

LABOR MIGRATION, SOCIAL CAPITAL AND HIV RISKS IN SOUTH AFRICA  
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ABSTRACT

This paper uses perspectives on social capital and social network analysis of health outcomes to examine labor migration and its association with HIV risks of migrants compared to non-migrants. Using cross-sectional data on 2020 respondents conducted in 2012 in metropolitan areas of Gauteng Province of South Africa, we find that compared to natives, internal and international migrants were less likely to know where to test and seek free treatment for HIV, they were also more likely to indicate higher risks of HIV. We also find that regular attendance at religious organizations and cultural activities was positively associated with testing and seeking treatment of HIV for migrants than for non-migrants. We interpret the results in the light of a network-based approach to social capital and health and efforts to prevent HIV in South Africa and sub-Saharan Africa.

## Introduction

Estimates from the International Organization for Migration (IOM) indicated that the number of international migrants worldwide was over 244 million (more than 3.3% of the global population), the highest ever recorded (World Migration Report 2018). A much larger number 740 million migrate internally within their own country of birth (UNDP 2009). Majority of international migrants move from middle-income to high income countries. Top origin countries of international migrants are India, Mexico, Russia, China and Bangladesh. Top countries of destination for international migrants are United States, which is home to about one-in-five international migrants. Others include Germany, Russian Federation, Saudi Arabia, the United Kingdom, Australia and Canada (World Migration Report 2018). Some of these migrants move voluntarily, seeking better economic and educational opportunities, but most have been forced from their homes by political turmoil, war and civil strife (such as in Iraq, Afghanistan and recently in Syria and Myanmar etc.). For example, in 2016, there were about 40.3 million internally displaced persons (IDPs) and 22.5 million refugees worldwide, the highest on record (World Migration Report 2018). Majority who move, move to cities across the world for labor, sending over \$429 billion in remittances to their families in lower- and middle-income countries (World Bank 2016).

However, migration whether internal or international is not all about the movement of people from origin to destination areas or why they move, but also about the net impact, over time, on the destination population and the health and well-being of migrants and their families left behind in places of migration origin. Thus an area of intense research has been the relationship between population migration, particularly labor migration and the HIV/AIDS

epidemic in the so called AIDS belt in Eastern and Southern Africa (Lurie 2006; Brockerhoff and Biddlecom 1999), which bears the disproportionate burden of the HIV/AIDS epidemic (about 53 percent (19.6 million) of the total number of people living with HIV (36.9 million) are located in Eastern and Southern Africa). Migrant labor contributing countries to the mines in Southern Africa have simultaneously the world's highest HIV prevalence. For example, Swaziland and Lesotho have the highest HIV prevalence in the World (27 and 25 percent respectively) and send the largest number of migrant workers to South African (Corno and Walque 2012).

Although the specific pathways through which labor migration produce HIV transmission are not entirely understood, studies show that labor migrants and generally people who are mobile and frequently change their residence on a temporary basis are more likely to engage in multiple, concurrent sexual partnerships than people in more stable living conditions (Lurie et al. 2003, Decosas et al. 1995). Family separation, low social support and weakened social control over traditional sexual norms has also increased the probability of high-risk behavior and HIV infection among labor migrants (Mberu and White 2011, Weine and Kashuba 2012).

Although there has been a shift, in the public health literature, from viewing HIV risk as individual behavior, little research has integrated social capital and social network approaches in understanding health and the mechanisms through which labor migration produce vulnerabilities to HIV in places of migration destination especially in urban areas of South Africa. Moreover, changes in the mining sector in the post-apartheid economy mainly as a result of reducing commodity prices and the retrenchment of workers, low wages, reduced remittances and frequency of visiting home, amongst others, has changed the dynamics of labor migration in urban South Africa (Corno and Walque 2012) and this has eroded the

economic fabric of most migrants. Coupled with rampant xenophobic responses to migration, which is deeply rooted in the racist interpretation of nationality and territory and decolonization and citizenship (Klotz 2016), many migrants from neighboring former British protectorates are now in liminal status and these circumstances underpin and guide social responses to HIV/AIDS epidemic.

Building on this background, this project investigates how labor migration and social capital are associated with HIV risks and behavior of migrants compared to non-migrants. First, we situate labor migration and HIV vulnerability within the broader literature of social capital and health, on one hand and social network approaches to health on the other. Using cross-sectional quantitative data on 2,020 respondents conducted in 2012 in metropolitan areas of Gauteng Province of South Africa, which includes the city of Johannesburg, we present findings that highlight migrant vulnerability and how informal social interaction and social networks are used to protect against the risk of HIV/AIDS and other health outcomes. Second, drawing data from data on the National Income Dynamics Study (NIDS), we examine internal labor migration in South Africa and its impact on self-rated health, a widely used and valid measure of health status. We argue that self-rated health differs within and between temporary migrants and the native-born population. We conclude with a discussion of multilevel intervention strategies that can improve policy approaches to address the health and wellbeing of migrants, both internal and international.

