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Social Networks of Women in Organizations: Evolution of Research and Future Research Agenda

Abstract

This article carries out a literature review of research on social networks regarding women's careers in the context of organizations and management for the period of 1970-2021. Our focus is on the conceptualization of social networks, understanding gender, and identification of the network effects that are important for women's careers. The study enables us to create a comprehensive foundation of research knowledge conducted over several decades and build a profound base of suggestions for further research. Our analysis shows that the field has widened to include individual, organizational, and social environment viewpoints. The research on women's social networks has evolved from establishing the field, to individualistic understanding, to accounting for socio-cultural dynamics. The approach to gender has evolved from gender comparison to gender particularity and then contextualizing gender. Our suggestions for future research avenues include incorporating environmental aspects, virtual social networking, diversity, and leadership perspectives to improve women's inclusion in social network research.

Keywords: social network, organization, career, literature review, gender, management

Introduction

Social networks refer to activities where individuals attempt to develop and maintain relationships with those who have the potential to support them in their career (Singh et al., 2006). These networks can have various benefits for people in organizational life such as access to important information and help getting a promotion in one's career (Coleman, 1988; Kleinbaum et al., 2013; Kogut et al., 2014). However, networks are not available or accessible in an equal manner to everyone (Smith-Lovin, 1993; Burt, 1998). Classical studies on the topic (e.g., Kanter, 1977; Brass, 1985) have suggested that particularly women may face challenges in accessing the social networks. They may also have lower returns from these networks (Burt, 1998).

The starting point of this article is that even though social networks are profoundly beneficial for career opportunities in organizational life (Brass, 1985; Klerk & Verreynne, 2017), there is an insufficient understanding about gender perspective in the corresponding research (Lutter, 2015). More specifically, the understanding concerning how women's careers benefit from social networks remain limited in many ways (Izraeli, 1984; Klerk & Verreynne, 2017), and little attention has been paid to the evolution of the social networks although they have been argued of being dynamic and progressing over time (Brass et al., 2004). This poses an interesting challenge for researchers to produce more knowledge concerning the role and challenges of social networks that women face during their careers. This review contributes to this line of studies by portraying the evolution of previous studies concerning social networks of women and what effects social networks have for their careers.

For the purposes of this literature review, we used the approach suggested by Snyder (2019). The following research questions are considered: 1) How has the research concerning social networks for women and their careers evolved during the period of 1970-2021? 2) What can be learnt from the previous research for future research agenda? The comprehensive analysis is composed of 90 organization and management research articles. This article is comprised as follows: in the first section we explain the connection between social networks and gender, followed by thorough account of methods and findings, and lastly, we discuss the future research avenues. Our research provides a novel evolution perspective that reveals distinct phases and the overall change in the understanding of the topic, including analysis considering shifts of interest in the previous research. The evolution viewpoint also offers a way of synthesizing research findings over time, as well as identification of knowledge gaps and future research ideas (Baumeister & Leary, 1997; Snyder, 2019).

Social networks and gender

Studies concerning social networks and gender have traditionally emphasized that both gender and social networks are interrelated (Brands et al., 2022) and that wherever social networks are found or developed, humans use and do gender to organize their relationships, allocate tasks, and assign people to different social roles (Eagly & Steffen, 1984; West & Zimmerman, 1987; Gneezy, Leonard, & List, 2009; Ridgeway & Correll, 2004). Brands and colleagues (2022), suggest that it is ideal to think of gender and social networks as mutually constitutive and interdependent, meaning social networks and gender are both causes and effects of each other. Thus, gender is conceptualized and enacted in social relations, and also in the socio-cultural setting. Previous research, traditionally, about social networks and gender has put emphasis on the structures in organizations and society that may produce gender inequality in social

networks (Brands et al., 2022). A newer approach tries to understand the dynamics of gender and social networks in organizations which are constituted in, and by the organizations and how the behaviours that are enacted by individuals interacting with each other as well as how their cognitions affect social networks (ibid.). Peculiar to both approaches is that most often the focus in research on gender in social networks have focused on the production of inequality, and for example research on social networks and gender have embedded within and reflect gendered stereotypes. A good example of this that those social networks that are dominated by women echo negative valuations associated with femininity (ibid.) and even command lower value and credibility (e.g., Belliveau, 2005; Ding, et al., 2013). Therefore, we need a more nuanced understanding on how gender can either help or hinder behaviour in social networking (Brands et al., 2022).

