Dyadic and Individual Dynamics in a Multi-Actor Survey: Understanding the Nonresponse Process of Secondary Respondents

Almut Schumann

Extended Abstract

Most social phenomena studied in social science are a result of interactions between two or more actors. It comes as no surprise that empirical research needs to conduct data that can measure and trace such processes between persons. To fill this gap, multi-actor designs are increasingly implemented in surveys, such as in the Netherlands Kinship Panel Study (Dykstra et al., 2005), in the German family panel pairfam (Huinink et al., 2011) and more recently in the German family demography panel FReDA (Schneider et al., 2021). Most of these studies ask about intimate relationships, such as with a partner or spouse, parents or children. Multi-actor designs enable to understand dynamics and interactions within a relationship in collecting not only information from the respondent, in this context referred to as primary respondent (PR), but also gathers information and perspectives from the so-called secondary respondent (SR). However, the added value of such data is also its challenge, as the collection process does not depend on one individual but on two. Unlike general participation in surveys, the participation of secondary respondents is a process because there are several steps that involve the cooperation of both, the primary respondent and the secondary respondent. Background is that the primary respondent first has to identify and to consent to contact the target person before the latter can decide to participate. At each of these steps, a loss of secondary respondents can happen which might lead to induced selectivity in multi-actor data. Accordingly, nonresponse for secondary respondents is not only dependent on the particular step, but can also be associated with characteristics of the two individual actors, and with characteristics within the dyad.

There is a large body of literature focusing on sources and reasons for survey nonresponse of primary respondents and its consequences for data usage (Dillman et al., 2002; Groves et al., 1992; Groves & Peytcheva, 2008; Lynn, 2008; Peytchev, 2013). Next to reasons related to sampling methods or non-contacts (e.g. Fuchs et al., 2013; Lynn & Clarke, 2002) and aspects related to survey design or the interview situation (e.g. Brick & Tourangeau, 2017; Vicente & Reis, 2010), nonresponse mostly results from the sample member's individual situation leading to non-cooperation. For instance, socio-demographic characteristics, like the educational level or ethnic background (Radler & Ryff, 2010; Tolonen et al., 2006) as well as personal attributes related to the survey topic, such as sexual orientation or political interest (Brehm, 2009; Campbell et al., 2020) have been found to impact participation decisions in affecting e.g. the perceived pleasantness or burden of the interview (Groves et al., 1992). Compared to nonresponse in single-actor surveys, multi-actor surveys face further challenges as the individual situation of two respondents has to be considered. Additionally, dyadic characteristics within the relationship might lead to dynamics that either encourage or discourage the respondents from proceeding further in the process. Unfortunately, research

