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## **Gender Dynamics in International Migration and Social Networks**

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# Gender Dynamics in International Migration and Social Networks

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## Abstract

Reviews of migration theories start from more classical and deterministic views and follow with more recent developments that consider networks, cumulative causation, planned behaviour, agency, and aspiration/capability frameworks. One of the less discussed dimensions is gender differences in how one's network affects their migration decision before, during, and after migration. In this chapter, we intend to provide an overview and critically delve into the literature discussing the network's effect on international migration and show the underexplored dimension of gender differences. The chapter has an additional focus on a subset of the highly-skilled population i.e., the case of migration of scholars, and is concluded by avenues for future research.

**Keywords:** Gender; Migration; Networks; Scholars; Social Network Analysis; Scientific mobility

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## Introduction

Migration research, which is the subset of scientific publications that deal with migration processes (e.g. emigration, immigration, return migration) and migration forms (e.g. labor migration, scholarly mobility), has traditionally lacked the incorporation of gender into migration theory<sup>1,2</sup> and in its associated data sources<sup>3</sup>, as well as a focus on gender differences in migration decisions or trends. Migration theory has been characterized by either a gender-blind approach<sup>1,2</sup> or by uncritically adding sex as a variable to be considered<sup>2</sup>, which does not necessarily contribute to a better understanding of how and why migration is a gendered process.

Generally, there exists no harmonized application of the terms “gender” and “sex” in migration literature, and these terms are used rather interchangeably depending on disciplinary traditions in academic writing<sup>4</sup>. Applying the definition that sex describes “biological attributes and differences” and gender refers to “societally ascribed roles”, we assume that the gender distribution in migration is determined by gender relations and not sex<sup>5</sup>. Although sex has been used as an individual’s attribute to differentiate among males and females in migrant populations<sup>3</sup>, there is still an important challenge regarding the availability of up to date estimates of migrant flows at a global scale<sup>6</sup>. This lack of focus in theory and data availability has a direct impact on the capacity to understand key questions for migration research, such as why migration rates differ by gender<sup>3</sup>, but also for addressing structural gender inequalities that are expressed throughout the whole migration process.

Migrant networks are at the core of the current theoretical developments in the area of migration and have proven to be a fundamental driver influencing migration decisions and capacities to migrate<sup>7,8</sup>. It is thanks to migrant networks that migration transforms into a social phenomenon within communities of origin<sup>9</sup>, which links them with countries of destination through transnational ties, similarly to how Massey<sup>10</sup> defines it:

“[...] migrant networks, which are sets of social ties formed on the basis of kinship, friendship, and common origin. They link migrants and non-migrants together in a system of reciprocal obligations and mutual expectations”<sup>10</sup>.

However, the lack of incorporation of the gender dimension and gender inequalities has been reproduced within the study of migrant networks. As a result, our understanding of the gendered differences among migrants in how they mobilize their network ties to acquire information and support before, during, and after migration is limited.

Reviews of migration theories<sup>8,11-13</sup> start from more classical and deterministic views such as functionalist (neo-classical, and push-pull as examples), and historical-structuralist (neo-Marxist, and World Systems theory as examples) views. These reviews follow on with more recent theoretical developments that consider networks, cumulative causation, planned behaviour, agency, and

aspiration/capability in migration theory. These works advocate that there is no general migration theory<sup>12</sup>. They emphasize that migration studies suffer from fragmentation and lack of consensus<sup>8,10,14</sup>. Theories are often underdeveloped and still use nineteenth- and twentieth-century concepts and models<sup>8,13</sup>. Furthermore, migration theories have a bias towards considering mobility as the norm<sup>15,16</sup> and neglect certain concepts, such as involuntary immobility, which could be due to differences in individuals' aspirations and capabilities<sup>17-21</sup>. These reviews emphasize that migration theories consider only specific units of analysis e.g., focus only on one of the macro, meso, or micro units. Once all of these units are considered, they are treated independently<sup>8,11</sup>. Theories that view migration as a solely individual decision miss out that migration involves households, and their risk minimization strategies, and cannot be solely driven by the utility maximization of rational self-interest-oriented actors under structural and macro forces<sup>8,11,13</sup>. Individuals are portrayed as pawns being pushed-pulled around by the structural or gravity forces without agency<sup>13</sup>. These theories neglect complexities such as what initiates migration flows are not necessarily what explains why people continue migrating<sup>8</sup>. Migrant networks develop in the shape of transnational weak and strong ties that connect families<sup>7,22</sup>, communities, and markets. Once these networks meet a threshold, migration can self-sustain and perpetuate itself as it becomes a social phenomenon within communities of origin<sup>10</sup>. Further, in the form of migration capital<sup>23</sup>, i.e., sharing information, migration networks lead to further migration, which alters the origins and destination locations. This alteration happens in a way that the next migration decisions are made in different contexts than those of pioneer migrants<sup>13</sup>. In addition, theories cannot explain if migration is advantageous and helps migrants get away from a bad situation, why only a small share of the population migrates and the majority stays<sup>10,12,16,17</sup>.

