

Assessing Respondent Driven Sampling for Network Studies in Ethnographic Contexts

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Respondent Driven Sampling (RDS) is generally considered a methodology for recruiting “hard-to-reach” populations for social science research. More recently, Wejnert has argued that RDS analysis can be used for general social network analysis as well (where he labels it, RDS-SN). In this article, we assess the value of Wejnert’s RDS-SN for use in more traditional ethnographic contexts. We employed RDS as part of a larger social network research project to recruit $n = 330$ community residents (over 17 years of age) in Nain, a predominantly (92%) aboriginal community in northern Labrador, Canada, for social network interviews about food sharing, housing, public health, and community traditions. The peer referral chains resulted in a sample that was then analyzed for its representativeness by two means—a comparison with the Statistics Canada 2006 Census of the same community, and with house-by-house demographic surveys carried out in the community as part of our research. The results show a close fit with available community statistics and our own survey. As such, we argue that the RDS sampling used in Nain was able to provide a useful and near-representative sample of the community. To demonstrate the usefulness of the results, the referral chains are also analyzed here for patterns in intragroup and intergroup relationships that were apparent only in the aggregate.

Keywords: Respondent Driven Sampling; Labrador Inuit; Ethnographic Methods; Network Sampling; Arctic Social Science

Introduction

Respondent Driven Sampling (RDS) is generally considered a methodology for recruiting “hard-to-reach” populations for social research. It was pioneered in the mid-1990s by sociologist Douglas Heckathorn (1997) and modified and extended in the decade since (Heckathorn & Jeffri, 2001; Heckathorn, 2002a, 2002b; Heckathorn et al., 2002; Salganik & Heckathorn, 2004; Salganik, 2006; Heckathorn, 2007; see Wejnert & Heckathorn, 2010). More recently, Wejnert has argued that RDS can be used for general social network analysis as well (where he labels it, RDS-SN; see Wejnert, 2010). In this paper, we assess the value of Wejnert’s RDS-SN for use in more traditional ethnographic contexts.

As part of a larger social network research project, we used Respondent Driven Sampling (RDS; Heckathorn, 2002a) to recruit $n = 330$ community residents (over 17 years of age) in Nain, a predominantly (92%) aboriginal community in northern Labrador, Canada, for social network interviews about food sharing, housing, public health, and community traditions. Per protocol, the RDS system employed in Nain involved the use of numbered referral coupons, which in turn allowed researchers to track referral chains. As described below, the peer referral chains resulted in a sample that was then analyzed for its representativeness by two means—a comparison with the Statistics Canada 2006 census of the same community, and with house-by-house demographic surveys carried out in the community as part of our research. To demonstrate the usefulness of the re-

sults, the referral chains are also analyzed here for patterns in intragroup and intergroup relationships that were apparent only in the aggregate.

While far from foolproof, RDS referrals have been shown to reliably recruit broad samples of otherwise hard-to-reach populations and, given sufficient referral depth and adequate sample-size, to achieve sampling equilibrium and independence from referral starting points (Heckathorn, 2007; Salganik & Heckathorn, 2004). Questions about the ability of RDS methods to produce anticipated results have recently been raised in formal terms by Gile and Handcock (2010), and Goel and Salganik (2009, 2010). As shown below, however, the sample of respondents recruited in Nain conformed closely to Statistics Canada’s published results for the community, including proportional distributions of ages, genders, ethnic identities, education levels, and employment statistics. Given this close fit with known community statistics, we argue that the RDS sample recruited in Nain was able to overcome these challenges, and provide a useful and near-representative sample of the community.

In employing RDS in this way, we join Wejnert (2010) in arguing that RDS methodologies provide a basis for network analysis and community description, as well as for recruitment and bias estimation. At another level, the current approach differs from past uses of broad survey forms in the Arctic by examining social relationships both in the aggregate and directly, and thereby forming conclusions about internal social networks based on relational data rather than statistical inference drawn from individual characteristics (as when, for example, data

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