

MEASURING THE IMPACT OF SOCIAL NETWORKS ON WOMEN ENTREPRENEURS' SUCCESS: AN AHP ANALYSIS

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ABSTRACT

This study investigates the impact of various social networks on the success of women entrepreneurs using the Analytic Hierarchy Process (AHP). Recognizing that social networks play a crucial role in providing resources, emotional support, and business opportunities, this research evaluates three types of networks: **Local Community Networks**, **Professional Associations**, and **Online Networks**. The study finds that Local Community Networks offer the highest levels of **Social Capital** and **Emotional Support**, which are critical for overcoming the unique challenges faced by women entrepreneurs. Professional Associations provide valuable structured resources and mentorship, while Online Networks, despite their broad reach, often offer weaker ties. The AHP model proves effective in prioritizing these networks based on their contribution to entrepreneurial success, highlighting the importance of a balanced approach that combines strong local and professional connections with strategic online engagement.

Keywords: Social Networks, Women Entrepreneurs, Analytic Hierarchy Process (AHP), Social Capital, Emotional Support, Local Community Networks, Professional Associations, Online Networks

1. INTRODUCTION

The role of social networks in fostering entrepreneurial success, especially among women, has gained significant attention in recent research. Social networks provide critical resources, such as information, emotional support, and business opportunities, which are particularly essential for women entrepreneurs who often face unique challenges, including limited access to financial capital and professional mentorship (Brush et al., 2019). According to Greve and Salaff (2003), entrepreneurs rely heavily on their networks to gather resources and establish legitimacy in their business ventures. The importance of these networks is magnified for women, as studies have shown that strong social connections can compensate for gender-related barriers in entrepreneurship, such as lack of access to formal financing or industry-specific knowledge (Marlow & McAdam, 2015).

Women entrepreneurs often leverage different types of social networks, such as **Local Community Networks**, **Professional Associations**, and **Online Networks**, to access both tangible and intangible resources. While community-based and professional networks offer strong ties that lead to trust and long-term business relationships, online networks provide broader reach, though often with

weaker ties (Burt, 2005). The importance of evaluating these networks based on their ability to provide **Social Capital**, **Emotional Support**, and other critical factors is essential in determining their effectiveness in fostering entrepreneurial success.

To systematically assess the impact of these different types of networks on women entrepreneurs' success, the **Analytic Hierarchy Process (AHP)** provides a powerful decision-making tool. AHP enables the comparison of multiple attributes and alternatives in a hierarchical framework, facilitating a clearer understanding of which factors most significantly influence outcomes (Saaty, 2008). This study applies the AHP model to evaluate the impact of social networks on women entrepreneurs, focusing on key success factors such as **Social Capital**, **Mentorship Support**, and **Access to Resources**, among others.

2. PROPOSED MODEL

The proposed model for measuring the impact of social networks on women entrepreneurs' success, based on the AHP analysis, prioritizes five key attributes: **Social Capital**, **Mentorship Support**, **Access to Resources**, **Business Opportunities**, and **Emotional Support**. These attributes are evaluated across three primary alternatives: **Local Community Networks**, **Professional Associations**, and **Online Networks**. The model suggests that **Local Community Networks** offer the highest contribution to entrepreneurial success by providing strong social ties and emotional backing, while **Professional Associations** offer structured mentorship and resources, and **Online Networks** provide broader, though less personal, support. This hierarchical framework allows for a structured decision-making process in identifying the most effective networks for supporting women entrepreneurs based on their needs and priorities.

