Social Isolation in a Society of Solidarity: The Case of Sereer Siin in Senegal

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Abstract:

Although sub-Saharan Africa is undergoing major social changes, including those in the support role played by families, the phenomenon of social isolation has been little studied. This article sets out to identify a theoretical framework for studying social isolation in the solidarity-based societies of sub-Saharan Africa and to describe how such isolation manifests among the Sereer Siin in Senegal. The analysis is based on 52 interviews conducted as part of a survey on social networks by the Niakhar Social Networks and Health Project. These data suggest that isolation happens through the inability to maintain membership in the informal social insurance system. They further suggest that migration (men migrating for work, women for marriage) is an explanatory factor for social isolation when it occurs in such situations as family conflict and impoverishment.

Keywords:

Social isolation
Informal support
Social networks
Insurance system
Rural areas
Senegal

1. Introduction

In Africa, elderly city dwellers are the focus of particular attention, not least because the city is thought to be conducive to a weakening of family solidarity. In contrast, the rural world is perceived as highly traditional and supportive. Yet some villagers live on the fringes of society, not just the elderly. In this article, the authors look at the little-known phenomenon of isolation in a rural region of Senegal and show how certain life events can lead to this situation, which social norms are supposed to prevent.

Social isolation, defined as a lack of meaningful social relationships [1], is a phenomenon in which interest is emerging in sub-Saharan Africa. It is generally discussed as a correlate of the transformations observed in intergenerational relations, in particular those brought about by the social changes associated with modernity [2,3]. Although often documented in urban environments, changes in forms of social support are not the sole preserve of cities. In rural contexts, where kinship forms the basis of social organization [4], the social and economic changes of recent decades—in particular, the growing desire for

autonomy within the family circle and migration to cities—suggest a weakening of the norms of family obligations [2].

Social isolation is a complex phenomenon that involves both a quantitative dimension (size of the social network) and a qualitative dimension (quality of relationships maintained and responses to needs provided by members of the network). Moreover, as the norms and values governing behavior vary according to context, culture, and time, social isolation requires a contextual understanding, particularly in the light of social organization and social protection systems (state or non-state).

Social protection systems (state or family) prevail in these environments [5]. Addressing social isolation as a corollary of intergenerational relations, however, obscures its specific features. There are several reasons for this state of knowledge. Despite the growing development of the field of social network analysis in African demography [6] and in the sociology of the family [7], it is the association between different markers of position in the network and the well-being of individuals that has so far been the focus of attention, rather than their marginality. By focusing on the role of social integration rather than isolation, the latter remains poorly understood. As a result, there is no theoretical basis for understanding social isolation. The few studies that have looked at isolation in Africa have focused on the situation of older people living in cities [8,9]. However, in the absence of a theoretical framework, these studies fail to identify the specific features of the phenomenon, in particular the nature of the solidarity and social organization characteristic of these environments.

Understanding how isolation plays out in people's lives is essential to analyzing its impact on well-being. The aim of this article is twofold: firstly, to identify a theoretical framework for studying social isolation in solidarity societies in sub-Saharan Africa; secondly, to describe how social isolation manifests itself among the Sereer Siin, an ethnic group in the groundnut basin of Senegal, and the life-course events that give rise to it. The data used for these purposes comes from interviews conducted during two field surveys (in 2007 and 2019) in Niakhar. This qualitative study contributes to the development of quantitative indicators for measuring the phenomenon in all its complexity.

In sub-Saharan Africa as elsewhere, interest in isolation is emerging in light of the challenges of caring for the elderly [10]. The absolute number of elderly people, which is expected to quadruple between 2010 and 2050 [11], combined with the weakness of state social protection systems [12,13], suggests that the elderly are vulnerable to the erosion of family solidarity.

This breakdown in family solidarity is likely to affect other populations, particularly because of the increase in rural-urban mobility. Rural-urban mobility is part of the demographic dynamics of several West African countries [14,15] and has been exacerbated by economic and environmental crises. In some countries in the sub-region, such as Mali and Senegal, the migration experiences of men and women from rural areas are underpinned by differentiated logic and expectations [16–18]. Men generally meet family financial and material needs, whereas women see them above all as an opportunity to emancipate themselves from community control [15]. Young women are also traditionally involved in migratory processes, due to the principle of patrilocality. This mobility often follows migration to work in the city. Mobility, by reorganizing networks and entourages, creates new relational dynamics, in which traditional family models gradually give way to the individual aspirations of younger people and women [19].

