




Beyond mixed embeddedness: Multilevel personal networks of migrant entrepreneurs in Naples and Manchester

Maria Camilla Fraudatario¹  | Giuseppe Giordano²  |
Anna Maria Zaccaria³ 

¹Department of Computer Science,
University of Salerno, Fisciano (SA), Italy

²Department of Political and Social Studies,
University of Salerno, Fisciano (SA), Italy

³Department of Social Sciences, University
of Naples, Napoli (NA), Italy

Correspondence

Maria Camilla Fraudatario, Department of
Computer Science, University of Salerno,
Via Giovanni Paolo II, 132, 84084, Fisciano
(SA), Italy.

Email: mfraudatario@unisa.it

Abstract

This article analyses immigrant entrepreneurship in different urban contexts and recognizes its significant impact on the economic and sociocultural development of cities. Immigrant entrepreneurs are often concentrated in neighbourhoods and promote diversified economic activities. The mixed embeddedness (ME) framework highlights the complex interplay of contextual, economic and institutional factors that shape immigrant entrepreneurship. As a source of social capital, entrepreneurial networks provide access to resources and opportunities. Despite all progress, the systematic analysis and quantification of embeddedness among immigrant entrepreneurs remains a challenge. This article aims to understand how different urban contexts shape various entrepreneurial strategies by quantifying forms of embeddedness. To pursue this goal, we examined the entrepreneurial strategies of Sri Lankans in Rione Sanità (Naples, Italy) and Pakistani entrepreneurs in Rusholme (Manchester, United Kingdom). By using social network analysis, this article reveals distinct forms

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership or other equity interest; and expert testimony or patent/licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in this article.

© 2024 International Organization for Migration.

of embeddedness and how the characteristics of urban contexts and groups simultaneously help define differences in entrepreneurial strategies.

INTRODUCTION

This article examines the entrepreneurial dynamics of immigrant groups in different urban settings. It is well-known that immigrant entrepreneurship is a significant phenomenon in Western cities, which not only contributes to economic and regional development but also brings about relevant changes in the sociocultural fabric of the areas where immigrants have settled (Kourtit & Nijkamp, 2012; Lalich, 2006; Waldinger, 1989). In this *new geography of migration* (Aliaga-Isla & Rialp, 2013), a city's neighbourhoods are places where business opportunities arise and where diversified economic activities can increase levels of social inclusion. Conversely, neighbourhoods are places where immigrants' business ventures are limited to certain economic and urban areas.

The mixed embeddedness (ME) framework offers a comprehensive explanation of the complex phenomenon of immigrant entrepreneurship, providing an analytical lens sensitive to the multiple factors that influence entrepreneurial advancement (Kloosterman & Rath, 2019). According to the ME perspective, immigrant entrepreneurship is the result of a dynamic interaction between contextual, economic and institutional factors and individual characteristics (Jones et al., 2014; Kloosterman et al., 1999; Kloosterman & Rath, 2001; Rath, 2002; Solano, 2020; Solano et al., 2023). Within this complex and dynamic structure, entrepreneurial networks are a source of diverse forms of social capital, with connective potential between social groups, not limited to ethnicity, and between places that transcend national borders (Berwing, 2019; Drori et al., 2009; Solano et al., 2023). Networks provide entrepreneurs with various opportunities, such as obtaining information and funding resources, recruiting customers and employees, and entering into commercial agreements (Jones & Ram, 2010; Kloosterman, 2000; Kloosterman & Rath, 2001).

Despite significant progress in the field of immigrant entrepreneurship, few studies offer a systematic method for analysing and quantifying forms of embeddedness among immigrant entrepreneurs. This is a legitimate difficulty, as empirically capturing the embeddedness of firms within local socio-economic and political institutions is not an easy task (Kloosterman & Rath, 2001; Price & Chacko, 2009). This article aims to understand how different urban contexts shape different entrepreneurial strategies by quantifying forms of embeddedness. In order to achieve this research objective, we analysed the entrepreneurial strategies of Sri Lankans in Rione Sanità (Naples, Italy) and Pakistanis in Rusholme (Manchester, United Kingdom).

The observation of two contexts that differ in terms of economic development patterns, migration histories and economic opportunities in the two neighbourhoods is interesting for our purpose. Indeed, these two case studies may provide an opportunity to capture similarities and, more importantly, differences in contextual factors for entrepreneurial trajectories.

In this sense, the research question that guided this article is whether and what forms of embeddedness immigrant entrepreneurship takes in their respective urban contexts. To answer this research question, we defined the levels of social embeddedness that support the creation of businesses: (i) the informal level (family, friends and acquaintances), (ii) the formal level (local institutions and various territorial agencies) and (iii) the contractual level (relationships with other businesses and partners).

We hypothesized that embeddedness can be effectively analysed and quantified as a network. Therefore, the methodological approach used was social network analysis, which emphasizes positions and roles within the network. Data were collected from a sample of 35 entrepreneurs through face-to-face interviews and a data-collection tool for personal networks (*Network Canvas Software*, Complex Data Collective, 2016).

The results reveal that entrepreneurial strategies are aligned with economic opportunities in their respective contexts. On the one hand, Pakistani entrepreneurship is influenced by the less regulated business environment in the United Kingdom, which encourages a wide range of businesses, from low-end to very high-end firms. On the other hand, Sri Lankan businesses lack well-defined organizational structures, have a weaker profile and focus mainly on trade and services, in line with the economic fabric of Naples. The forms of embeddedness reconstructed within personal networks show that the characteristics of the urban context and those of the group simultaneously help define differences.

The article is structured as follows: The first section provides an overview of immigrant entrepreneurship in the framework of ME. The second section focuses on the research methodology, including the network perspective, case studies and data collection. Next, the key findings of the research are presented, highlighting the profile of entrepreneurs and businesses, the levels of personal networks in entrepreneurship support and the typology of embeddedness. Finally, the last section summarizes the main results and draws some policy implications.

MIXED EMBEDDEDNESS

A key framework for analysing immigrant entrepreneurship

Immigrant entrepreneurship has been analysed from two distinct perspectives: the supply side and the demand side. The former focuses on the strategies adopted by immigrants, cultural determinants, ethnic affiliations and individual skills, as well as human and social capital (Jones & McEvoy, 1992; Portes & Stepick, 1985). The latter emphasizes contextual influences such as industry transformation, market dynamics, licencing and regulation (Rajman & Tienda, 2000; Ram & Jones, 2008a). The limitations of this dual analytical framework, however, have driven the development of new theoretical models that aim to understand the interplay between individual capabilities and the structural elements of the surrounding milieu (Storti, 2018). Kloosterman and Rath's (1999) ME theory was conceptualized along these lines and has subsequently stimulated further studies, demonstrating its adaptability across diverse disciplinary domains (Mitchell, 2015; Ram & Jones, 2008b). Scholars have pointed out that immigrant entrepreneurship is not solely influenced by cultural factors related to the ethnic group but, more importantly, by economic conditions and the influence of institutional frameworks (Kloosterman et al., 1999). This perspective offers a promising analytical lens for immigrant entrepreneurship, which is multidimensional and needs to be examined in light of multiple conditioning factors.

At the core of ME is the concept of *opportunity structure* and its impact on immigrant entrepreneurship. The opportunity structure includes crucial components, such as market characteristics, accessibility and the impact of institutional factors like the welfare system, sectoral organizations and business practices. It is evident that the opportunity structure is contextual and dynamic and varies at different levels of analysis. In this regard, scholars recommend analysing opportunity structures at three different scales: macro, meso and micro (Kloosterman, 2010).

At the macro level, the opportunity structure must include not only national market trends but also factors such as regulations on migration status, commercial licencing, rules on opening hours, product lines, wage conditions and social welfare in the employed labour market (Kloosterman & Rath, 2001). The interaction of these factors can either encourage or discourage the establishment of foreign-run businesses and determine the types of activities that are viable. Sometimes, self-employment is a response to economic needs and inequalities in access to well-paid jobs rather than a consequence of economic growth (Örtenblad, 2020).

