison, 2019). The influence of digital technological innovations on females' entrepreneurship has been scrutinized in previous research. Social media and entrepreneurial opportunity for female entrepreneurs has been shown to be related in the urban areas of Bangladesh (Hossain & Rahman, 2018). In emerging economies, primarily Kenya, Indonesia, Nigeria, Egypt, and South Africa, social media are claimed to provide novel opportunities for women entrepreneurs, encouraging the generation of novel businesses directed by women, owing to their flexibility and characteristics (Cesaroni, Demartini, & Paoloni, 2017).

The wide application of ICT to assist the entrepreneur to create an advantage, research, partake in the worldwide business for transferring technology, training, collaboration, and development initiatives at the global level has been emphasized in a previous study (Mathew, 2010). In another study (Ameen & Willis, 2016), inaccessibility to ICTs was reported generally for Arab women and Arab women entrepreneurs particularly, and ICTs were claimed to effectively improve females’ entrepreneurship as they are helpful to overcome the majority of obstacles. Similar findings were observed for females in Indonesia (Setini et al., 2020). On the other hand, no significant role was found for digital technologies in improving females' entrepreneurship elsewhere (Dy et al., 2017).

The same authors reported that offline inequalities could be readily reproduced online, and digital technology could insufficiently surmount the resource restrictions encountered by immigrant females. In Iran, the contribution of digital technologies to females' entrepreneurship has been examined in some investigations (e.g. Bahramitash & Esfahani, 2016; Mivehchi, 2019). For example, it was found that Iranian women-possessed initiatives usually encounter certain challenging conditions to access some infrastructure services, in particular telecoms and the Internet (Bahramitash & Esfahani, 2016).

A study on the influence of IT on Iranian females’ entrepreneurship demonstrated that IT had a significant and critical contribution to both simplifying job accessibility and improving the marketing and sales of
products (Mivehchi, 2019). Of studies on females’ entrepreneurship, the below-mentioned surveys are some examples in Hungary. A recent examination (Primecz, 2021) on the contribution of social enterprise to females' life improvement in Hungary has shown that an award-winning and famous social enterprise in Hungary can only slightly impact the social state of females. In other investigations (Siničáková, 2011; Salamzadeh, Yadolah Farsi, & Salamzadeh, 2013; Holienka, Jančovičová, & Kovačičová, 2016), the motivators of females' engagement in early-stage entrepreneurial undertakings were studied in Visegrad countries (i.e. Czech Republic, Hungary, Slovakia, and Poland), discussing the dissimilarities among the mentioned countries. Elsewhere (Ribes-Giner et al., 2018), the combined economic and social aspects linked to women's entrepreneurship were examined in OECD countries. Some authors have claimed that the combined high risk of the country and little involvement of females in power positions in organizations were associated with high women's entrepreneurship (Salamzadeh, 2018).

According to the reviewed literature, scant surveys have comparatively studied the influence of digital media on females' entrepreneurship, particularly between developed and developing countries. Thus, the current research compares the influence of online media on women’s entrepreneurship between Hungary and Iran.

**Method**

In this study, Cabrera and Mauricio’s (2017) 7-item questionnaire on women’s entrepreneurship was used. The most important concepts mentioned in the items are “independence in the field of entrepreneurship”, “flexibility of online businesses” and “belief in the financial success of online businesses”. Likewise, a 5-point Likert scale from 1 = strongly disagree to 5 = strongly agree has been used.

The statistical population of the present study consists of women entrepreneurs active in the field of online businesses in Iran and Hungary. The questionnaire was distributed via online links on social networks (on the online business website, Twitter, Facebook, and Instagram), and respondents were asked to answer questions if they were women entrepreneurs (the authors tried to obtain and identify online jobs run by women entrepreneurs). To ensure that, respondents were asked to enter demographic information and contact numbers on the response form if they
wished. A sample of 95 female entrepreneurs in Hungary and 105 female entrepreneurs in Iran were studied.

Before the formal data collection process, a pilot study was conducted (Ebrahimi et al., 2021) for confirming the content validity and reliability from 20 sample sizes. The verification of the ICC coefficient was done regarding consistency and absolute agreement to confirm the questionnaire's content validity (Khajeheian & Ebrahimi, 2020; Janavi et al., 2021).