In addition to the discussed theoretical issues and data lacks, there is a mobility bias in migration research<sup>15</sup> where mobility is considered the norm and not being mobile, which is the condition of the majority of the population, is understudied<sup>15</sup>. This mobility bias is even more prevalent in studies on migration focused on specific subpopulations, such as the case of highly skilled, and scholars. In scholarly migration, or as it is called in the sociology of science and scientometrics in "scientific mobility", researchers typically discuss advantages of the mobility or "the mover's advantage," and not much is discussed about the immobile majority. A focus on those who are involuntarily mobile<sup>17</sup> and the disadvantages of mobility is lacking. There is also a theoretical gap in considering the migration of scholars solely as "free migration". For instance, in the typology presented by de Haas<sup>13</sup> based on positive and negative liberties, migration of the highly skilled is categorized as free migration. This view assumes that migrant scholars are exercising their freedom to move to obtain the advantages of mobility and ignore the whole population of scientists in exile<sup>24,25</sup> or refugee scholars who flee war or unpleasant conditions by obligation and are forced to migrate. There is little evidence about the number of academics that are involuntarily mobile and its intersection with gender. There is an anecdotal

discussion with minor empirical evidence stating that scientists are among the first subset of the population to migrate once a war is going to happen since they have access to networks, capital, resources, and previously formed ties to migrate in comparison to the general population, and the less educated or low-skilled sub-population are among the last to leave such unpleasant conditions as they lack credentials or ties to support their move.

In this chapter, we will provide an overview of the literature on gender, networks, and migration. We will discuss the state of the art in migration studies and highlight the underexplored areas in considering gender differences in migration networks. In addition to summarizing the literature, using a unique corpus of publications identified as migration-related research based on Scopus bibliometric data, we provide comparisons between the volume of research dealing with three substantive interlinkages, namely: “gender and migration”; “network and migration”; and “gender, network, and migration” to highlight that while this literature has increased, there are still underexplored domains. This chapter has a special focus on actively publishing researchers working in academia and elsewhere and their migration. It will be concluded with an outlook on the future direction of research.

### **An overview of the literature on gender, networks, and migration research**

While many studies address different aspects of migration, this literature has traditionally lacked a focus on gender differences<sup>1</sup> in the migration process. Here, we present empirical evidence on temporal change in four groups of scientific publications dealing with i) migration in general, ii) the subset of the first group that deals with gender and migration, iii) the subset that deals with networks and migration, and iv) the overlap between the second and third group which is dealing with both gender and network, in migration research. We do not apply any restrictions on methods (e.g., qualitative, quantitative, or mixed methods) or approaches (e.g., empirical studies versus theoretical or review ones) to provide a comprehensive view of where the field of migration research is standing.

