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Social capital of entrepreneurs in a developing country: The effect of gender on access to and requests for resources

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ABSTRACT

This paper addresses gender differences in the social capital of entrepreneurs in a developing country. Social networks are often an important asset for accessing resources; however, they may also be a liability in developing countries, since entrepreneurs are often expected to support their contacts. Using a recent survey among urban and rural Ugandan entrepreneurs, we focus on the financial resources that entrepreneurs can obtain from their contacts on the one hand, and requests for financial support made to the entrepreneurs from these contacts on the other hand. Our results show that there are gender differences associated with access to, and requests for, financial resources.

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1. Introduction

Female entrepreneurship in developing countries is increasingly receiving attention from scholars and policy makers (Minniti and Naudé, 2010; Lindvert et al., 2017). Female entrepreneurs can make significant contributions to innovation and economic growth in developing countries (Brush and Cooper, 2012; de Bruin et al., 2007; Welter et al., 2007). However, female entrepreneurs are still an ‘untapped source’ of growth (Vossenbergh, 2013), given that they face many barriers related to their gender, and this prevents them from reaching their full potential (Jamali, 2009; Lindvert et al., 2017; Yetim, 2008). Notwithstanding the increasing attention and policy initiatives, and despite the importance of female entrepreneurship for developing countries, there is still a significant gender gap when it comes to entrepreneurship in developing countries (Vossenbergh, 2013). Businesses owned by women are generally more likely to under-perform or fail, due to formal and informal obstacles (Roomi and Parrott, 2008; Vossenbergh, 2016a,b).

One possible reason for this gender gap is the difference between the social networks of male and female entrepreneurs in developing countries (Jamali, 2009; Lindvert et al., 2017). Researchers have long since acknowledged that entrepreneurial activity is embedded in network relationships (Dubini and Aldrich, 1991; Hoang and Antoncic, 2003). There is consensus that networks of personal relations are an important asset that determines the success of a

business, hence entrepreneurial networks are often said to constitute a form of social capital (Stam et al., 2014).

In general, it has been noted that the type and amount of support that women can obtain from their networks differs from what men can obtain (van Emmerik, 2006). There is a lack of systematic evidence on the differences between male and female entrepreneurs in their social capital in developing countries (Al-Dajani et al., 2015; Mair et al., 2012; Lindvert et al., 2017; Myroniuk, 2016). As underlined by Lindvert et al. (2017, 759), “recent works have increasingly questioned whether theoretical frameworks on social capital from mature economic contexts apply to women entrepreneurs in developing country contexts, where religious and cultural norms could be a prominent hindrance in leveraging social capital”.

Moreover, most research regarding networks of entrepreneurs predominantly focuses on the positive outcomes of networks in developing countries, namely the resources that an entrepreneur can get from his/her contacts (Boso et al., 2013; Berrou and Combarous, 2011, 2012; Bruton et al., 2007; Fafchamps, 2001; Fafchamps and Minten, 1999, 2002; Fafchamps and Quinn, 2016). The downsides of social networks both in developing and developed countries have received less attention in the literature, although various negative aspects derived from social networks have been mentioned on occasion (Barr, 2002; Deguilhem et al., 2017; Nordman, 2016; Nordman and Pasquier-Doumer, 2015; O’Brien, 2012; Portes, 1998). Anecdotal evidence, early anthropological research (Hunter, 1962; Khalaf and Shwayri, 1966) and a few recent studies (Alby et al., 2014; Grimm et al., 2013) suggest that excessive claims on entrepreneurs is an important issue in developing countries, and this is linked to a scarcity of resources (Comola, 2016). Successful entrepreneurs face distributive obligations. Once a business becomes successful and generates profit, further growth

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may be hindered because entrepreneurs are expected to support relatives, friends, and community members. However, systematic research into the downsides of networks in developing countries is scarce, especially with regard to the Sub-Saharan African context (see Rooks et al., 2016).

In this article we compare female and male entrepreneurs in terms of both the benefits they can get from their contacts (access to resources), and the claims they might receive from these contacts (requests for resources). In other words, we focus on access to, and requests for, resources via the entrepreneurs' contacts (i.e., their social capital). We focus on financial resources in particular.

In developing countries, where the financial and legal systems are still underdeveloped, financial resources are a critical issue for entrepreneurs (Beck and Demirgüç-Kunt, 2006; Cook, 2001). Siba's (2016) elaboration on World Development Indicators (WDI) showed that this issue is even more critical in sub-Saharan Africa, where the formal borrowing rate is lower compared to other developing areas (e.g. Latin America and East Asia). Previous studies underlined that there are differences between men and women in terms of accessing financial capital (Amine and Staub, 2009; Fletschner, 2009; Makena et al., 2014; Malmström et al., 2017; Marlow and Patton, 2005; Mwobobia, 2012; Lindvert et al., 2017; Siba, 2016). By and large, women (entrepreneurs) have more difficulty getting formal financial support (e.g., loans) than men (entrepreneurs). Figures from the International Finance Corporation report (IFC, 2013) estimated that 63–69% of businesses owned by a woman are unserved or underserved by financial institutions in developing countries. Women are less likely than men to have a bank account and to borrow formally (Demirgüç-Kunt et al., 2015; Siba, 2016; Zins and Weill, 2016). This is linked with (formal and non-formal) collateral requirements. For example, studies in Kenya (Makena et al., 2014; Mwobobia, 2012) highlight that, although formally men and women can access loans equally, in practice, women face more difficulties when trying to access credit, as traditional beliefs and gender roles continue to influence resource allocation. As a consequence, women do not have the assets that banks normally require to secure credit (Makena et al., 2014). In addition, women often lack the pieces of information required to get loans (Vossenbergh, 2016a,b). For example, Fletschner and Mesbah (2011) found that Paraguayan wives were less likely to have knowledge of financial markets and institutions than their husbands. Finally, as noted by Vossenbergh (2016, 15), “women entrepreneurs often (...) may face discriminatory practices, such as banking clerks questioning the legitimacy and ability of women entrepreneurs to grow a business when asking for a loan”. Given this, the difference between male and female entrepreneurs in the role of social networks when it comes to financial resources seems particularly important.

The aim of this article is to empirically investigate gender differences in the formation of networks of support and requests in relation to small business activities in a developing country, namely Uganda (East Africa). We conducted a large-scale survey in two regions: an urban area (the country capital, Kampala) and Nakaseke (a more rural area in Central Uganda). This allowed us to compare gender differences in networks between a more traditional, collectivistic context (the rural area) and a more modern, individualistic context (the urban area). Indeed, as noticed by Vossenbergh (2013), the context in which the entrepreneur is embedded is particularly important when it comes to gender dynamics.

2. Theory

2.1. Social capital and access to/requests for resources

Social capital is a broad concept with many different interpretations (for reviews, see: Lin, 2001; Adler and Kwon, 2002; Akçomak

and ter Weel, 2009). In this article we draw upon Portes (1998), who defined social capital as the “ability of actors to secure benefits by virtue of membership in social networks” (Portes, 1998, 6). Entrepreneurs – in developed and developing countries – can obtain various resources from their social connections, such as: information, finances and emotional support (see for example; Greve and Salaff, 2003; Hoang and Antoncic, 2003). However, as noted by Portes (1998), the creation of, and participation in, social networks is not cost-free.¹ While entrepreneurs may gain access to resources from contacts, conversely those relations may also involve costs, and the entrepreneurs' contacts may in turn try to obtain resources from them.

In this paper we adopt Portes' (1998, 8) double-edged view² that social capital entails both “network-mediated benefits” – namely, the resources that a person can obtain from his/her contacts – and “claims on group members” – namely, the resources that a person may be ‘forced’ to give to his/her contacts –. We therefore distinguish between access to resources through social contacts and requests for resources on the part of these contacts.