## **Literature Review and Conceptual Framework**

Broadly, social capital refers to the sum of in-person interactions between people in a society. These interactions are believed to facilitate the pursuit of shared resources and goals. Although fraught with conceptual ambiguities and dilemmas, much of the application of social capital to health is centered on the influential work of Robert Putnam who defines the concept as features of a social organization such as social cohesion, social support, interpersonal trust, and norms of reciprocity that result from high levels of participation in community and civic groups. Such direct participation, he alleges, is known to improve efficiency by facilitating coordinated action for mutual benefit, especially in the consolidation of democracy (Putnam, Leonardi and Nanetti 1993).

Generally, research on social capital and health in Sub-Saharan Africa is rare; the few studies that have applied social capital to health outcomes such as HIV risks and transmission have done so at the community level and not specifically through social networks. Similarly, not much attention has focused on the social capital of labor migrants and its implication for health, particularly HIV/AIDS. For example, a cross-sectional study in Zimbabwe found that membership and participation in local community groups is associated with risk-avoiding behavior (Gregson et al. 2004). Another study using a similar conceptualization of social capital suggests that different types of social capital (structural and cognitive) have potential benefits for HIV prevention through participation in formal social institutions (Pronyk et al. 2008). A more recent study examined how migration acts as a conduit for HIV transmission in South Africa and proposed using social capital theory, and a prevention model that mobilizes community leaders, institutions and stakeholders to combat AIDS (Sen et al. 2010).

The dynamics of labor migration in South Africa, thus offers a unique avenue to contribute to this literature on social capital and health by examining the role of informal social interaction and social networks to HIV risks and behavior of migrants compared to non-migrants. We draw on structural disadvantages and vulnerabilities of labor migrants in places of migration destination to examine the social support, social influence and community resources migrants are exposed to through interactions with others in their personal networks. We link the structure and characteristics of social networks to the psychosocial mechanisms that affect HIV risks among migrant.

Previous literature has shown that social capital has a dual nature- bonding and bridging (Putnam 2000); the former refers to linkages and perceptions in relation to people who are similar to each other (homogenous groups), while the latter interconnects people who are different (heterogeneous groups). This dual nature of social capital is consistent with the concept of strong and weak social ties as defined by Mark Granovetter (1973, 1995). Whereas, strong social ties involve contact with intimate others; weak ties are the opposite (relationships are formed with extended and nonintimate ties). A third form of social capital identified in the literature is “linking social capital”- i.e. social capital that can be generated through formal institutions such as between a community and local government structures (Szreter and Woolcock 2004).

When applied to labor migration and HIV risks, the social capital framework allows for understanding how social networks are lodged within the broader

we first test how social structural factors such as labor migration affects individual health related behavior by enforcing group norms, exerting social influence and control,

enabling or constraining individual choice and offering structural and cognitive social support (Lindstrom 2008, Beckman and Glass 2000). Social capital gained through community and personal networks may enable or constrain adoption of health promoting behaviors and provide access to resources and material goods and group coping strategies or mechanisms that mitigate negative health outcomes of migrants (Lindstrom 2008).

