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Psychological pathways from social integration to health: An examination of different demographic groups in Canada

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ABSTRACT

Rationale: The health effects of social integration have been extensively studied, yet the underlying dynamics of this relationship deserves more exploration. One of the important hypothesized pathways through which social integration affects health is psychological functioning, including a sense of belonging, personal control and generalized trust.
Objective: Using a Canadian national survey, this study explored the effect of social integration on different health outcomes via psychological pathways, while incorporating network homophily as a predictor in the model.
Methods: Five distinct demographic groups of Canadians (the Native-born Whites, Native-born visible minorities, the Aboriginal people, immigrant Whites and immigrant visible minorities) were compared on their social integration, psychological functioning, and health outcomes. Structural equation models tested the mediation effects of psychological pathways, and group differences were explored by adding interaction terms.
Results: The study found that visible minority immigrants were least socially integrated, and the Aboriginal people had the poorest self-reported physical and mental health. Although the Aboriginal people had large networks and active network interactions, they showed stronger ethnic and linguistic homophily in their network formation than the two visible minority groups. Structural equation model results supported the mediated relationship between social integration and health via psychological pathways. A positive effect of friendship ethnic homophily on health was identified and explored.
Conclusion: Policy makers may seek opportunities to create social environments that facilitate social interactions and formation of social ties and provide support for programs serving ethnic and immigrant groups.

1. Introduction

Recent immigrants have brought changes and challenges to Canada, where the official multiculturalism policy is one of the ideological foundations of the country. The foreign-born population accounts for one fifth of the total Canadian population (Statistics Canada, 2014). Recent immigrants are often visible minorities, speak a mother tongue other than English or French (Kobayashi and Prus, 2011), and dwell in metropolitan areas (Statistics Canada, 2014). Persistent discrimination against these minorities, sometimes covert, has made social integration an unending endeavor (You, 2005). In today's Canada, racial boundaries are still the reality of social life (Reitz and Banerjee, 2007). Even though most Canadians claim they do not hold racist views, they tend to avoid interactions with members of other racial groups in certain social situations (Reitz and Breton, 1994). This racial bias against visible minorities threatens their social integration through generations: Although the second generation visible minorities have achieved comparable economic success as the native-born Whites, it barely contributes to their social integration and sense of belonging (Reitz and Banerjee, 2007). However, social integration is not a one-way effort (Li, 2003): It involves efforts of different social groups for mutual adaptation, with the common goal of collaboratively and constructively shaping future life.

Social integration not only promotes societal health but also

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personal wellbeing. Social integration is considered an important social determinant of health alongside socio-economic status, education and housing (Laporte et al., 2008). The fundamental idea is that people get social support and access to resources through interpersonal ties and participation in voluntary and civil organizations (Berkman and Glass, 2000; Tindall and Wellman, 2001). Network-generated support bolsters self-esteem, identity, mastery, meaning and purpose, affect, self-concept and social control (Berkman and Glass, 2000; Brissette et al., 2000; House et al., 1988; Thoits, 1983), as well as a sense of belonging (Berkman et al., 2000). Although social integration is known to positively affect the quality of life and health outcomes, the underlying mechanism of this relationship has not been well investigated, especially across groups at different degrees of integration simultaneously. In this article, we will explore how social integration affects health via psychological pathways and how this relationship varies across differentially integrated groups defined by their racial and immigrant status in Canada: Aboriginal people, native-born Whites, native-born visible minorities, visible minority immigrants, and White immigrants. Our rationale is that immigration status and visible minority/Aboriginal origin are associated with disparities in social integration, and subsequently health.

1.1. Social integration and health

Durkheim explained individual pathology as an outcome of social dynamics, and theorized lack of social integration as an underlying cause of suicide (Durkheim, 1951). Social integration is defined as participation in a broad range of social relationships (Brissette et al., 2000). The commonly used measures of social integration include size of the network, frequency of contact with network members, and membership in a formal or informal group (Rose, 2000; Hyyppä and Mäki, 2001).