The meso level refers to the urban or regional scale. As cities play an increasingly central role in global markets, it is imperative to consider the opportunities and constraints inherent in these environments. Cities have unique sociocultural and economic characteristics that sometimes diverge from national trends, thus creating investment niches and attractions for immigrants (Korsgaard et al., 2015). Within cities, immigrant businesses may specialize

in ethnic markets, address the specific needs of their ethnic group or operate in sectors with different skill requirements, each of which requires a different allocation of resources, both human and financial (Kloosterman, 2008). Aspiring entrepreneurs with limited financial capital often find it easier to invest in low-end markets, especially in niches where immigrants are more concentrated (Kloosterman, 2006).

Constraints and opportunities also manifest themselves at the micro level. It may be the case that constraints in one urban area represent opportunities in another area of the same city. For example, changes in lifestyles and consumption patterns may lead to investment in activities that cater to co-ethnic demands, such as in the hospitality industry (Kloosterman, 2006). Alternatively, the concentration of certain ethnic groups in residential areas may serve as a 'natural' market for immigrant entrepreneurs to provide tailored services and products (Barrett et al., 2001).

Cities and neighbourhoods, in particular, are also privileged points of observation for understanding how individual resources combine with local opportunity structures and the resulting entrepreneurial outcomes. These are places of physical and social proximity that facilitate social interactions, where the social networks that emerge also transmit a variety of forms of capital to sustain immigrant entrepreneurship or to structure survival strategies in competitive markets (Kloosterman & Rath, 2010). In contrast to explanations based on social capital theory, which emphasize its role in providing access to information and strategic pathways for enterprise creation (Khayesi & George, 2011; Nee & Sanders, 2001; Portes & Stepick, 1985), ME recognizes the importance of social capital by explicitly linking it to the economic, political and institutional context in which immigrants operate.

Following this framework, further research has explored how forms of capital are strongly influenced by the *accumulation of structural disabilities* (Ram et al., 2008, p. 439). The authors interviewed a group of Somali entrepreneurs in Leicester (United Kingdom), highlighting the importance of ethnic, social, human and financial capital, which are used differently in the entrepreneurial process. Solano (2020, 2023) compared Moroccan entrepreneurs in Milan and Amsterdam, analysing domestic and transnational businesses. The results showed that opportunity structures, individual characteristics and support networks contribute to the identification and exploitation of business opportunities. Similarly, Sommer and Gamper (2018) studied immigrants from the former Soviet Union in Germany using network maps to analyse how the use of social capital identifies transnational strategies.

Recent contributions using qualitative interviews have shown how *multifocality*—the simultaneous membership of immigrants in multiple groups and multiple places—and entrepreneurial behaviour (habits, customs, norms and traditions) determine the pursuit of business opportunities (Rath & Schütjens, 2016; Solano et al., 2022). Therefore, the ME framework provides an open design that enables the analysis of immigrant entrepreneurship in terms of opportunities, economic-institutional specificities of contexts, resources employed by immigrants and different strategies (Dheer, 2018). It also facilitates the development of new research hypotheses in the field (Kloosterman & Rath, 2018).

This article adopted the ME framework to identify and quantify the different forms of embeddedness of Sri Lankans in Naples and Pakistanis in Manchester. These objectives were achieved by collecting network data through a personal network approach regarding three social circles (levels) in which immigrants are embedded: (i) the informal level, the social circle of close relationships with relatives and friends; (ii) the formal level, of the relationships with institutions and other actors in the territory; and (iii) the contractual level, the business exchange relationships with other businesses.

The data on the composition and structure of personal networks provide a valuable tool for measuring the embeddedness of immigrant entrepreneurs. More specifically, it allows us to demonstrate the methodological effectiveness of combining social network analysis techniques within the theoretical framework of ME. The two cases of Manchester and Naples could then serve as examples of how this can be implemented empirically.

RESEARCH METHODOLOGY

The network perspective

This article aims to understand how immigrant businesses are embedded within social groups based on urban contexts by using the personal network approach (Campbell & Lee, 1991; McCarty, 1996) to frame and measure the different forms of embeddedness. The personal network perspective considers the viewpoint of the individual (*focal node*); it provides information about their social environment, which consists of relationships (*ties*) with other people (*alters*) and the mediated flows (e.g. support, exchange, cooperation and conflict).

Personal networks are a valuable research tool because they allow for the collection of information about the *ego* and its environment and reveal the presence of social patterns that facilitate comparisons between relationship structures (Vacca, 2018, 2019). Different models of interaction correspond to different network configurations. For example, the cohesive subgraphs in the network indicate a tendency to group together. A dense network implies high transitivity, with mutual connections between most alters. A star network shows maximum centralization, indicating the influence of a leading actor. It follows that the types of structures and relationships in personal networks can influence individuals' behaviours (Vacca, 2019). From this perspective, network ties are channels for the diffusion of resources, cultures and information. Dense relationships generate reciprocal influence, reflecting homogeneity in the practices, attitudes and preferences of actors in the network (Crossley et al., 2015).

The case studies

This article focuses on the entrepreneurial practices of the Sri Lankan community in Naples and the Pakistani community in Manchester to identify and quantify forms of embeddedness. These two ethnic groups are important because both Pakistanis and Sri Lankans represent the largest expatriate communities in their respective cities. They have similar residential patterns and are concentrated in Rusholme (39.9%)¹ and Rione Sanità (35.7%) respectively.² Furthermore, both immigrant communities have a high concentration of entrepreneurship in their residential neighbourhoods, providing a relevant context for comparing their entrepreneurial dynamics.

The comparison of case studies is interesting for capturing differences in entrepreneurial practices, starting from heterogeneous urban contexts (Yin, 2014). Manchester has a strong industrial past, including cotton mills and the coal industry, which employed first-generation Pakistanis (Werbner, 1990). They transferred the skills they had acquired in the factories to establish thriving businesses in the textile and retail sectors during deindustrialization (Barrett & McEvoy, 2006; Werbner, 1990). Such entrepreneurial growth has been explained as the result of *entrepreneurial chains* based on practical support and community credit (Werbner, 1990). Originally an economic enclave within the Manchester market, it helped the community prosper. In the late 1990s, a combination of factors, including liberalization policies, multinational competition and limited government intervention, led to a decline that resulted in the closure of many Pakistani factories. Some entrepreneurs survived the economic changes by investing in the quality of products and services, skilled labour and targeting a diverse customer base. Pakistani entrepreneurship has thus evolved by moving into new productive sectors beyond its original economic enclave (Werbner, 2001).

In contrast to Manchester, Naples is a southern European metropolis on the periphery of industry-led economic development that suffers from chronic unemployment. Since the 1980s, an economic structure has developed in the city that is mainly centred on retail, handicrafts and small and medium-sized enterprises, which often work as subcontractors for the domestic textile industry (Bagnasco, 1977). In addition, informality regulates access to the labour market and labour relations. Combined with the spatial proximity between groups with different socio-economic backgrounds, this creates a unique backdrop.

The employment of the early Sri Lankans who arrived in Naples from the 1990s onwards is related to personal care services for wealthy Neapolitan families, a typical employment niche for this group. A minority of Sri Lankans were employed as pedlars in restaurants or small local factories. The rise of Sri Lankan-owned businesses has only occurred in recent years, which provides us with initial insight into the phenomenon of Sri Lankan entrepreneurship in a still-developing context. The differences between the two cities provide fertile ground for exploring how environmental factors and individual resources influence entrepreneurial activities within immigrant communities.

The historical context of immigration in these neighbourhoods is another point of interest. As the literature observes, Pakistanis have settled in South Manchester since their first arrival in the 1930s, establishing meeting spots and places of worship (e.g. the Manchester Central Mosque in Victoria Park) while investing in various services and commerce. Rusholme, in particular, was transformed from a traditional English shopping street into an Indian corridor of restaurants, kebab shops and takeaways by the mid-1980s, eventually earning it the name 'Curry Mile'. Compared to its original structure, this street segment has diversified with various activities in retail (clothing, jewellery, food, electronics and repairs), personal services (beauty salons and barber shops), real estate and payments (property markets and money transfer), as well as legal and consulting offices. Many Pakistanis work as entrepreneurs and professionals in this wide range of manufacturing sectors.