As already illustrated in the introduction, we focus on financial support for two main reasons. First, financial issues and, in particular access to financial resources, is critical when it comes to running a business, especially in developing countries where resources are limited (Beck and Demirgüç-Kunt, 2006). Second, previous literature has underlined that there is a gender dimension in access to financial resources (Marlow and Patton 2005; Lindvert et al., 2017; Vossenbergh, 2016a,b).

2.2. Gender differences in social capital

The existing literature has repeatedly suggested that male and female entrepreneurial networks differ in terms of their composition and structure (Agneessens et al., 2006; Aidis et al., 2007; Bastani, 2007; Moore, 1990; Myroniuk, 2016; Liebler and Sandefur, 2002; van Emmerik, 2006). In her pioneering article on determinants of men's and women's personal networks in the US, Moore (1990) found dissimilarities between men and women: whereas men discuss personal matters with a wider range of contacts (co-workers, friends, relatives, etc.), women are more likely to discuss them with relatives and neighbourhood friends, and have closer, and more homogeneous contacts in their personal-advice networks.

Less is known about the differences between male and female entrepreneurs when it comes to the resources they can obtain from their networks (Ahl, 2006; Foss, 2010). In one of the few articles addressing this topic, van Emmerik (2006) found that men were more able to access job-related resources through their contacts than were women.

2.2.1. Gender (ego level)

Gender roles are influenced by cultural context, which shapes expectations and relations between men and women (Acker, 1992; Baughn et al., 2006). In more traditional societies, gender roles cause men – entrepreneurs and non-entrepreneurs – to take on the responsibility of providing financial support for their ‘group’ (Farré, 2013; Jamali, 2009; Risman and Davis, 2013).

¹ Portes (1998, 5) provided a clear example to explain his view: “Saying, for example, that student A has social capital because he obtained access to a large tuition loan from his kin and that student B does not because she failed to do so neglects the possibility that B's kin network is equally or more motivated to come to her aid but simply lacks the means to do so. Defining social capital as equivalent to the resources thus obtained is tantamount to saying that the successful succeed”.

² We took the expression ‘double-edge view of social capital’ from Lindvert et al. (2017).

By and large, in Uganda men are expected to have the financial power to take care of their (extended) family, clan, etc. (Otiso, 2006). Due to their role as providers of resources, we expect male entrepreneurs to have more people who are dependent on them for financial support, and fewer people who can help them financially. On the one hand, male entrepreneurs may face greater redistributive pressure; as men, these entrepreneurs might feel obligated to help certain people. On the other hand, they might be less attentive to include in their networks people who can provide access to financial capital. For these reasons, we expect that, when the entrepreneur is male, he is less likely to have access to financial resources from his contacts, and that the contacts are more likely to require financial support from him.

Hypothesis 1a. when the entrepreneur is male, contacts are less likely to provide access to financial resources to the entrepreneur;

Hypothesis 1b. when the entrepreneur is male, contacts are more likely to request financial resources from the entrepreneur.

2.2.2. Gender (*alter*)

Most studies on women entrepreneurship have focused on gender as an attribute of the entrepreneur. Less is known about whether male or female contacts provide similar resources to entrepreneurs (Klyver, 2011). The literature suggests that male contacts are more likely to provide instrumental support such as financial resources, while female contacts are more likely to provide emotional support (Klyver, 2011; Liebler and Sandefur, 2002; Plickert et al., 2007; Reevy and Maslach, 2001). This pattern has been observed in a developing country as well. In their research into the Sidama, an agro-pastoralist population in southwestern Ethiopia, Caudell et al. (2015) found that male contacts were three times more likely to be mentioned as lenders than female contacts.

This seems related to the fact that women generally have less economic power and control over finances than men. Firstly, they have less economic power due to limited property ownership, smaller savings, and greater difficulty in accessing formal credit (Amine and Staub, 2009). Secondly, when they do have financial resources, women face greater difficulties in maintaining control over these resources, especially due to issues of control in the households (Agarwal, 1997; Aterido et al., 2013; Minniti, 2010; ILO, 2017; Jamali, 2009; Vossenber, 2016a,b). The husband – or another male relative in the household (e.g., father, brother) if the woman is not married – normally controls the household assets. A recent ILO study on Uganda (ILO, 2017) confirms this by highlighting the fact that female entrepreneurs are more likely to keep control of their savings when they are willing to hide their money from their husbands.

Therefore, as men have more financial power, they are more likely to keep control over household assets, and since women have difficulty accessing other lending options, we expect male contacts to be better able to provide financial support than are female contacts. Thus, we hypothesised that:

Hypothesis 2a. male contacts are more likely to provide access to financial resources to the entrepreneurs;

Hypothesis 2b. male contacts are less likely to request financial resources from the entrepreneurs.

2.2.3. Gender (*ego and alter*)

Relationships are gender-oriented as they change based on the gender of the persons involved (Klyver, 2011). Providing access to, or requesting financial support may depend on whether the entrepreneur and the contact are of the same or opposite gender. Homophily refers to the tendency of people with similar attributes, such as gender, to interact (McPherson et al., 2001). There is a clear lack of research on how gender homophily influences access to, and

requests for, resources, especially in developing countries (Caudell et al., 2015). However, previous studies suggest that lending networks are characterised by a lack of homophily (Caudell et al., 2015; Fafchamps, 1992; Platteau, 1997). This seems to apply even more readily to gender homophily. As noted above, women are less economically powerful than men, and they are usually dependent on men (their husband, their father, etc.). Therefore, it seems less likely that people of the same sex would provide access to/requests for finances:

Hypothesis 3a. when the entrepreneur and the contact are of the same gender (male-male or female-female), the contact is less likely to provide access to financial resources

Hypothesis 3b. when the entrepreneur and the contact are of the same gender (male-male or female-female), the contact is less likely to request financial resources

To further disentangle the interaction between *ego* and *alter* gender, we now focus on situations where the entrepreneur and the contact are of different genders (male-female or female-male). As illustrated before, women generally lack financial power, access to, and control over, finances (Amine and Staub, 2009; ILO, 2017; Vossenber, 2016a,b). Thus, we hypothesised that:

Hypothesis 4a. when the entrepreneur is female and the contact is male, the likelihood that the entrepreneur may be provided with access to financial resources is higher compared to the opposite situation (namely, when the entrepreneur is male and the contact is female);

Hypothesis 4b. when the entrepreneur is female and the contact is male, the likelihood that the entrepreneur may be asked for resources is lower compared to the opposite situation (namely, when the entrepreneur is male and the contact is female).