2. Theoretical framework

2.1. The moral economy of solidarity societies

In rural African societies, the so-called moral economy—a vision of the social obligations that members of a community have towards each other—ensures that everyone is protected against the inability to meet basic needs. The "subsistence ethic" and the principle of reciprocity are the moral foundations of this approach [20], upheld by a common system of values. So-called solidarity societies, organized around kinship, neighborhood, or village ties, are home to an informal insurance system characterized by the sharing of risks associated with environmental hazards, potential threats to agriculture. This system is based on the principle of "balanced reciprocity" [21,22] where the recipient of aid (financial, material, or moral) must return the favor to anyone in the village in need.

Involvement in these exchange networks, and above all the ability to meet expectations of reciprocity, means that risks can be shared. Reputational issues are particularly important, as reputation serves as insurance in the absence of formal coercion in the event of mutual aid failures. Gossip acts as a social control mechanism. So-called traditional societies are characterized by the constant presence of comments, rumors, and judgments about others [23], potentially undermining the maintenance of relationships based on trust.

2.2. The binding nature of the moral obligation to reciprocate

In industrialized societies, it is considered that the reciprocal nature of exchanges, both material (money, gifts, etc.) and immaterial (hospitality, for example), acts as a source of exclusion [24,25]. Indeed, individuals who do not have the resources to meet these expectations are particularly vulnerable. Some of them withdraw from these networks, further reducing the availability of support for them.

While the over-romanticized nature of mutual aid networks in solidarity societies has already been highlighted [26], little attention has so far been paid to the potential marginalizing effect of the principle of reciprocity. Not being able to contribute, or no longer being able to contribute, to the mutual aid network could lead to the individuals concerned being excluded, at least temporarily [27]. In solidarity societies, lack of financial resources is thought to be a major determinant of exclusion from these networks [22]. This mechanism has been documented in several countries, including Ghana, Côte d'Ivoire, and Tanzania [28–30]. These studies also show that being a woman or belonging to a minority ethnic group are potential barrier to joining a self-help network [30,31].

Finally, the binding nature of the principle of reciprocity is best understood in the light of the social organization in which it takes shape, an organization produced and reproduced through kinship ties acquired by blood, alliance, or affinity. The social organization of solidarity societies revolves around kitchens, made up of relatives whose respective roles within the economic system are assigned according to sex and age [32]. Kinship plays a central supporting role, with the ties maintained with others providing both a source of protection and a

moral obligation to reciprocate. However, the increasing frequency and duration of migration outside the village are contributing to the development of new relationships, potentially altering "traditional" views of the rural world, but above all the roles that each person plays in maintaining this hierarchical system.

It is within this theoretical framework that the manifestations and events at the origin of social isolation in rural Senegal are explored. It is hypothesized that rural-urban mobility and the increasing participation of women in the labor market act as vectors for the transformation of solidarity relationships characteristic of societies where the moral economy prevails. As a result, given family configurations, gender roles, and the restrictive nature of the norm of reciprocity, we can expect the forms taken by social isolation to be illustrated more by the quality of social relationships than their quantity.

3. Background, data, and methods

3.1. Context of the study: the Niakhar Observatory

Located in the Fatick region, the Niakhar Observatory comprises 30 villages with a population of 44,726 in 2014 [33]. Its population is young (56% of residents were under 20 in 2014) and is experiencing significant natural growth (3% in 2014). Mortality has fallen considerably, particularly among children under five, and life expectancy rose from 30 to 70 years between the 1960s and 2014. Fertility has begun to decline but remains high, falling from eight to six children per woman between 1984 and 2014.

Residents are 97% ethnic Sereer, with a Muslim majority. Within Sereer society, different markers of social status, such as age, gender, and marital status, interact constantly. Dense networks and frequent social interactions are guided by the geographical proximity of concessions and the nature of economic activities (essentially agro-pastoral). Despite the significant growth in rural-urban mobility, encouraged by the financial precariousness associated with the agricultural and climate crises, the majority of interactions take place within the village [34]. Although migrant profiles are now more diverse than before, young single people make up the majority of them [16]. The migratory experience of

young men from the village is a family economic strategy, and the migration of young single women generally precedes entry into a union, which is conditioned by the principle of patrilocality. Following a union, the woman returns to her husband's home and takes on a certain number of domestic roles, including taking care of daily household activities such as cooking, laundry, and the specific needs of children and the elderly.