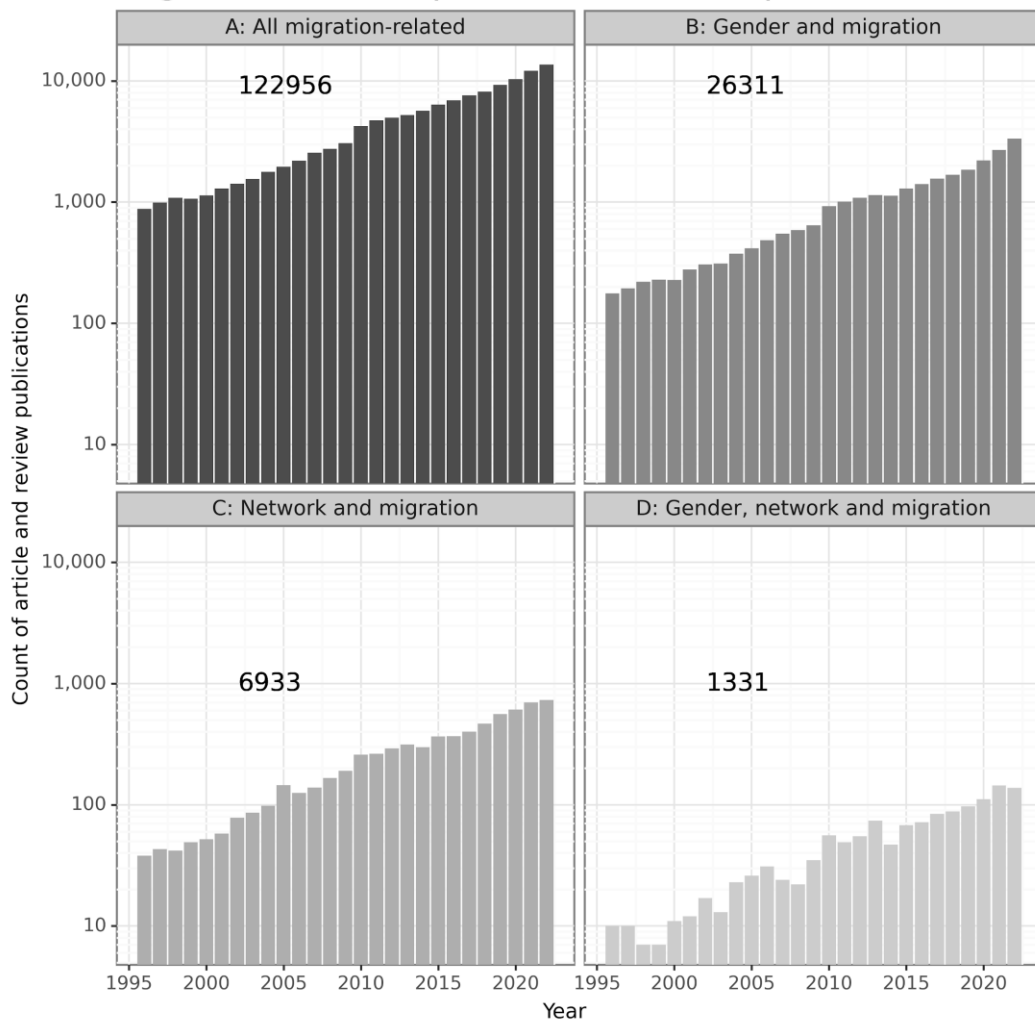
Figure 1 shows that the count of migration-related article and review publications indexed in Scopus has increased. It has increased from 1,000 publications in 1996 to more than 10,000 in 2022 (Panel A on the figure) and arrived at a total of 122,956 publications over all years (see figure’s caption for details on methods of identifying migration-related publications). The count of publications dealing with gender (Panel B) and network and migration (Panel C) increased much less i.e., from about 100 publications in 1996 to above 1,000 in 2022, arriving at a total of 26,311 and 6,933 publications, respectively. Once a combination of these terms is used to identify publications dealing with both gender and network among migration-related publications the share is much smaller, from 10 publications in 1996 to slightly more than 100 in 2022 (total of 1,331 publications in 26 years, Panel D). This shows the highly underexplored area in the overlap of these themes.

Figure 2 shows the subset of the migration-related publications dealing with both gender and networks, which are published in five selected journals considered prominent migration research outlets i.e.,

