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# Using the innovative to improve the established: The employment of social networking sites as recruitment tools in migrant surveys

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## INTRODUCTION

During the last 30 years, most countries around the world have experienced rapid digitization in almost every aspect of society and daily life. This holds, for instance, as much true for communication behaviour (e.g. using messenger services and video chat) as for news consumption (e.g. online newspapers and social networking sites) and the way we keep ourselves entertained (e.g. streaming music and video content or reading the latest eBook). The number of appliances that are becoming “smart” increases steadily, and a multitude of sensors has become daily companions of many people, be they incorporated in phones, wristwatches or fitness gadgets. An ever-growing amount of data is continuously generated by and collected through all of the aforementioned. The potential this digitization and big data hold for research in many fields and the multitude of challenges associated with their scientific use have become focal points of inquiry and discussion. In migration research, this is not only visible in the increasing occurrence of dedicated conference sessions, workshops and summer schools but also in the growing number of corresponding methods-oriented publications (e.g. McAuliffe, 2021; Pötzschke & Rinken, forthcoming; Sandberg et al., 2022; Tjaden, 2021).

## RELEVANCE OF SOCIAL NETWORKING SITES FOR MIGRATION RESEARCH

In terms of data collection, Social Networking Sites (SNS)<sup>1</sup> seem specifically interesting for migration scholars. First, they allow migrants to connect and stay connected with individuals, be it other migrants, people left behind in their country of origin or contacts in their envisioned target country during the migration process itself.

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Furthermore, they can be used to stay informed about ethnic communities or developments in the country of origin. Consequently, there is no reason to assume that migrants are less likely to use SNS than non-migrants; in fact, they may even be more likely to do so. Second, SNS allow users to enter varying degrees of personal information (e.g. place of birth and language knowledge) in their accounts, and many such services record geographical information at given points in time. These records are based for instance, on user profiles, internet connecting points or geotagged posts and messages. Depending on the specific SNS and data availability, such information can be combined, allowing researchers to identify potential migrants within a larger user community. In quantitative research, SNS are mostly used to extract aggregate data on a large number of users often using Application Programming Interfaces (API) and computational methods. In terms of migration-related topics, such data have, for example, been used to analyse migrant stocks (Zagheni et al., 2017), migration flows (Palotti et al., 2020; Zagheni et al., 2014), work-related migration (State et al., 2014) and residential integration (Lamanna et al., 2018).

This strand of research is certainly important and deserves further attention. However, when discussing how migration scholars might harness the spoils of digitization, it is worth looking beyond the analysis of big data as such and to ask how comparatively new services can be used to enhance established methods and ways of data collection, such as survey research. In this short commentary, I argue that SNS can be powerful tools for respondent sampling in the context of migration research. I will focus on two SNS owned and maintained by Meta, Facebook and Instagram, to briefly illustrate this point. It is not my intention to present a comprehensive discussion of all relevant aspects but rather to highlight some of those which I consider crucial.

## SAMPLING OF MIGRANTS THROUGH ADVERTISEMENTS IN FACEBOOK AND INSTAGRAM

Sampling of hard-to-reach populations is generally tricky and comes with added challenges regarding migrant populations. Depending on the specific target group, the surveyed countries and the chosen sampling method, these challenges may manifest themselves, for example, in linguistic diversity, unknown geographical distribution, gatekeepers or the target population's general under-representation in available sampling frames. While there are established sampling methods, they come with varying degrees of challenges in terms of coverage, cost-efficiency, and general availability especially regarding particularly small or scattered target groups and in cross-national research (Reichel & Morales, 2017; Salentin, 2014; Tourangeau et al., 2014).

