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# Exploring the Mechanisms Through Which Social Ties Affect Fertility Decisions in Turkey

**Background:** Although there is extensive evidence that social interactions within different types of social ties affect fertility decisions and behavior both in western and nonwestern settings, there is no available data to evaluate the impact within the Middle Eastern context, leading to difficulty in explaining fully the ways in which interactions in personal networks influence fertility behavior among the region's populations.

Aims: This study aims to explore the mechanisms through which social ties affect fertility decisions in Turkey. We examine various social mechanisms such as social support, social pressure, social influence and social learning to explore how and why these mechanisms exert influence on women's fertility decision-making processes.

*Method:* Using semi-structured interviewing (N = 51), the study draws on mothers' retrospective accounts of the childbearing process and current intentions for higher order births.

**Results:** Our findings point to the substantial role played by family networks in women's fertility behavior in Turkey. While family and nonfamily network partners stimulate social pressure

and social influence respectively, social support exclusively operates through family members. Also, the majority of social learning occurs within the family. Our findings also show how kin and non-kin network partners operate through these mechanisms and differentially influence specific stages of the fertility process such as the transition to parenthood and parity progression. Conclusion: The overarching finding of this study is that the personal networks have effects on fertility decisions in Turkey. Our findings pointed to the role of the social and cultural context of the Middle Eastern setting where childbearing is a substantive issue that matters to extended family and the community. An important contribution of this study is that it is the first of its kind to explore social mechanisms vis-à-vis fertility decision-making in the Middle Eastern context and provides a nonwestern and comparative perspective to the research in this area.

In recent years, demographers have devoted increasing attention to the influence of social relationships within personal networks on childbearing decisions as important factors offering new explanations of determinants of fertility intention and behavior. With respect to fertility behavior, the prominence of personal networks is associated with the idea that "childbearing is a social act, and that individual beliefs and behaviors are interdependent and are moderated by social interactions and social structures" (Bernardi & Klärner, 2014, p. 642).

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A growing number of studies both qualitative and quantitative in approach have attempted to explain the influence of social ties on fertility intentions and behavior, with research both in non-Western countries (e.g., Bongaarts & Watkins, 1996; Kohler, 2001; Montgomery & Casterline, 1996) and Western countries (e.g., Bernardi, 2003; Diaz, Fent, Prskawetz, & Bernardi, 2011; Keim, Klärner, & Bernardi, 2009; Lyngstad & Prskawetz, 2010; Pink, Leopold, & Engelhardt, 2014). However, although there is extensive evidence that social interactions within different types of social ties affect fertility decisions and behavior in non-Western settings, there is no available data to evaluate the impact within the Middle Eastern context, leading to difficulty in explaining fully the ways in which interactions in personal networks influence fertility behavior among the region's populations. Moreover, this dearth of data also prevents us from analyzing the role of various social mechanisms through which personal networks affect fertility in the region. Therefore, it is useful to examine this association in a variety of settings and generate new and comparative data to explore cross-national variation.

From this perspective, Turkey is a relevant location for the study of the role of social mechanisms on fertility decisions of individuals because it is an especially poignant example of dramatic fertility change. The Turkish Republic has witnessed an accelerating downward trend in the total fertility rate from a high of 7.1 children per woman in 1930, to 4.3 in 1978, to 3.1 during the late 1980s, and finally 2.1 in 2017 (Turkish Statistical Institute, 2018). This decrease has been accompanied by an increase in age at first birth, with age at first birth most commonly in the range of 20 to 24 in 2006, but age 25 to 29 in subsequent years (Turkish Statistical Institute, 2018) as well as a significant increase in contraceptive use, with 50% of women using contraception in 1978 to 74% in 2013 (Çağatay-Seçkiner, Akadlı-Ergöçmen, & Abbasoğlu-Özgören, 2013; Turkish Fertility Survey, 1978). Moreover, Turkish fertility patterns are characterized by a high degree of geographic variability, with women living in the eastern region having higher fertility (Turkish Statistical Institute 3.34) as opposed to women living in the western region of the country (Turkish Statistical Institute 1.69; Turkish Statistical Institute, 2018). In this non-Western,

low-fertility context, it is important to understand the role that social mechanisms play in reproductive decision-making and how these mechanisms trigger diffusion of the ideas surrounding the value of a small family and delayed childbearing.