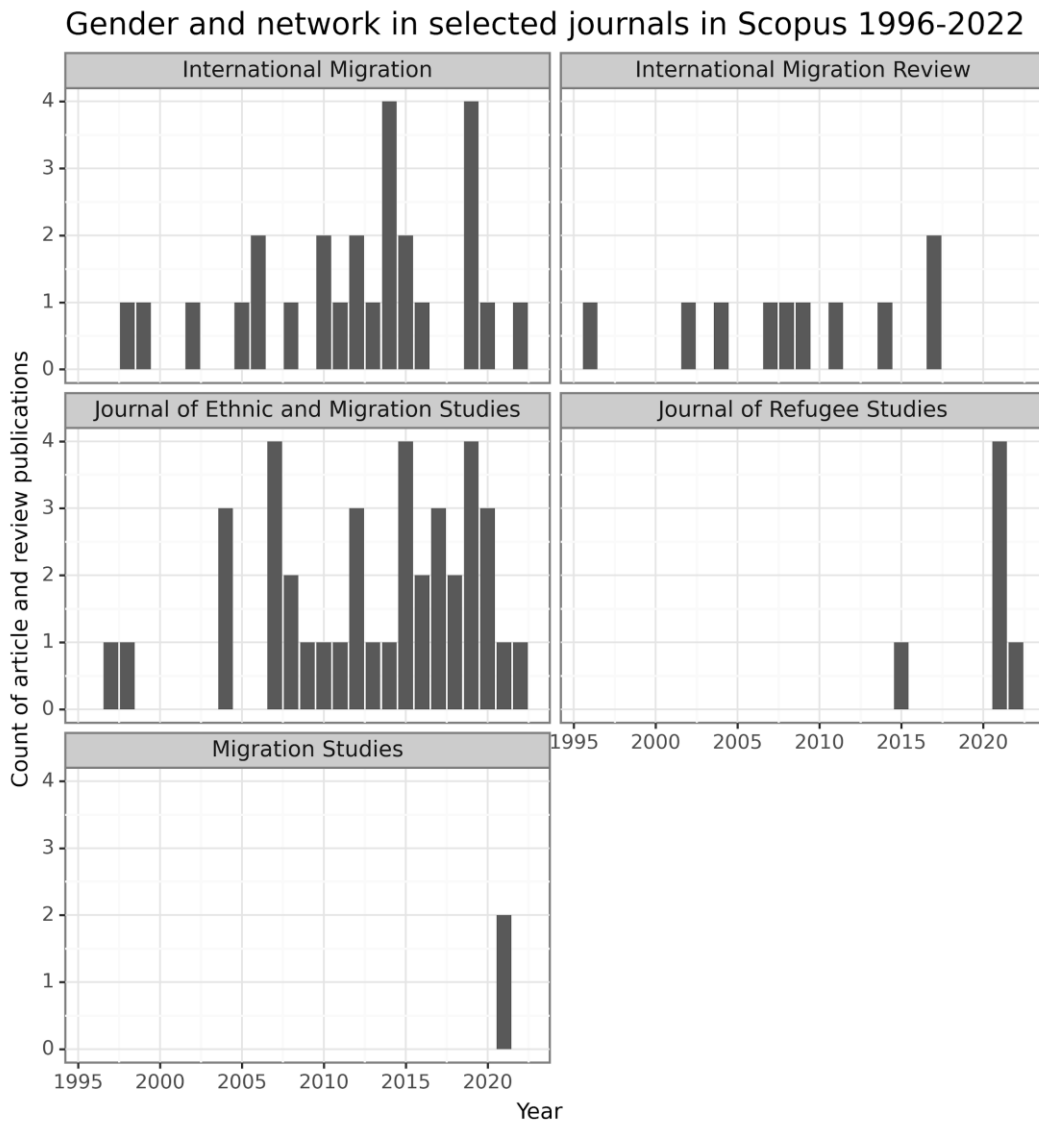
“International Migration”, “International Migration Review”, “Journal of Ethnic and Migration Studies”, “Journal of Refugee Studies”, and “Migration Studies”. These are 83 publications. The trend shown for these five journals is similar to the one observed for all migration-related publications that covered any publication related to migration in all disciplines without a restriction on methodology or approach. For the selected five journals, the subset dealing with the overlap of gender and networks is a minority among these publications and the maximum number of publications in one year arrives to 7 and 8 in 2015 and 2019, respectively. Additionally, some of these journals only recently have a few publications focused on the overlapping area of topics.

Overall, this empirical evidence highlights the lack of focus on both areas of gender in combination with networks in migration-related publications which is still prevalent and has only slightly changed by the recently increasing number of publications. This evidence further highlighted that the lack is also prevalent in the five selected journals, which are considered prominent outlets for migration research. We conclude that there is unrealized potential in this area that could be further studied by future research.

### Migration-related publications in Scopus 1996-2022



**Figure 1** Yearly count of article and review publications in Scopus from 1996 to 2022, which are identified as migration-related by searching for an extended list of terms from the literature<sup>26,27</sup> and evaluated by experts (total of 122,956 publications, panel A). In addition to the count of the migration-related publications, and to identify publications related to gender, following<sup>28</sup>, the exact use of terms such as "women", "woman", "female", "gender", "sex", and "gendered" are searched in the text of publication's abstract (labeled "B: gender and migration on the figure, a total of 26,311 publications). Similarly, the exact use of terms such as "network", "networks", "network analysis", "personal network", "community detection", "block modelling", "social network analysis", "edge", "tie", "arc", "vertice", "migrant networks", and "cumulative causation" are searched in the abstract (labeled "C: network and migration on the figure, a total of 6,933 publications). Overlap of all three groups occurs in 1,331 publications shown on the bottom right (panel D).