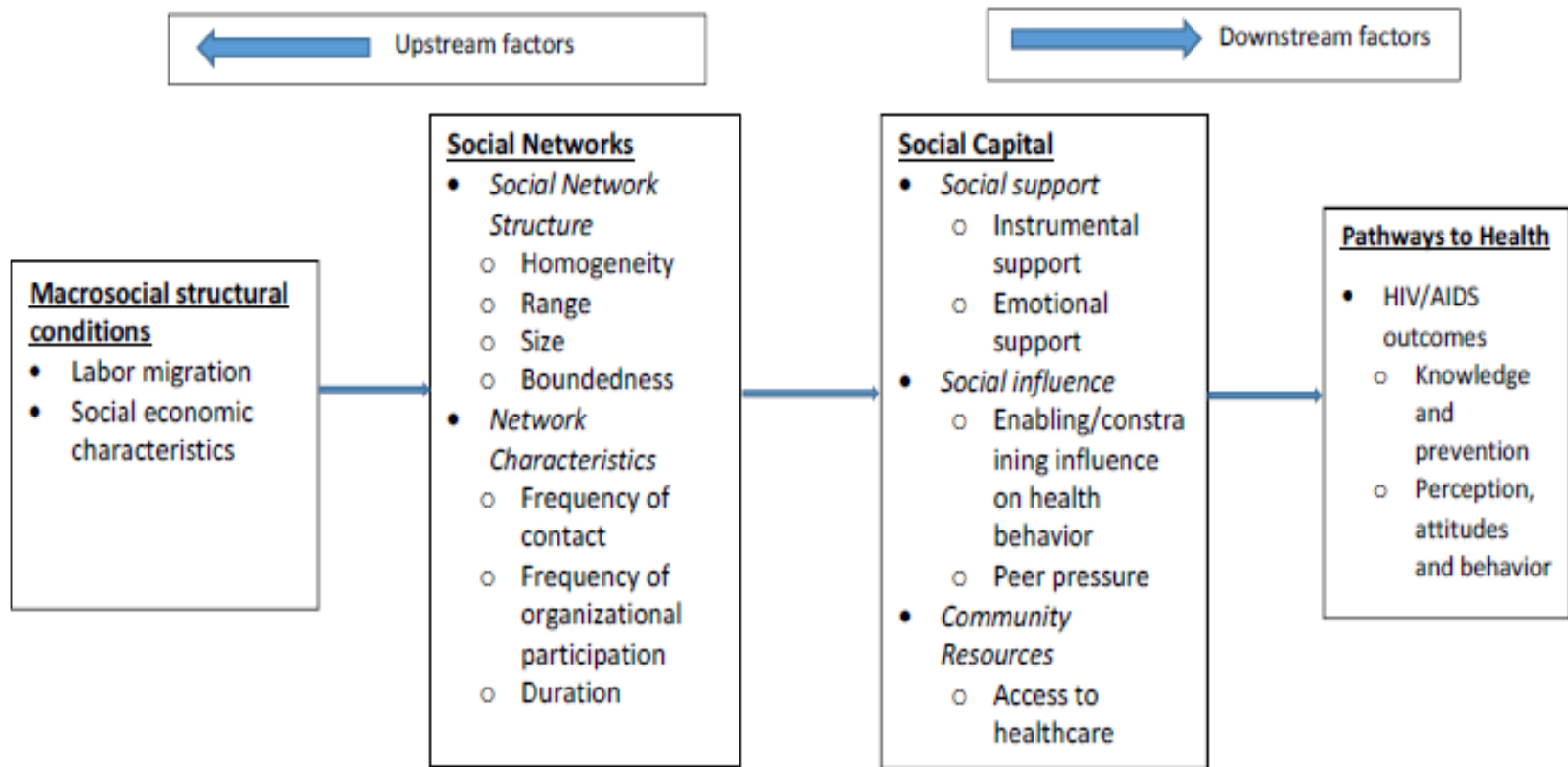
Second, following scholars such as Hirsch 2013 who advocates meso-level perspectives (theories of the middle ground) as an overarching heuristic approach to analyzing important but not easily modifiable structural and environmental factors, we explore how the complexities of labor migration (such as the role of mining companies and the private sector in general in shaping conditions that produce health vulnerabilities) might reveal targets for multi-sectorial action to prevent HIV for migrants. Many policy makers and international institutions (including the World Health Organization and the World Bank) have advocated social capital as an essential feature of health promotion and addressing health inequalities. However, it is unclear whether there is research evidence to support policy on social capital, especially in developing settings.

Figure 1 summarizes the basic conceptual model of risks and prevention emerging from labor migration, social networks and health risks in South Africa. Following Berkman and Glass 2000 who proposed a comprehensive conceptual model linking social networks to health, we test a framework based on upstream factors; the broader social conditions that impact and shape social network structure and characteristics and downstream factors that create opportunities for social support, both emotional and instrumental which in turn influence HIV/AIDS risks and other related health outcomes.





Figure 1: Conceptual Model of how Labor Migration and Social Capital Impacts HIV/Risks



## **Data and Methods**

This report draws from a cross sectional study of 2020 respondents (1085 women and 935 men) conducted in urban metropolitan areas of Gauteng Province. The study titled “Gauteng Assessment of Migrant Populations’ Needs and Vulnerabilities Survey 2012” was conducted by the Africa Centre for Migration and Society (ACMS), in collaboration with the International Organization of Migration (IOM), and the Gauteng Department of Social Development (DSD). The major objective of the project is to address gaps in knowledge on population dynamics and migrant vulnerabilities within the Gauteng province to enable government and civil society address the needs of migrant groups (ACMS 2013). Using a multi-stage sampling technique, internal and international migrants, and natives living in three different urban areas (inner city, periphery (townships), informal settlements) were selected in each of the three Metropolitan areas (Ekurhuleni, City of Johannesburg and City of Tshwane) in Gauteng province. Multivariate test using binary logistic regression were employed to analyse the data using.