2.2.4. Gender and urbanisation

Previous literature underlines that the wider cultural context (urban vs. rural areas) – in terms of individualistic/less traditional culture (urban areas) versus a collectivistic/more traditional (rural areas) – influences relationships and resources exchange (Rooks et al., 2012, 2016). In a collectivistic traditional culture, which is still dominant in rural areas (Oyserman et al., 2002; Otiso, 2006), gender relationships are particularly powerful in influencing economic and social life (Lauras-Lecoh, 1990; McKenzie, 2011; Onjala and K'Akumu, 2016; Stoeltje, 2015; Stone, 2013; Vossenber, 2016a,b). We expect that in urban areas, where the culture is less traditional and collectivistic (Ma and Schoeneman, 1997), the effect of *ego* and *alter* gender is weaker. Therefore, we formulate the following four hypotheses:

Hypothesis 5a. the effect of *ego* gender on access to resources is weaker in the urban area compared to the rural area;

Hypothesis 5b. the effect of *alter* gender on access to resources is weaker in the urban area compared to the rural area

Hypothesis 5c. the effect of *ego* gender on requests for resources is weaker in the urban area compared to the rural area;

Hypothesis 5d. the effect of *alter* gender on requests for resources is weaker in the urban area compared to the rural area

3. Methods

To test our hypotheses, we conducted a survey amongst Ugandan entrepreneurs. Uganda is a very interesting place to study entrepreneurship, since entrepreneurial activity in Uganda is relatively high (Balunywa et al., 2012). Over one in three adults are engaged in some form of entrepreneurial activity. The

Table 1
Demographic characteristics: comparison between the urban and the rural area, and between male and female entrepreneurs.

| | Total sample | Kampala (urban district) | Nakaseke (rural district) | T-test | Male entrepreneurs | Female entrepreneurs | T-test |
|--|--------------|--------------------------|---------------------------|----------|--------------------|----------------------|----------|
| Number of observations | 608 | 294 | 314 | – | 313 | 281 | – |
| <i>Individual characteristics</i> | | | | | | | |
| Age (mean) | 34.1 | 33.4 | 34.9 | 1.66 | 34.1 | 34.2 | 0.09 |
| % of males | 47 | 48 | 47 | –0.29 | – | – | – |
| Years of education (mean) | 9 | 9.8 | 8.2 | –4.38*** | 9.6 | 8.5 | –2.99** |
| <i>Business characteristics</i> | | | | | | | |
| Business age (mean) | 7.3 | 6.3 | 8.2 | 2.87** | 8.2 | 6.4 | –2.75** |
| Number of employees (mean) | 1.3 | 1.5 | 1.2 | –0.52 | 1.7 | 0.8 | –5.84*** |
| % of businesses in the trade sector | 50.2 | 50 | 50.3 | 0.08 | 41.4 | 57.4 | 3.92*** |
| % of businesses in the services sector | 30.8 | 32.7 | 29.2 | –0.93 | 29.3 | 32.7 | 0.89 |
| % of businesses in the production sector | 11.7 | 14.6 | 9 | –2.17 | 20.4 | 4.5 | –6.11*** |
| % of businesses in agriculture sector | 7.3 | 2.7 | 11.5 | 4.24*** | 8.9 | 5.5 | –1.65 |

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

entrepreneurship rate is higher amongst women, in the younger part of the population (18–34 years old), as well as in the better-educated members of society (Balunywa et al., 2012).

3.1. Sampling and data collection

As a sampling frame, we used the Census of Businesses and Establishments (COBE) 2011 provided by the Uganda Bureau of Statistics (UBOS) – the most updated list available. The COBE was conducted in 2010–2011 and covered all businesses with fixed establishments, irrespective of their degree of formality – UBOS worked autonomously from the Uganda Revenue Authority – (Uganda Bureau of Statistics, 2011). During the fieldwork, the UBOS team physically moved up and down the streets and registered all businesses.

We selected entrepreneurs from two sampling sites: an urban district and a rural district. Then, we randomly selected entrepreneurs from two of the COBE lists, one for the urban district and one for a rural district. The urban district was Kampala, the capital of the country, with a population of approximately 1,500,000. The rural sampling site was the Nakaseke district, which is located in the Central Region (one of the four administrative regions of Uganda), at approximately 150 km from the capital. The Nakaseke district has a population of approximately 94,800.

The research on which the article is based was part of an overarching research project that focused on urban and rural differences. The choice of including both urban and rural entrepreneurs was based on previous literature. Rooks et al. (2016) showed that there were differences between urban and rural areas in Uganda concerning social capital. The authors found that the effect of network density on access to resources was weaker in the rural area than in the urban area.

We decided to focus on the Central Region since, according to UBOS statistics (Uganda Bureau of Statistics, 2011), this is the region where the majority of businesses are located; indeed, 30% of all businesses in Uganda are located in that area (59% if we also consider Kampala). Kampala was selected given that, as it is the country's capital, it is the most important Ugandan city, and because it is home to 29% of all businesses in the country (Uganda Bureau of Statistics, 2011). To maximise the variation between urban and rural areas, we selected Nakaseke because it is one of the most rural districts of the Central Region.³

³ For example, the Nakaseke district has one of the lower population densities of the region (source: elaboration from UBOS data, www.ubos.org).

The data collection took place in January 2016. We interviewed 608 respondents, 294 entrepreneurs in the urban area (Kampala) and 314 in the rural area (Nakaseke). In almost all cases, the selected respondents were willing to participate in the study. In Kampala there were 9 refusals, while in Nakaseke only one person declined to participate, making for a response rate of 98.3%. When a person refused to be interviewed, or when the business was no longer present,⁴ we replaced it with the nearest available equivalent.⁵

Face-to-face interviews were carried out by eight experienced interviewers. They were given a three-day training program to help them understand the questionnaire and familiarize with the data collection software (QuestionPro). After the training sessions, a pilot collection was undertaken in which 16 respondents were interviewed.

Respondents were interviewed on their business premises. The interviews were sometimes interrupted, for instance when the entrepreneur had to attend to business. They lasted an average of 25–35 min. After each interview the respondent was given a notebook as a token of appreciation.

3.2. Sample

Table 1 presents the demographic characteristics of our respondents. Consistent with trends in the Ugandan population presented in the GEM (Global Entrepreneurship Monitor) report (Balunywa et al., 2012), the sample consists of a slight majority of female entrepreneurs (53%); the respondents are 34 years old on average, with 9 years of education. Respondents in the urban sample are better educated than their counterparts in the rural sample (number of years of education: $M_{\text{urban}} = 9.8$; $M_{\text{rural}} = 8.2$; $t = -4.38$, $p < 0.01$). Similarly, male entrepreneurs are better educated than their female counterparts (number of years of education: $M_{\text{male}} = 9.6$; $M_{\text{female}} = 8.5$; $t = -2.99$, $p < 0.01$). We also found that 65% of the urban sample consisted of entrepreneurs who were born in rural areas and who, at some point, decided to move to Kampala.

The entrepreneurs in our sample own small, but rather well-established, businesses. On average, they started about seven years ago (four, if we consider the median) and they have one employee (Table 1). These results are in line with the UBOS figures

⁴ The list displayed the location of the business, and not the description of the business in itself. Only a few times – in about 1% of the cases – did we go to the indicated location and find out that there was no business present.

⁵ We replaced the business with the closest one, first on the opposite side of the street, and, if not possible, on the same side. In this way, we believe that we replaced the old business with a similar one, since frequently businesses in the same area have similar characteristics (e.g., size, macro-sector).

Table 2
Business sectors. Comparison between survey sample and UBOS statistics (percentages).

| | Total sample | | Kampala (urban district) | | Nakaseke ^a (rural district) | |
|-------------|----------------------|-------------|--------------------------|-------------|--|-------------|
| | Survey Sample (2016) | UBOS (2011) | Survey Sample (2016) | UBOS (2011) | Survey Sample (2016) | UBOS (2011) |
| Trade | 50.2 | 61.5 | 50 | 60.6 | 50.3 | 59.7 |
| Service | 30.8 | 29.4 | 32.7 | 30.9 | 29.2 | 31.5 |
| Production | 11.7 | 7.3 | 14.6 | 8.2 | 9 | 6.4 |
| Agriculture | 7.3 | 1.8 | 2.7 | 0.3 | 11.5 | 2.3 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| N | 608 | 454,766 | 294 | 133,663 | 314 | 137,541 |

^a $p < 0.05$; ^{**} $p < 0.01$; ^{***} $p < 0.001$.

^a This data refers to Central Region (excluding Kampala), given that UBOS data only from Nakaseke district is not available.