3.2. Qualitative data from two surveys

This article uses qualitative data from two surveys conducted as part of the Niakhar Social Networks and Health Project (NSNHP), the aim of which was to understand the diffusion of health behaviors and preferences through social networks. A survey was conducted to reconstruct respondents' complete networks using the "name generator" method, i.e. the list of people with whom the respondent shares a specific activity [34]. In 2014, all residents of a village (Yandé) aged 16 and over (n = 1,308) were interviewed to record all their social relationships and document the structure of interactions within this space. This so-called sociocentric approach "aims to reconstruct the system of interdependencies between the members that make it up" [35].

For each of the 15 "name generators" in the collection instrument, respondents could name an unlimited number of individuals. The size of the respondents' socio-centric network is measured by the number of times they were cited by the village residents who took part in the survey. The sociometric literature considers the number of quotations received to be an indicator of the prestige enjoyed by an individual [36]. Taking all name generators together, the respondents were cited an average of 11.8 times, ranging from a minimum of 0 (a person who any other resident had not cited) to a maximum of 118 (a person who 118 other residents had cited).

The unique protocol of this project makes it particularly suitable for studying social isolation because it overcomes some of the methodological limitations of standard surveys collecting social network data. Typically, surveys are limited to five individuals who can be mentioned in each name generator, and they most often use a single name generator to identify the number of people with whom the respondent communicates.

Finally, the network surveys used to study isolation are generally not socio-centric, which makes it impossible to capture the full structure of respondents' entire networks.

In 2019, a qualitative survey was conducted among the isolates identified in the 2014 survey to better understand their specific situation. This article draws on the qualitative data collected during this latest fieldwork, supplemented by a secondary analysis of interviews conducted as part of a pilot survey dating back to 2007 (details below).

The 135 people below the 10th percentile of the distribution of the number of quotations, i.e. cited by three people or fewer, are considered to be isolated (**Table 1**). The "isolated" population is relatively young, with more women than men being married, never having been to school and born in the village. The profile of these "isolated" people is somewhat atypical compared with the general population: they have a relatively high level of education and a relatively high proportion of non-natives compared with women, especially given the principle of patrilocality.

Table 1. Socio-demographic characteristics of people identified as isolated in 2014, by gender (%)

	Women (n = 74)	Men (n = 61)
Age group		
20–24 years old	54.1	52.5
25–59 years old	37.8	44.3
60 and over	8.1	3.3
Marital status		
Never married	39.2	60.7
Married	55.4	34.4
Widowed/separated/divorced	5.4	4.9
Level of education		
Never been to school	43.2	34.4
Primary	21.6	23.0
Secondary or higher	35.1	42.6
Migration status		
Native of the village	80.3	58.1
Immigrant	19.7	41.9

Scope: Residents who received three or fewer citations in the 2014 sociometric survey (n = 135)
Source: Niakhar Social Networks and Health Project

Semi-structured individual interviews were conducted between September and November 2019 with 12 men and 16 women from these 135 people identified as isolated in 2014. This selection was initially carried out on a reasoned basis (according to sex, age, and marital status), then individuals were selected within each of these categories on a random basis. During the interviews carried out in 2019, some people identified as isolated in 2014 were not in fact so. To allow us to discuss the limitations of the sociometric indicator chosen to identify isolated people a priori, as well as the nature of isolation in this context, they were kept in the sample, and these people are referred to as non-isolated in the qualitative analysis.

The interview guide (supplementary material) addressed four themes: the last episode of illness, biographical events and the transformation of the support network, the qualification of the social network and the consequences of isolation on health. Most of the interviews took place in the respondent's compound (a few were conducted in the fields), and all were conducted by the first author accompanied by a Sereer language interpreter. They lasted 51 minutes on average and were recorded in digital audio format, then transcribed into French.

This analysis is also based on 24 interviews (taken from a random sample within the study area, stratified by age and gender) conducted in the Niakhar area during a pilot survey carried out in 2007. The aim of the survey was to identify the nature of social interactions in this context, and to understand the role of local people in providing support [37]. These interviews help to describe the solidarity society in this environment.

The demographic characteristics of the respondents to the 2007 and 2019 interviews are presented in **Table 2**. Some information on respondents to the 2007 survey is missing, in particular, age and level of education. Despite our efforts to ensure representativeness, the respondents to the 2019 interviews are older and/or have been married more often than the single people identified in the 2014 survey (**Table 1**). Many single people and young adults go on seasonal migrations, which reduces the chances of being able to interview them in the village.

