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Fertility-relevant social networks: composition, structure, and meaning of personal relationships for fertility intentions

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Abstract

Although the relevance of social interactions or social networks for fertility research has been increasingly acknowledged in recent years, little is known about the channels and mechanisms of social influences on individuals' fertility decision making. Drawing on problem-centred interviews and network data collected among young adults in western Germany the authors show that qualitative methods broaden our understanding of social and contextual influences on couples' fertility intentions, by exploring the phenomenon, taking subjective perceptions into account, analysing interactions within networks as well as the dynamics of networks. Qualitative methods allow for the collection and analysis of rich retrospective information on network dynamics in relation to life course events. This also can be helpful both to complement the still rare longitudinal data on social networks and to develop parsimonious and efficient survey instruments to collect such information in a standardized way.

Key-words: fertility, social network, social influence, qualitative methods, Germany

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Introduction

Social network research has grown over recent decades and entered many fields of sociological enquiry (Freeman, 2004). Much effort has been made to find adequate means of collecting quantitative network data and appropriate statistical analyses; in addition, the legitimacy of qualitative procedures in social network analysis has been acknowledged (Breiger, 2004). Correspondingly, qualitative researchers, especially in the field of life-course research, have turned their attention to social network research. They can draw on work of those pioneers of network research who used qualitative methods (e.g. Barnes, 1954; Bott, 1957).

One stream of life-course research is interested in understanding individual plans, motives and decisions, in short: individual agency. The social network perspective opens the individual life-course perspective to the social context of individual agency. The network perspective stresses that individuals do not act in isolation, but are 'embedded' (Granovetter, 1985) in a network of social relations. Individual actors ('Egos') exchange information and material and immaterial goods and services in social interactions with their network partners ('Alters'). Resources bound in social networks build the 'social capital' of individuals (Coleman, 1988). Individuals also learn, transmit, negotiate and challenge social norms in social interactions (Mitchell, 1973). Network structure and composition thereby strongly shape the availability of access to information and other resources (Granovetter, 1973; Freeman, 1979), as well as the intensity of social control exerted to enforce social norms (Coleman, 1988; Portes, 1998). Social networks are

key elements in structuring individuals' expectations of the future, and therefore in restricting and/or enabling their choices (Emirbayer and Goodwin, 1994; Emirbayer and Mische, 1998). Prominent challenges in the area of network research currently comprise the integration of structure and agency, a theoretical reflection of the relationship between network structure and subjective meanings, norms, institutions and cultures, the specification of network boundaries, as well as network dynamics and selection effects (Jansen, 2003). To these issues, qualitative research can contribute by (a) *exploring* new phenomena and research areas where little is known; (b) understanding *meanings, interpretations* and *subjective perceptions* of the individual actors embedded in social networks; (c) reconstructing *actions, interactions* and *modes of actions* of individual actors in the context of their networks; and (d) understanding the *formation* and *dynamics* of networks (Hollstein, 2006).

In this paper, we want to show the potential of qualitative methods in network research, drawing on our own research on social influences on family formation in Germany. Family formation in contemporary Western societies is a research area in which little is known about how meaning and subjective perceptions are created in interactions with relevant others and shape individual behaviour. Especially in this area, there is a tension between theoretical approaches which emphasise the growing autonomy of the individual and the couple in negotiating their relationship and choosing the timing and spacing of births and other approaches which stress the social construction of the appropriate timing of life-course transitions such as union formation, marriage, timing and spacing of births.

1. Social networks in fertility research

In recent decades, the relevance of social interactions or social networks for fertility research has been increasingly acknowledged (Bongaarts and Watkins, 1996; Kohler 2001). One stream of research focuses on diffusion processes, analyzing communication networks and their role in the diffusion of new behaviour (Kohler and Bühler, 2001). Another stream of research is centred on the concept of 'social capital' (e.g. Philipov et al., 2006). This research focuses on material resources and various forms of social support exchanged in social networks, showing that supportive networks encourage fertility intentions.