Cronbach's alpha coefficient was also used to confirm the reliability of the research questionnaire. Given that the value of this coefficient was greater than 0.7 (Kelidbari, Fadaei, & Ebrahimi, 2016; Hair et al., 2017; Ebrahimi et al., 2018; Roshandel-Arbatani et al., 2019) indicates the internal consistency of items related to women's entrepreneurship. In addition, the value of the AVE index is greater than 0.5 (Gholampour et al., 2020; Moghadamzadeh et al., 2020; Ebrahimi et al., 2021) which indicates convergent validity.

Key Findings and Discussion

The current study highlights the importance of online social networks on women’s entrepreneurship. The rate of women’s entrepreneurship on online social networks has increased rapidly. The highest number of respondents are in the age range of 25 to 35 years (80.2%). It reveals the interest of the young generation in online businesses in Iran and Hungary.

First, it is essential to mention that the test of homogeneity of variance has been examined. According to the results of Levene’s test for equality of variance and the value of sig> 0, it can be claimed that the data obtained in both Iran and Hungary should be considered as equal variance assumed. ANOVA test was used to examine the variable of online social networks on different platforms in Iran and Hungary (Kaufmann & Schering, 2014). The test results show a significant difference between social networks in the field of women’s entrepreneurship in Iran and Hungary (Sig <0).

Data related to female entrepreneurs in Hungary (Table 1) and Iran (Table 2) are examined. Post hoc tests have been used for multiple comparisons between different online social networks using the Bonferroni test (Armstrong, 2014).
The results of Table (1) indicate that Facebook media in Hungary in the field of women’s entrepreneurship is significantly different from other online social networks. Based on the data collected, more than 95% of women entrepreneurs in Hungary use Facebook. Conversely, according to Table (2), in Iran, in the field of women’s entrepreneurship, Instagram has a significant difference from other online social networks and is the most popular media in the field of women’s entrepreneurship. So that more than 92% of female respondents in Iran have a channel related to their online business in Instagram media.
<table>
<thead>
<tr>
<th>Online social networks (I)</th>
<th>Online social networks (II)</th>
<th>Mean difference</th>
<th>SD</th>
<th>Sig</th>
<th>CI 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>LinkedIn</td>
<td>0.264</td>
<td>0.638</td>
<td>0.802</td>
<td>[-1.550, 2.079]</td>
</tr>
<tr>
<td></td>
<td>Twitter</td>
<td>-0.628</td>
<td>0.638</td>
<td>0.838</td>
<td>[-2.443, 1.186]</td>
</tr>
<tr>
<td></td>
<td>YouTube</td>
<td>-0.596</td>
<td>0.481</td>
<td>0.820</td>
<td>[-1.964, 0.771]</td>
</tr>
<tr>
<td></td>
<td>Instagram</td>
<td>-0.751</td>
<td>0.432</td>
<td>0.838</td>
<td>[-1.981, 0.477]</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>Facebook</td>
<td>-0.264</td>
<td>0.638</td>
<td>0.791</td>
<td>[-2.079, 1.550]</td>
</tr>
<tr>
<td></td>
<td>Twitter</td>
<td>-0.892</td>
<td>0.672</td>
<td>0.852</td>
<td>[-2.805, 1.019]</td>
</tr>
<tr>
<td></td>
<td>YouTube</td>
<td>-0.861</td>
<td>0.526</td>
<td>0.844</td>
<td>[-2.356, 0.634]</td>
</tr>
<tr>
<td></td>
<td>Instagram</td>
<td>-1.016</td>
<td>0.482</td>
<td>0.364</td>
<td>[-2.386, 0.354]</td>
</tr>
<tr>
<td>Twitter</td>
<td>Facebook</td>
<td>0.628</td>
<td>0.638</td>
<td>0.858</td>
<td>[-1.185, 2.43]</td>
</tr>
<tr>
<td></td>
<td>LinkedIn</td>
<td>0.892</td>
<td>0.673</td>
<td>0.872</td>
<td>[-1.019, 2.806]</td>
</tr>
<tr>
<td></td>
<td>YouTube</td>
<td>0.031</td>
<td>0.526</td>
<td>0.803</td>
<td>[-1.463, 1.527]</td>
</tr>
<tr>
<td></td>
<td>Instagram</td>
<td>-0.123</td>
<td>0.481</td>
<td>0.902</td>
<td>[-0.770, 1.246]</td>
</tr>
<tr>
<td>YouTube</td>
<td>Facebook</td>
<td>0.861</td>
<td>0.526</td>
<td>0.804</td>
<td>[-0.634, 1.964]</td>
</tr>
<tr>
<td></td>
<td>LinkedIn</td>
<td>-0.419</td>
<td>0.591</td>
<td>0.775</td>
<td>[-2.101, 2.356]</td>
</tr>
<tr>
<td></td>
<td>Twitter</td>
<td>-0.317</td>
<td>0.526</td>
<td>0.678</td>
<td>[-1.526, 1.463]</td>
</tr>
<tr>
<td></td>
<td>Instagram</td>
<td>-0.155</td>
<td>0.237</td>
<td>0.789</td>
<td>[-0.829, 0.519]</td>
</tr>
<tr>
<td>Instagram</td>
<td>Facebook</td>
<td>0.751</td>
<td>0.432</td>
<td>0.038*</td>
<td>[0.477, 1.981]</td>
</tr>
<tr>
<td></td>
<td>LinkedIn</td>
<td>1.016</td>
<td>0.482</td>
<td>0.034*</td>
<td>[0.353, 2.386]</td>
</tr>
<tr>
<td></td>
<td>Twitter</td>
<td>0.123</td>
<td>0.482</td>
<td>0.002*</td>
<td>[1.246, 1.493]</td>
</tr>
<tr>
<td></td>
<td>YouTube</td>
<td>0.155</td>
<td>0.237</td>
<td>0.001*</td>
<td>[0.519, 0.829]</td>
</tr>
</tbody>
</table>