Table 2. Socio-demographic characteristics of respondents to interviews conducted in 2007 and 2019

	2007 Survey ($n = 24$)	2019 Survey ($n = 28$)
Gender		
Male	12	12
Female	12	16
Age group	n.a.	
21–24 years old		9
25–59 years old		16
60 and over		3
Marital status		
Never married	15	5
Is/was married	9	23
Level of education	n.a.	
Never been to school		14
Primary		8
Secondary or higher		6
Migration status		
Native of the village	19	21
Immigrant	5	7

Note: n.a. = not available
Scope: People interviewed at the time of the qualitative surveys
Source: Niakhar Social Networks and Health Project

3.3. Reflective content analysis

A reflexive thematic content analysis [38] was used to address the aims of the study. Deductive coding, based on the literature, and inductive coding, based on the content of the 2019 interviews, were then carried out (available as supplementary material). The 2007 interviews were subject to secondary analysis. NVivo10 software was used to facilitate verbatim handling and coding. Triangulation with informal interviews conducted with key informants enabled us to check the consistency of the participants' points of view. These informants (researchers from the Institut de recherche pour le développement based in Dakar and teachers living in Niakhar) were chosen for their in-depth knowledge of the environment and the diversity of their professional backgrounds.

4. Social isolation in Niakhar: social and financial insecurity amplified by the migration experience

Analysis of the interviews on the experience of isolation in Niakhar revealed two main themes. Firstly, the fact that village residents are part of the informal insurance system helps to meet their need for financial support, and social isolation is reflected in the difficulties they have in remaining part of these exchange networks. Secondly, the experience of migration, in different ways for men and women, was shown to be a vector of isolation.

4.1. The normative pressure of the informal insurance system

In Niakhar, family and friends are the preferred means of meeting the immediate needs of village residents. The interviews show that, despite the importance of contemporary social changes—particularly rural-urban mobility—the fundamental principles of the moral economy are maintained, at least in discourse, as illustrated by the words of Moussa, who had been identified as isolated in 2014 but no longer appeared to be so when interviewed in 2019. At the time of the survey, he was passing through the village to help his family with farm work. Outside this period and the annual festivities, Moussa lives in Dakar, where he works at the port. This job enables him to contribute to the needs of his family back in the village. Asked about the importance of neighborliness, he explains: "At all times, we have to unite because we all share the same village. If we split up, the village will be ruined. If you have problems and everyone supports you, the village will only prosper," (non-isolated, single male, migrant, aged 25).

Mutual support is at the heart of the insurance system, but the pressure to comply puts those who are unable to do so in a delicate position. Financial insecurity is seen as a way of sidelining people from solidarity networks, depriving the less well-off of material support. "The isolated are those who are tired because they have no support," explained a key informant we met in 2019. Not only do they deliberately choose to limit their interactions, but those around them encourage them to do so.

Indeed, the internalization of self-help norms

(assimilated since childhood), but above all the inability to respond to them, are for isolated people the triggers for their withdrawal. Shame in the eyes of those around them and concern about damage to their reputation are the most frequently cited reasons for withdrawal. Shame, a feeling whose consequences are particularly acute in sub-Saharan Africa [39–41], and more specifically the feeling of not meeting expectations of reciprocal help, leads them to distance themselves from their support network. Fatou explains: "Today, if I didn't have enough to prepare lunch, I'd be ashamed to go and ask," (single, married woman, non-migrant, aged 54). Fatou's social and financial insecurity stems from her decision to leave the family home because of domestic violence. Her eldest son, a migrant worker in Dakar, used his savings to build her a hut outside her husband's compound, where she lives with her two youngest children. With no access to land for farming, her financial resources quickly became very limited. The decision to leave her home to escape the violence may have ostracized her even further within the village.

As the norm of reciprocity acts as an insurance mechanism, an individual's inability to meet the expectations of others damages his or her reputation. Asking for help represents a potential threat if it reveals future difficulties in meeting the moral duty of reciprocity. Thus, distrust of those around them becomes omnipresent, for fear of being gossiped about and excluded from future exchanges. Fatou adds: "Some people, if you hang around them a lot, they'll think you're looking for something when you're not. In that case, it's better to stay at home and make do with what you've got."

Avoiding being the subject of comments or rumors, particularly about financial insecurity, is a major challenge in this context of repeated interactions. To avoid being excluded from this network, isolated people refrain from sharing their problems, as Maïmouna puts it: "I have good relations with them [the neighbors], but as for help, I don't get much because I rarely reveal my problems. Often you can tell someone about your problems and they'll know all your secrets and I don't want that. When the children fall ill, for example, if the nurse prescribes medicine and I can't afford it, I manage to come and pay for it afterward," (single, married

woman, migrant, aged 35).