Most studies on diffusion processes and social capital connected to fertility behaviour have been conducted in developing countries and in the post-communist transformation societies of Eastern Europe, stressing the relevance of social relations and interpersonal support in these countries with rather weak mass media, education and welfare systems. Little is known of how social networks affect fertility intentions and behaviour in western European societies. Nevertheless, research on intergenerational support (Aquilino, 2005; Mandemakers and Dykstra, 2008) indicates the existence and relevance of various forms of reciprocal support between parents and children in Western countries. Research on intergenerational transfer of fertility patterns and the transmission of family values and ideals in the US and other Western countries show positive correlations across generations and among siblings (Axinn et al., 1994; Murphy and Wang, 2001; Steenhof and Liefbroer, 2008). Besides relatives, other relationships, such as peers, are important factors of secondary socialisation affecting fertility, as research on teenage pregnancies has shown (Billy and Udry, 1985; Arai, 2007). This research, however, considers specific relationships and does not take an explicit network perspective, which usually stresses the relevance of a variety of relations for an actor and focuses on the patterns of relationships providing or constraining opportunities for individual action (Wasserman and Faust, 1999).

One step forward towards analyzing network effects on fertility behaviour in western countries was taken by Bernardi (2003) in her qualitative research on Italian couples. Analyzing the influence of personal relationships on fertility decisions, she identified influential relationships

(stressing the relevance of parents and siblings as well as peers and acquaintances) and four mechanisms of social influence: social learning, social pressure, social contagion and subjective obligation. We will refer to these mechanisms in more detail in our results section.

Our study is aimed at advancing research on the influence of personal relationships on fertility decision-making in Western industrialized countries by combining analysis of quantitative network data and qualitative interview data. The usage of qualitative methods seems advisable to us, because little is known about how personal relations influence fertility decisionmaking in Western countries, which personal relationships can be influential, how processes of social influence are perceived and what meanings are connected with relevant others, mechanisms of influence or certain network structures.

2. Methods

The present research is part of a study on social networks and fertility in northern Germany (cf. Bernardi et al., 2007, 2008). This study was designed to compare two settings in eastern and western Germany. We therefore selected two highly comparable cities from the north of Germany on the shore of the Baltic Sea: Rostock (eastern) and Lübeck (western). Both cities are comparable in the size of their resident population (around 200,000), their relatively high unemployment rate (13.8% in Lübeck compared with 7.6% in western Germany, and 18.2% in Rostock compared to 17.7% in eastern Germany in the year 2002), and because they shared the same religious, historic and economic background at least until after the Second World War. However, during the 40 years of post-war separation, both parts of the country developed different fertility regimes that continue today. In western Germany women have their first child at older ages and a larger proportion remains childless (Konietzka and Kreyenfeld, 2004). While

there is a polarisation of either having two or no children in the west (Huinink, 2002), for eastern Germany a trend to a one-child-family could be observed (Kreyenfeld, 2003)

Our main respondents (designated as Egos) were selected based on a purposive sampling. The criteria defining the sampling are the city (Rostock or Lübeck) and the educational attainment. Since it is known that longer terms of education can lead to postponement of childbearing we focussed on persons with medium and higher education that are prone to extend their educational periods. The data were collected between May 2004 and February 2006. Our main respondents were aged 27–31 at the time of interview. We chose this cohort because family formation is likely to be a salient issue for individuals of this age group and because the social network of these individuals may have experienced parenthood. Married women experience their first birth on average with age 29 (western Germany) or 28 (eastern Germany), the age of unmarried mothers lies approximately one year below (Engstler and Menning, 2003: 76f.). To this first sample of Egos, we added a sub-sample composed of three relevant members (designated as Alters) of their social network: one of Ego's parents, the current partner, and a close friend, when these were available (see Table 1 for a summary overview of the sample characteristics).

Table 1: Sample characteristics

| | Rostock | | Lübeck | | Total |
|-----------------------|---------|-----|--------|-----|-------|
| | Women | Men | Women | Men | |
| Egos | 19 | 13 | 20 | 15 | 57 |
| Education | | | | | |
| Medium education | 7 | 6 | 5 | 7 | |
| High education | 12 | 7 | 15 | 8 | |
| Parity | | | | | |
| Childless | 11 | 9 | 13 | 11 | |
| One child | 7 | 2 | 6 | 3 | |
| Two and more children | 1 | 2 | 1 | 1 | |
| Civil status | | | | | |
| Married | 1 | 2 | 8 | 6 | |
| Cohabiting | 5 | 4 | 5 | 1 | |
| Single or LAT | 11 | 7 | 7 | 7 | |
| Other | 2 | 0 | 0 | 1 | |
| Alters | 15 | 10 | 18 | 7 | 50 |
| Parents | 9 | 5 | 9 | 0 | |
| Partners | 2 | 0 | 4 | 7 | |
| Friends | 4 | 5 | 4 | 0 | |
| Others | 0 | 0 | 1 | 0 | |
| Total interviews | 5 | 57 | 6 | 0 | 117 |