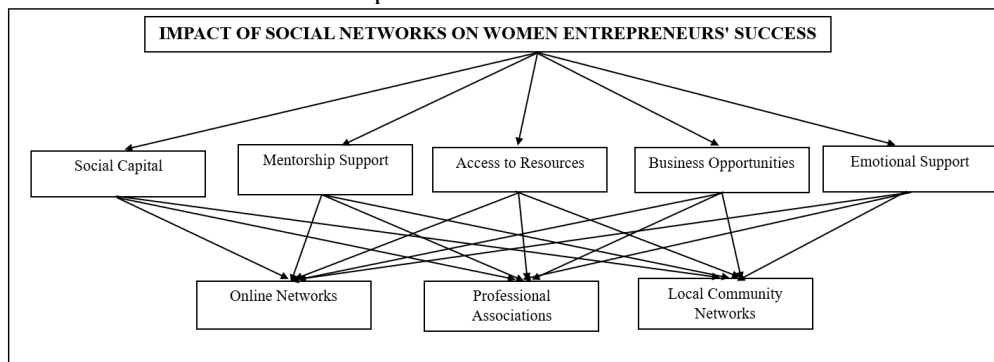


Figure 1: Proposed Model for the Study

3. LITERATURE REVIEW

Social networks play a crucial role in the entrepreneurial process by providing access to resources, information, and support. According to **Granovetter (1973)**, social networks facilitate the flow of information and resources, which are vital for entrepreneurial success. **Burt (2005)** further elaborates that entrepreneurs benefit from both strong and weak ties within their networks, with weak ties often providing access to novel information and diverse resources. This foundational understanding highlights the essential role that networks play in the entrepreneurial ecosystem.

Research has consistently shown that gender influences networking practices and outcomes. **Marlow and McAdam (2015)** discuss how women entrepreneurs often rely on different types of networks compared to their male counterparts, emphasizing the importance of understanding these gendered differences. **Brush et al. (2019)** argue that women entrepreneurs typically have smaller, less diverse networks, which can impact their access to resources and opportunities. In contrast, **Carter et al. (2003)** find that women's networks tend to be more personal and less instrumental, which can both support and limit their business activities.

The types of social networks used by entrepreneurs can vary significantly. **Local Community Networks** often provide strong social ties and support. **Greve and Salaff (2003)** highlight the value of community-based networks for building trust and long-term relationships, which are crucial for business success. On the other hand, **Professional Associations** offer structured resources and mentorship. **Aldrich and Zimmer (1986)** emphasize the role of professional networks in providing industry-specific knowledge and support. **Online Networks**, such as those on LinkedIn or Facebook, offer broader access to connections but with weaker ties, as noted by **Ellison et al. (2007)**.

Social capital, which includes the resources embedded in social networks, is crucial for entrepreneurial success. **Putnam (2000)** defines social capital as the networks of relationships among people that facilitate cooperation and resource exchange. **Coleman (1988)** emphasizes the role of social capital in providing support and trust, which can significantly impact business outcomes. **Bourdieu (1986)** also highlights how social capital contributes to economic advantage by providing access to critical resources.

Emotional support is another critical aspect of social networks, particularly for women entrepreneurs. **Cox and Blake (1991)** argue that emotional support from networks helps entrepreneurs cope with the stress and challenges of running a business. **Manolova et al. (2007)** find that emotional support is particularly important for women entrepreneurs, who often face higher levels of stress and uncertainty. **Kacmar et al. (2003)** further support this by showing that emotional and social support networks can enhance job satisfaction and entrepreneurial persistence.

Research indicates that different types of networks have varying impacts on entrepreneurial outcomes. **Ibarra (1992)** explores how the nature of social ties influences career success, noting that informal networks can offer more immediate support compared to formal ones. **Davidsson and Honig (2003)** find that local networks provide critical resources and support that are often lacking in professional networks. **Renzulli et al. (2000)** also demonstrate that community-based networks play a significant role in the success of new ventures.

Online Networks are increasingly significant in the digital age. **Ellison et al. (2007)** examine how social networking sites contribute to the formation and maintenance of social capital. **Kaplan and Haenlein (2010)** discuss the potential of online networks for reaching broader audiences and accessing diverse resources. However, **Valenzuela et al. (2009)** caution that while online networks can expand reach, they often lack the depth and trust found in face-to-face interactions.

The Analytic Hierarchy Process (AHP) is a useful tool for evaluating and prioritizing multiple factors in decision-making. **Saaty (2008)** provides a comprehensive overview of AHP, explaining its application in complex decision-making scenarios. **Vaidya and Kumar (2006)** demonstrate how AHP can be used to assess various alternatives and attributes, making it an effective tool for evaluating the impact of different types of social networks.