Table 3
Network characteristics of the sample divided into two sampling sites (mean).

| | Total sample | Kampala (urban district) | Nakaseke (rural district) | T-test | Male entrepreneurs | Female entrepreneurs | T-test |
|------------------------------------|-------------------|--------------------------|---------------------------|---------------------|--------------------|----------------------|-----------------------|
| Whole network (0–15) | 4.9 | 4.8 | 5 | 0.75 | 5.3 | 4.6 | –3.37 ^{***} |
| Personal-advice network size (0–5) | 1.1 | 1.1 | 1.1 | –0.30 | 1.3 | 0.9 | –4.48 ^{***} |
| Business-advice network size (0–5) | 2.5 | 2.5 | 2.5 | 0.78 | 2.7 | 2.4 | –2.62 ^{**} |
| Request network size (0–5) | 1.3 | 1.2 | 1.4 | 1.15 | 1.3 | 1.3 | 0.03 |
| Density (0–1) | 0.7 | 0.6 | 0.7 | 3.76 ^{***} | 0.6 | 0.6 | 1.52 |
| % of males | 56 | 54 | 57 | 1.05 | 69 | 42 | –12.99 ^{***} |
| % of kin | 50 | 47 | 53 | 1.49 | 43 | 59 | 6.01 ^{***} |
| Homophily | 55 | 55 | 55 | 0.15 | 64 | 49 | –8.56 ^{***} |
| Number of people mentioned | 2983 ^a | 1414 | 1569 | – | 1495 | 1426 | – |

^a The number of contacts when comparing male and female entrepreneurs is 2921.

^{**} $p < 0.01$.

^{***} $p < 0.001$.

(Uganda Bureau of Statistics, 2011), which show that Ugandan businesses are rather small (two employees on average), and between two and five years old. The size of the business does not differ between Kampala and Nakaseke; however, businesses in Kampala are, on average, more recent than those in Nakaseke (number of years since start-up: $M_{\text{urban}} = 6.3$; $M_{\text{rural}} = 8.2$; $t = 2.87$, $p < 0.01$). As for gender differences, businesses owned by male entrepreneurs are on average older than those owned by female entrepreneurs (number of years since start-up: $M_{\text{male}} = 8.2$; $M_{\text{female}} = 6.4$; $t = 2.75$, $p < 0.01$).

Most of the businesses in our sample are either in trade-related industries or services. Together, they represent more than 80% of the businesses in our sample. This is in line with UBOS data (Uganda Bureau of Statistics, 2011) showing that the majority of businesses in Uganda are in the trade sector. If we compare the Kampala and Nakaseke districts, businesses in Kampala are less likely to be in the production and agricultural sectors compared to those in Nakaseke (Table 1). Our sample is consistent with UBOS figures concerning business sectors, including when sorting the sample between Kampala and Nakaseke districts (Table 2 presents the comparison between survey sample and UBOS figures). Finally, compared to female entrepreneurs, male entrepreneurs are less likely to operate in the trade sector ($M_{\text{male}} = 41.4$; $M_{\text{female}} = 57.4$; $t = 3.9$, $p < 0.001$) and more likely to operate in the production sector ($M_{\text{male}} = 20.4$; $M_{\text{female}} = 4.5$; $t = -0.6.1$, $p < 0.001$).

3.3. Questionnaire

We used three name generators to measure the entrepreneurs' social networks: two to assess personal-advice and business-advice network ties (together, the advice network), and one to assess the number of people requesting resources from the entrepreneurs (the request network). To measure the personal-advice network, we asked the following question: "From time to time, most people discuss important personal matters with other people. Looking back over the last six months, who are the people with whom you have discussed an important personal matter?" For the business-advice network name generator we asked, "From time to time,

entrepreneurs seek advice on important business matters. Looking back over the last six months, who are the people with whom you have discussed an important business matter?" To measure the request network we asked, "Looking back over the last six months, could you mention the names of people who asked you for financial support, free goods, services or a job?"

For every one of the three name generators, respondents were asked to list a maximum of five names (Burt, 1984). By combining the three name generators, we collected 2983 names, i.e. approximately 5 people per respondent.⁶ The persons mentioned constituted the entrepreneur's social networks. These are rather close-knit, especially in rural areas.

For each person identified (contacts), we asked about their gender and their relationship with the entrepreneur (relative,⁷ friend or job contact).⁸ Most of the contacts were male and, largely, most were relatives. The composition of the networks was similar in urban and rural areas (Table 3). We also mapped the relationship between alters by asking the respondent (*ego*), "Do these two persons know each other quite well?"⁹ (Response categories: yes/no).

3.4. Dependent variables: access to financial resources and requests for financial resources

For every contact, entrepreneurs were asked to indicate whether they could obtain financial resources from this contact or if they had received requests for financial support from this contact.

⁶ Some contacts (26%) were mentioned more than once. We counted them as one.

⁷ We included both close and extended family as relatives. We defined a relative as a person belonging to the same family as the respondent. We defined family as a group of people related by blood or marriage.

⁸ We decided to focus only on gender and relationship with *ego*, since we wanted to explore in-depth the exchange of resources (see also below), for which we asked 7 questions for each *alter*. To avoid obtaining a questionnaire that would be too lengthy – since our respondents were clearly losing attention and willingness to answer after 20 min –, we only included these pieces of information as name interpreters.

⁹ During the interviews, we made it clear that 'know quite well' meant that they may meet up, or talk to each other, even when the entrepreneur was not there.

Table 4
Number and percentage of contacts who asked for support from the entrepreneurs.

| | Total sample (N = 2983) | Kampala (urban district, N = 1414) | Nakaseke (rural district, N = 1569) | T-test | Male entrepreneurs (N = 1492) | Female entrepreneurs (N = 1428) | T-test |
|------------------------------|----------------------------|---------------------------------------|--|----------|-------------------------------------|---------------------------------------|----------|
| Financial support | 1707 (57%) | 798 (56%) | 909 (58%) | 0.8 | 887 (59.5%) | 799 (56%) | –1.94* |
| Free goods or services | 972 (32%) | 441 (31%) | 531 (34%) | 1.55 | 475 (31.8%) | 475 (33.3%) | 0.82 |
| Job | 143 (5%) | 94 (7%) | 49 (3%) | –4.51*** | 98 (6.6%) | 45 (3.2%) | –4.29*** |
| At least one kind of support | 2125 (71.3%) | 1040 (73.6%) | 1085 (69.2%) | –2.68** | 1120 (75.1%) | 973 (68.1%) | –4.20*** |

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

Table 5
Number and percentage of contacts that are able to support the entrepreneur.

| | Total sample (N = 2983) | Kampala (urban district, N = 1414) | Nakaseke (rural district, N = 1569) | T-test | Male entrepreneurs (N = 1495) | Female entrepreneurs (N = 1428) | T-test |
|------------------------------|-------------------------|---------------------------------------|--|----------|-------------------------------------|---------------------------------------|---------|
| Financial support | 1208 (40.5%) | 574 (40.5%) | 634 (40.4%) | –0.06 | 592 (39.6%) | 591 (41.4%) | 0.98 |
| Information | 1669 (55.9%) | 806 (56.9%) | 863 (55%) | –1.03 | 821 (54.9%) | 813 (56.9%) | 1.10 |
| Introduction to other people | 665 (22.3%) | 290 (20.5%) | 375 (23.9%) | 2.25* | 339 (22.7%) | 322 (22.6%) | –0.08 |
| Free labour | 647 (21.7%) | 383 (27%) | 264 (16.8%) | –6.81*** | 322 (21.5%) | 303 (21.2%) | –0.21 |
| At least one kind of support | 2633 (88.2%) | 1309 (92.3%) | 1324 (84.4%) | –6.80*** | 1342 (89.8%) | 1236 (86.6%) | –2.69** |

* $p < 0.05$.