An important contribution of this study is its emphasis on exploring the following four social mechanisms that affect fertility decision-making and are most commonly examined in the relevant literature: social support, social pressure, social influence, and social learning. These mechanisms have been extensively studied in the social network and fertility research with each exhibiting considerable national variation. Understanding how and why these mechanisms exert influence on fertility decisions in the Turkish context provides additional and comparative evidence regarding the way these four mechanisms render the effects of personal networks on fertility decision-making. As discussed later, given Turkey's family norms promoting interdependence among family members, social support mechanisms are expected to be particularly influential on fertility decisions in the Turkish context.

Another contribution of the current study is that it provides an additional and comparative data point about how and why the operationalization of different social mechanisms influence women's fertility decision-making. Although Turkey's collectivistic culture differentiates the country from many Western settings where individualism predominates, Turkey's appropriation of other aspects of the Western lifestyle and the current motivation among elites to modernize the country through entrance into the European Union, along with the current low fertility, set it apart from many countries in the Middle East (Kavas & Thornton, 2019). Moreover, its distinct family characteristics, where the notion of a strong family bond prevails and family norms promote supportive parent-child relationships with parents' influential involvement in reproductive decision-making, differentiate Turkey from many Western and non-Western countries. As discussed later, Turkey also differs with regard to its patterns of women's participation in the labor force and utilization of child care as well as social norms regarding these patterns. Therefore, exploring the relationship between social mechanisms and fertility in a setting as distinct as Turkey provides an important

comparative perspective in understanding the broader issue of the impact of social ties on women's fertility decision-making.

Toward that end, this study aims to provide a qualitative understanding of the mechanisms through which personal networks affect decisions regarding fertility in the Turkish setting. The qualitative method allows for a collection of more comprehensive and nuanced data required for analytical examination and the disentangling of contextual effects on individuals' interactions with network partners and the associated influence on people's reproductive decision-making. Using the qualitative method of semistructured interviewing, the study relies on mothers' retrospective accounts of childbearing processes as well as their intentions for higher order births to investigate the roles that social mechanisms play in fertility decision-making.

The next section discusses previous research on personal networks and fertility transitions and specific mechanisms relevant in the Turkish study setting. The sections following are devoted to the research design, qualitative findings, and suggestions for future research.

#### PREVIOUS RESEARCH

Recently, scholars have paid increasing attention to the question of how social relationships in personal networks influence childbearing decisions. Coale and Watkins' (1986) pioneering investigation studied the decline of birth rates in Western countries and proposed the concept of social interaction to explain fertility change. Another seminal work, carried out by Bongaarts and Watkins (1996), examined the notion of social networks vis-á-vis the diffusion of information about methods of fertility control as an important means of fertility change.

More recent studies provide extensive evidence for the influence of face-to-face interactions among a variety of network structures relevant to fertility decision-making (e.g., family, kin, peers, colleagues; Bernardi & Klärner, 2014; Keim et al., 2009). Extensive research centered on the family network as an important determinant of fertility decision-making (Balbo & Mills, 2011; Bernardi, 2003; Keim et al., 2009; Kotte & Ludwig, 2011; Lyngstad & Prskawetz, 2010; Mathews & Sear, 2013). For the most part, these studies tended to investigate the impact of having family-based social support by examining the number of relatives in one's close network and the associated impact on one's fertility intention. For example, using data from the British Household Panel Study, Mathews and Sear (2013) found a strong association between the risk of first birth and the number of relatives within the individuals' closest network. Moreover, there are studies that examine sibling interaction on fertility intention. Two such quantitative studies are particularly important to note here. Using longitudinal data from Norwegian administrative registers, Lyngstad and Prskawetz (2010) investigated whether siblings' fertility influences an individual's fertility, with analyses confirming the existence of cross-sibling effects. Another study explored the influence of sibling interaction on the realization of fertility intention. Using the Netherlands Kinship Panel Study, Balbo and Mills (2011) found a strong correlation between having a sibling with a young child and transition to parenthood, which is one of the very few studies to focus on the realization of fertility intention.

However, there is evidence of cross-national variation as well. Using the German Pairfam study to investigate whether the notion of contagion exists within a family, Kotte and Ludwig (2011) found no indication that siblings impact the fertility behavior of individuals. Rather than evidence of contagion among siblings, there was instead an indication of a significant peer effect in a woman's likelihood of having children.