Maïmouna is a young woman in a polygamous union who has been immigrating to the village for around ten years. Living with her co-wife is proving particularly difficult because of the physical and verbal violence to which she is subjected. She reports that her co-wife's children, all over 18, insult her by suggesting that her six children are too much of a financial burden on the compound. Despite the gossip about her fueled by her co-wife, whose children's age and success contribute to her claim to a high status, Maïmouna hopes that her own children's future entry into working life will put an end to this situation.

The frequent reluctance of single people to turn to those around them is accompanied by a decline in the support available. Despite the normative nature of mutual aid, illustrated in Fatou's words, "if you have the means, you're not going to wait for him [your neighbor] to come and ask you [for help], that's for sure." The majority of single people said that the expectation to help others spontaneously was generally not honored. According to them, without financial means, it becomes particularly difficult to obtain support. So, contrary to what would have been expected based on the principles of moral economy, reciprocity is not in the balance, but rather conditional on the ability of the parties involved to reciprocate, especially when it comes to helping the needy.

There is, however, a palpable tension among the isolated residents who prefer not to come forward so as not to publicize their situation, but who seek to maintain relationships within the village, a strategy that may enable them to rejoin the self-help network. "Remaining visible" i.e. maintaining relationships despite their non-reciprocal nature, is imperative. Given that to receive help, you need to be known in your environment [42], the withdrawal of isolated people, which manifests itself in their refusal to seek help from those around them, could further compromise their chances of being helped. The importance of maintaining relationships in the village was stressed on several occasions. Biram, a former village party organizer who now owns a small shop, explains: "You have to be close to people so that they can help you. You have to chat and talk. But when you're alone, you don't talk to anyone, you're treated like an animal. When you don't seek help, you're considered an animal," (isolated, married man, non-migrant, 39 years old).

In his opinion, the loss of interest in him on the part of those around him explains the transformation of his network: "People used to be around me. For example, when you had a baptism, you would come to me for help. When that happened, I was able to reduce [the price of the entertainment]. Since I stopped hosting, the people around me have all withdrawn because the interest they saw in me no longer exists. They've all abandoned me."

Seeing their main source of help drying up, and wishing to minimize comments about them, the isolated people put in place alternative strategies for obtaining support. Firstly, by appealing to family members living outside the village. Isolated men and women mentioned that they had called on their children, most of whom had migrated to Dakar, during their most recent episode of illness. While close family and friends provide moral support to the isolated, it is the lack of financial resources that the children contribute.

Many women who immigrated to the village after marrying, like Fatou, often choose to turn to their families in their village of origin: "You can go to someone's house and they'll know about your problem, but they won't help you. That's why when I need something, I go home [to my family]."

Extra-familial relationships outside the village also appeared to be an important source of support, both for women who did not wish to inform their families of the origin of the difficulties they were experiencing at home and for men from the village who had not met their family's expectations in terms of financial support. The discomfort caused by the need to ask for help is illustrated by Bougna's story. Originally from the south of the country and an immigrant following her marriage, her daily food needs and those of her children are struggling to be met. Her husband, formerly a Koranic master, has stopped his activities due to health problems, reducing the household's source of income. Her brother, who shares the same plot, has decided to stop supporting them, accusing Bougna of having too many children and incurring too many expenses. She explains that she has had to ask one of her husband's friends to feed her family.

Maintaining frequent relations with those close to them is therefore essential for isolated people, both to aspire to rejoin mutual aid networks and to guard against gossip about behavior deemed to be anti-social. Isolated people's relationships with village residents are frequent but superficial. This is easy to understand in light of the fears mentioned about the risk of their problems being known by several villagers, despite their nature. When asked about her relationship with the village women, Bougna says: "They can't hold their tongues and I don't have the means, but I'm proud. If they help you and are under the palaver tree or in the fields picking leaves, they'll start saying: 'Such a person, if it wasn't for me...' That's why I don't give myself over to them," (isolated, married woman, migrant, 33 years old)

4.2. Migration and social isolation of women and men

The experience of migration is a decisive element in the biographical journey for understanding the size of respondents' social networks. Two cases were illustrated, depending on whether the migration took place in the present or the past.