** $p < 0.01$.

First, the entrepreneur was asked what type of resources could be obtained from a specific contact via the question, ‘What support for the business can you get from this person?’ Then, the entrepreneur was asked about requests for resources on the part of these specific contacts through the question, ‘What kind of support did each contact ask of you?’

Following the definition of social capital, we did not ask the entrepreneurs about actual resources received, but rather about potential access to resources (namely, resources that could be gained). However, note that, when it came to investigating claims from contacts, we asked whether the contact had actually requested resources in the past. Earlier fieldwork conducted by the authors showed that entrepreneurs were prone to giving socially desirable answers when asked what kind of resources the contact might obtain from them. Thus, we decided to refer to actual requests for resources. On the contrary, Rooks et al. (2016) found that social desirability issues were less problematic when asking what type of resources could be obtained from a contact.

We created two variables: (1) *access to resources*: this dichotomous variable indicates that a contact is able to provide finances; (2) *requests for resources*: this dichotomous variable indicates that the entrepreneur has been asked by the contact for financial support.

3.5. Independent variables

3.5.1. Gender (alter level)

To account for gender differences, we included the gender of the contacts (‘0’ for female and ‘1’ for male).

3.5.2. Gender (ego level)

To account for the different network composition between male and female entrepreneurs, we included the gender of the entrepreneur (‘0’ for female and ‘1’ for male).

3.5.3. Homophily (ego-alter level)

To account for situations where the entrepreneur and the contact are the same gender we included the variable homophily (‘0’ for different gender and ‘1’ for same gender).

3.6. Control variables

3.6.1. Kinship (alter level)

Each contact was classified based on whether or not he or she was a relative (including partner/spouse). We created a dummy variable labelled ‘relative,’ using all other categories (friendship and business-only relationship) as a reference.

3.6.2. Urbanisation (ego level)

To account for differences between urban and rural areas we inserted an urbanisation variable, indicating whether the entrepreneur was living in the urban or rural area (reference category).

3.6.3. Network size (ego level)

To account for differences in network size (Wellman and Frank, 2001), we added two additional variables to control for the impact of network size: [1] *advice network size*, which is the total number of contacts mentioned in the personal and business advice networks, and [2] *request network size*, namely the number of unique contacts mentioned by the respondent in the ‘requests’ name generator.

3.6.4. Density (ego level)

Previous research underlines the fact that network density may influence the exchange of resources (Burt, 2001; Shane and Cable, 2002). Density shows how closely a network of relationships is knit and, more specifically, how well an entrepreneur’s contacts might know each other. We calculated the variable *density* as the number of actual ties, out of the number of possible ties in the network (namely, if every contact mentioned had a relationship with every other contact mentioned).

3.6.5. Years of education (ego level)

We included the number of years of education as a variable to control for the confounding effects of human capital, since higher levels of human capital are generally associated with greater social resources (van Tilburg, 1998).

3.6.6. Age (ego level)

Age may affect network composition and social support (Moore, 1990). To control for any confounding effects of this, we included

Table 6
Correlations between Variables.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---------------------------|----------|---------|----------|----------|---------|---------|----------|---------|---------|-------|----------|
| 1 Access to resources | 1 | | | | | | | | | | |
| 2 Request for resources | -0.53*** | 1 | | | | | | | | | |
| 3 Urbanisation | 0.00 | 0 | 1 | | | | | | | | |
| 4 Kinship | 0.01 | 0.12*** | -0.06* | 1 | | | | | | | |
| 5 Gender (alter) | 0.08*** | 0.07*** | -0.03 | -0.18*** | 1 | | | | | | |
| 6 Homophily | -0.06** | 0.01 | -0.01 | -0.24*** | 0.00 | 1 | | | | | |
| 7 Request-network contact | -0.39*** | 0.43*** | -0.02 | 0.18*** | -0.05** | 0.02 | 1 | | | | |
| 8 Advice network size | 0.12*** | -0.04* | -0.01 | -0.18*** | 0.05** | 0.09*** | -0.13*** | 1 | | | |
| 9 Request network size | -0.17*** | 0.15*** | -0.05 | 0.06** | 0.00 | -0.02 | 0.38*** | 0.19*** | 1 | | |
| 10 Density | 0.01 | 0.01 | -0.18*** | 0.16*** | -0.03 | 0.01 | 0.03 | 0.27*** | 0.21*** | 1 | |
| 11 Gender (ego) | -0.02 | 0.03 | 0.01 | -0.05** | 0.27*** | 0.15*** | -0.02 | 0.18*** | 0.00 | -0.06 | 1 |
| 12 Age | -0.02 | -0.01 | -0.07 | 0.08*** | 0.01 | 0.00 | 0.04* | 0.00 | 0.06 | 0.01 | 0.00 |
| 13 Years of education | 0.07** | 0.01 | 0.18*** | -0.09*** | 0.01 | 0.00 | -0.06** | 0.12* | -0.06 | -0.03 | 0.12* |
| 14 Marital status | 0.03 | 0.03 | -0.16*** | 0.01 | 0.02 | -0.02 | 0.01 | -0.07 | 0.08* | 0.01 | -0.20*** |
| 15 Number of children | 0.02 | -0.01 | -0.20*** | 0.07*** | -0.01 | -0.01 | 0.03 | 0.04 | -0.09 | 0.05 | 0.03 |
| 16 Business size | -0.04* | 0.00 | 0.02 | -0.07*** | 0.08*** | 0.05** | -0.03 | 0.21*** | 0.05 | 0.09* | 0.25*** |
| 17 Business age | -0.03 | -0.01 | -0.12* | 0.02 | 0.05* | 0.01 | 0.01 | 0.08 | 0.02 | 0.08* | 0.11** |
| 18 Sector: Production | 0.03 | 0.02 | 0.08* | 0.04* | 0.07*** | 0.05* | 0.05* | 0.05 | 0.12** | 0.02 | 0.24*** |
| 19 Sector: Service | -0.02 | -0.01 | 0.04 | 0.07 | 0.06 | -0.01 | -0.02 | 0.00 | -0.03 | 0.02 | -0.04 |
| 20 Sector: Trade | 0 | 0.0 | 0.00 | -0.05* | -0.06** | -0.03 | -0.01 | -0.06 | -0.02 | -0.05 | -0.16*** |
| 21 Sector: Agriculture | 0.01 | -0.04** | -0.17*** | 0.02 | 0.01 | -0.01 | -0.03 | 0.04 | -0.05 | 0.05 | 0.07 |

| | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
|------------------------|----------|----------|---------|---------|----------|---------|---------|----------|----------|----|
| 12 Age | 1 | | | | | | | | | |
| 13 Years of education | -0.35*** | 1 | | | | | | | | |
| 14 Marital status | 0.46*** | -0.02*** | 1 | | | | | | | |
| 15 Number of children | 0.60*** | -0.32*** | 0.33*** | 1 | | | | | | |
| 16 Business size | -0.01 | 0.08 | -0.07 | 0.06 | 1 | | | | | |
| 17 Business age | -0.64*** | -0.34*** | 0.25*** | 0.51 | 0.12** | 1 | | | | |
| 18 Sector: Production | 0.02 | -0.03 | -0.02 | 0.01 | 0.17*** | 0.14*** | 1 | | | |
| 19 Sector: Service | -0.03 | 0.04 | -0.04 | 0.03 | 0.05 | -0.10** | -0.24** | 1 | | |
| 20 Sector: Trade | -0.05 | 0.07 | 0.04 | -0.13** | -0.27*** | 0.14 | 0.37*** | -0.37*** | 1 | |
| 21 Sector: Agriculture | 0.12*** | -0.15*** | 0.02 | 0.20*** | 0.23*** | 0.27*** | -0.11** | -0.19** | -0.28*** | 1 |

Note: when the correlation is between two variables at the ego level (e.g. density and age), the correlations were calculated at an ego level. Otherwise, correlations were calculated at an alter level.