Note: SD, Std. Deviation; CI, Confidence Intervals; * Sig <0.05 significant at 95% CI; two-tailed test (source: authors)

Conclusion

This paper aimed to study women's entrepreneurship in Iran and Hungary and compare them in terms of the type of social networks. To this end, Iranian and Hungarian women's entrepreneurship has been compared in 5 types of social networks, including Instagram, Facebook, LinkedIn, Youtube, and Twitter. According to the research results, social networks are essential for women's entrepreneurship in Iran and Hungary. Women use different social media platforms to start online businesses. Past research has highlighted the importance of social media and other online media to provide a platform for entrepreneurship, especially women's entrepreneurship. The importance of digital media to boost women's
entrepreneurship in Bangladesh (Hossain & Rahman, 2018); emerging economies (Cesaroni et al., 2017; Vukmirovic, 2019); Arab countries (Ameen & Willis, 2016; Mathew, 2010), Indonesia (Setini et al., 2020) and Iran (Bahramitash & Esfahani, 2016; Mivehchi, 2019) have been emphasized in previous research.

The results show that the most popular social network for women entrepreneurs in Hungary is Facebook, and for women entrepreneurs in Iran, it is Instagram. Based on the Statista website, Facebook ranks first in the world in 2021 in the ranking of social networks based on the number of active users. According to this ranking, Instagram is in fourth place after Facebook, YouTube, and WhatsApp. The different behaviour of women entrepreneurs in choosing the type of social network to start and run online businesses is related to the different cultural, social, economic, and political conditions in these two countries. In Iran, this behaviour is particularly affected by filtering popular social networks such as Facebook and YouTube. On the other hand, the unique capabilities of the Instagram social network for activities related to the introduction of products and services by women entrepreneurial businesses make this social network in Iran and have made this social network more attractive in Iran than WhatsApp, which is not filtered.

The current study highlights the importance of online social networks for women’s entrepreneurship in Iran and Hungary. The results revealed that women’s entrepreneurial behaviour in Iran and Hungary has a significant difference according to the type of platform. This important finding emphasizes the importance and impact of social networks as entrepreneurial channels according to the atmosphere of each country. Online businesses are based on entrepreneurial behaviour and marketing on online social networks and various platforms and can easily influence consumer shopping behaviour. Investigating the reason why Facebook media in Hungary and Instagram media in Iran are more popular with women entrepreneurs can be a suggestion for qualitative research in the future. Future researchers are suggested to use qualitative methods to examine the behavioural differences of entrepreneurs in different social networks. Future researchers are also suggested to examine the behavioural differences of female entrepreneurs in different age groups, especially in qualitative research and through interviews. One of the limitations of this study was the collection of data from women entrepreneurs in Covid-19. Specifically, data collection in Iran was difficult due to the filtering of some social networks. Another limitation
of the research is its type, i.e., being a cross-sectional research. Then, longitudinal research is recommended for future researchers.

References


[34] Pettersson, Katarina; Helene Ahl; Karin Berglund and Malin Tillmar. 2017. "In the Name of Women? Feminist Readings of Policies for Women’s


[46] Vučeković, Miloš; Mirjana Radović-Marković; Borislav Dukanović; Svetlana Duković; and Arsen Dragojević. 2021. "Gender Aspects of


Article history: Received: August 15th, 2021
Accepted: November 29th, 2021