On the one hand, for migrants at the time of the survey, having a restricted network reflects a prolonged absence from the village rather than a situation of social precariousness. Indeed, for these respondents, having been little mentioned mainly reflects a geographical distance. Numerous interviews with migrants visiting the village, such as Babacar, showed that the ties forged before their departure had been maintained: "Basically, they [the ties to the village] have neither increased nor decreased. Those who knew me continue to know me. There are no changes and no one has forgotten me either," (non-isolated, single male, migrant, aged 25).

On the other hand, past migratory experience plays an important role in understanding the changes that isolated individuals' social networks have undergone, and this applies to men and women separately. Gendered norms of behavior and the expectations associated with positions in the social hierarchy are central to understanding the reasons for marginalization.

For men, it was forced return migration, together with the expectations of relatives regarding the help expected, that came to the fore. Various events that disrupt the migration experience, such as widowhood and illness, are at the root of premature returns to the village. The men's role in providing financial support to the family proved decisive in changing the attitudes of those around them. This is what Cheikh, who returned after the death of his first wife, said: "When you're outside your village and you have money, life is interesting. But when my wife died and left the children here with me, it was difficult. You don't have the means and people don't respect you," (isolated, married man, former migrant, 64 years old).

Cheikh, who emigrated to work for over twenty-six years, attributes the change in attitude of those around him to his dissatisfaction with the management of the income he earned during his migration. He says that when he returned with no savings and had to start farming, his family turned their backs on him, criticizing him for failing to support them financially during his migration and since his return.

His story, combined with those of other respondents highlighting the transformation in the quality of the relationships maintained following their early return, raises the question of the conditions under which they maintained their support obligations until their return. Did they try to emancipate themselves from the mutual support system through migration? Current migrants, who are mostly younger than non-migrants and single, seem to be under less pressure, possibly because they do not yet have the status of married men with families.

In the case of lone women, marital mobility appeared to be an explanatory factor for their isolation. In the sample, seven isolated women out of eight were not natives of the village. In Niakhar, as in most traditional societies in sub-Saharan Africa, marriage is a major step in the life course. Its main function is to maintain the social organization dominated by kinship relationships [43]. Perceived as a tradition to be honored, this institution is valued by the majority of women of all ages: "Marriage is a woman's paradise" declares Coumba (non-isolated, married woman, non-migrant, aged 64). However, the obligations imposed by entering into a union are restrictive for these women, who acquire a new status, and even more so for those who have settled in their spouse's village following the principle of virilocality [44].

Many of the norms guiding the behavior of married

women limit the development of social relationships outside the compound or beyond the immediate neighborhood. Maintaining friendships with neighbors who are "too far away," especially for a woman new to the village, is criticized: "You know, when you're a Sereer woman and you move around a lot, people are bound to slander you. When you decide to go and visit a friend, if it's more than two or three houses [away from your own compound], you'll get the reputation of a woman who doesn't take it easy," (married woman, 2007 interview).

Meeting these requirements as a married woman, and a migrant at that, makes it particularly difficult to develop a social network, especially if relations with other members of the kitchen are conflictual. For women who have recently immigrated to the village, relationships within the compound are essential to the development of an external entourage. For them, marriage-induced migration represents an important vector for transforming social relationships, but also for losing the autonomy they acquired during any work migration. Awa's story illustrates this type of situation: "Really, when I was at home, I felt joy because I was going to Dakar and coming back. I had my own money and I made my mother happy. Today, I don't have that any more. Before, I was independent, I bought what I wanted... Now, I manage. I don't have a little brother or an older brother to ask. No one," (isolated, married woman, migrant, aged 30).

Hierarchical relationships within the concessions, particularly concerning in-laws, can act as a brake on mutual assistance with family and friends. The power relations between the young bride and her mother-in-law, for example, are likely to lead to considerable tension. As well as having to come to terms with the new environment created by her migration, Awa finds herself unable to contribute to good neighborly relations through reciprocal exchanges because of the obstacles posed by her mother-in-law. Her mother-in-law opposes all her initiatives to trade within the village. Awa associates these behaviors with a personality incompatibility, described as "complicated." "Interpreter: As she [the mother-in-law] doesn't accept you giving anything to anyone, do people sometimes come to ask you for help? Interviewee: Yes, they do, but when she's not there.

When people come and I have something to give, if she's not there, I rush to help them. They say to me, 'You don't need to give anything because your mother-in-law won't let you,' but I tell them not to dwell on it and to help me, otherwise, nothing will get better."