The main respondents as well as Egos' network partners were asked to be available for an intensive personal interview of three parts:

1. A semi-structured interview: The problem-centred semi-structured part of the interview (Witzel, 2000) focused on educational and professional trajectories, partnership histories, intentions to have a (further) child, as well as general information on family-related attitudes, general values and life goals. We covered retrospective experiences with childbearing, in the cases of respondents who were already parents. This part of the interview provided rich information on biographic events after graduation, orientations, meanings, and expectations concerning childbearing, interaction with the partner and other persons on the topic and the characteristics of informal social relations. The interview was analysed systematically through theoretical and thematic coding (Strauss and Corbin, 1998; Flick, 2002).

2. A network chart and network grid: To assess and evaluate the influence of social networks on fertility choices, we used an adapted version of the hierarchical mapping procedure employed successfully in social psychology (Antonucci, 1986). We were asking respondents to use a diagram of six graded concentric circles, with the smallest circle in the centre containing a word representing Ego. Each circle represents different levels of the perceived relevance of the network partner. The two innermost circles are labelled 'very important', the two medium circles 'important' and the two outer circles 'of little importance'. The space outside the chart is labelled 'not important', and one corner was reserved for persons perceived as 'problematic'. The respondents were free to define 'a relevant relationship'. We used the open stimulus as a first step to explore the variety of dimensions of relevance and to assess the kind of relationships relevant to fertility decision-making. Whilst the respondents filled in the chart, we asked them to explain their choices in their own words, for instance the reason behind including a specific person and the meaning of placing them in a given circle. With this think-aloud technique we also asked the respondents to specify in what ways they interpreted the term 'importance' each time. The ten most highly rated persons from the chart were entered into a classic grid. The respondents were asked to indicate the extent to which each person mentioned was acquainted or befriended with any other in the grid, ranked on a five-grade scale ranging from 0 (not at all) to 4 (very closely). The network chart and the grid were a central tool in the interview, providing in-depth information for qualitative and quantitative analyses. On the one hand, it provided rich descriptions of the ongoing social influence within the network; on the other hand, it recorded the structural characteristics of Ego-centred networks (e.g. size and density).

3. A socio-demographic questionnaire. At the end of the interview we used a questionnaire summarising the respondent's socio-demographic characteristics and some characteristics of up to eight of their important network partners. We asked for age, education, occupation, income,

partnership status, duration of partnership, number and age of children, place of residence and religion.

Drawing on the data collected, the following analysis explores the social network influence on individual fertility intentions, and we analyse the mechanisms of social influence and the relevant role relations. Additionally, we want to show the importance of subjective evaluations of social network relations when analysing network structure. For the purpose of this paper we mainly draw on our sub-sample from Lübeck in western Germany.

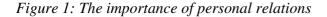
3. Results

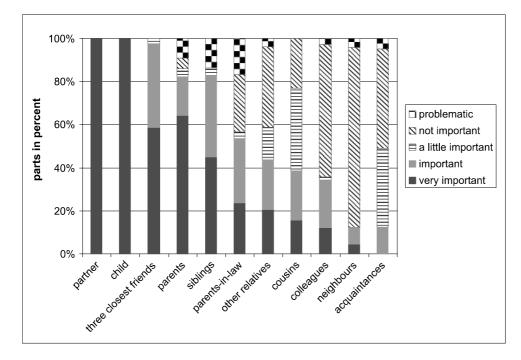
Through the network chart we identify a large section of Egos' current social relations (median network size is 25.5) varying in their role relations, degree of emotional closeness, and frequency of contact with respect to Ego. Only few persons mentioned in the interview were not included in the chart, because considered of too little importance for Ego's life. On the basis of the chart data we can identify the social relations forming the respondents' networks (Section 3.1), and evaluate the way in which they are relevant in influencing fertility decision (Section 3.2). Then we will present selective results that shed light on the relation of network structure and subjective perceptions (Section 3.3), the relation of network structure and individual's modes of action (Section 3.4), as well as on network dynamics related to family formation (Section 3.5).