The main appeal of Facebook and Instagram as a sampling frame consists in their huge user base (according to Meta (2022, p. 50), Facebook alone had 2.91 billion monthly active users in December 2021), and their availability in nearly all countries. By using Meta's Ads Manager,<sup>2</sup> researchers can target specific user sub-groups to whom the SNS will then display tailored advertisements. Such advertisements consist of short and appealing text elements, appropriate pictures (or videos) and a survey link. The Ads Manager offers a multitude of indicators to narrow-down target populations. Besides age and gender, most important for migration researchers are the possibility to select specific geopolitical areas (e.g. countries) and how users relate to them (e.g. living there), language usage, and variables that indicate if users have previously lived in specific countries.<sup>3</sup> Importantly, using this approach, only the recruitment of respondents takes place within the SNS while individual-level data are exclusively collected through an externally hosted web survey. As part of the latter, researchers need, of course, to record respondents' consent to participate in the survey and they should, furthermore, always include instruments in their questionnaire to check whether respondents belong to the target group.

## STRENGTHS, LIMITATIONS AND PERSPECTIVES

Previous research used such advertisements, for instance, to recruit refugee (Elçi et al., 2021) and non-refugee migrants (Ersanilli & van der Gaag, 2020; Koikkalainen, 2019; Ryndyk, 2020) in selected countries as well as emigrants of a single nationality at a global level (Pötzschke & Weiß, 2021). The results of these and other studies highlight several advantages of this approach: it is an effective means to contact and recruit otherwise hard-to-reach (migrant) populations, it has a high level of accuracy, it is very cost effective<sup>4</sup>, and it is quick and comparatively easy to implement. The latter means that it could be a suitable choice in cases in which timely data collection is essential. Furthermore, no cooperation with the company owning the SNS, Meta, is needed since the approach uses their business model. Hence, scholars can apply this method independently of their personal or institutional networks. The broad geographical coverage makes SNS sampling especially attractive for cross-national research because it allows the implementation of identical sampling strategies in all countries under observation. Finally, because researchers do not gain access to individual-level user data but employ a service that SNS users are aware of and that is fully covered by the terms of service they agreed to, scholars avoid ethical grey areas associated with some other use cases of big data and digital methods.

However, like any other, this method also comes with specific weaknesses and limitations. First and foremost, it is a non-probability method, and selection biases must be considered when interpreting results. More specifically, this method will only reach individuals who use the corresponding SNS and of those who receive a given advertisement, not all will click on the survey link and participate. Furthermore, Meta is not transparent as to how the Advertisements Manager computes targeting variables. Consequently, researchers cannot be sure that users are correctly categorized, which might lead to under- or over coverage. Finally, it should be noted that the variables indicating whether users used to live in specific countries are not available for all countries of origin, including those of many recent refugees (e.g. Syria). However, the latter limitation can be overcome by combining language indicators with well-designed advertisements.

It is crucial that the sampling method's limitations, especially its non-probability character and the associated biases, are kept in mind when deciding for its application, analysing the collected data and, importantly, when presenting results. Nevertheless, there are many use cases in which SNS sampling might be purposefully employed; this includes pilot studies, explorative research and research on target populations for which no other sampling frame is available. Furthermore, for reasons ranging from a lack of funds to the unavailability of probability-based sampling frames, the use of non-probability samples is a regular practice in migration research. To enhance data quality in cases in which probability-based sampling is not an option, we should, therefore, consider and further investigate possibilities of combining various nonprobability methods instead of relying on one at a time. Doing so would not only allow combining their strengths but also counterbalancing their weaknesses. Due to its above-mentioned advantages, SNS sampling has the potential to constitute a crucial part of such methods mix.

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## ENDNOTES

1. The term Social Networking Site (SNS) is used in this contribution when referring to services such as Facebook, Instagram and Twitter following the established convention in the relevant literature. Nevertheless, it refers to the corresponding networks and relevant applications as a whole and not just to website-based components.
2. <https://www.facebook.com/business/tools/ads-manager>
3. Targeting can be restricted further using a large set of indicators. For details on targeting, ad campaign and ad design see Kühne & Zindel (2020), Neundorff & Öztürk (2021) and Pötzschke & Braun (2017).
4. For example, Ersanilli & van der Gaag (2020) report average sampling costs of 1.45€ per valid observation and completed questionnaire, while Pötzschke & Weiß (2021) report 0.62€. Various aspects influence the accrued costs. However, a review analysing 35 studies in health research reported median costs of only \$14.41 per participant (Whitaker et al., 2017) even though most of these projects surveyed very specific target populations on rather sensitive topics.

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