**Figure 2** Yearly count of 83 article and review publications indexed in Scopus from 1996 to 2022, which are focused on both gender and network (panel D in figure 1) and are published in five selected

migration-related journals i.e., “International Migration”, “International Migration Review”, “Journal of Ethnic and Migration Studies”, “Journal of Refugee Studies”, and “Migration Studies”.

## **State of the art**

Most migration theories collectively overlook the dimension of gender and its intersections with all other factors driving migration. However, gender is a core organizing principle underlying the migration process from preparation, throughout the journey until integration and settlement<sup>2</sup>. Gender relations and hierarchies in the household as well as on the societal level, determine who migrates and who does not<sup>2</sup>. For instance, female potential migrants tend to be less likely to realize their move compared to their male counterparts<sup>29</sup>. While the decision to migrate is only a precondition for a move, the journey itself and its direction are affected by gendered access to social and material resources<sup>30–32</sup>. Finally, at the destination, integration trajectories of migrants can differ by gender and result in divergent outcomes<sup>33–36</sup>.

Boyd and Grieco<sup>2</sup> view the reason for this gender-blindness in the collective efforts of theorists to explain labor migration as the dominant type of migration. The typical economic and labor migrant in the literature has been depicted as a man and this view has completely neglected the long-lasting moves of independent women for career reasons<sup>37</sup>. Another reason why migration theories have overlooked gender can be attributed to the lack of gender-disaggregated migration data<sup>1,38</sup>. As migration theories tended to view the process of migration as gender-neutral, they struggle until today to explain gender compositions of certain flows.

In the particular case of migrant networks, findings in the literature point to similar differences by gender<sup>32,39–42</sup>. Female migrants from Mexico to the US have been found to rely on male migrant networks to navigate the dangerous journey to the US, while they relied on female migrant networks to find employment and settle in the destination<sup>41</sup>. At the same time, Curran and Rivero-Fuentes<sup>31,42</sup> conclude that male migrants rely more on male networks and vice versa for females in said migration corridor. Moreover, village-level or family networks are utilized more by women for international moves while their male counterparts utilize these and also professional networks to facilitate their migration<sup>31,42</sup>. Both studies highlight the importance of same-sex networks for international migrations. Heering et al.<sup>40</sup> have discovered similar patterns for Moroccan emigrants where family networks abroad turned out to increase women’s migration intentions compared to men’s intentions. Additionally, these studies find support for an interaction between gender, educational attainment, and migration hinting at a gender equity and migration nexus<sup>32,40</sup>. These empirical findings highlight the importance of gendered social capital for forming migration decisions and give rise to the assumption that network effects and cumulative causation are highly gendered<sup>28</sup>. Nevertheless, a gendered perspective on migrant networks



should be both employed across different subgroups of migrants and be studied for different migration corridors.

### **The specific case of scholarly migration**

Digitalization and big data have caused a substantial change in the subject of study and empirical data used in the social sciences and led to the emergence and consolidation of the field of “Computational Social Science<sup>43,44</sup>”. For instance, bibliometric data is increasingly used for demographic research<sup>45</sup>. The availability of large-scale and longitudinal bibliometric data on individual scholars has affected studies on the migration of scholars. The literature on scientific mobility roughly focuses on two aspects of mobility: 1) the experience of mobility and its properties and 2) the by-products and positive or negative impacts of mobility. The first group of literature considers national or international mobility. Some look at internal, i.e. sub-national, moves inside a country or international migration to/from a country – see the case of Russia<sup>46</sup>, Mexico<sup>47</sup>, and Germany<sup>48</sup>. Others have focused on the global mobility of scholars<sup>6,49</sup>. The second group of literature looks at (dis)advantages or (in)significance<sup>50</sup> of mobility for scientific careers, contributions to the scientific field, knowledge transfer, institutional, national or global productivity, and innovation. Some research has focused on the performance and impact of mobile scientists or the so-called “mover’s advantage”<sup>51</sup>. Additionally, the social capital advantage of those academics with experiences of international mobility is emphasized, which could lead to a larger network of collaborators and facilitate long-term success<sup>52</sup>, hence, it is important to see how gender interacts with the mobility of academics.