3.1 Identifying network members

All network charts contained relatives (mostly parents and siblings, the partner and children if available) as well as persons considered as friends and acquaintances. The category 'importance' was interpreted mostly as 'emotional closeness', 'supportive relationship', 'intimacy', and frequency of contacts with the person. In other words importance is a measure of

tie strength (Granovetter, 1973). Strong ties, that is network partners placed as 'very important' and 'important', are in most cases: partners, children, parents, siblings and close friends. Weaker ties, that are network partners of 'little importance', are mainly acquaintances (e.g. sports mates and neighbours), and further relatives. A mixed category is composed by parents-in-law, cousins, aunts and uncles, other relatives, and colleagues. The indicated tie strength for these role relations mostly varies with the family situation of Ego: Egos with children tend to consider kin of both partners more important than childless Egos do; Egos who do not have any siblings consider cousins as important network members more often than Egos with siblings. Figure 1 displays the role relations according to their 'importance'.





Many of the persons indicated as strong ties are found to influence Ego's decision-making on family formation, but some are largely irrelevant in this respect. These are mainly the grandparents, siblings and cousins who are younger than Ego and childless, and friends Ego views as being involved in a different living situation, that is incomparable with the Ego's living situation. We also found that some persons indicated as weak ties exert substantial influence on Ego's decision-making, as providers of information or as a frame of reference.

3.2. Identifying influence mechanisms

The qualitative analysis of the respondents' accounts of their fertility intentions, their attitudes and values, as well as their reasoning and explanations for their choices, revealed various instances of social network influences. It became clear that – despite the common notion of individualisation and couples' autonomy – personal relations were important in a couple's decision-making about family formation also in our western German context. We identified different mechanisms of influence, which are largely comparable to those found by Bernardi (2003) in the Italian context. Table 2 presents the four mechanisms of social support, social pressure, social learning, and social contagion in conjunction with the type of relationship mainly exerting these types of social influence. Additionally, from our qualitative data we present quotes illustrating the ways respondents talk about these network influences.

| Mechanism | Persons | Illustrative Quotes |
|----------------------------------|-----------------------------|---|
| Social Support | Parents, Parents-in-law, | When we have a child and my wife will start working |
| | Siblings, Cousins, Friends | again - maybe for two days a week - then we can arrange |
| | | it in this way, that one day her parents will take care of |
| | | the child and the other day my parents will do so. |
| | | (Torsten, 31, childless, married, medium education) |
| Social Pressure Parents, Friends | | Well, my parents have developed this ideal image of my |
| | | life, what it should look like in the ideal case. And |
| | | simply included in this image are children, or in this case |
| | | grandchildren If I tell them about my godchild, I |
| | | hear: 'hey, it would be so nice if you also' (Natalie, |
| | | 29, childless, living apart together, higher education) |
| Social Learning | Parents, Friends, Siblings, | First finish the studies. Because a child, you don't deal |
| | Cousins, Acquaintances | with it if you have to study a lot and so on. That's |
| | | simply a, well, a risk factor. That sounds so |
| | | unemotional, but I can see it from my colleagues who |
| | | had children during their studies. That was no bed of |
| | | roses for them; two even failed their exam. (Claudia, 28, |
| | | childless, married, higher education) |
| Social Contagion | Friends, Siblings, Cousins | One of my friend's girlfriends will this year already have |
| | | her second child Well, this is certainly nice. It's very |
| | | interesting and cute of course and so on. Well, actually I |
| | | would like to [have a child], yes once you have a |
| | | baby in your hand, or see it in front of you, that's |
| | | something different, yes. (Robert, 29, childless, Single, |
| | | higher education) |

Table 2: Mechanisms of influence, type of influential relations, and illustrative quotes

Parents and parents-in-law provide various forms of *social support*: they support their offspring financially, provide cheap housing, they are important sources of emotional support and advice, and (are expected to) provide support in childcare – one of the most influential forms of support in family formation. Being able to draw on parental support fosters family formation, while a lack of support is a factor hampering it. Apart from parents, the siblings, cousins and friends are also perceived as supportive, mainly providing emotional support, advice on raising children and

casual support in childcare. Their supportive function also gives these network partners sanctioning powers they can use to exert *social pressure* to enforce their views and expectations. Social pressure is mainly exercised by parents who ask for grandchildren and by friends who expect that Ego conforms to their attitudes, intentions and behaviour. *Social learning* influences respondents' intentions on family formation via vicarious experiences and observations in their social networks. Friends, siblings, cousins and acquaintances, especially if they are similar in age, gender and educational background, and already have children, are important sources for learning about family formation, e.g. partnership arrangements after childbirth or reconciling work and caring responsibilities. The experiences respondents had in their family of origin also shape their current views on family formation. In addition, we found several accounts of *social or emotional contagion*, that is contact with the children of friends, siblings or cousins increases the respondents' desire for a child.