In contrast, immigration from Sri Lanka to Naples dates back to the 1990s. Originally, the immigrants regarded the city as a temporary stopover before travelling on to northern Italy or other European countries. The Sri Lankans who arrived in the city mainly found employment in domestic work and personal care with wealthy families in Naples, which greatly influenced their choice of residence. Neighbourhoods such as Rione Sanità and others around the historic centre of Naples offered them affordable housing and a strategic location to easily reach the families they worked for, often located in nearby neighbourhoods such as Corso Vittorio Emanuele, Posillipo and Vomero. Rione Sanità is also a significant part of the social and urban regeneration of the last decade, which has been driven by the bottom-up participation of local associations and citizens. The results of this process include an economic impact, which can be seen in the opening of new commercial enterprises and the attraction of residents and tourists (Corbisiero & Zaccaria, 2021). As part of this local revitalization, Sri Lankans have found an accessible opportunity structure for investment in services (travel agencies, hairdressers and money transfers), retail, gastronomy and street food. The result is an area characterized by a social mix of low-income and middle-class people, as well as locals, non-resident students and immigrants from different backgrounds.

The cross-reading of case studies provides an opportunity for fieldwork and analytical reflection on two different models of immigrant entrepreneurship conditioned by the idiosyncrasies of the cities. As mentioned above, this article aims to quantify the forms of embeddedness in businesses, starting with the relationships involved in setting up a business and the support received. We hypothesized that embeddedness can be effectively analysed and quantified as a network. To answer our research question, we defined the levels of embeddedness that support the creation of businesses: informal level, formal level and contractual level. Each social circle, from intimate ties to institutional relationships, can be seen as a proxy measure of the entrepreneur's level of embeddedness. Of course, not all relationships can effectively support business creation. For example, contacts with banks for financing do not always yield positive results. However, identifying relationships that are also barriers has been valuable in understanding how entrepreneurial dynamics are structured.

Data collection

Face-to-face interviews were conducted between June 2019 and February 2020. We identified 35 entrepreneurs through both convenience sampling by visiting their businesses directly and snowball sampling by asking respondents to provide references to other entrepreneurs in their communities. We took a multilevel personal network approach and used *Network Canvas*,³ an interactive tool for constructing and collecting data, to gather information about different levels of the network. Specifically, we developed an interview protocol divided into

the following five sections: *EgoForm* to collect general information about ego and its enterprise (educational level, age, gender, enterprise name, foundation year, sector, number of employees and branches); *Name Generator (using forms)* to obtain a list of alters and their attributes (gender, age, nationality and type of support); *OrdinalBin* to rate the importance of the support received on a Likert scale; and *Sociogram* to trace the relationship between alters before being listed.

We used the Name Generator form to refer to three predetermined social circles (Figure 1). The first level, *informal*, consists of individuals who are directly connected to the ego through multiple relationships. These include relatives, friends, colleagues and acquaintances who have provided various forms of support to the entrepreneurial project, such as financial assistance, advice and emotional support. The second is the formal level and comprises contacts established by ego with institutions, associations, banks and other stakeholders in order to benefit from some services, such as financing, administrative and legal advice, professionalization workshops, security and trading services, compliance audits, know-how and business consultancy. Lastly, the *contractual* level includes the supply and collaboration that ego maintains with other firms. These are formal agreements and partnerships that contribute to the overall functioning of ego's business.

After eliciting the free-listed alters,⁴ we asked the ego to place alters in concentric circles (interactive sociograms) and classify them into different neighbourhood-level categories that overlapped the social circle supporting entrepreneurship. The results suggest that contact is stronger when an alter is closer to the ego, whereas alters occupying external levels are characterized by weak ties. Entrepreneurs interactively built networks, providing information about their characteristics and neighbourhoods. In doing so, they anticipated how they would implement their entrepreneurial strategies and referred to the three basic social institutions: family, institutions and the market.

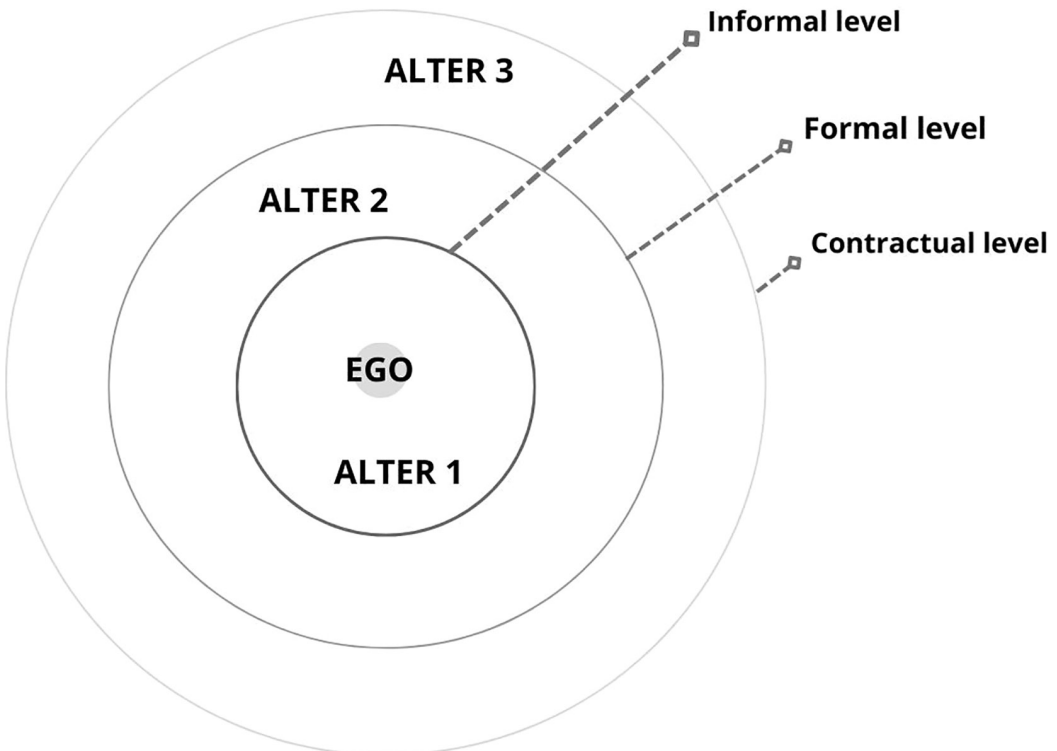


FIGURE 1 Interaction level of Ego.

After collecting the data, we computed measures of cohesion (density, transitivity, average distance, cohesion and E-I index⁵) and centrality (degree, brokerage and ego betweenness) for each personal network, which are useful for defining the positional properties of a node and interpreting the network structure (Borgatti et al., 2013). Therefore, we adopted these measures as descriptive network statistics to analyse the characteristics of entrepreneurs' networks. Let $X_{n,p}$ be the matrix in which the n rows contain the 35 personal networks, and the p columns contain the 13 network statistics and six attribute variables measured at the ego level. A multidimensional exploratory data analysis was conducted. The next section discusses the results of this analysis after a brief introduction to the profile of entrepreneurs and the nature of the support provided by the network levels.

ANALYSIS OF ENTREPRENEURIAL NETWORKS

Profiles of entrepreneurs and businesses

This section describes the entrepreneurs and their enterprises. The entrepreneurs were predominantly men (15 in both groups), compared to the women who were running entrepreneurial activities (two Pakistanis and three Sri Lankans). Sri Lankans tend to transition to self-employment later in life, around the age of 48 years, often after gaining extensive experience in the local labour market (e.g. domestic work or caregiving in Neapolitan households). Pakistanis, on the other hand, start their self-employment at a slightly younger age, with an average age of 42.5 years.