According to prior research, women's decisions to engage with social networks may be an immediate result of their individual choice or preference, women receive unsolicited verbal and non-verbal feedback from their network members (Brands et al., 2022). As a result, behaviour is bounded not only by network structure but also by gender as a shared, cultural frame, for interpersonal behaviour (ibid.). This also means that we need to reflect on the historical implications of social networks and gender, and how they have evolved over time. In conventional settings, career advancement, formal networking, corporate evenings, and so forth have for long been a part of what is considered as “masculine” in many societies (e.g., Talmud & Izraeli, 1999). Whereas women’s role has been mainly to build a family home and work if they want to (e.g., Ohlott et al., 1994). The importance of making and utilizing personal connections for career purposes has not diminished (e.g., Lee & James, 2007), yet women hold a historically built unfavourable position for doing so. With our literature review, we aim to

further distinguish how prior literature investigates the social networks and gender from women's careers perspective and showcase the literature gaps that need additional research.

Method

We utilized a semi-systematic literature review approach by Snyder (2019). This approach aims to identify, synthesize, and understand research traditions that have implications for the studied topic by suggesting broader entities such as themes instead of measuring details. This is particularly suitable for a comprehensive research topic that covers a broad research area, as is the case here. This approach allowed us a reasonable and relevant protocol to make a comprehensive overview of the analyzed literature and interpret the phases of its evolution followed by a three-staged protocol: 1) finding databases and sources, 2) reading the abstracts and finding the relevant articles, 3).

Firstly, four databases (EBSCO, JSTOR, ScienceDirect, and Web of Science) were chosen as the relevant sources of information due to their content of leading journals in the field of organization and management. Network, women's careers, and gender were selected as keywords to narrow the spectrum of our search to the focal topic. The initial search from these databases with the chosen keywords generated a total of 1442 publications. After this, we applied several criteria to narrow the search. The criteria were *1) articles published in academic journals, 2) written in English, 3) time period of 1970-2021, and 4) targeted to the field of organizations and management.* The reasoning to start the review from 1970 onwards was chosen while we could detect that the women's entering the working life meant societal changes and many countries promoted equal opportunity acts in the 1960's or 1970's. Gender equality measures that took place at that time was a game-changer for women to attain managerial positions, even they confronted many difficulties in the organizations (Guy, 1993).

This raised the interest in scholars that what difficulties women confronted and for what reasons the career progression for women was slow. This interest resulted a significant increase in published academic research during that time. In the review the interest was also on international audience, and we chose to use a search strategy to only include *academic articles written in English from high-ranking journals* using the Chartered ABS Academic Journal Guide (AJG). At this point, the total number of publications was 242 articles.

Secondly, we followed the suggestion of Snyder (2019) and read the abstracts of the selected articles before making a final selection for analysis. After reading the abstracts, a total of 90 articles that included key ideas were selected for the final analysis of the review.

Thirdly, our review continued with analysis of the 90 selected articles. To systematize our analysis, we used Garrard's (2013) matrix method. We started by building a table in which we organized the data according to 1) publication year, 2) authors, 3) title, 4) journal, 5) theory used, 6) sample design, 7) method design and 8) key findings. According to this method, there were five articles published in the 1980s, sixteen articles published in the 1990s, twenty-eight articles published in the 2000s, and forty-one articles published in the 2010s and onwards. After the three-staged protocol, we used a thematic analysis to investigate the articles in more detail (Braun & Clarke, 2012). For the thematic analysis we focused on three themes which were 1) conceptualization of a social network, 2) how gender was understood in the research, and 3) effects of social networks on women's careers. These themes were chosen to capture social networks from various perspectives to provide understanding on conceptualization, gender and its effects on careers. The conceptualization of a social network refers to how the authors had defined and characterised a social network within the study, the understanding gender refers to how authors viewed and portrayed gender in their research, and the final theme

deals with what were the effects of social networks on women's careers. This was followed by an investigation into the evolution perspective. As a result, we identified three phases of the research, and the changes in the themes of each phase were analysed. In the following section, we will explain results of our review and each of the phases.