A growing number of scholars provide ample evidence of the importance of fertility-related personal networks outside the family as well. Balbo and Barban (2014) investigated whether and how high school friends' fertility behaviors affected an individual's transition to parenthood. Analyses found a short-term curvilinear effect, wherein a friend's childbearing positively influences an individual's risk of becoming a parent, with the effect reaching a peak around 2 years later and then decreasing. Another study focused on social interactions among colleagues at the place of employment using the Linked-Employer-Employee data of the German Institute for Employment Research (Pink et al., 2014). The results of this study indicated a strong initial effect of social interaction on fertility among female colleagues. When a colleague gives birth, the likelihood of a woman's transition to pregnancy increases in the first year, with the effect then declining over time. In another study, Lois and Becker (2013) corroborated

the previous research regarding the presence of a social contagion effect and revealed that such intervening mechanisms as social learning, social pressure or norm enforcement, and social opportunity cost had a strong impact on fertility intentions and behavior. Overall, these quantitative studies provide strong empirical evidence in support of the effects of personal networks on fertility; however, they fall short of giving the full account of the specific mechanisms through which personal networks affect fertility decisions.

Qualitative studies collect rich and retrospective data on network dynamics in relation to life course events (Keim et al., 2009). A growing number of qualitatively orientated scholars have made significant efforts to provide insights into the various mechanisms channeling personal networks' effects as well as revealing "the significant other" who potentially shapes individuals' fertility behavior (Arai, 2007; Bernardi, 2003; Bernardi, Keim, & Von der Lippe, 2007; Bernardi & Klärner, 2014; Keim et al., 2009). For example, in her qualitative study on Italian couples, Bernardi (2003) identified influential relationships and found parents and siblings as having primary importance in shaping fertility decisions of individuals. Using a mixed-methods study, Keim et al. (2009) identified relevant network partners with the greatest influence on the fertility intentions and behavior of individuals. This study stressed the role of intrafamily networks, classified as "strong ties," and suggested that family networks have a significant effect on fertility. Arai (2007) focused on teenage mothers and explored their perceptions of peer and other influences. Her qualitative approach enabled her to move beyond the existing research on community and peer influences on teenage fertility behavior and explored the transition from pregnancy to motherhood.

### Social Mechanisms and Fertility Behavior

Social mechanisms operate in interactions between individuals and play important role in affecting fertility decisions (Bernardi & Klärner, 2014). The literature cites four mechanisms through which personal networks operate vis-á-vis fertility: social support, social influence, social pressure, and social learning. These mechanisms have been extensively studied in the relevant literature, with studies identifying either one or more specific mechanisms that play a major role in the fertility decision-making process (e.g., Balbo & Mills, 2011; Keim et al., 2009; Pink et al., 2014). In this study, four social mechanisms consistent with the previous research were identified on the basis of respondents' explanations for fertility decision-making.

The first mechanism, social support, is defined as the reciprocal sharing of financial, instrumental, and emotional support resources between partners. This is especially true in fertility-related personal networks. Research provides ample evidence regarding the central role social support plays in both fertility decisions and behavior (Bühler & Fratczak, 2007; Bühler & Philipov, 2005; Keim et al., 2009). This research indicates that social support constituted by personal networks is transmitted either through direct help such as child-care assistance or through indirect ways such as financial, functional (e.g., help with household tasks), or emotional help. These sources are important in helping couples to improve the standard of living and to diminish uncertainty about the cost of childbearing, in turn enabling the realization of reproductive goals (Balbo & Mills, 2011; Bühler & Philipov, 2005; Philipov, Speder, & Billari, 2006). It is for this reason that people with social support from personal networks tend to realize their reproductive goals more easily than others (Balbo & Mills, 2011; Keim et al., 2009).

It is also important to stress the role of the social context because cultural norms may either promote or inhibit social support. For example, if a society does not view childbearing positively and does not promote the idea that parents should be supported through various means, then the consequence will be less support for parents (Bernardi & Klärner, 2014). Consistent with this, research documents cross-national variation in the level of support provided and fertility intentions (Bühler & Fratczak, 2007; Philipov et al., 2006). For instance, Philipov et al. (2006) investigated the determinants of women's fertility intentions using comparative survey data from Bulgaria and Hungary. Their findings stressed the role of supportive relationships for fertility intentions, which they found was more important in Bulgaria—a social setting differing from Hungary in terms of socioeconomic patterns and fertility-related policies.