Knowing how central participation in the mutual aid system is not only to maintain good neighborly relations but above all as an alternative source of financial support to her husband, Awa's inability to contribute makes her particularly bitter about her marriage.

In addition to the integrating role played by in-laws in the village, in Senegal there is the practice of twinning (*Ndeye Dikké*) two women, the first "adopting" the second, which enables her to become part of networks of exchanges between women [45]. In Niakhar, this practice, which previously favored the social integration of newly married women, who at the time were deprived of many social relations, would no longer have the same importance. This change, combined with conflicts in the immediate circle, makes it difficult to develop social relationships based on trust and reciprocity. The quantitative data from the network survey (2014) also highlights the fact that unions can play a role in female isolation. In our sample (**Table 1**), 61% of isolated women were married, compared with only a third of men.

For the isolated women surveyed, marriage, and especially migration to a new village and a new family, therefore seems difficult to reconcile with successful integration into a new environment. Those who marry in their home village may also experience isolation. Mariama's story bears witness to this reality. This young woman, recently married to a man whose work takes him away from home for much of the year, is also the mother of a young child. She explains that since her best friend left to get married, the relationships she has in the village are not as strong as they used to be: "They're not even friends, they're just companions, little sisters whom I advise on studies, telling them to make an effort to get what they want before they find a husband," (isolated, married woman, non-migrant, aged 30).

The situation of relative isolation in which she finds herself could also be understood in the light of the results of a qualitative study carried out among residents of a predominantly Wolof town (Senegal's majority

ethnic group) highlighting the case where the wife of a migrant is often the subject of rumors about the couple's fidelity given the distance, which increases the feeling of isolation [44]. Mariama, the only isolated woman in our sample to be a native of the village, may have been affected both by the departure of her confidante and by derogatory comments about her marriage, raising doubts about the couple's fidelity, for example.

Migration plays a central role in the recomposition of social networks and the difficulties associated with integrating into new environments. Given the major role that marriage plays in the development of new alliances based on kinship, as well as the constraints imposed especially on women who have migrated following their union, particular attention should be paid to the strategies developed by these women in response to the immediate needs of their families.

5. Understanding isolation among the Sereer Siin

Analysis of the interviews conducted among the Sereer Siin in Niakhar has enabled us to gain a better understanding of how solidarity manifests itself and its limits in this rural Senegalese environment. More specifically, we looked at the characteristics of this society and those of social isolation, as well as the biographical events likely to lead to situations of social and financial insecurity.

How the informal insurance system operates in the experience of the isolated people of Niakhar suggests that mutual aid is based on conditional rather than balanced reciprocity. The former relates to potential support conditional on the assurance that it will be returned to the giver, while the latter relates to one-off exchanges where the recipient is anyone who might need it. These findings are in line with those of a study carried out in Côte d'Ivoire and Ghana, which suggests that the principles of the moral economy are being transformed, particularly as a result of the economic crisis [31]. This conditionality of mutual aid is echoed in research highlighting the role of financial insecurity as a vector for exclusion from mutual aid networks. Not being able to participate in the informal insurance system creates a self-withdrawal effect for the individuals concerned (linked to the shame

of finding themselves in this situation), combined with the rejection to which they are subjected by those around them (because they represent a threat to the balance of the mutual aid system) [46]. It is also interesting to note that all the isolated people referred almost exclusively to the financial support they were unable to return, although this type of mutual aid was not specifically mentioned during the interviews. They try to stay within solidarity networks by offering non-material support (washing, cooking, or shopping at the market), but it is to the lack of financial means that they attribute their social precariousness.

The theoretical framework also highlighted the importance of the quality of social relations in understanding isolation. In this context, it is reflected in the fact that the isolated maintain dense and frequent social relationships, but which appear to be more constrained than chosen. This paradoxical observation—that isolated people are socially surrounded—is fairly well explained by traditional norms of social interaction and local social organization. In a context of repeated interactions, and in an environment where relationships are built on family alliances forged through unions, it is necessary to maintain cordial relations within the village. In this way, the embarrassment felt by isolated people about their difficulty in contributing to the insurance system has to be combined with the need to remain involved in village life. This reality is part of a context of close-knit relationships where anything negative about an individual, made known to others, becomes a source of dishonor and shame [40]. The maintenance of seemingly cordial social relations with the local community should not, therefore, conceal the existence of socially isolated individuals, although physically well-integrated.