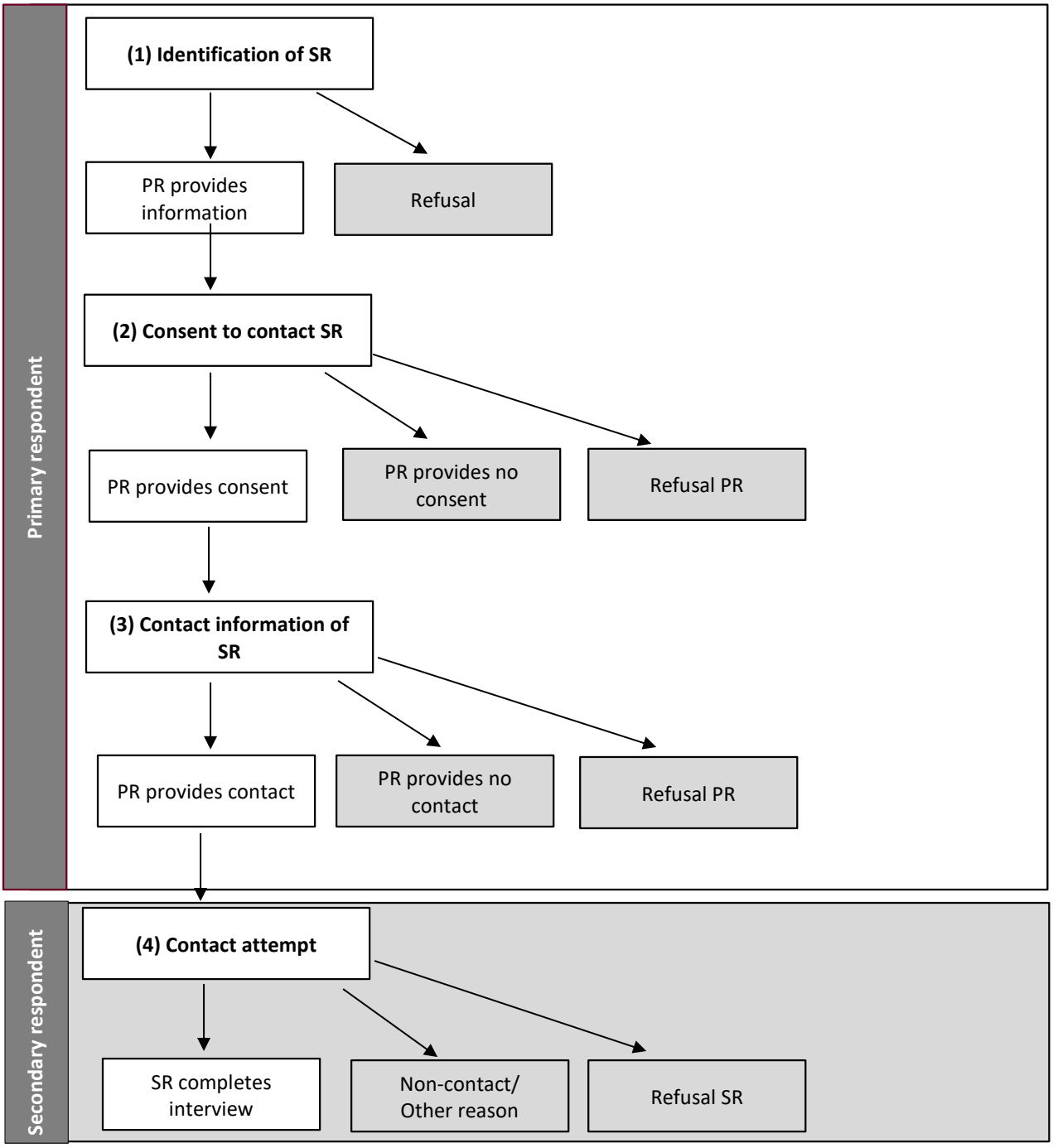
on nonresponse of secondary respondents in multi-actor surveys is relatively scarce. However, prior studies found evidence that specific relationship characteristics, such as co-residence or higher levels of relationship quality, were overrepresented in multi-actor data (Hünteler & Wetzel, 2020; Kalmijn, 2021; Kalmijn & Liefbroer, 2011; Schröder et al., 2012). Nevertheless, most of these studies examined only the final participation of secondary respondents, without accounting for the nonresponse steps before. Thus, selection processes that might occur already before the participation decision were neglected. Additionally, all previous studies are based on multi-actor data conducted in personal face-to-face interviews. Therefore, authors questioned whether their findings, such as higher shares of co-residence, rather depend on the interview situation (Müller, 2017; Schröder et al., 2012).

Therefore, this study aims to schematically track the nonresponse process of secondary respondents in a multi-actor survey to identify all sources of nonresponse in the realization of a secondary respondent's interview. To do so, this study uses the first wave of the German family demography panel FReDA which is the first multi-actor survey that is conducted in a fully self-administered mode and approaches respondent's partners to participate (Schneider et al., 2021). By tracing the nonresponse process, this study examines which particular steps cause most drop-outs of possible secondary respondents. Having identified these steps, I explore which characteristics might impact the probability of nonresponse at the particular step by looking at characteristics on the individual level, that are generally associated with nonresponse from the literature, and characteristics on the dyadic level, to account for the interdependence within the relationship. Therefore, I will run logistic regression models with using the main nonresponse steps as binary outcome variables separately. To further test the magnitude of the individual and dyadic characteristics at each step, I will estimate predicted probabilities. The aim is to see whether possible selection effects in- or decrease during the process as different motivations from the two individuals might be at work.