One factor that distinguishes the two groups is the difference in educational attainment. Most Pakistanis have a second-level degree and specialization in economic-mathematical courses (13 individuals), while Sri Lankans have a medium-low level of education (six individuals), with five cases unspecified. This educational disparity reflects the difference in migration times, with Pakistanis having a longer history of migration to the United Kingdom than Sri Lankans in Italy. Indeed, most of the Pakistanis involved in this study were either second or third generation.

These demographic factors also influence the entrepreneurial process. The first difference relates to industry investment preferences. Sri Lankans concentrated on the agency and services sector (eight)⁶ to meet the primary needs of the community. In addition, five Sri Lankans are involved in ethnic restaurants and another five in retail. Pakistani entrepreneurs settled in restaurants (eight), retail (four), agency and specialized services (four) and as suppliers (one), following the growth of Rusholme, which has been an area with many typical Indian-Pakistani restaurants from the outset. The year of establishment of the enterprises highlights another distinction between the two groups. Sri Lankan enterprises are recent, with 13 new openings between 2007 and 2020; Pakistani entrepreneurship has a long history, with 12 enterprises established between 1999 and 2007. The structural characteristics of the enterprises are also reflected in the number of employees and branches. Of the Sri Lankan firms, 14 have hired 2–5 employees, often including relatives and friends, while four individuals are self-employed. Sri Lankan businesses operate from a single branch. In contrast, Pakistani firms appear to be better structured in these aspects: seven entrepreneurs have more than one branch, and nine have hired between six and 10 employees.

Levels of personal networks supporting entrepreneurship

To assess how the informal, formal and contractual levels supported entrepreneurial careers, we propose an interpretation of the composition of personal networks based on the average network size for each respondent. At the informal level, Pakistanis and Sri Lankans used their close-knit circles to varying degrees. This level is prominent in Sri Lankan networks, with an average of 4.3 alters, including relatives, friends and acquaintances who played a crucial role in the early stages. On the other hand, Pakistani networks consist of an average of 2.2 alters at the informal level. Alters belonging to the informal circle responded to needs that entrepreneurs did not

have the resources to address, mainly by providing motivational support and economic assistance through loans or family savings.

However, there were some differences between the groups in terms of administrative and functional issues. For most Sri Lankans, the informal level was essential for developing project ideas, advice and administrative and accounting support, particularly for registration with the Chamber of Commerce and day-to-day bookkeeping. These aspects reflect the difficulties encountered in the urban context and, at the same time, outline a low entrepreneurial culture and a lack of knowledge of the regulatory framework. All these aspects create a weak entrepreneurial model that is more prone to failure and less sustainable in the long term. Instead, the Pakistanis in Manchester explained that they relied on informal relationships to reduce costs and ensure the functionality of their businesses, as the concentration of trade in Rusholme had significantly increased competition. The Pakistanis involved their relatives and friends through two primary strategies: one aimed at competing on the basis of product quality, thereby enhancing marketing and social media activities, and the other focused on reducing workforce costs by directly tapping into informal networks.

The relationship underlying the formal level reflects the opportunity structure of Naples and Manchester, as it includes the offer organized by the cities to support entrepreneurship and the extent to which entrepreneurs have benefited from it. There are more differences between the groups at this level (four average alters for the Pakistani network and 1.5 average alters for the Sri Lankan network). Pakistani entrepreneurs made extensive use of local institutions and other agencies for administrative, financial and advisory support, appreciating the efficiency of bureaucratic processes facilitated by online services. They also actively sought more specialized support, including know-how, professionalization courses, marketing services and occupational safety. In this case, individual skills and adequate knowledge of the regulatory environment are essential to accessing the resources needed to launch business projects.

Sri Lankans have mainly turned to local agencies for legal, administrative and financial assistance, which were the priority areas at the outset. Nevertheless, the services provided by the agencies in Naples only partially met these needs. Consequently, the decision to rely on intermediaries, often individuals with direct or indirect connections, to fill these gaps has helped to strengthen aspects of the informal support structure.

Of interest to stakeholders is the consideration that, in Manchester, there is an emerging need for more focused attention on the conditions of the self-employed, both in terms of workload and protection from exogenous market changes. In Naples, where the phenomenon of foreign entrepreneurship is still in the consolidation stage, it seems relevant to strengthen the provision of services aimed at bridging skill gaps and providing adequate support with regard to the risks and opportunities involved in starting new businesses.

Finally, in terms of the supply-focused contractual level, Pakistanis tend to establish more partnerships with other companies (2.2 alters on average) than Sri Lankan firms (1.7 alters on average). For Pakistanis, the main contractual relationships are within the community, established over time in the wholesale market, and concern the supply of goods, but mainly partnerships for the provision of specialized services. The contractual relationships of Sri Lankan networks relate to two groups: local and Chinese entrepreneurs, especially those supplying food and technology equipment. In addition, trade and supply are often conducted between neighbourhood shops, indicating practices based on informal subcontracting.

Topological characteristics and typology of personal networks

We analyse the characteristics of personal networks through a multidimensional data analysis approach to understand the latent characteristics underlying entrepreneurial networks and to obtain a typology of embeddedness. Following the graph theorists who used the concepts of space and distance to represent relational data in a metric space (Scott, 1991, 1998), it is possible to analyse the roles and positions of relevant nodes using correlation and association models (Becker & Clogg, 1989; Wasserman & Faust, 1993). Thus,

we propose the investigation of the structural properties of networks using factorial analysis (Giordano & Vitale, 2007).

This framework provides an interpretative contribution to the metric space of personal networks, reducing the redundancy of information conveyed by traditional network indices. We perform a principal component analysis (PCA), starting from the $X_{n,p}$ matrix, containing 35 personal networks with 13 network indices and six attribute variables. The node-point configuration is projected onto a reduced subspace that summarizes the key features of a network. The PCA was performed on the following 13 active variables in Table 1. The result is that the first two components account for 62.22% (32.62% + 29.60%) of the total variability.

In Figure 2, the correlation circle shows the variables associated with the two principal components (PC). *Broker*, *density*, *ego betweenness* and *cohesion* characterize the first PC (Dim.1), which is inversely correlated with the *N_nodes*. The result is coherent, as a large personal network often leads to reduced cohesion (or compactness) due to incomplete reciprocal connections between alters. Based on this information, we identify the first PC as the *structure of the personal network*.

The second PC (Dim.2) shows linear correlations with *transitivity*, *average_degree* and *N_ties* and an inverse correlation with *average_distance* and *E-I indices*. For example, high transitivity within social circles indicates strong and informal ties. In contrast, personal networks with low transitivity show high *average_distance* and positive E-I index values for the *out_in* partition. The formal relationships describe the ego's decision to look beyond the ethnic group and engage with local stakeholders in the early stages of the business project. Therefore, we define the second PC as the *form of ties in personal networks*.

The projection of individuals (here, personal networks) onto the plan provides further analytical detail (Figure 3 on the left). According to the description above, the factorial plan captures the ego network's characteristics for *structure* and *form of ties*.

The key individual points for personal network structure (Dim.1) are P2, C8, C18, C13, P9 and C14, located to the right of the plot and characterized by a positive coordinate on the first component. Personal networks have a higher density or show higher values of intermediation (brokerage and ego betweenness). For example, P2's prestige stems from the manufacture and wholesale of clothing, which operates across borders between Pakistan and the United Kingdom.

Similarly, C8 has high intermediation values because he runs the Taxpayer Assistance Centre (TAC), and he works with trade unions in Naples to help Sri Lankan clients with their income tax returns and other tax practices,

TABLE 1 Active variables in PCA.