Results

Phase I: Rising interest

The first phase of the research lasts from 1970 until the end of the 1990s; altogether, 21 articles out of 90 were included in this phase. During this period, the research basis for the topic was established. The organizational and managerial interest in women's careers started to gain legitimacy and increase in recognition. Therefore, social networks as a research topic took its foothold in the contexts of organizations and management 1970's onwards.

Conceptualization of a social network

Commonly, a distinction was made between formal and informal structures of network (Brass, 1985; Ibarra, 1993; Shah, 1998). According to Ibarra, a formal network consists of formally specified relationships between people, i.e., among actors from different functions of an organization who aim to reach an organizationally defined task. Informal networks, as stated by Ibarra, include more discretion, and can be linked to a work or non-work context, or both.

Another viewpoint on the conceptualization of a social network is that social networks can be instrumental and expressive by nature (Ibarra, 1993; Shah, 1998). Instrumental networks are work-related and involve exchanging job-related resources, such as information, professional advice, and material resources (Brass, 1985; Ibarra, 1993). These types of networks include

career direction, increase a woman's visibility, and advance her chances of getting challenging tasks and promotions (Brass, 1985; Ibarra, 1993; Tharenou, 1994). Expressive network relationships are contacts, which primarily provide friendship and psychological and social support (Ibarra, 1993; Shah, 1998) as well as higher levels of closeness and trust compared to instrumental relationships (Brass, 1985; Ibarra, 1993).

On the early phase of research, the social network research started to focus on the concepts of centrality, cohesion, and structural equivalence. These kinds of factors were used to determine various aspects of social networks. Centrality determines that who is the central figure in the functioning of the social network and how was the central figure positioned among direct or indirect connections (Ibarra, 1992). Cohesiveness shows the closeness of the ties and actors in a social network that need to connect the group, whereas structural equivalence determines the influence of actors who occupy the same position (i.e., job related or organizational ties) in their networks (Shah, 1998). In other words, these concepts focus on the unique roles actors can have in social networks.

As a summary of the conceptualization, the gender composition also played a role as a dimension. The structural conceptualization of a network was a single gender network (either an only-women network or an only-men network) or a mixed gender network (consisting of men and women) (Brass, 1982; Ibarra, 1992). The conversation revolved around the question of whether women should join the only-women network or to the mixed gender network in which it was assumed that women would benefit from having men in these networks.

Understanding gender

When looking at how gender is understood in this phase, several scholars suggested that social networks are important for the careers of women (e.g., Kanter, 1977; Izraeli, 1984; Brass, 1985; Cannings, 1988; Ibarra, 1992; Newman, 1994). Yet, the studies stated that men were still more likely to get promotions (e.g., Brass, 1985; Cannings, 1988; Gilbert & Ones, 1998). It was mentioned that a problem for women is that interaction in influential male-dominated networks tends to be informal by nature, and women have more difficulties than men in gaining access to them (Brass, 1985, Ibarra, 1992).

Consequently, comparisons and contrasts between women and men were key tendencies to understand gender in the research. Women's networks and networking were compared to those of men (e.g., Izraeli, 1984; Brass, 1985; Ibarra, 1992; Igbaria & Baroudi, 1995). For example, in the comparison by Brass (1985) it was reported that women are not so well represented in men's networks, and vice versa. In these comparisons, gender tended to be understood as a dichotomy meaning that two gender categories exist, namely those of men and those of women.

Effects of social networks

Different effects of the networks for men and women were a basic line of discussion. It was reported that men intentionally exclude women from influential 'old boys' networks' (Brass, 1985; Ibarra, 1992; Ely, 1995; Talmud & Izraeli, 1999). Thus, women have difficulties gaining access to these networks, which negatively affects their careers (e.g., Tharenou, 1991; Ohlott et al., 1994; Mehra et al., 1998; Bartlett, 1998). Women's exclusion was explained as being based on a preference for interacting with the same sex, namely *homophily* (Kanter, 1977; Brass, 1985; Ibarra, 1992). Men were reported to have a stronger tendency towards sex-based

homophily in their network preference, and women were viewed as differentiated in this sense (Ibarra, 1992). It was reported that women are not very conscious of the positive effects of informal networks on their careers; and a common claim was that women do not develop such networks as intensively as men (Brass, 1985).