3.3 Network structure and subjective perceptions

Drawing on the literature of social network structure and mechanisms of social influence, we would expect that especially in dense networks, containing a large number of network partners who have recently got children, social pressure and other mechanisms of social influence should be at work and encourage Ego to conform and also to have children. As a consequence, respondents embedded in such networks should express an intention to have children soon and their narrations should include various accounts of social influences encouraging them to become parents.

To study this, we selected from our sample respondents who are childless and embedded in dense networks including two or more network partners with young children. The number of network partners with young children, that is children aged 5 or below, varied in the selected sample between zero and five, with a median of two. From the narrations we have learned that respondents including only one person with a young child unanimously perceive this person as having had children 'by accident' or 'too early', or feel that their own situation is very much different from theirs and therefore incomparable, while respondents who include two or more network partners with young children report about a large variety of influences exerted by these persons. Table 3 presents the network characteristics and fertility intentions of the sample of our childless respondents who are engaged in a partnership and embedded in dense networks containing two or more children.

Table 3: network characteristics and intentions of respondents with networks of high density, composed of two or more persons with children below age five

| Men and women in partnership | Age | Density ¹ (range: 0–1) | Network partners with children below age of five | Intention to have a child |
|---------------------------------|-----|--------------------------------------|--|------------------------------|
| Nadine | 29 | 0.53 | 2 | already pregnant |
| Torsten | 31 | 0.64 | 4 | soon |
| Markus | 31 | 0.60 | 2 | soon |
| Anna | 30 | 0.69 | 5 | later |
| Britta | 29 | 0.56 | 2 | later |
| Simone | 33 | 0.67 | 3 | ambivalent |
| Claudia | 27 | 0.67 | 3 | ambivalent |
| Corinna | 31 | 0.58 | 2 | none |

For some of our respondents our expectation holds true; they are embedded in dense networks containing two or more young children and are either already pregnant or intend to have a child soon. They are subject to social pressure and other mechanisms of social influence that triggered and encouraged their decision-making, as this female respondent reports:

Let me think, how did it become more concrete? Well, it really started in the classic manner. In my group of friends and acquaintances the first people had children, the first children jumped around, then my partner became a godfather – already three years ago. Especially within the family circle there were some – who were older than us – who already had children. At family parties the children came to me. Previously I had no appreciation of children. I didn't want them. But somehow, in recent years, I found myself playing with them. Somehow – don't know – they were cute somehow. That's how it happens in the end. And now, especially in the last year, acquaintances and friends had their first children, other friends want to have children soon, and have married, and somehow the topic is there. And then, eventually, we said: O.K. My friend turned 32, I will be 30 this winter. Then we said; now we can imagine that too, now we chance it (Nadine, 29 years old, cohabiting, pregnant, higher education).

Experiencing relatives, friends and acquaintances in her age-group having children triggered our respondent to consider having children herself and that presently among her closer friends the first persons have got children while others intend to have children soon fostered her in deciding to stop using contraceptives.

However, there are several respondents embedded in networks of similar structure (i.e. a dense network, containing a comparable number of children), who do not intend to have a child soon, express a very ambivalent desire for children or even intend to remain childless. One example is this respondent who although she also experiences many persons in her network starting family formation, does not intend to have a child soon:

Everyone around us is pregnant at the moment or has become a parent. In my circle of friends, in my family, my cousin, they all have children already or most of them do. Only my brother does not yet. When I am with them, the children are often annoying, they are rioting, and that's too strenuous. Well, I think you can cope with that only when your life's on track, and when you have found something that makes you feel content. My partner must have a job that suits him well and fulfils him. And I will do these studies I always wanted to do, and go abroad for some time (Anna, 30 years old, living apart together, higher education).