Network statistics (PCA variables)	Label
Number of nodes	<i>N_nodes</i>
Number of ties	<i>N_Ties</i>
Network density	<i>Density</i>
Average degree	<i>Avg_Degree</i>
Transitivity index	<i>Transitivity</i>
Brokerage index	<i>Broker</i>
Network cohesion	<i>Cohesion</i>
Ego betweenness index	<i>Ego_Bet</i>
Average geodesic distance	<i>Avg_Distance</i>
E-I Index formal–informal	<i>Formal_Informal</i>
E-I Index external–internal	<i>Out_In</i>
E-I Index weak–strong	<i>Weak_Strong</i>
E-I Index heterogeneous–homogeneous gender	<i>Gender_homophily</i>

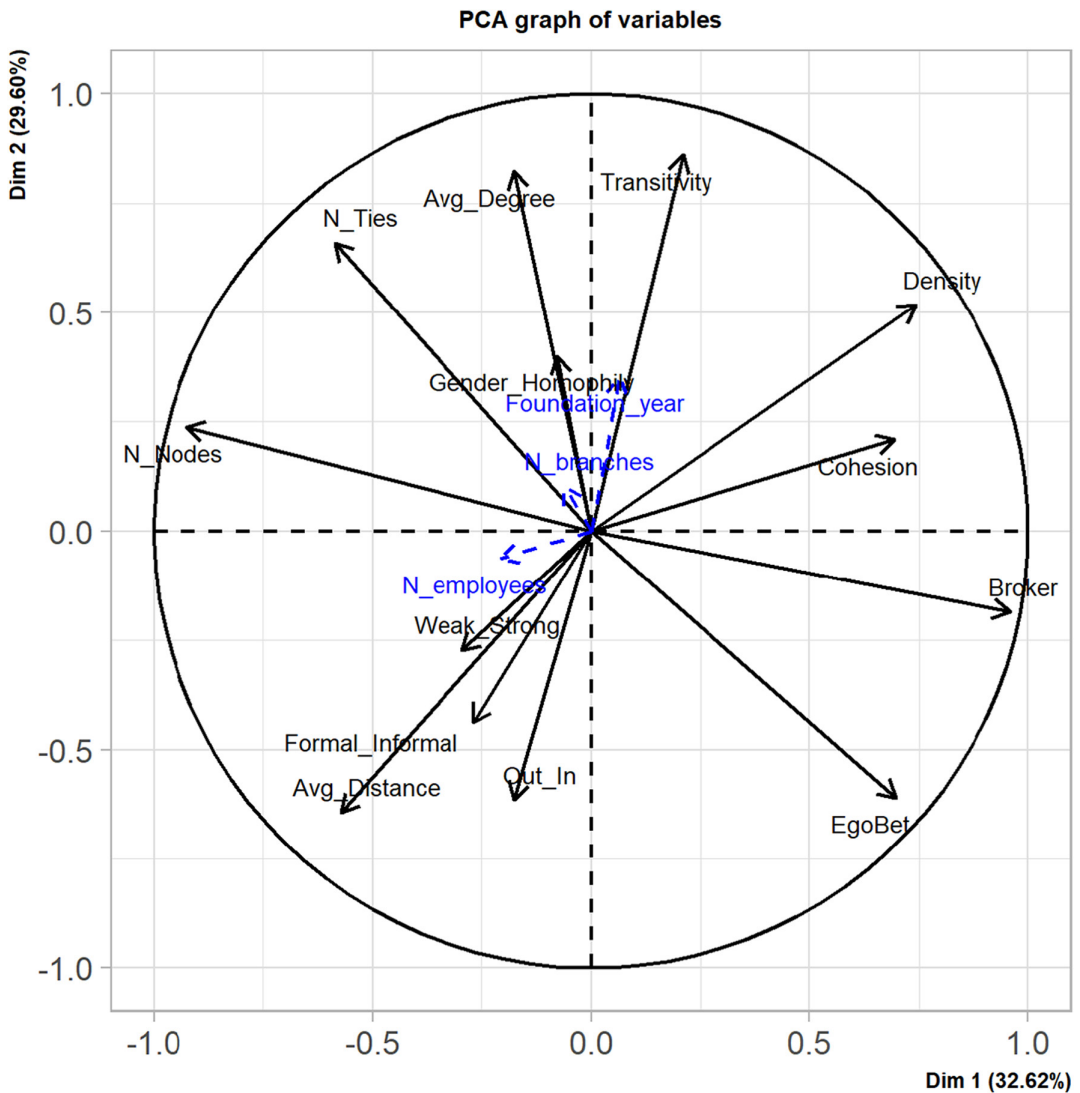


FIGURE 2 PCA correlations.

acting as an intermediary between the ethnic group and local trade unions. The second component, the *form of ties*, is characterized by individuals C16, P8, P11 and C12, whose networks show many relationships and values of transitivity. Family and friends supported them in their entrepreneurial projects. If the family plays a central role in these cases, what stands out is that the performance of P6, P7 and P17 with high skills (in the legal profession, real estate and supply industries) mainly looked outside the ethnic group and interacted with stakeholders in Manchester to set up their enterprise.

PCA provides a synthesis of entrepreneurship characteristics, while personal network analysis gives relevance to how entrepreneurs are embedded in the social system without neglecting situational economic strategies. Therefore, we perform a cluster analysis (Ward's method) on the results of PCA coordinates to obtain a classification of ego networks that share similar structural properties. We obtained four clusters distributed on the factorial map (Figure 3) according to the structure (Dim.1) and form of the personal network (Dim.2). In addition, the dendrogram (Figure 3, right) provides a summary reading of the personal network distance matrix, highlighting the dissimilarity of the clusters.

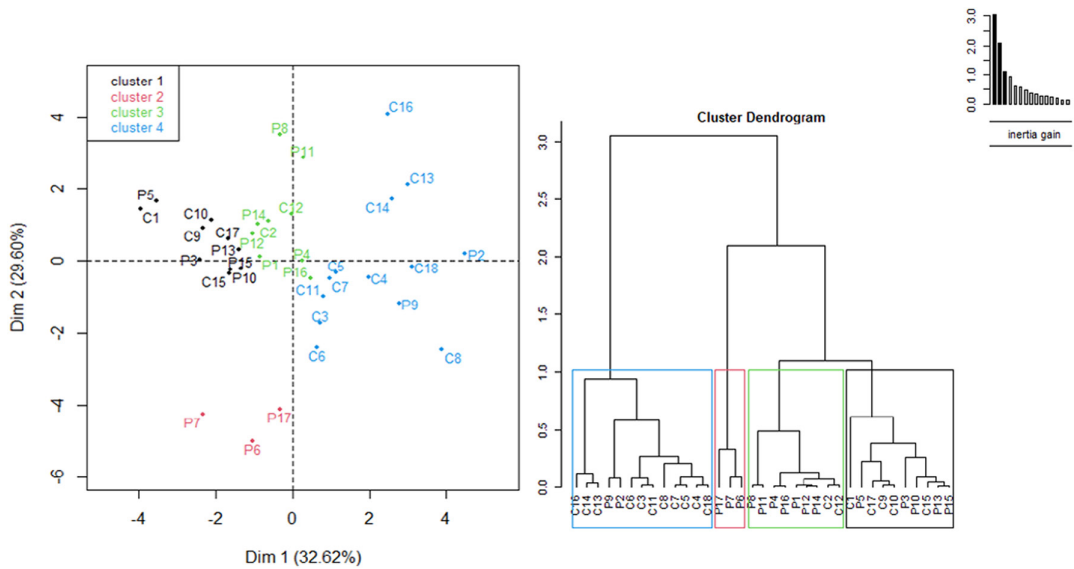


FIGURE 3 Cluster analysis: Dendrogram and representation of the 4 clusters on the factorial plane.

The following section interprets the clusters in terms of their relevant characteristics and outlines different types of personal networks, each corresponding to a specific entrepreneurial embeddedness.

Typology of embeddedness

To capture the structural characteristics of each cluster, we constructed a typology by selecting four archetypal networks from the data set (Figure 4). This typology facilitates an understanding of the type of embeddedness that emerges within social systems and urban contexts.