A second mechanism concerns social pressure, which refers to a force that drives individuals to comply with accepted social norms either to gain approval or to avoid conflict with network partners (Bernardi & Klärner, 2014). Social pressure can be considered to be a stronger form of social influence, which procures behavior through sanctions and rewards, particularly "when the individual considers these social costs and benefits as relevant and behaves accordingly" (Bernardi, 2003, p. 10). Network partners may exert social pressure to enforce their norms and beliefs on each other (Lois & Becker, 2013).

The mechanism of social pressure is contingent on the nature and the type of the interpersonal relationship among the network partners; having a dense and homogeneous network with members having strong ties to each other is a crucial factor in determining the magnitude of pressure in shaping reproductive choices (Bernardi & Klärner, 2014). Friends with higher or more desirable status, family members, and parents, particularly those providing supportive networks, may have more sanctioning power to urge people to conform to mainstream fertility patterns. Parents are particularly influential in exerting pressure because of their acknowledged claims on grandchildren and the child-care assistance offered in return as well as the emotional bond with adult children (Bernardi, 2003, p. 11).

A third important mechanism is social influence. As defined by Kelman (1958), social influence refers to the process where an individual's attitudes, beliefs, and behaviors are influenced by his reference group. During this "socialization" process, when social actors exert impact on reproductive behavior, individuals' fertility behaviors are shaped. For example, a friend's childbearing experience can increase an individual's likelihood of having a child because people compare themselves to friends, are susceptible to the influence of friends' beliefs and attitudes, and tend to imitate friends' behaviors (Balbo & Barban, 2014; Rossier & Bernardi, 2009). This particular mechanism has been extensively studied in the social network and fertility research (Balbo & Barban, 2014; Bernardi, 2003; Bernardi et al., 2007; Keim et al., 2009). In their qualitative study in western Germany, Keim et al. (2009) found that in dense social networks with many children, mechanisms of social influence are motivational factors when the positive aspects of having children are perceived. Yet, dense networks with many children may also be a deterrence from childbearing if the disadvantages of having children are more pronounced. In either case, social influence operates to shape reproductive decision-making.

The fourth mechanism repeatedly appearing in the literature is social learning. Social learning is described as a process by which network partners acquire new and relevant information either through social intercourse or observation, shaping their fertility decisions and behavior. An extensive body of research refers to the major role social learning plays in the diffusion of new and innovative ideas (e.g., Bernardi & Klärner, 2014; Rindfuss, Bumpass, Choe, & Tsuya, 2004). These scholars argue that an individual's exposure to new ideas can be followed by acceptance or rejection. However, over time and with increasing knowledge and contact with innovators, new ideas are more likely to be tolerated, resulting in a change in behavioral patterns (Rindfuss et al., 2004). Fertility behaviors such as voluntary childlessness, delayed transition to parenthood, and having only one child are some of the novel fertility choices diffused through social learning (Rindfuss et al., 2004).

Social learning is likely to be at work at each stage of the childbearing process. For example, in the transition to parenthood, social learning acts to reduce uncertainty and strain stemming from inexperience (Kohler, 2001; Lyngstad & Prskawetz, 2010). First-time parents observe network partners with regards to the timing of childbearing, the pregnancy process, and other aspects such as obtaining maternal leave and child care. Moreover, individuals may value information about the experiences of higher order births. For example, a woman anticipating her second child may observe her colleagues in a similar position with regard to the ways they handle the challenges of having a larger family and integrating household tasks, child care, and work. Having this information, a woman may feel encouraged or discouraged to realize her fertility intentions. This effect has been found to be important by several researchers (Bernardi, 2003; Diaz et al., 2011; Keim et al., 2009; Kohler, 2001; Lois & Becker, 2013; Pink et al., 2014).

In this study, we expect that these four social mechanisms have important effects on fertility decision-making. However, for reasons that we discuss, we expect social support to be a particularly relevant mechanism to mothers in the fertility decision-making process. The idea of social support is crucial in a society where the welfare model promotes family solidarity. Scholars argue that Turkey resembles a Southern European model where the family is placed as the primary welfare unit (Buğra & Keyder, 2005; Grütjen, 2008). The Turkish social security system does not reach all strata of society and does not meet peoples' expectations (Grütjen, 2008). Empirical evidence demonstrates that the notion of a strong family bond is widespread in Turkish society, with collectivism and interdependence among family members characterizing the Turkish family (Sunar & Fişek, 2005). Family members rely on each other for various kinds of support including care and financial assistance and act as a safety net in times of crisis. Moreover, family norms promote supportive relationships. Turkish parents are continuously involved in adult children's decision-making concerning such personal issues as marriage and childbearing (Kavas & Thornton, 2013; Nauck & Klaus, 2008). Therefore, in this social environment, we hypothesize that having family support increases the desire for continued childbearing.