As a summary, there were conflicting accounts concerning the gender composition of a network. On one hand, only-women networks were seen as fruitful because they openly supported women's leadership development (Izraeli, 1984). On other hand, the advantage of the only-women network argument faced criticism. Several scholars (Brass, 1985; Ibarra, 1992; Cannings, 1998) brought forward that women's networks can reinforce the stereotypes of a "social club" that indicated women's interest in talk rather than task which was not often considered as an asset for one's career. It was suggested that developing gender-mixed networks where both participate formally and informally could be more influential for women's careers (Ibarra, 1992; Cannings, 1998). During that time, an idea was promoted in which a gender-mixed work group would allow women to network with the "dominant coalition", hence increasing their chances to get instrumental support from influential groups (Ibarra, 1992).

Moreover, it was claimed that the network with high-level men in an organizational hierarchy would be beneficial to women's careers, compared to nonsupervisory networks (Brass, 1985). For example, in mentoring, regarded as an influential form of network (e.g., Hunt & Michael, 1983; Brass, 1985; Noe, 1988; Cannings & Montmarquette, 1991; Ibarra, 1992; Guy, 1993; Ohlott et al., 1994; Carroll & Teo, 1996), high-profile male mentors were seen important actors in supporting women's self-confidence, leadership skills and career advancement (Hunt & Michael, 1983). However, male mentors were mentioned to tend to avoid choosing women as

their proteges due to challenges related to cross-gender relationships and its risks of being interpreted as sexual relationships (Noe, 1988). Although it was acknowledged that a mixed-gender relationship can be beneficial for women's careers, problems and criticisms of such relationships were made very visible.

Phase II: Extending views through individuals

The second phase prevails from 2000 until 2009. Number of studies increased to some extent, 28 out of 90 articles are part of this phase. Research topics shifted from the recognition of the subject to more deepened views with a particular focus on individuals. Success in social networking was seen as an individual achievement.

Conceptualization of a social network

In this phase, Forret and Dougherty (2004), defined a social network as an arena for individuals' attempts to advance and maintain social relationships with those who can support them in careers. These researchers promoted the conceptualization of the social network especially by arguing that an individual's capacity to form networks is notably connected to career. They conceptualized the network from the viewpoint of career competence in a changing career context where the responsibility for one's career was increasingly on the shoulders of the individual. Forret and Dougherty (2004), categorized individuals' networking competencies into five behavioral dimensions, namely maintaining contacts, socializing, engaging in professional activities, participating in community, and increasing internal visibility. These researchers found that gender is a factor that influences the utility of networking behavior so that participation in social networks is more useful for the career advancement of males compared to females. Additionally, Eby and colleagues (2003)

developed the intelligent career theory which stressed the dimension of ‘knowing whom’, and the importance of developing and maintaining social networks to gain career success.

A social network tended to be conceptualized and studied stressing the viewpoint of marketability. Thus, an instrumental viewpoint was also brought forward. The studies started to expand the conceptualization of a social network by arguing that the network is related to not only internal but also external environments of an organization (Eby et al., 2003). Family was especially understood to form an external environment that limited women’s possibilities to participate in informal social networks outside working hours (Morgan & Martin, 2006; Van Emmerik, 2006; Griffiths et al., 2007; Linehan & Scullion, 2008; Ng & Feldman, 2008). This was a result of traditional views on gender roles referring to care responsibilities as only a woman’s issue.

Understanding gender

Alongside the research tradition in the previous phase that focused on gender comparisons between women and men, this same tendency continued to dominate in this phase. Yet, a degree of shift in understandings could be detected. First, a woman’s own experiences were considered. In a study by Morgan and Martin (2006), the focus was on the viewpoint of professional women in sales concerning how social networks in out-of-the-office settings influence their chances in a career. This study found that women may be more vulnerable to experiencing sexual harassment in heterosocial settings because women and men are understood as a heterosexually linked pair. In homosocial settings women may be more vulnerable to experiencing exclusion from out-of-the-office male-dominated networks. A study by Kumra and Vinnicombe (2008) reported that women may experience discomfort while

practicing networking and self-promotion as career enhancement strategies. This feeling was found to be triggered by a belief that those who behave outside of their gender stereotypical norms risk facing social criticism, such as being perceived as unfeminine, pushy or aggressive (Phillips, 2005; Parboteeah et al., 2008; Kumra & Vinnicombe, 2008).