The first type is *relational embeddedness*, which concerns 10 personal networks (five Pakistanis and five Sri Lankans)⁷ and is characterized by the number of nodes and ties. The network shows a classical structure with the ego at the centre of different social circles and describes the role of the *informal level* in supporting entrepreneurial projects. This structure can be both a constraint and an opportunity, as nodes and ties can either predict project realization or reflect a socialized profile of the ego and its ability to access resources through multiple channels. This network structure depends on local responses to specific issues. We refer to the constraints faced by Sri Lankans in Naples, mainly in registering with the Chamber of Commerce and accessing finance through conventional channels (local institutions and banks). A lack of information, partly covered by the local stakeholders, led them to rely on their compatriots for financial support, legal and accounting contacts, and for setting up new businesses. The ethnic boundary was extended to include locals, fostering relationships based on sociocultural proximity and feeding the overall size of the network. The heterophily scores on the E-I index for gender and origin segregation confirm this tendency.

Although Pakistanis have not experienced any issues with local institutions, their preference for informal engagement reflects typical behaviour based on strong social ties and mutual obligations between families that go back generations. In several cases, the informal level has been instrumental in negotiating wholesale supply agreements (food and electronics) with other Pakistani entrepreneurs who, over time, have strengthened their position in the wholesale market or with Pakistani companies providing specialized services (accounting, marketing and technological development services).

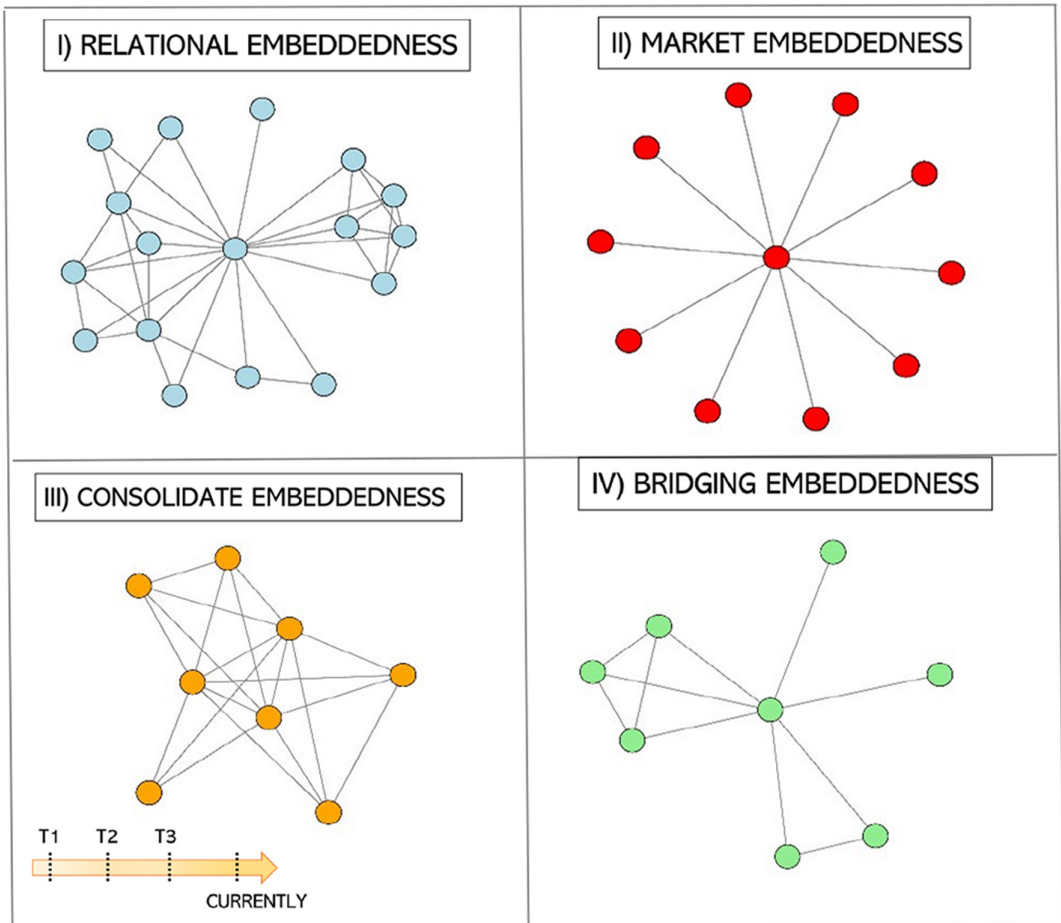


FIGURE 4 Typology of the embeddedness.

The second type of entrepreneur is described by a star network with high heterophily values for the E-I index in both the *out-in* partition (ethnic group) and the *formal-informal* partition (relationships with local stakeholders). In this case, three Pakistanis have achieved advanced careers. These professionals specialize in a few industries, such as large food supplies, real estate markets and law offices. From the outset, they relied on British institutions and former colleagues (weak ties) to obtain information and the resources necessary for establishing their enterprises. This entrepreneurial behaviour results in specialized and competitive services for a mixed clientele, sometimes across national borders. Personal networks confirm structural embeddedness in society and their active participation in a dynamic and open market (*market embeddedness*).

The third type is *consolidated embeddedness*. Nine personal networks (seven Pakistanis and two Sri Lankans)⁸ showed a higher degree of cohesion and transitivity. Within this cohesive structure, the position of the ego is not clearly separated from the alters. This type highlights the pivotal role of the family, which was involved at every stage of the enterprise, from its inception to its development. The family provided motivation and financial support and helped to manage the enterprise (e.g. by helping to reduce staff costs). Particularly for Pakistanis working in the hospitality industry, the family is employed to maintain a high pace of work in neighbourhoods like Rusholme, where demand is high.

Consolidated embeddedness also refers to the way in which the business is part of the family history and its management is passed down from one generation to the next. Over time, younger family members have taken

over the reins of the company, allowing the older generation to explore new industries or pursue other activities (e.g. grocery wholesaling and new openings).

The final cluster, *bridging embeddedness*, includes 13 entrepreneurs (11 Sri Lankans and two Pakistanis).⁹ This network configuration reveals the 'positional advantage' of the ego within its relational system, as confirmed by the values of mediation (average 10.08) and prestige (average 0.329). A strategic position in a network means having access to influential circles in order to obtain resources and mediate the flow of information (Burt, 1992). Studies have found that structural holes and a low network density improve entrepreneurial performance.

Essentially, the ego of this third type consciously manipulates the networks to serve its own ends (Watt, 1999). In some cases, structural entrepreneurs choose alternative partners to improve their bargaining power. In these personal networks, the quality of relationships with influential alters is more decisive than network size. For the Sri Lankans, establishing connections with Neapolitan professionals, such as lawyers and accountants, was essential to obtaining the resources and know-how to develop their business.

CONCLUSION

This article analysed the entrepreneurial dynamics of Sri Lankans in Naples and Pakistanis in Manchester, two significant ethnic groups within the population structure of both cities that have shown decisive entrepreneurial tendencies over time. This article adopted ME framework and aimed to identify and quantify the forms of embeddedness of these enterprises in the cities using a methodological approach based on personal networks. Given the backdrop of the specificities of the cities in terms of migration history and economic development models, the focus was on how immigrants used informal relationships and engaged with local institutions and other businesses to set up their entrepreneurial projects. This analysis at a given level allowed us to model forms of embeddedness and present them in the form of a network configuration.

The results are consistent with the economic opportunities in the respective contexts. On the one hand, the less regulated business environment in the United Kingdom encouraged the creation of diversified firms, ranging from low-end to very high-end firms. On the other hand, Sri Lankan businesses lack a highly defined organizational structure, have a weaker profile and are mainly engaged in the trade and service sector, which corresponds to the economic fabric of Naples.

Furthermore, the results revealed interesting differences that are influenced by contextual factors rather than ethnic conditioning. Family and community support are common to both entrepreneurial experiences (relational embeddedness and consolidated embeddedness). For Sri Lankans, family support, which extends even to Neapolitans, usually the families they work for, manifests itself in practical help, access to information and motivational support. For Pakistanis working in a busy and highly competitive environment, particularly in the catering industry, family support is critical to the survival of the business, for example, by reducing personnel costs and employing parents, siblings and cousins.

Different readings were also found that reflect the specificities of urban contexts in terms of market embeddedness and bridging embeddedness. Market embeddedness describes the economic performance of the Pakistani community in Greater Manchester. Indeed, the city offers a wide range of services and diversified economic sectors that are easily accessible, which has encouraged the Pakistani community to invest their resources and professional skills in establishing a business.