Figure 1 illustrates where nonresponse of secondary respondents can happen. First of all, the target person, i.e. the secondary respondent, has to be identified (1). This information can only be obtained from the primary respondent, e.g. in reporting to have a partner. Given this information, the survey or fieldwork agency is obliged to ask the primary respondent to consent to interview the identified target person (2). Having consented that the secondary respondent can be invited to the survey, the primary respondent also needs to provide valid contact information of the target person (3), otherwise no communication is possible. Until here, all steps are determined by the primary respondent; only when all these conditions are achieved, the involvement of the secondary respondent comes into play: In the last step the secondary respondent is contacted and if contact is made successfully, the secondary respondent can decide to participate (4). This step is mostly corresponding to nonresponse of primary respondents as there are similar reasons why the required data cannot be collected, e.g. when the secondary respondent is unwilling to cooperate or unable to cooperate due to absence or language barriers, or because a completed interview fails to end up at the data collector due to e.g. technical or postal problems (Lynn, 2008). However, different to the latter is that in this context, the secondary respondent knows that the primary respondent has

already agreed to an interview, latest when receiving the invitation. As both respondents are related to each other, it is almost likely that they already communicated about it which leads to a different situation here.

Figure 1: The process of nonresponse for secondary respondents



Source: Author's own illustration.

On this basis, I expect that the loss of secondary respondents in this process mainly takes place at two steps: When the primary respondent has to consent (3) and second, when the secondary respondent is contacted (4) and can decide to participate.

I expect that characteristics on the individual level, such as the socio-demographic situation or topic-related attributes of the respondent, impact nonresponse at the two steps in similar ways. Complying with a survey request, may it be providing consent or deciding to participate, might be perceived as more demanding and burdensome for specific subgroups or persons. For instance, lower educated persons or those with migration background are generally less likely to participate (Tolonen et al., 2006; Tourangeau, 2014) as they face more often understanding problems or language barriers which lead to a higher respondent burden, especially in a self-administered mode without the assistance of an interviewer. Additionally, it might be that these persons do not have a strong social responsibility to comply with a scientific request, and rather have concerns regarding data protection and privacy, which is particularly relevant for gaining consent. Similarly, some persons perceive the survey topic as more salient because of their individual situation, and are therefore less likely to comply with a survey request (Groves et al., 2004; Groves et al., 2000). For instance, persons who experienced instable family lives and biographies are associated with higher levels of nonresponse in surveys on intimate relationships (Mitchell, 2010; Kalmijn, 2021). On the one hand there might be a higher motivation to agree that a secondary respondent can be interviewed, when the interview was perceived as enjoyable and on the other hand, there might be a higher motivation to participate when a person feels connected and familiar with the survey topic. Therefore, I expect individual characteristics of the primary respondent to affect the decision to consent in the same way as individual characteristics of the secondary respondent affect the decision to participate.

Besides the individual evaluation, there are also negotiations taking place on the dyadic level. It is likely that a higher degree of closeness and commitment between the two respondents reduces nonresponse during the process as studies found an association between secondary participation and stronger intergenerational family ties (Kalmijn & Liefbroer, 2011; Hünteler & Wetzel, 2020). However, other authors found only a negligible association between relationship quality and nonresponse of the partner whereas co-residence with the partner increased participation rates (Schröder et al., 2012). Hence, there is evidence that the dyadic level affects the nonresponse process, but it remains unclear if dyadic characteristics have a stronger impact on the consent or participation step. I assume that respondents with lower levels of commitment and closeness in their relationship are more concerned to consent for interviewing the other part, as they might fear and anticipate that the secondary respondent is not obliged to participate or will be deterred by the invitation without his or her own approval. Probably, primary respondents want to avoid obtaining the secondary respondents' view about the poor relationship, or they do not know the address at all and therefore do not provide valid contact information. As a result, the participation step of the secondary respondent underlies other situational conditions as the primary respondent has already agreed to an interview. On the one hand the group of secondary respondents might already be selective as those having a weak relationship already dropped out because their counterparts have not consented. On the other hand, secondary respondents might feel a higher obligation or pressure to participate in the study as they already know that their

primary respondents had agreed. Therefore, I expect dyadic characteristics to affect the decision to consent stronger than the decision to participate.

These findings will be highly important for conducting and analyzing multi-actor data, as they shed light on the whole nonresponse process of secondary respondents. A comprehensive investigation into the reasons behind nonresponse can only be obtained after identifying all potential sources where nonresponse may arise to get a proper understanding when and why secondary respondents get lost in the process. This knowledge contributes to develop new approaches in data collection and survey design to achieve a higher participation rate of secondary respondents in multi-actor surveys that not only boost sample sizes but also sample representativity of multi-actor data.

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