An emphasis on diversity started to gain some interest. Özbilgin and Woodward (2004) claimed that other diversity dimensions, such as age, sexual orientation, class, marriage, etc., need to be connected with gender. Thus, a combination of various dimensions affects an individual's chances of belonging to an influential network (Reskin & Bielby, 2005; Hillman et al., 2007; Denker, 2008). In a study by Forret and Dougherty (2004), single women who were professionals and managers were found to have a specific networking pattern that resembles that of men in similar positions, and that differs from other women. So, instead of seeing women professionals as one homogenous group, two different groups, single and married, were distinguished. Morgan and Martin (2006) moved to a more fluid understanding of gender. They used to conduct gender theory which emphasized gender as a dynamic 'doing' in social interactions and no fixed gender categories existed. This theory started to emphasize that various gender constructions can exist.

Effects of social networks

Overall, social networks were further emphasized of being a crucial mean for women's career advancement (Higgins & Kram, 2001; Seibert et al., 2001; Eby et al., 2003; Brass, et al., 2004; Morgan & Martin, 2006; Griffiths et al., 2007; Linehan & Scullion, 2008). Especially the value of informal networks was stressed, and women's access to the informal "old boys" networks was viewed as important but difficult (Lemons, 2003; Forret & Dougherty, 2004; Sparrowe &

Liden, 2005). Further understanding of this difficulty was provided, namely women's low visibility in organizations and management was reported to negatively affect access. Singh et al. (2002) found that because women are not as willing as men to play "the organizational game" with unwritten male-constructed rules, their visibility decreases. Limited participation in informal networks was also seen to slow down women's careers because women miss critical information shared (Morgan & Martin, 2006; Griffiths et al., 2007; Linehan & Scullion, 2008).

Discussions concerning effects of mentoring continued (Athey et al., 2000; Allen et al., 2000; Higgins & Kram, 2001). An influential mentor was found to help increase women's visibility and support them in gaining better access to influential networks (Allen et al., 2000). Moreover, organizations were seen to acknowledge women's potential more strongly for organizational performance and company growth than earlier (Oakley, 2000). The business case argument for women's social networks to advance their careers was presented as an influential idea (e.g., Forret & Dougherty, 2004; Linehan & Scullion, 2008). Despite this request, women continued to be described as tokens, especially in top managerial positions and their exclusion from influential social networks was the topic of continued interest (Tharenou, 2001; Lemons, 2003; Forret & Dougherty, 2004; Sagas & Cunningham, 2004; Ibarra et al., 2005; Lee & James, 2007; Ryan & Haslam, 2007).

Phase III: Increasing interest in contextuality

The final phase constituted of forty-one articles and lasted from 2010 until 2021. Accordingly, the number of the studies increased clearly. A crucial feature of this phase is that the borders of organizations were increasingly contested as a limitation of social networks. The idea of the context boundedness of the social networks started to gain particular attention.

Conceptualization of a social network

A social network was not conceptualized only as a face-to-face relationship, but it expanded to include virtual relationships. It was stated that a social network can operate online across and outside organizational borders (Davis et al., 2020; Smith et al., 2020). Alongside the development of technology and digitalization, platforms such as LinkedIn were seen as modern contexts of networks. Davis and colleagues (2020) defined a web-based network as an arena that allows individuals to “1) construct a (semi -) public profile within a bounded system, 2) articulate a list of other people with whom they share a connection, and 3) view and traverse their list of connections and those made by others within the system” (p. 211).

In this phase, social networks tended to be conceptualized and studied stressing the role of external relationships, such as family and friends, and were found to be beneficial in strengthening women’s careers (e.g., Gorji et al., 2021; Carlson et al., 2021). In a study by Gorji and colleagues (2021), it was discovered that spouses can serve as a steppingstone and help to gain access to tightly connected groups. In other words, women were found to benefit from the size and quality of their spouse’s social networks (Gorji et al., 2021), which could help women to gain access to career benefits. Personal support from friends was found to lower work-to-family conflicts that women experienced (Carlson et al., 2021). This meant that the more personal support women received from friends, the less work-to-family conflicts they experienced, which subsequently led to experiencing less emotional exhaustion and depression and to increased well-being (Carlson et al., 2021).