Bridging embeddedness is more prevalent in Naples and allows individuals to exploit structural gaps in the network, especially when faced with a restrictive opportunity structure. The two entrepreneurial patterns strongly reflect urban opportunity structures. In Greater Manchester, Pakistani entrepreneurship is facilitated by local institutions and actors, offering a more straightforward entry into the economy and access to various enabling resources through formal and institutional channels.

In Naples, Sri Lankan entrepreneurship faces multiple challenges. On one hand, low skill levels, including language skills and a vague understanding of business regulations are barriers. On the other hand, the city is not fully equipped to provide support and services to a growing proportion of immigrant businesses. The services offered are primarily related to fulfilling basic needs (e.g. reception, language skills, migration status, health services and integration into employment and housing).

In this regard, local gatekeepers act as *filters* between the needs expressed by Sri Lankans and access to the territory and fulfil specific requests such as administrative consultations and financial assistance. Ultimately, relationships within the Neapolitan community played a crucial role in entrepreneurial trajectories, often informally addressing the multiple challenges faced by entrepreneurs in the city. This trend is confirmed by the E-I index, which measures heterophily (of gender and origin) in relationships with others.

Another significant factor is time, which refers to the sedimentation of ethnic groups. Most of the Pakistani individuals who took part in this study were second generation. Having grown up in England and equipped with advanced education, Pakistanis show higher entrepreneurial skills and greater integration into Manchester's institutional context. Conversely, first-generation Sri Lankans in Naples face more significant challenges. Initially, they face language barriers and then regulatory complexities as they try to start their own business. Ultimately, while Pakistanis demonstrate systemic embeddedness in Manchester, Sri Lankans appear to be better integrated into the city's social fabric, which operates as a parallel welfare system.

Moreover, this article suggests some policy implications that emphasize the role of public actors in the consideration of immigrant entrepreneurship. Indeed, it is a phenomenon that affects cities differently, generating economic, social and cultural value. In contexts such as Manchester, it is necessary to pay more attention to the conditions of the self-employed, both in terms of workload and protection from exogenous market changes. That is particularly crucial given the additional challenges posed by Brexit-related dynamics that have recently affected the socio-economic and political environment. In contexts such as Naples, where the phenomenon of foreign entrepreneurship is still in the consolidation phase, it seems important to strengthen the offer of services aimed at bridging skill gaps and providing adequate support with regard to the risks and opportunities of starting a new business.

From a methodological point of view, the social network analysis component adds value to the interactionist ME framework to the study of immigrant entrepreneurship embeddedness by enabling a comparison of the entrepreneurial experiences of different groups and cities. However, it is worth acknowledging the limitations of this study. The focus on specific contexts and groups limits the generalizability of the findings to other immigrant groups or geographic locations. The cross sectional design limits the ability to examine long-term dynamics and changes over time. Future research should incorporate longitudinal studies to capture the evolving nature of immigrant entrepreneurship. The study did not fully consider contextual conditions, such as policy or regulatory frameworks, that influence immigrant entrepreneurship. Additionally, the proposed methodological approach could include other explanatory demographic variables. Exploring these factors in future research could provide a more comprehensive understanding of entrepreneurship dynamics and outcomes.

PEER REVIEW

The peer review history for this article is available at <https://www.webofscience.com/api/gateway/wos/peer-review/10.1111/imig.13262>.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Maria Camilla Fraudatario  <https://orcid.org/0000-0003-0817-8586>

Giuseppe Giordano  <https://orcid.org/0000-0002-0582-109X>

Anna Maria Zaccaria  <https://orcid.org/0000-0002-0456-5506>

ENDNOTES

- ¹Source: Ethnic group residents in Rusholme (2011). NOMIS, Official Census and labour markets statistics <https://www.nomisweb.co.uk/>.
- ²Source: Prevalent citizenships per neighbourhood. City at the 2011 census, Comune di Napoli, <https://www.comune.napoli.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/2833>.
- ³The software, released in November 2019 with funding from the National Institute on Drug Abuse (NIDA/NIH), offers a suite of integrated tools: *Architect* to create interview protocols, *Interviewer* to simplify data collection and *Server* to archive complex social network data (Birkett et al., 2021).
- ⁴All participants provided informed consent prior to enrolment in this study, which guaranteed the confidentiality and anonymity of the individuals named in the interview.
- ⁵We calculated the E-I index for the following dimensions: (i) formal–informal: relationships within close circles and externally with institutions and stakeholders; (ii) external–internal: relationships within ethnic groups and those with locals; (iii) weak–strong: strong relationships (family and friendships) and weak relationships (professional, exchange and acquaintance); and (iv) gender homophily: relationships related to the gender of the ego.
- ⁶These are travel agencies and package shipping services to Sri Lanka, money transfer services used for remittances and the Tax Service Centre for processing income tax declarations.
- ⁷The five Sri Lankans run the following businesses: a grocery store, an electronics repair shop, a stationery bookshop, a tax service centre and a money transfer. The five Pakistani businesses are restaurants (two), clothing retailing, grocery wholesaling and [advertising](#).
- ⁸The seven Pakistanis run businesses in the hospitality industry (five restaurants, café and shisha club). The two Sri Lankans both own travel agencies.
- ⁹The 11 Sri Lankan businesses are mainly in the service sector (nine), such as travel agencies, electronic retailing, barber-shops, parcel delivery and two in the catering industry (restaurants and takeaways). The two Pakistani enterprises are a takeaway and a clothing store.

REFERENCES

- Aliaga-Isla, R. & Rialp, A. (2013) Systematic review of immigrant entrepreneurship literature: previous findings and ways forward. *Entrepreneurship & Regional Development*, 25(9–10), 819–844.
- Bagnasco, A. (1977) *Tre Italie: la problematica territoriale dello sviluppo italiano*. Bologna: Il mulino.
- Barrett, G.A. & McEvoy, D. (2006) The evolution of Manchester's curry mile: from suburban shopping street to ethnic destination. In: Kaplan, D.H. & Wei, L. (Eds.) *Landscapes of the ethnic economy*. Plymouth: Rowman & Littlefield Publishers, Inc.
- Barrett, G.A., Jones, T.P. & McEvoy, D. (2001) Socio-economic and policy dimensions of the mixed embeddedness of ethnic minority business, Britain. *Journal of Ethnic and Migration Studies*, 27(2), 241–258. Available from: <https://doi.org/10.1080/13691830125088>
- Becker, M.P. & Clogg, C.C. (1989) Analysis of sets of two-way contingency tables using association models. *Journal of the American Statistical Association*, 84, 142–151.
- Berwing, S. (2019) Extending mixed embeddedness: entrepreneurial figurations of entrepreneurs with migrant origins in Germany. *Historical Social Research*, 44(24), 162–185.
- Birkett, M., Melville, J., Janulis, P., Phillips, G., Contractor, N. & Hogan, B. (2021) Network canvas: key decisions in the design of an interviewer-assisted network data collection software suite. *Social Networks*, 66, 114–124.
- Borgatti, S.P., Everett, M.G. & Johnson, J.C. (2013) *Analyzing social networks*. London: SAGE.
- Burt, R.S. (1992) *Structural holes: the social structure of competition*. Harvard: University Press.
- Campbell, K.E. & Lee, B.A. (1991) Name generators in surveys of personal networks. *Social Networks*, 13, 203–221.
- Complex Data Collective. (2016) Network Canvas Interviewer. www.doi.org/10.5281/zenodo.6026548
- Corbisiero, F. & Zaccaria, A.M. (2021) Effetto Paranza. Le visioni, i confini, le prospettive. In: Consiglio, S. & Izzo, F. (Eds.) *Luci nelle tenebre. Un'analisi dell'impatto sociale ed economico delle Catacombe di San Gennaro*. Napoli: Edizioni San Gennaro, pp. 85–116.
- Crossley, N., Bellotti, E., Edwards, G., Everett, M.G., Koskinen, J. & Tranmer, M. (2015) *Social network analysis for ego-nets*. London: SAGE.