In line with our hypothesis, work and marital mobility play an important role in the emergence of social isolation. While these phenomena are not new, the forms they are taking today have contributed to the weakening of the relationships of solidarity that are characteristic of African societies [47]. The interactions between the migration experience and other biographical events that play a decisive role in the inability to maintain lasting relationships within mutual aid networks are illustrated in different ways for men and women. For men, it was the forced returns from migration that were

most significant, raising the question of the conditions of return, more specifically about participation in the informal insurance system during migration. The expectations of the family back in the village are such that it is sometimes difficult to reconcile work and success so the sense of shame referred to above is also illustrated for those who return "involuntarily," having to deal with the inability to honor the expectations placed on them. This reality, which has been documented in the context of international migration [48], remains little explored in the context of internal migration. However, the stories of Biram (married) and Moussa and Babacar (single) highlight the importance of linking migration experience and marital status in understanding isolation. In fact, 61% of the men who received only three quotes or less at the time of the survey had never been married (**Table 1**).

For women, marital mobility can be a source of isolation. The interviewees' accounts reveal the difficulty of reconciling the autonomy temporarily achieved during previous migrations with the obligations and responsibilities associated with each person's position in the family hierarchy (daughter-in-law and mother-in-law in particular). The stories of several respondents, such as Fatou and Maïmouna, also highlight the existence of conflicts and the experience of violence within the family, which contribute to the isolation of these immigrant women in the village. Growing participation in the labor market and the more or less assertive questioning of traditional support roles have emerged as key factors in the emergence of situations of female isolation. Increasingly frequent work migration by young women calls into question the established order, between respect for the norm and the expectations of those around them and the urban lifestyles they have experienced. In this context, marriage and intra-family conflicts appear to be obstacles to the autonomy acquired through work migration. This participation in the labor market raises the issue of the durability of the social organization of solidarity societies, and more specifically of gender roles in the provision of help for the most dependent.

This finding differs from those in West African literature (particularly from Mali), which suggests that young migrant women emancipate themselves from their family environment through a migratory work path [49].

The young women of Niakhar are subject to traditional domestic role norms and their agency remains limited by the patriarchal organization that keeps them in a certain dependence [3]. Sereer society is characterized by a strong attachment to traditions [43], which makes it difficult to adopt alternative behaviors and attitudes to the norm.

Finally, the interpretation of the results requires us to highlight their limitations. Firstly, choosing the size of the network as an indicator of social isolation only allowed us to identify one of the modalities of the phenomenon and limited the analysis in terms of sample size. During data collection, we were confronted with the fact that several individuals in the sample of 135 were absent due to migration. In addition, some of the respondents in the sample turned out not to be isolated, but rather involved in work migration. In addition, there were more non-native men than women in the 135-person sample, a surprising distribution given the principle of virilocality, but also the circumstances of female isolation documented in this article. It is possible that some of the men were born in a neighboring village, but grew up in Yandé. However, this provides information on the role of migratory experience in the composition of networks, as well as on expectations differentiated by marital status. The temporality of migratory experiences, especially for women who migrated to the village following their marriage, requires particular attention to understand whether certain events help to avoid isolation.

Secondly, the socio-centric approach assumes isolation within the village, but it is possible that those isolated within the village are not isolated on a wider geographical scale. That said, looking at proximity relationships remains a subject of interest in these contexts, particularly for individuals who are not part of a migration process.

Thirdly, the years separating the data collections (2014 and 2019) raise the question of the stability of the networks over time. However, the interviews were conducted in such a way as to identify situations of social isolation that might have changed in the meantime.

Lastly, although the results cannot be generalized to all rural populations, they highlight mechanisms of social isolation that may be at play in other contexts and may, in this sense, help future studies on isolation in Africa.

6. Conclusion

The inability to meet the moral obligation of reciprocity is the main manifestation of social isolation, and the conditionality of support suggests that the mutual aid system is more a promoter of inequality than a social safety net for all. The theoretical framework used has made it possible to identify the key elements of social isolation in a context characterized by the cohabitation of the principles of the moral economy and the transformations brought about by modernity. These elements argue in favor of paying greater attention to the transformation of the foundations of the mutual aid system, initially maintained by moral obligations towards relatives. Finally, the results raise the question of the durability of informal support systems, but also of the possible pillars of resilience in the face of situations of isolation. While certain demographic events (migration and marriage) have been shown, in specific contexts such as family conflict and impoverishment, to play a decisive role in the emergence of isolation, the question arises as to which events would enable the re-establishment of the relationships of trust and informal exchanges necessary for re-entry into mutual support networks.

Disclosure statement

The authors declare no conflict of interest.

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