Understanding gender

Research expanded the focus to diversity by studying for example women in minority groups. A study by Khattab and colleagues (2020) found out that women in minority groups engage less in networking for the purposes of career advancement. It was stated that they may have lower expectations of the usefulness of their networks for career upward mobility and they were afraid of rejection. Even if women in minority groups do engage in networking, their efforts were assumed to create a slow advancement to leadership positions (Khattab et al., 2020; Bolzani et al., 2021; Schultheiss, 2021). Career advancement was suggested to be more complicated for women of color or with a migrant background (Cook & Glass, 2014; Schultheiss, 2021; Bolzani, 2021) as their exclusion is not solely based on gender (Williams et al., 2012; Festing, 2015; Mickey, 2019b), but includes race, ethnicity, educational background, and organization role (Matsa & Miller, 2011; Levy et al., 2015; McGee, 2018; Choi, 2019).

Barriers such as workplace discrimination and bullying (e.g., Fernandez-Mateo & Kind, 2011; Choi, 2019; Chanland & Murphy, 2018; Calinaud et al., 2021) as well as social isolation (Schultheiss, 2021; Berger et al., 2013; Tortoriello et al., 2012) were suggested to further limit career advancement of women in minority groups. A study by Lutter (2015) revealed the effects of social capital on gender inequality and it found that more open and diverse team structures increase project-based career advancement. In other words, if women pursue their careers in open and diverse network architectures, they reduce their disadvantaged position as one of the benefits would be acquiring higher degrees of information diversity (Lutter, 2015). Therefore, organizations were encouraged to promote gender equality and diversity through training and development programs, encouraging networking, mentorship, and removing gendered barriers (Gibson & Lawrence, 2010; Dezsó & Ross, 2012; Gress & Paek, 2014; Durbin & Tomlinson,

2014; Dashper, 2017; Biron & Hanuka, 2018; Cohen et al., 2018; Calinaud et al., 2021; Schultheiss, 2021).

Effects of social networks

Increased attention on identifying contextual effects of social networks of women was distinguished. We noted that scholars urged organizations to create possibilities for women's career advancement through social networks. For instance, a longitudinal study on women leaders by Offerman and colleagues (2020) showed that women who experienced greater use of networks reported themselves to be significantly more successful, more satisfied and better compensated than women who reported lower levels of these activities. Therefore, scholars in this era support the view that organizations should encourage women to form networks in their workplaces, professional conferences and by hosting networking events (e.g., Brands & Kilduff, 2014; Offerman et al., 2020; Soares & Mosquera, 2021; Agarwal et al., 2016; Greguletz, 2019; Wing-Fai, 2016; Kogut et al., 2014; Haenggli et al., 2021). Moreover, organizational support was found to result in employees increasing commitment whereas support from supervisors and colleagues was found to reduce turnover and burnout (Soares & Mosquera, 2021).

With the digital revolution women have an opportunity to develop, maintain, and benefit their social network ties through social networking sites. According to Smith and colleagues (2020), women were found to be more successful when they formed women to women coalitions. Therefore, they suggested that women could take advantage of new technologies and form a virtual coalition to provide mutual support. Furthermore, Davis and colleagues' (2020) research supported the benefits of social network sites and suggested that women could further their knowing-whom competency and find networks more efficiently through social network

sites such as LinkedIn. At the same time, organizations' encouragement to network could be extended towards social networking sites. As these sites provide an opportunity for women to learn information about their contacts and colleagues, they would know who to approach when seeking assistance (Davis et al., 2020).

Discussion and future research

This review contributes to the field of organization and management by providing a comprehensive view of the evolution of previous studies concerning social networks for women and their careers. The summary of evolution perspective along with key findings has been introduced to present the overall change and has been portrayed in *Table 1*. The horizontal dimensions show the progress of research in accordance with timeline. The topics that we used in our thematic analysis are summarized in the vertical dimensions. The columns demonstrate the development of research by taking together the major results.

Table 1. Summary of findings

Phases Themes	Phase I: Rising interest From 1970 until the end of the 1990s	Phase II: Extending views through individuals Between 2000-2009	Phase III: Increasing interest in contextuality 2010-2021
Conceptualization of a social network	Social network conceptualized from its social structure viewpoint: formal and informal, instrumental and expressive, single gender and mixed gender structure	A swift from the structural viewpoint to an individualist viewpoint: Women's own competency to form and market herself to and in influential networks was conceptualized. Some signs of the idea of contextuality emerged: women's capacity to combine	A swift from the conceptualization of a network only as a face-to-face relationship expanded to include virtual relationships. The boundaries of the networks started being seen blurred and a contextual viewpoint started to be taken into consideration.