* $p < 0.05$.
 ** $p < 0.01$.
 *** $p < 0.001$.

the age of the respondent – specifically the respondent’s exact age at the time of the interview – as a control variable.

3.6.7. Marital status (ego level)

Given the importance of intra-household relations (ILO, 2017; Vossenber, 2013), we included the marital status of the entrepreneur (‘0’ for unmarried and ‘1’ for married).

3.6.8. Number of children (ego level)

To account for family composition, we also included number of children.

3.6.9. Business size (ego level)

As a proxy for business success (Frese et al., 2007), we included business size (i.e. number of employees). We inserted the logarithmic version in the model because the original variable resulted in a skewed distribution.

3.6.10. Business age (ego level)

To control for the date that the business was started, we included the age of the business (in number of years). We inserted the logarithmic version in the model because the original variable resulted in a skewed distribution.

3.6.11. Sector (ego level)

To check for any effect stemming from sector differences, we created three variables: [1] production (whether or not a business is in the manufacturing or construction sector); [2] services (whether

or not a business is in the services sector) [3] trade (whether a business is retail or wholesale). The reference category is agriculture (whether or not a business is in the agricultural sector).

3.6.12. Request-network contact (alter level)

To control for the effect of which name generator the contact had been mentioned in, we included a variable indicating whether the contact was mentioned in the advice network (‘0’) or in the request network (‘1’).

4. Results

In this section, we first illustrate the descriptive results of our research, focusing on the different forms of support asked for and accessed. Then, in order to test the above-formulated hypotheses, we present the results of two separate multilevel logistic regressions.

4.1. Descriptive analyses

Table 3 displays the results of the descriptive analyses. Entrepreneurs have a limited number of people in their networks (fewer than five people, on average). On average, male entrepreneurs mentioned significantly more contacts than female entrepreneurs, ($M_{male} = 5.3 M_{female} = 4.6$; $t = -3.4, p < 0.001$). The same holds for the personal-advice network ($M_{male} = 1.3 M_{female} = 0.9$; $t = -4.5, p < 0.001$) and the business-advice network ($M_{male} = 2.7 M_{female} = 2.4$; $t = -2.6, p < 0.01$). By contrast, male and female entrepreneurs do not differ concerning the request network.

Table 7
Multilevel Logistic Regression Analysis.

| | Access to resources | | | | Requests for resources | | | |
|--|---------------------|-------------|---|-------------|------------------------|-------------|---|-------------|
| | Model I | | Model II (Model I+ interaction ego gender*alter gender) | | Model I | | Model II (Model I+ interaction ego gender*alter gender) | |
| | β | SE | β | SE | | | β | SE |
| Context (entrepreneur) | | | | | | | | |
| Urbanisation | 0.00 | 0.21 | 0.00 | 0.21 | 0.03 | 0.19 | 0.03 | 0.19 |
| Relational level (alter) | | | | | | | | |
| Kinship | 0.72*** | 0.13 | 0.72*** | 0.13 | 0.59*** | 0.13 | 0.59*** | 0.13 |
| Gender (alter) | 0.52*** | 0.13 | – | – | –0.41*** | 0.13 | – | – |
| Request-network contact | –3.23*** | 0.20 | –3.23*** | 0.20 | 2.94** | 0.16 | 2.94** | 0.16 |
| Homophily | –0.44*** | 0.13 | – | – | 0.16 | 0.13 | – | – |
| Network characteristics (entrepreneur) | | | | | | | | |
| Advice network size | 0.14** | 0.05 | 0.14* | 0.05 | –0.04 | 0.05 | –0.04 | 0.05 |
| Request network size | –0.06 | 0.07 | –0.06 | 0.07 | 0.08 | 0.70 | 0.08 | 0.70 |
| Density | 0.20 | 0.29 | 0.20 | 0.29 | 0.14 | 0.28 | 0.14 | 0.28 |
| Individual level (entrepreneur) | | | | | | | | |
| Gender (ego) | –0.45* | 0.22 | – | – | 0.23 | 0.3 | – | – |
| Age | –0.01 | 0.01 | –0.01 | 0.01 | –0.01 | 0.01 | –0.01 | 0.01 |
| Years of education | 0.03 | 0.03 | 0.03 | 0.03 | 0.05 | 0.04 | 0.05 | 0.04 |
| Marital status | –0.01 | 0.24 | –0.01 | 0.24 | 0.34 | 0.23 | 0.34 | 0.23 |
| Number of children | 0.35 | 0.23 | 0.35 | 0.23 | –0.18 | 0.21 | –0.18 | 0.21 |
| Firm level | | | | | | | | |
| Business size | –0.44** | 0.16 | –0.44** | 0.16 | 0.15 | 0.15 | 0.15 | 0.15 |
| Business age | –0.17 | 0.15 | –0.17 | 0.15 | 0.04 | 0.14 | 0.04 | 0.14 |
| Sector: Production | 0.38 | 0.49 | 0.38 | 0.49 | –0.43 | 0.45 | –0.43 | 0.45 |
| Sector: Service | –0.42 | 0.44 | –0.42 | 0.44 | –0.19 | 0.40 | –0.19 | 0.40 |
| Sector: Trade | –0.46 | 0.44 | –0.46 | 0.44 | –0.14 | 0.40 | –0.14 | 0.40 |
| Interactions | | | | | | | | |
| Female(alter)*Female(ego) | – | – | 0.01 | 0.26 | – | – | –0.08 | 0.24 |
| Male(alter)*Female(ego) | – | – | 0.97*** | 0.26 | – | – | –0.65** | 0.26 |
| Male(alter)*Male(ego) | – | – | 0.07 | 0.18 | – | – | –0.25 | 0.18 |
| Constant | –1.18 | 0.69 | –0.63 | 0.69 | –2.74*** | 0.65 | –2.50*** | 0.66 |
| N observations | 2548 | | 2548 | | 2548 | | 2548 | |
| N entrepreneurs | 491 | | 491 | | 491 | | 491 | |
| SD (u) | 1.65 | | 1.65 | | 1.39 | | 1.39 | |
| Log likelihood | –1327.66 | | –1327.66 | | –1200.52 | | –1200.52 | |
| Wald (df) | 317.25*** (18) | | 317.25*** (18) | | 401.65*** (18) | | 401.65*** (18) | |

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

The majority of contacts are males (on average, 56% of network contacts). Homophily is a driving factor when it comes to including a person in the network, given that 55% of the contacts in the network are of the same gender. Compared to female entrepreneurs, male entrepreneurs have a higher percentage of males ($M_{\text{male}} = 69$ $M_{\text{female}} = 42$; $t = -13.0$, $p < 0.001$), and a lower percentage of relatives ($M_{\text{male}} = 43$ $M_{\text{female}} = 59$; $t = -6.0$, $p < 0.001$), in their networks.

Entrepreneurs' networks are rather close-knit – density is equal to 0.6 –, meaning that the people within the network are likely to know each other. There is no difference between male and female entrepreneurs. Networks of entrepreneurs in the rural area and in the urban are similar, except for network density. Entrepreneurs in the rural area have denser networks than those in the urban area ($M_{\text{urban}} = 0.6$ $M_{\text{rural}} = 0.7$; $t = -3.8$, $p < 0.001$).