There are gender differences in academic careers, such as being more mobile or not. Zhao et al.<sup>53</sup> investigated the emigration, immigration, and return migration of scientists who once had an affiliation with an institution in Germany. They found that female emigrant scholars returned less to Germany, and the returnee scholars were mostly male. This could have long-term consequences for the academia in Germany. Zhao et al.<sup>53</sup> provided a global perspective on gender differences in the migration of scholars and scientific mobility. They showed that while the gender gap among the population of migrant scholars has reduced faster than the gap in the whole population of scholars, women are still underrepresented among the mobile scholars, and they move over much shorter distances than men, which is a consistent pattern across fields of science. They reported distinctive patterns by country. Specific countries such as Brazil, Portugal, Argentina, and Serbia (to name a few) have gone through a transformation from being less gender equal to becoming more gender-equal over time while other groups of countries such as the Western ones i.e., Germany, United States (to name a few) have shown quite stable trends and a third group of countries such as Japan, and South Korea (to name a few) have not changed and remained gender unequal in the mobility experiences of scholars.

Sanliturk et al.<sup>54</sup> demonstrated that the minority of scholars who are mobile worldwide do not exhibit the same migration patterns in association with the country’s development as the general population.

Academics' emigration tends to decrease with development and after a certain level of the country's development is reached, it starts to increase. There is a need for future studies to investigate the association between migration of scholars, development and gender. All of the studies focused on the migration of scholars point to the lack of high-quality and longitudinal data enabling research on the migration networks before, during, and after mobility. However, there are recent initiatives on preparing and publicly sharing such data to enable further research<sup>6</sup>.

Schewel<sup>15</sup> highlights a lack in migration research that has traditionally been focused on the mobile subset of the population and neglects the immobile majority. Schewel<sup>15</sup> asks, as de Haas<sup>13</sup> does, if migration has so many advantages, why the majority of the population are not mobile and the migrant population remains the minority of below 5% in the population. In the case of scholars<sup>54,54,55</sup>, this share is higher, about 8%, however, mobile scholars are still the minority in the population of scholars. These studies advocate for acknowledging the agency of the migrants, together with the structural factors that limit this agency, by redefining migration as “exercising one’s freedom to move, including the decision to stay<sup>13</sup>”. This definition will enable considering the immobile majority to investigate their decision-making process, and potential gender differences, which lead to weighing the disadvantages of mobility over its advantages and hence staying. For instance, Schaer et al<sup>56</sup> discuss the negotiations among the heterosexual academic couples and the gender differences in the decision to be mobile which could entail prioritizing the career of one of the partners over the other. This discussion is very similar to Rivera<sup>57</sup>'s findings that hiring committees for faculty positions might consider a certain group of applicants as “not movable”, who are over-represented by married women and consequently rank them lower in the final list of selected applicants for the position in comparison to single or married men and single women.

## **Summary, outlook, and future research**

In this chapter, we have discussed the state of the art in migration studies concerning the incorporation of gender as a dimension in the study of migrant networks. By relying on a description of previous systematic reviews<sup>8,13,14,28,58</sup> and on the analysis of bibliometric data, we asked to what extent the lack of incorporation of gender differences within migration theory is also present in research related to migrant networks. We emphasized that solely including variables indicating the biological sex as an external characteristic of the migrant does not suffice to account for gender as a product of societally ascribed roles based on gender norms and hierarchies.

Results from our bibliometric analysis of a corpus of 122,956 publications identified as migration-related indicate that research in which gender and migrant networks overlap is scarce. Here, we did not apply any restrictions on methods or approaches to provide a comprehensive view of where the field of migration research is standing. These results also hold for a selection of prominent migration journals,

suggesting this relevant study area is an underexplored one with important potential. It has previously been discussed that while network thinking has been present for some time in migration studies<sup>59</sup>, the use of network modeling frameworks and social network analysis is still a niche area in migration research<sup>59,60</sup>, and our results show this condition has not particularly improved in recent years.

It is key that future research aiming at considering the gender differences within migrant networks contextualizes these efforts in association with the challenge of incorporating gender in migration theory<sup>1,2</sup> and in the design of migration data infrastructures<sup>58</sup>. Fortunately, there is currently more data on migrant flows disaggregated by gender<sup>3</sup>, which helps to confirm empirically that migration rates differ by gender. By incorporating gender within the study of migrant networks, researchers will be able to better understand, for instance, the differential aggregated effect of migrant networks on migration rates, across migration processes and forms. This will potentially allow researchers to predict the size, direction, and composition of migration flows in the future. But it will also allow for better policy-making and capacity to address gender inequalities generated among those who migrate, but also those who stay. While most studies analyzing the gendered effects of migrant networks rely on survey data, future research can benefit from the abundance of digital trace data<sup>6,45</sup>, for instance, generated by online social networks, and utilize them for migration research.

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