		career and family was questioned.	
Understanding gender	Gender understood as a dichotomy: Two gender categories exist, one homogeneous group of women and one homogeneous group of men. The groups were compared and contrasted.	Gender understood as a dichotomy continued to dominate. Some shift in the understanding: A woman's own, individual viewpoint without comparing to men was stressed. Some signs of combining gender with other diversity dimensions (e.g., age, class) occurred.	The shift to a diversity viewpoint increased: gender understood as combined with other diversity dimensions.
Effects of social networks	Contrasting views of the effects: A mixed-gender relationship can be beneficial and unbeneficial for women's careers. An only-women network can be beneficial and unbeneficial for women's careers.	The value of informal networks to women's careers was emphasized. Women's problems in an access to and low visibility in the networks affect negatively to their careers.	Various positive contextual effects on women's careers were discussed increasingly such as organizational and virtual sites.

Based on our analysis, we now account several research themes that might be beneficial to enhance research on women's social networking. Firstly, research on the analysis of contextual factors influencing social networks needs more attention. According to the previous studies (e.g., Gorji et al., 2021; Carlson et al., 2021) contextual factors such as organization, family, and friends play an important role on advancement of social networks as well as careers of women. Despite the increased amount of research on the social networks of women, little is known about the effects of environmental factors and to what level they might influence women's social networks. Therefore, research on analyzing environmental factors (such as organizational, national culture, and interunit relations) that impact social networks should focus more on the factors that enhance social networks.

Secondly, as advancements in the digital world and the isolation risks that we witnessed during the recent pandemic left us unprepared for distance work, we suggest that virtual social networks need to be studied more (e.g., Davis et al., 2020). The practices of social networks in organizations have been typically investigated in relation to a physical space (Brass et al., 2004). However, possible uncertainties in and around organizations and management, such as the COVID-19 pandemic and the development of technologies that increase virtual cooperation, will likely diminish the importance of physical contacts in networks. The traditional culture of networking may change, since little is known about how individuals use the internet and social networking sites such as LinkedIn in the job search process (Sullivan and Al Ariss, 2021). Virtual social networks and their (dis)advantages from a gender perspective need more research. It is possible that virtual networks can cause problems for networking, but they can offer additional advantages, for instance, increasing women's visibility in networks (e.g., Davis et al., 2020).

Thirdly, research on diversity should be continued despite the considerable social, economic, and technological progress achieved so far, equality of gender remains a work in progress and traditional gender roles continue to dominate in organizational settings (e.g., Callinaud et al., 2020). With the increase of mobility in the workforce, research on diversity issues in the context of organizations and careers has not received the attention it deserves. For example, social networks of women with a foreign background have received less attention in previous research and challenges in accessing professional networks for non-foreigners exist (e.g., Lynam, 1985). Consequently, an intersectional lens is worth employing more in future studies.

And finally, studies on a leadership perspective regarding women's networks and mixed-gender group networks (Khattab et al., 2020) require more attention by researchers. According to previous studies (e.g., Lutter, 2015; Cohen et al., 2018) 'glass ceiling' still holds a strong influence on women's career advancement therefore future research should analyse further how organizational leadership may enforce women's career upward mobility. At the same time future research should also analyse how organizational structures, policies and initiatives can be instrumental in influencing network utilization of women's career advancement. Research could also focus on analysing how leadership is implemented and by whom in networks.

While this review aims to contribute on presenting evolution of the research on women's social networking over time and, by establishing gaps in existing studies and proposing directions for future research it has not been immune to several limitations. First of all, our study is limited to management and organization studies. Moreover, we have placed some search criterias are chosen for the purposes of this study, studies with other focus might have resulted exclusion other type of studies. Much like all semi-systematic reviews, there are risks of bias and selective outcome reporting (Snyder, 2019). Despite of these, the semi-systematic literature review process we followed is replicable, and other researchers may undertake a similar review, which would then facilitate a comparative analysis of the corresponding findings with our review, further informing this research topic. All things considered, our review just provides one view on the topic, and many other potential viewpoints for studying social networks and gender exist. We call more research for reviewing cultural differences, and for example to study how social networking happens in different fields of businesses. To this end we suggest the inclusion of publications from wider interdisciplinary sources. We also recommend focus more on understanding the theories and theoretical understandings used in the social networks and gender research field.

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