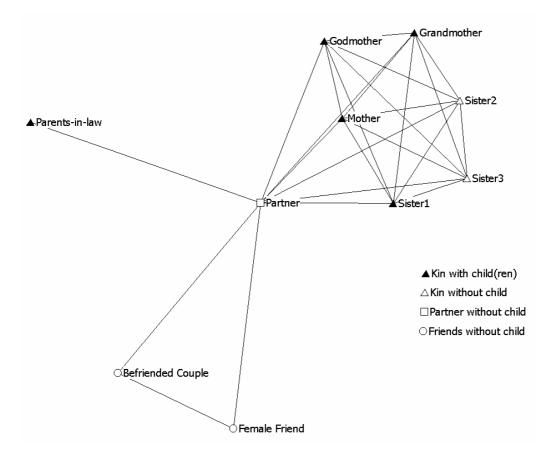
In contrast to the respondent cited above, she stresses the negative aspects of having children. She perceives how 'strenuous' children can be and therefore finds it advisable to be well prepared before engaging in parenthood and to have accomplished everything one would like to do before having children. Therefore, from her observations that many of her network partners currently are becoming parents, she feels pressured into considering family formation and talks about it with her partner, but she neither infers that at present would be a good time to have children for her nor feels prompted to urgently have her own children. This shows that also in dense networks being exposed in the network to persons with young children does not automatically encourage Ego to also have children, but on the contrary may encourage Ego to postpone or forgo childbirth. Crucial for the impact these children can have, is the meaning Ego attributes to them, how Ego evaluates others' family lives and to what extent Ego feels their situation is comparable to hers.

All respondents who do not intend to have children soon, although engaged in a dense network with many children, stress the disadvantages their network partners experienced because of having children and often evaluate their network partners with children as having had them too early. They have learned that having children is 'stressful', reduces personal freedom and threatens the successful completion of university studies and career development.

3.4. Network structure and modes of action

While some respondents have a very clear intention as to whether and when to have children, others are very ambivalent on the topic. The networks of the latter display a very specific structure: the core network of the most important ten persons is polarised. Figure 2 displays the polarised network of Simone, who was indicated as holding ambivalent intentions in Table 2.

Figure 2: A polarised network



Simone is a 33-year old married and childless woman with higher education. The ten persons most important to her are her partner, her mother, three younger sisters, grandmother, godmother, her parents-in-law, and a befriended couple as well as one close friend. She is in contact with all of those persons since a long time, her friends she holds since her school time. These persons build two densely knit groups: one of the respondent's kin, and one of the couples' most important friends. As we know from the interview, to the latter group also belongs one other friend, who was not included in the network grid due to its limitation to 10 persons. The persons belonging to Ego's kin either have children themselves (including Ego's sister who is 2 years younger than her and has two children, aged 5 and 8), intend to have children in general (the two

youngest sisters who are 21 and 25 years old) and Ego assumes that they expect her to have a child rather soon. In contrast, her friends are childless and do not intend to have children soon. While the one friend is perceived as very uncertain whether and when to have children and encourages Ego in postponing the decision, the befriended couple is reported to be voluntary childless and Ego perceives that they would be shocked if Ego would have a child, because as a mother she could not continue the friendship and freely engage in leisure time activities. During the interview Ego reports incidents of social learning, contagion, pressure and support that encourage her in having a child and at the same time we can identify incidents of social learning and social pressure that encourage her to remain childless (for the time being or permanently). Being torn between these two groups with (perceived) conflicting expectations Ego is unable to decide for certain behaviour. In this case she keeps using contraceptives and postpones the decision.

3.5 Network Dynamics in relation to family formation

In the network chart many of our respondents indicate long-lasting relationships which were formed long before they started thinking about family formation, often in school times, or with kin. These relationships are difficult to abandon when it turns out that there is a disagreement on the issue of family formation. In a social context, in which voluntary childlessness is still rare and often evaluated negatively, persons who chose to be childless often face social pressure regarding their decision. Our data show that they are reducing this pressure by changing their personal relations as for example Corinna, the woman indicated in Table 2 as voluntary childless, despite being embedded in a rather dense network, containing two network partners with young children. She indicates her network partners with young children as 'of little importance' and is not sure if

they can remain on this position, or will become 'not important', as she explains when referring to her former colleague and friend Tina:

Tina I got to know two years ago, we were working together [until she recently quitted this job]. Now she has a child; therefore she has another perspective in her life. We are very different, but also have similarities, we like each other a lot. I think we will have to see how this relationship develops. In the past we have seen each other regularly, and this is changing now. I need to find out if this relation will stay at this position [on the chart] in the future (Corinna, 31, cohabiting, higher education).