Tables 4 and 5 present the number of respondents who either provided access to resources, or requested resources from the entrepreneurs. In approximately 70% of cases, the contacts had asked for support from the entrepreneur. Financial support is the most often requested (57%). 88% of the contacts were able to provide the entrepreneur with some form of support, although less than half were able to provide financing.

Male entrepreneurs have (on average) a higher percentage of contacts in their network who had asked for at least one form of support ($M_{\text{male}} = 75.1$ $M_{\text{female}} = 68.1$; $t = -4.2$, $p < 0.001$) compared to female entrepreneurs. This difference holds for financial support and requests for a job, but not requests for free goods and services. Similarly, male entrepreneurs have a higher percentage of con-

tacts in their network who provide them with access to resources ($M_{\text{male}} = 89.8$ $M_{\text{female}} = 86.6$; $t = -2.7$, $p < 0.001$) in comparison with female entrepreneurs. However, no significant differences emerge for each form of support.

As for urban and rural entrepreneurs, those in the urban area have a higher percentage of both contacts who had asked for at least one form of support ($M_{\text{urban}} = 92.3$ $M_{\text{rural}} = 84.3$; $t = -6.8$, $p < 0.001$) and contacts who had provided them with access to resources ($M_{\text{urban}} = 73.6$ $M_{\text{rural}} = 69.2$; $t = -2.7$, $p < 0.01$).

4.2. Main analysis

In order to test our hypotheses, we ran two separate multilevel logistic regressions. Our data consists of multiple ties per responding entrepreneur, and so it is characterized by a nested structure. To deal with the nested structure of the data, we applied a multilevel logistic regression model (Snijders and Bosker, 1999). Table 6 shows the correlations of the variables included in the models. The correlations between independent variables are generally low, apart from those between age and number of children, age and business age, business age and number of children. However, since these high values of correlations were not about the three main independent variables (ego gender, alter gender and homophily), we decided to keep them as control variables. Further analysis (not reported here) shows that the effects did not change when we ran the models without number of children and business age (i.e. the variables with higher correlations).

Table 8
Multilevel Logistic Regression Analysis – Interactions between urbanisation, and ego and alter gender.

| | Access to resources | | | | Requests for resources | | | |
|--|--|-------------|---|-------------|--|-------------|---|-------------|
| | Model III (Model I+ interaction ego gender*urbanisation) | | Model IV (Model I+ interaction alter gender*urbanisation) | | Model III (Model I+ interaction ego gender*urbanisation) | | Model IV (Model I+ interaction alter gender*urbanisation) | |
| | β | SE | β | SE | β | SE | β | SE |
| Context (entrepreneur) | | | | | | | | |
| Urbanisation | 0.20 | 0.28 | 0.13 | 0.25 | -0.33 | 0.23 | -0.26 | 0.23 |
| Relational level (alter) | | | | | | | | |
| Kinship | 0.71*** | 0.13 | 0.72*** | 0.13 | 0.59*** | 0.13 | 0.59*** | 0.13 |
| Gender (alter) | 0.52*** | 0.13 | 0.63*** | 0.17 | -0.42*** | 0.13 | -0.68*** | 0.17 |
| Request-network contact | -3.23*** | 0.2 | -3.23*** | 0.20 | 2.94*** | 0.16 | 2.94*** | 0.16 |
| Homophily | -0.44*** | 0.13 | -0.43*** | 0.13 | 0.17 | 0.13 | 0.15 | 0.13 |
| Network characteristics (entrepreneur) | | | | | | | | |
| Advice network size | 0.14** | 0.05 | 0.14** | 0.05 | -0.03 | 0.05 | -0.04 | 0.05 |
| Request network size | -0.06 | 0.07 | -0.06 | 0.07 | 0.07 | 0.70 | 0.08 | 0.70 |
| Density | 0.20 | 0.29 | 0.20 | 0.29 | 0.14 | 0.28 | 0.14 | 0.28 |
| Individual level (entrepreneur) | | | | | | | | |
| Gender (ego) | -0.27 | 0.27 | -0.45* | 0.22 | -0.09 | 0.26 | 0.23 | 0.20 |
| Age | -0.01 | 0.01 | -0.01 | 0.01 | -0.01 | 0.01 | -0.01 | 0.01 |
| Years of education | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02 | 0.05 | 0.04 |
| Marital status | -0.02 | 0.23 | -0.01 | 0.24 | 0.36 | 0.26 | 0.34 | 0.23 |
| Number of children | 0.36 | 0.23 | 0.35 | 0.23 | -0.19 | 0.21 | -0.19 | 0.21 |
| Firm level | | | | | | | | |
| Business size | -0.44** | 0.17 | -0.44** | 0.16 | 0.13 | 0.15 | 0.14 | 0.15 |
| Business age | -0.17 | 0.15 | -0.17 | 0.15 | 0.04 | 0.14 | 0.05 | 0.14 |
| Sector: Production | 0.45 | 0.49 | 0.39 | 0.49 | -0.46 | 0.45 | -0.46 | 0.45 |
| Sector: Service | -0.37 | 0.44 | -0.42 | 0.44 | -0.29 | 0.40 | -0.22 | 0.40 |
| Sector: Trade | -0.39 | 0.44 | -0.46 | 0.44 | -0.25 | 0.40 | -0.16 | 0.40 |
| Interactions | | | | | | | | |
| ego gender*urbanisation | -0.41 | 0.39 | - | - | 0.75* | 0.36 | - | - |
| alter gender*urbanisation | - | - | -0.24 | 0.24 | - | - | 0.56* | 0.25 |
| Constant | -0.34 | 0.70 | -0.26 | 0.69 | -2.46*** | 0.65 | -2.56*** | 0.65 |
| N observations | 2548 | | 2548 | | 2548 | | 2548 | |
| N entrepreneurs | 491 | | 491 | | 491 | | 491 | |
| SD (u) | 1.65 | | 1.65 | | 1.38 | | 1.39 | |
| Log likelihood | -1327.12 | | -1327.66 | | -1198.42 | | -1197.86 | |
| Wald (df) | 317.63*** (19) | | 317.25*** (19) | | 402.80*** (19) | | 403.37*** (19) | |

* $p < 0.05$.** $p < 0.01$.*** $p < 0.00$.

The results of the multilevel logistic regressions are presented in Table 7. In Model 1 of Table 7, we tested Hypotheses 1–3, formulated in the theory section.

Hypotheses 1a and 1b address ego gender. Hypothesis 1a is supported by the results, which show that contacts are less likely to provide access to financial resources when the entrepreneur is male ($\beta = -0.48$; $p < 0.01$). This implies that the odds of a male entrepreneur having access to financial resources are about 36% lower than that of a female entrepreneur. Hypothesis 1b states that contacts are more likely to ask for financial resources when the entrepreneur is male. This hypothesis is not supported by our results.

Our results support Hypotheses 2a and 2b, which refer to alter gender. A male contact is more likely to provide access to financial resources ($\beta = 0.65$; $p < 0.001$), as stated by Hypothesis 2a, and less likely to ask for financial support ($\beta = -0.28$; $p < 0.01$), as stated by Hypothesis 2b. This implies that the odds that a male contact will provide financial support are 68% higher than a female contact. The odds of a male contact requesting financial support are 34% lower compared to a female contact asking for support.

Hypotheses 3a and 3b address gender homophily. The hypotheses stated that, when the entrepreneur and the contact are of the same gender, the contact is less likely to both provide access to financial resources and also request resources from the entrepreneur. Our results only support Hypothesis 3a that gender homophily negatively affects access to resources ($\beta = -0.43$; $p < 0.001$). This implies that when entrepreneur and contact have

the same gender, the odds that a contact provides financial support are 35% lower. Hypothesis 3b is not supported by our results.