## **Measures**

**Dependent:** Three dependent outcomes measuring the risk HIV are analysed. First, respondents were asked “Do you know where someone from this community can get tested for HIV”, second, respondents were asked “Do you know where someone from this community can get free treatment for HIV-ART” and lastly, they were asked “what do you think your chances of getting a HIV/AIDS are?” All outcome variables are dichotomous.

**Independent:** The key independent outcome is migration status. A question on nationality was asked to deduce the immigration status of respondents: “What is your nationality?” with responses “1 South African 2 Non-South African”. For South Africans, a follow up question was

asked to differentiate internal migrants from local residents or non-migrants. “How long have you been living in this metro?” The respondents who reported having lived in the metro for 10 years or less but did not grow up in the metro are considered as internal migrants while those who have lived longer than 10 years and grew up in the metro are considered as non-migrants or locals. Non-South Africans were considered international migrants.

To measure social capital, four indicators consistent with previous literature were chosen and all were coded as dichotomous indicators. Respondents were asked to indicate if they regularly attend meetings from a list of organizations within the community. Regular attendance in two groups; religious and cultural groups/organizations were chosen for this analysis as they were the most popular organizations respondents participated in frequently. Respondents were also asked if they received emotional/spiritual support from family, friends, church or community organizations. Lastly, respondents were asked to indicate if they received in kind or material support or help in times of crisis (such as urgent babysitting).

**Covariates:** We control for a number socio-economic characteristics: age (in groups), gender, education and marital status.

**Analytical Model:** We fit logistic regression for binary outcomes and include interaction terms between migration status and social capital to test the key assumptions of the study.

## **Results**

### **Descriptive Results**

Results from the full model on table 1 show that compared to natives, internal and international migrants (generally designated as labor migrants) were less likely to know where to

test for HIV, obtain free treatment for HIV or indicate that they were not at risk of HIV. Migrants were clearly at a health disadvantage than natives on our chosen outcomes.

On social capital, regular attendance at religious organizations was positively associated with two of the HIV/AIDS outcomes. Respondents who regularly attended these organizations were 36% and 65% more likely to know where to test for HIV and where to get free treatment for HIV respectively. However, they were not more likely than those who did not belong to these organizations or attend meetings regularly to indicate no risk of HIV/AIDS.

Socio-economic characteristics were variously related with AIDS outcomes. For example, age was positively associated with HIV outcomes, education was positively associated with the first two outcomes but not the third and females were significantly more likely to know where to test for HIV and less likely to indicate that they were not at risk of HIV of HIV/AIDS.

Finally, the only interaction term found to be statistically significant was between migration status and regular attendance in a cultural organization. Migrants compared to non-migrants who regularly attended cultural groups were more likely to know where to test and treat for HIV.

**Table 1: Odds ratios of migration status, social capital and HIV/AIDS outcomes**

	Know where to test for HIV	Know where to get free treatment for HIV	No Risk of HIV/AIDS
<b>Migration Status</b>			
Native (Ref)			
Internal migrant	0.61 **	0.67 **	0.78 **
International migrant	0.48 **	0.54 **	0.97
<b>Social capital</b>			
Regular attendance in Church/moqque/religious organization	1.36 **	1.65 ***	0.95
Regular attendance in Cultural Club/organization	0.36	0.47 †	0.64
Received Emotional/spritual support	1.21	0.73	1.30
Received assistance in crisis	1.16	1.34	1.00
<b>Socio-economic characteristics</b>			
<b>Age group</b>			
18-24			
25-34	1.57 **	1.43 **	0.76 **
35-44	1.57 †	1.58 **	0.81
45-54	2.75 **	2.05 **	1.34
Above 55 years	0.64	0.84	2.96
<b>Sex</b>			
Male (ref)			
Female	1.43 **	1.12	0.81 **
<b>Level of education</b>			
Less than secondary school (ref)			
Secondary and above	1.43 **	1.28 †	1.16
<b>Marital status</b>			
In union (ref)			
Not in union	1.08	1.04	1.25 **
Migration Status*Regular attendance in Cultural Club/organization	1.75 **	1.52 †	1.08
Log Likelihood	-621.52386	-846.43968	-1325.751
***p<0.000; **p<0.05; †P<0.10			
Source: Gauteng Assessment of Migrant Populations' Needs and Vulnerabilities Survey 2012			

## Further Analysis

In further analysis of the paper before the conference, we will include network measures of selection and homophily by examining if respondents mostly interact with fellow migrants or natives in their participation in voluntary organizations. We will also test if most of the members of the organizations were from the same ethnic group as the respondent. This will help illuminate social network approaches to social capital in South Africa.