The experience, that persons that have been important once, lose importance for her when they get children, she has made before, with a former colleague who has got a child and she meets now only 'sporadically'. Corinna feels that this woman 'would always try to convince me how nice it is to have children' and is therefore not interested in intensifying contacts with her. By moving persons with children into the position of little or no importance over the years and establishing and increasing contacts to persons that intend to remain childless (at least for the time being), the voluntary childless respondents have managed to establish themselves in a 'niche of childlessness', where they find acceptance for their choice. The more our respondents can count on having a close network partner, who also intends to stay childless, the more convinced they are about their choice.

4. Discussion

Our research shows that qualitative methods can make a valuable contribution to social network research in the domains of exploring new research areas, taking subjective perceptions into account, understanding individual action in the context of social relations and analysing network dynamics. One aim of our research was to explore whether social network influences on fertility intentions play a role in individuals' decision-making on family formation in western Germany. Thus counter-arguing the common assumption that social networks are less relevant in a modernised and highly individualised social context where fertility decisions are believed to be the autonomous decision of the couple and the need for family support can be neglected in the light of a functioning welfare state. Qualitative methods provide the opportunity to the respondents to explain their views and choices and how they came about. In these narrations personal relations play an important role and we were able to identify network members who influence the respondents in their decision-making about family formation as well as the mechanisms of influence. These findings indicate that a social network perspective can be applied profitably to explain the formation of fertility intentions in a western European context. Additionally the identification of network partners who influence individual fertility intentions contributes to specifying the boundaries for fertility relevant social networks.

Further, our research shows that the respondents' subjective evaluation of certain relationships and of their network partners' experiences, behaviours and attitudes is crucial to understanding the effects of certain network structures. In dense networks, containing a comparably high number of small children, mechanisms of social influence encourage Ego to have children only if Ego evaluates network partners with children positively and finds that she is in a comparable situation and therefore can build on their experiences. However, dense networks containing many children even can discourage from having children when individuals perceive the disadvantages of being a parent when observing their network partners with children. So the content of the information transmitted in social networks and the subjective evaluations are crucial.

These evaluations are also crucial for understanding the impact of network structures in shaping individuals' opportunities to act. We could show with the example of polarised networks, that a

20

certain network structure (composed of two densely knit subgroups) in combination with the subjective perception, that network partners' expectations are incompatible constrain Ego's opportunities to act, making her incapable of taking an active decision for or against having children. For the future, two ways out of the dilemma seem possible: 1) to keep postponing childbirth until menopause and eventually regarding herself as involuntary childless or 2) changing the network structure by reducing or increasing contacts to certain persons and thereby overcoming the polarised structure.

This latter alternative leads to one challenging question in network research as regards changes in network structure respectively network dynamics. It is often difficult to disentangle selection effects from network effects: is Ego influenced in her attitudes by network partners or does she exclusively engage in relationships with persons who share her attitudes? Longitudinal data is often the only (and costly) way to answer this. However, collecting qualitative data on social networks provides the chance to learn how the respondents themselves make sense of changes in their social networks, how they speak about it and what reasons they give for actively searching for new network members or reducing contacts with others. From our voluntary childless respondents we learned that their networks changed considerably in recent years: contacts with friends who had children were actively reduced successively, while new contacts with persons who also intend to remain childless or at least do not want to have children for the next few years emerged.

To sum up, qualitative methods help understanding the influence of personal relations and social networks on fertility decisions by identifying and clarifying the role of relational ties, of network structures and composition, and of their interaction. These specifications are necessary to support with theoretical and empirical evidence the general recognition of social and contextual influences on couples' fertility intentions. In addition, qualitative methods allow for the collection

and analysis of rich retrospective information on network dynamics in relation to life course events. This is extremely helpful both to complement the still rare longitudinal data on social networks and to develop parsimonious and efficient survey instruments to collect such information in a standardized way

Note

¹ We comprised the information from the grid (Alter-Alter relations ranging from 0 = do not know each other to 4 = are in close contact) into two dimensions (0 = do not know each other, 1 = know each other), by recoding the values 0 and 1 as 0 and the values 2 to 4 as 1. Then we used the classic density formula.

$$\Delta = \frac{L}{g(g-1)/2}$$

L designates the number of realized relationships (ties rated 1), g designates the number of persons included in the density matrix (see, Wasserman and Faust, 1999: 101).

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25

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