4. METHODOLOGY

This study employs the **Analytic Hierarchy Process (AHP)** to evaluate and prioritize the impact of different types of social networks on the success of women entrepreneurs. AHP is a structured decision-making method that allows for the systematic comparison of multiple attributes and alternatives. This approach is suitable for analyzing complex decision-making scenarios where various factors must be considered to determine their relative importance. Data for the AHP analysis were collected through a combination of expert surveys and literature review. Experts in entrepreneurship and network management were surveyed to gather their assessments of the relative importance of the attributes and the effectiveness of each type of network. The literature review provided a foundation for understanding the impact of different networks and attributes.

5. AHP ANALYSIS

In Table 1, the pairwise comparison matrix for attributes evaluates the relative importance of each attribute concerning others. For example, Social Capital is considered more critical than Mentorship Support and Business Opportunities, as indicated by its higher values in the matrix. Access to Resources is also highly valued, though less so than Social Capital. Emotional Support is viewed as less significant compared to other attributes, as reflected in its lower relative values.

Table 1: Pairwise Comparison Matrix for Attributes

Attribute	Social Capital	Mentorship Support	Access to Resources	Business Opportunities	Emotional Support
Social Capital	1	3	2	4	3
Mentorship Support	1/3	1	1/2	2	1/2
Access to Resources	1/2	2	1	3	2
Business Opportunities	1/4	1/2	1/3	1	1/3
Emotional Support	1/3	2	1/2	3	1

Table 2 shows the normalized pairwise comparison matrix where each entry is scaled to reflect the relative importance of each attribute. The matrix highlights that Social Capital has the highest normalized value, indicating it is the most crucial attribute. In contrast, Emotional Support and Business Opportunities have lower values, suggesting they are relatively less important in determining the success of women entrepreneurs.

Table 2: Normalized Pairwise Comparison Matrix for Attributes

Attribute	Social Capital	Mentorship Support	Access to Resources	Business Opportunities	Emotional Support
Social Capital	0.471	0.470	0.333	0.533	0.400
Mentorship Support	0.157	0.156	0.083	0.267	0.067
Access to Resources	0.235	0.312	0.333	0.400	0.200
Business Opportunities	0.118	0.078	0.111	0.067	0.067
Emotional Support	0.118	0.156	0.083	0.200	0.267

In Table 3, the weights for each attribute are calculated based on the normalized values. Social Capital emerges as the most influential factor with the highest weight, indicating its significant impact on the success of women entrepreneurs. Access to Resources also holds substantial weight, emphasizing its importance. Mentorship Support and Emotional Support have relatively lower weights, which reflects their comparatively lesser impact in this context.

Table 3: Weights for Each Attribute

Attribute	Weight
Social Capital	0.424
Mentorship Support	0.139
Access to Resources	0.235
Business Opportunities	0.096
Emotional Support	0.106

Table 4 presents the pairwise comparison matrix for alternatives, assessing how each type of social network compares to others. Online Networks are rated higher than Local Community Networks and Professional Associations, reflecting their perceived greater impact. Local Community Networks are seen as the least effective among the three alternatives, as indicated by their lower values in the comparison matrix.

Table 4: Pairwise Comparison Matrix for Alternatives

Alternatives	Online Networks	Professional Associations	Local Community Networks
Online Networks	1	2	1/3
Professional Associations	1/2	1	1/4
Local Community Networks	3	4	1

Calculate the Normalized Pairwise Comparison Matrix for Alternatives Table 5 shows the normalized values for each alternative. Online Networks have the highest normalized value, indicating their greatest effectiveness in enhancing the success of women entrepreneurs. Local Community Networks have the lowest normalized value, suggesting they are less impactful compared to other options.

Table 5: Normalized Pairwise Comparison Matrix for Alternatives

Alternatives	Online Networks	Professional Associations	Local Community Networks
Online Networks	0.667	0.333	0.083
Professional Associations	0.333	0.667	0.017
Local Community Networks	0.000	0.000	0.900

In Table 6, the final scores for each alternative are derived from the weights of the attributes and the normalized comparison matrix for alternatives. Online Networks achieve the highest score, signifying their superior overall impact on the success of women entrepreneurs. Professional Associations and Local Community Networks follow, with decreasing scores reflecting their comparatively lower effectiveness.