In Model 2 (Table 7), we take into account the interactions between contact gender and entrepreneur gender. In order to test Hypotheses 4a and 4b, we inserted all possible interactions,¹⁰ taking the combination of female (contact)-male (entrepreneur) as a reference category. As for Hypothesis 4a, we found that male contacts provided a female entrepreneur with access to financial resources more often than a female contact provides a male entrepreneur with access ($\beta = 0.97$; $p < 0.001$). As for requests for resources (Hypothesis 4b), in comparison with the reference situation (i.e., female contact and male entrepreneur), a male contact is less likely to ask for resources from a female entrepreneur ($\beta = -0.65$; $p < 0.01$). Therefore, both Hypotheses 4a and 4b are supported.

As for control variables, the most interesting results regard kinship. Relatives are more likely to provide financial social capital ($\beta = 0.84$; $p < 0.001$). However, if the contact is a relative, he or she is more likely to ask for financial resources as well ($\beta = 1.13$; $p < 0.001$).

The results also show that urbanisation does not play a role in either access to financial resources or requests for resources. Furthermore, in partial contrast with other literature on the topic (e.g. Bhagavatula et al., 2010; Rooks et al., 2016; Shane and Cable, 2002),

¹⁰ Homophily was not inserted in the model for obvious problems of multicollinearity.

density has no effect on access to financial resources. Similarly, despite the fact that close-knit networks have also been associated with negative outcomes (see for example, Shinnar et al., 2011), density does not affect requests for financial resources.

To test whether the effect of ego and alter gender differed between the urban and the rural area (Hypotheses 5a–d), we ran two models (Table 8). One included the interaction effects between urbanisation and ego gender (Table 8, Model 3), and the other included the interaction between urbanisation and alter gender (Table 8, Model 4).¹¹ Running the models with the interaction effects, we found that the values of the interactions were significant only for 'requests for resources'. Therefore, both Hypothesis 5a and Hypothesis 5b, which refer to access to resources (in the urban in comparison with the rural area), are not confirmed.

As for requests for resources, in our results (Table 8, Model III), when the entrepreneur is male and lives in the urban area, the effect on requests for resources is positive (combined effect: 0.33) and stronger than the effect of the entrepreneur being male in the rural area ($\beta = -0.09$). This result contradicts Hypothesis 5c, which stated that the effect of ego gender on requests for resources was weaker in the urban area than in the rural area.

The same reasoning applies to the interaction between alter gender and urbanisation (Table 8, Model IV). When the contact is male and lives in the urban area, the effect on requests for resources is positive (combined effect: 0.53) and stronger than the effect of the contact being male in the rural area ($\beta = 0.23$). Therefore, Hypothesis 5d is contradicted.

Overall, our hypotheses that gender is less critical in the urban area than in the rural area are not supported. Actually, the results show the opposite when it comes to 'requests for resources'; the effect of ego and alter gender is stronger in the urban area than in the rural area.

5. Discussion and conclusions

In this article, we addressed gender differences in social capital among Ugandan entrepreneurs. We found that gender influences the likelihood of accessing financial capital through contacts and receiving requests of financial support from these contacts. Specifically, when the entrepreneur is a man, his contacts are less likely to provide access to financial resources. As for the gender of the contact, female contacts are more likely to ask for financial support, and they are also less able to provide entrepreneurs with financial support. Furthermore, male contacts are generally more likely to provide access to financial resources to female entrepreneurs than the other way around (female contacts to male entrepreneurs). A situation in which a male contact requests financial resources from a female entrepreneur is less likely to happen than a situation where a female contact asks a man for resources.

Our results suggest that female entrepreneurs generally have less financial power than men, due to difficulties in accessing financial resources via loans by formal institutions, and a lack of control over finances in the household (Aidis et al., 2007; Demirgüç-Kunt et al., 2015; Fletschner, 2009; Minniti, 2010; ILO, 2017; Jamali, 2009; Vossenber, 2016b; World Bank, 2015). As a consequence, most of the time, requesting money from their husbands or their male relatives seems the only option for women entrepreneurs who wish to obtain financial support (Jamali, 2009; Vossenber, 2016a,b).

We also compared gender differences in urban and rural areas. Our results suggest that urbanisation does not matter when it comes to exchanging resources. Urbanisation is not associated with

either access to resources or requests for resources. Our hypothesis that gender is less critical in urban areas compared to rural areas is not supported. A possible explanation is suggested by the literature on rural-urban migration (Mukwaya et al., 2011; Bell et al., 2015). Given the high number of people moving from rural to urban areas in Uganda, cultural differences between urban and rural areas are more or less blurred. The relevance of this phenomenon is also confirmed in our study, since 65% of the entrepreneurs in our urban sample were born outside Kampala.

Our research confirms that the role of the family is critical for entrepreneurship in developing countries. In line with some previous studies (Arregle et al., 2015; Berrou and Combarous, 2012; Egbert, 2009; Hoff and Sen, 2016), this study makes it clear that the role of the family is not always positive. On the one hand, relatives are more likely to provide access to financial resources, but on the other hand, they are also more likely to ask for financial support.

Last but not least, our findings show that a significant part of a Ugandan entrepreneurs' networks can prove to be a liability. For entrepreneurs in Uganda, being embedded in a network of relations often implies that they are expected to support their contacts.

This article contributes to the literature on social capital and entrepreneurship by connecting these with gender and focusing on requests for resources. Firstly, our study contributes to filling the gap regarding differences between male and female entrepreneurs' social capital in developing countries, a topic that certainly deserves more attention (Lindvert et al., 2017; Myroniuk, 2016). Secondly, the article constitutes one of the first attempts to identify the determinants of requests for resources. In particular, our results show that there is a serious issue related to the pressure endured by entrepreneurs, who are expected to provide support to some of their contacts. Our research suggests possible limitations present in previous literature, which has often adopted an overemphatic view of social networks in terms of social capital (see: O'Brien, 2012; Portes, 1998).

The results of this article are limited, which leaves room for further research. First, since we studied Ugandan entrepreneurs, we are not sure whether or not, and to what extent, our results might be generalised to other contexts. In this regard, a possible future research avenue might be to conduct similar research studies in other developing countries, or in developed Western countries. Combined with our research, this could shed further light on the determinants of requests for resources from the contacts that make up an entrepreneurs' social capital.

Second, we employed a dichotomous definition of the exchange of resources between the entrepreneur (ego) and each his or her contacts (alter): contacts are able to provide financial support or they do not; contacts ask for financial support or they do not. In this way, we did not take into account possible differences concerning the amount of financial support extended or requested.

Third, in order to limit the length of the interviews, we collected limited information concerning contact characteristics. However, more detailed information can be gathered, such as whether or not the person was the respondent's partner; the contact's age; the contact's job position. Other possible information to collect might be the social status of the contacts, as suggested by Berrou and Combarous (2011). Indeed, the contact's social status might influence the likelihood of him or her being able to provide financial support or ask for it.

Lastly, we focus on one rural context only, but rural areas may well differ from one another. The Nakaseke area is (relatively) close to the country's capital. Therefore, it is not clear how well this area represents other rural areas that are more distant from the capital. Further studies could therefore explore variations between rural areas when it comes to the entrepreneur's social capital.

In conclusion, this article has illustrated that the effect of social capital on the exchange of resources depends on gender. Gen-

¹¹ For the interpretation of interaction effects, see: Grotenhuis and Thijs (2015).

der relations (and the social dynamics linked to them) are critical in influencing the outcomes of social capital. Indeed, rather than entailing only the receiving of support from contacts, social capital is also linked to the handing over of these resources to one's contacts.

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