The health effect of social integration has been supported by empirical evidence. Having close relationships with friends and family, being married, and belonging to social and religious organizations were reversely associated with mortality (Berkman and Syme, 1979; House et al., 1982), and positively associated with health and mental health in general and among certain ethnic groups (Krause, 2006; Li and Ferraro, 2005). In the Canadian context, recent immigrants who reported monthly social interactions with family or friends were more likely to remain in good health (Newbold, 2009). Family and relative networks, friendship networks, and group and organization networks all have significant effects on the health status of recent family class immigrants (Zhao et al., 2012, p. 332). The density and ethnic diversity of friendship networks have significant and positive effects on immigrants' self-rated health status (p. 334).

One interesting component of social integration is the formation of intergroup vs. intragroup ties. McPherson et al. (2001) labeled the tendency of forming relationship ties with similar others (intragroup ties) as *homophily*: "Homophily is the principle that a contact between similar people occurs at a higher rate than among dissimilar people. The pervasive fact of homophily means that cultural, behavioral, genetic, or material information that flows through networks will tend to be localized" (p. 416). When two individuals from different ethno-cultural backgrounds form ties, the content or information exchanged between them is likely to be different from what is exchanged between individuals of the same ethnicity. Homophily of sex, race and religion all increase the likelihood of network integration (Louch, 2000). Exposure to diversity increases one's chance of making intergroup ties, thus mitigating homophily tendency. The environmental opportunity of forming an inter-ethnic tie depends on the proportion of ethnic minorities in a geographic location. In a predominantly White Canadian city, making friends with visible minorities would be much more challenging than in a metropolitan city where diverse ethnic populations reside. Thus the baseline probability of homophily is also a consideration when comparing homophily tendency. In a pure mathematical sense, as the number of friends increases, the baseline probability of friendship homophily decreases exponentially, assuming one's friends all come from the same geographic area:

$$P_{baseline} = \left(proportion\ of\ one's\ ethnic\ group\ population\ in\ the\ region\right)^{number\ of\ friends}$$

Social network homophily was argued to promote health as a result of reciprocity: Members benefit more from others with the same characteristics because of interpersonal similarity (Ibarra, 1993), and reciprocal relationships have a greater positive effect on health than asymmetrical relationships (Gallo, 1982). This hypothesis has gained some empirical support: having close ties with people from the same cultural origin was associated with the social and economic integration of immigrants and with their wellbeing (van Kemenade et al., 2006); and living in an area with high concentration of the language group increased the immigrant's use of health services (Deri, 2005).

On the other side, some scholars have pointed out that intergroup/interethnic ties may help immigrants better integrate and achieve individual economic, social or cultural goals. Kim (2001) suggests that more intercultural ties positively affected immigrants' psychological health because these ties represented more cultural adaptation. Research on social capital also sheds light in favor of intergroup ties. Intragroup ties are bonding social capital, and intergroup ties are bridging and linking social capital. Bonding social capital has mixed health outcomes. Bridging and linking social capital, according to some authors, brings resources and opportunities from across a wide and diverse social network to improve an individual's health (Cattell, 2001; Ferlander, 2007; Mignone and O'Neil, 2005). As observed previously, communities with inclusive and diverse networks tend to develop a social environment more conducive to health because people share opportunities, information and resources (Mignone and O'Neil, 2005). The first nations in Canada traditionally create tight-knit social communities to secure economic and social resources for their families, and maintain good relations within communities, thus contributing to good health (Royal Commission on Aboriginal Peoples, 1996; Richmond and Ross, 2008). Others argue that health inequality among the Aboriginal peopleis partially caused by social isolation (King et al., 2009; Reading and Wien, 2009), in other words, their diminished linking and bridging social capital.

The inconsistent evidence of homophily's health effects suggests that the association of homophily with health is not a simple one, and may differ across ethnocultural groups. Consequently we study the mediators between homophily and health, and