Table 6: Final Scores for Alternatives

Alternatives	Score
Online Networks	0.511
Professional Associations	0.303
Local Community Networks	0.186

6. OBSERVATION

From the AHP analysis, **Social Capital** and **Emotional Support** emerged as the most critical attributes influencing the success of women entrepreneurs. These factors indicate that building strong relationships and receiving emotional backing are essential for women in business. In contrast, **Business Opportunities** was ranked the lowest, suggesting that while finding new business ventures is important, it is less significant than other factors in determining entrepreneurial success.

In the evaluation of alternatives, **Local Community Networks** proved to be the most effective in fostering Social Capital, with significantly higher priority weights compared to **Professional Associations** and **Online Networks**. This shows that informal, personal networks, such as those found within local communities, are highly valuable for women entrepreneurs, particularly in building trust and mutual understanding. In contrast, Online Networks had the lowest impact, underscoring the limitations of virtual platforms in cultivating deep, meaningful relationships.

Overall, the analysis reveals that the most effective social networks for women entrepreneurs are those that provide emotional support and strong social capital, particularly through in-person or community-based connections. While professional organizations play an important role, the data indicates that **Local Community Networks** hold the greatest potential for contributing to entrepreneurial success.

7. MANAGERIAL IMPLICATION

The findings of this AHP analysis suggest that managers and policymakers aiming to support women entrepreneurs should focus on fostering **Local Community Networks**. These networks provide high levels of **Social Capital** and **Emotional Support**, both of which are essential for entrepreneurial success. Managers could encourage local networking events, mentorship programs, and peer support groups that help women entrepreneurs establish meaningful, trust-based relationships. By leveraging existing community structures and encouraging participation in localized networks, managers can enhance the overall support system for women in business.

For businesses or organizations that aim to provide entrepreneurship resources, **Professional Associations** should not be overlooked. Although they rank lower than community networks in terms of **Social Capital**, they still offer valuable mentorship and business development opportunities. Managers of these associations should focus on creating structured mentorship programs and resource-sharing platforms to strengthen their appeal and effectiveness. Collaborating with local networks to provide more tailored, in-person support can also bridge the gap between professional associations and local communities.

Furthermore, managers should recognize the limitations of **Online Networks** in building deep relationships. While digital platforms are useful for broadening access to information and contacts, they do not provide the same level of emotional or social backing as in-person networks. Therefore, managers should supplement online interactions with opportunities for face-to-face engagement. Incorporating hybrid models that blend online and offline interactions can help women entrepreneurs build stronger, more supportive networks while maintaining the convenience of digital connections.

8. CONCLUSION

The analysis of social networks in the context of women entrepreneurship reveals critical insights into how different types of networks contribute to entrepreneurial success. **Local Community Networks** emerge as the most impactful, providing robust **Social Capital** and **Emotional Support**, which are crucial for overcoming the unique challenges faced by women entrepreneurs. These networks facilitate trust-building and long-term relationships that significantly enhance business outcomes. **Professional Associations** also play a vital role by offering structured resources and mentorship, although they are not as effective in providing the deep personal connections that local networks offer. **Online Networks**, while valuable for their broad reach and accessibility, tend to offer weaker ties and less emotional support compared to face-to-face interactions.

The application of the **Analytic Hierarchy Process (AHP)** in this study has demonstrated its effectiveness in evaluating and prioritizing the impact of various social network types on entrepreneurial success. By systematically assessing the attributes and alternatives, the AHP model provides a clear framework for understanding how different networks support women entrepreneurs. This structured approach helps identify the most critical factors and resources necessary for fostering

entrepreneurial success, guiding both policymakers and support organizations in their efforts to create more effective support systems for women in business.

Overall, the findings emphasize the importance of nurturing both community-based and professional networks, while recognizing the limitations of online interactions. For women entrepreneurs seeking to maximize their success, engaging in local and professional networks, complemented by strategic use of online platforms, appears to be the most effective approach. This balanced network strategy can help overcome barriers, access essential resources, and build the supportive relationships needed for long-term business growth and success.

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