- Dheer, R.J.S. (2018) Entrepreneurship by immigrants: a review of existing literature and directions for future research. *International Entrepreneurship and Management Journal*, 14, 555–614.
- Drori, I., Honig, B. & Wright, M. (2009) Transnational entrepreneurship: an emergent field of study. *Entrepreneurship Theory and Practice*, 33(5), 1001–1022.
- Giordano, G. & Vitale, M.P. (2007) Factorial contiguity maps to explore relational data patterns. *Statistica Applicata*, 19(4), 297–306.
- Jones, T. & McEvoy, D. (1992) Ressources ethniques et égalité des chances: les entreprises indopakistanaïses In: Grande Bretagne et au Canada. *Revue européenne Des Migrations Internationales*, 8(1), 107–112.
- Jones, T. & Ram, M. (2010) Review article: ethnic variations on the small firm labour process. *International Small Business Journal*, 28(2), 163–173.
- Jones, T., Ram, M., Edwards, P., Kiselincev, A. & Muchenje, L. (2014) Mixed embeddedness and new migrant enterprise in the UK. *Entrepreneurship & Regional Development*, 26(5–6), 500–520.
- Khayesi, J.N.O. & George, G. (2011) When does the socio-cultural context matter? Communal orientation and entrepreneurs' resource accumulation efforts in Africa. *Journal of Occupational and Organizational Psychology*, 84, 471–492.
- Kloosterman, R. (2006) Mixed embeddedness as a conceptual framework for exploring immigrant entrepreneurship. *Eurex Lecture*, 8, 1–19.
- Kloosterman, R. (2008) Walls and bridges: knowledge spillover between 'superdutch' architectural firms. *Journal of Economic Geography*, 8(4), 545–563.
- Kloosterman, R. (2010) Matching opportunities with resources: a framework for analysing (migrant) entrepreneurship from a mixed embeddedness perspective. *Entrepreneurship and Regional Development*, 22(1), 25–45.
- Kloosterman, R. & Rath, J. (2001) Immigrants entrepreneurs in advanced economies: mixed embeddedness further explored. *Journal of Ethnic and Migration Studies*, 27(2), 189–201.
- Kloosterman, R. & Rath, J. (2019) Mixed embeddedness revisited: a conclusion to the symposium. *Sociologica*, 12(2), 103–114.
- Kloosterman, R., van der Leun, J. & Rath, J. (1999) Mixed embeddedness: (in)formal economic activities and immigrant business in The Netherlands. *International Journal of Urban and Regional Research*, 23(2), 253–267.
- Kloosterman, R.C. (2000) Immigrant entrepreneurship and the institutional context: a theoretical exploration. In: Houndmills, R.J. (Ed.) *Immigrant businesses. The economic, political and social environment*. Basingstoke, Hampshire: Macmillan Press.
- Korsgaard, S., Ferguson, R. & Gaddefors, J. (2015) The best of both worlds: how rural entrepreneurs use placial embeddedness and strategic networks to create opportunities. *Entrepreneurship and Regional Development*, 27(9/10), 574–598.
- Kourtik, K. & Nijkamp, P. (2012) Strangers on the move: ethnic entrepreneurs as urban change actors. *European Review*, 20(3), 376–402. Available from: <https://doi.org/10.1017/S1062798711000627>
- Lalich, W.F. (2006) *Measurement and spatial effects of the immigrant-created cultural diversity in Sydney*. FEEM Working Paper No. 47.2006.
- McCarty, C. (1996) The meaning of knowing as a network tie. *Connect*, 18, 20–31.
- Mitchell, C. (2015) *Growth the missing ingredient of immigrant entrepreneurship*. Lund: Lund University.
- Nee, V. & Sanders, J. (2001) Understanding the diversity of immigrant incorporation: a forms-of-capital model. *Ethnic and Racial Studies*, 24(3), 386–411.
- Örtenblad, A. (2020) *Against entrepreneurship. A critical examination*. Cham: Palgrave Macmillan.
- Portes, A. & Stepick, A. (1985) Unwelcome immigrants: the labour market experiences of 1980 (Mariel) Cuban and Haitian refugees in South Florida. *American Sociological Review*, 50, 493–514.
- Price, M. & Chacko, E. (2009) The mixed embeddedness of ethnic entrepreneurs in a new immigrant gateway. *Journal of Immigrant & Refugee Studies*, 7(3), 328–346.
- Raijman, R. & Tienda, M. (2000) Immigrants' pathways to business ownership: a comparative ethnic perspective. *International Migration Review*, 34(3), 682–706.
- Ram, M. & Jones, T. (2008a) Ethnic minority businesses in the UK: an overview. In: Reis, C. & Rath, J. (Eds.) *Migrações journal - special issue on immigrant entrepreneurship*, Vol. 3. Lisbon: ACIDI, pp. 61–71.
- Ram, M. & Jones, T. (2008b) Ethnic-minority businesses in the UK: a review of research and policy developments. *Environment And Planning C, Government & Policy*, 26(2), 352–374.
- Ram, M., Theodorakopoulos, N. & Jones, T. (2008) Forms of capital, mixed embeddedness and Somali enterprise. *Work, Employment and Society*, 22(3), 427–446.
- Rath, J. (2002) *Unravelling the rag trade: immigrant entrepreneurship in seven world cities*. Oxford: Berg.
- Rath, J. & Schutjens, V. (2016) Migrant entrepreneurship: alternative paradigms of economic integration. In: Triandafyllidou, A. (Ed.) *Handbook of immigration and refugee studies*. London: Routledge, pp. 96–103.
- Scott, J. (1991) *Social network analysis. A handbook*, London: SAGE.

- Scott, J. (1998) Trend report. Social network analysis. *Sociology*, 22(1), 109–127.
- Solano, G. (2020) The mixed embeddedness of transnational migrant entrepreneurs: Moroccans in Amsterdam and Milan. *Journal of Ethnic and Migration Studies*, 46, 2067–2085.
- Solano, G., Ram, M. & Rath, J. (2023) Regulation of migrant entrepreneurship: the strained conjunction of laws, policies and practices. *International Migration*, 61(2), 3–8.
- Solano, G., Schutjens, V. & Rath, J. (2022) Multifocality and opportunity structure: towards a mixed embeddedness model for transnational migrant entrepreneurship. *Comparative Migration Studies*, 10, 3.
- Sommer, E. & Gamper, M. (2018) Transnational entrepreneurial activities: a qualitative network study of self-employed migrants from the former Soviet Union in Germany. *Social Networks*, 53, 136–147.
- Storti, L. (2018) Deepening the liaison: mixed embeddedness and economic sociology. *Sociologica*, 12(2), 23–37.
- Vacca, R. (2018) Structure in personal networks: constructing and comparing typologies. *Network Science*, 8, 142–167.
- Vacca, R. (2019) Multilevel models for personal networks: methods and applications. *Statistica Applicata - Italian Journal of Applied Statistics*, 30(1), 59–97.
- Waldinger, R. (1989) Immigration and urban change. *Annual Review of Sociology*, 15, 211–232.
- Wasserman, S. & Faust, K. (1993) Correlation and association models for studying measurements on ordinal relations. *Sociological Methodology*, 23, 177–215.
- Werbner, P. (1990) *The migration process: capital, gifts and offerings among British Pakistanis*. Oxford: Berg.
- Werbner, P. (2001) Metaphors of spatiality and networks in the Plural City: a critique of the ethnic enclave economy debate. *Sociology*, 35(3), 671–693.
- Yin, R. (2014) *Case study research: design and methods*, 5th edition. Thousand Oaks, CA: Sage.

How to cite this article: Fraudatario, M.C., Giordano, G. & Zaccaria, A.M. (2024) Beyond mixed embeddedness: Multilevel personal networks of migrant entrepreneurs in Naples and Manchester. *International Migration*, 00, 1–18. Available from: <https://doi.org/10.1111/imig.13262>