In a social context such as Turkey, where there are prevailing norms about various dimensions of the childbearing experience, particularly timing and parity, people who follow a reproductive path deviating from the social norm inevitably face pressure. Therefore, we also expect social pressure to play a predominant role in fertility decision-making, and in particular manifest itself directly through parental pressure. As research demonstrates, parents are particularly effective in exerting pressure to influence adult children's fertility decisions (e.g., Bernardi, 2003). As previously discussed, Turkish parents are continuously involved in children's family formation behavior and can exert pressure by expressing the desire to have grandchildren. Thus, in our study setting, we expect parental social pressure to play a significant role in individuals' fertility plans and behaviors.

We also expect the mechanism of social influence to play an important role in individuals' fertility plans and behaviors in the Turkish context, where marriage and childbearing are universal and socially valued phenomena (Yüksel-Kaptanoğlu et al., 2013). In such a social setting, where research shows that being in a network with other parents stimulates individuals' fertility intentions (Balbo & Barban, 2014; Diaz et al., 2011), we expect women who interact with their peers or friends with children to be vulnerable to social influence.

Finally, we expect social learning to be a relevant mechanism in the Turkish setting. Turkish women are socialized to learn that the most important events in their lives are marriage and childbearing. Discussions around these issues begin very early in the life course, with females frequently engaged in such conversations about marriage and motherhood in circles of friends, at school and later at work, and in other social settings. Another way the mechanism of social learning occurs is through child-care assistance provided to a family member at an earlier point in the life course. Child-care assistance from a family member is very common in Turkey as institutional child care is limited and "the intrafamily solidarity in childminding is usually provided by relatives who constitute a substantial proportion of those involved in taking care of children" (Akadlı-Ergöçmen, 1997, p. 92). Therefore, a woman is likely to help a family member with child care prior to her own transition to parenthood. Although an extensive research refers to the importance of social learning vis-á-vis fertility choice among friends and colleagues, in our study, given Turkey's collectivistic family culture where close relationships and frequent contacts with kin are prevalent, we expect social learning to play an important role among family members, but be less relevant and determinant among friends.

#### METHODS

#### Data Collection

The study was designed to investigate the influence of personal networks on the fertility decisions of Turkish mothers. Together with two research assistants, the first author of this study conducted 51 in-depth, face-to-face, semistructured interviews with women in several cities of Turkey. Using a snowball sampling technique, we initially recruited participants from a daycare center in downtown Istanbul. These participants were then asked to identify other women either living in their communities or in their family networks and residing in Istanbul or elsewhere in Turkey. We visited seven cities (Ankara, İzmir, Bursa, Antalya, Eskişehir, Edirne, and Urfa) altogether to interview each eligible contact, with most of the respondents residing in Istanbul. Eligibility criteria included as having at least one child and being of reproductive age (ages 18–49). The rationale for restricting the sample as such stemmed from the motivation to capture social mechanisms relating both to fertility behavior and to intentions from women who have already experienced parenthood. Having mothers' retrospective account of the transition to parenthood and current fertility intention provided us rich data and acquiring such data otherwise would have only been possible through a longitudinal study. Collecting retrospective information on fertility-related network dynamics is helpful to complement the shortage of longitudinal data on personal networks (Keim et al., 2009; see also Schütze, 2006). Based on our specific research questions, we prioritized the inclusion of women with at least one child in our sample. Of course, our reliance on a sample restricted to mothers prohibited the ability to capture information from women without children. Indeed, it is most likely that the excluded population would have yielded very different results than if they had been included as well. Therefore, our sample design constitutes a major limitation of this study as it provides knowledge about the mechanisms influencing the fertility decisions of only those women of childbearing age across Turkey who have had at least one child.

Data collection began in June 2015 and continued through January 2016. Interviews lasted for about an hour. We began each interview by asking a series of demographic questions and continued with questions about issues related to family formation processes, including marriage and transition to parenthood. We focused on respondents' retrospective accounts of childbearing and childrearing experiences, which also included information about respondents' interactions with network partner(s) and the decision-making process. Although we used the same set of questions for each respondent, our approach allowed us to explore various topics as they arose. All interviews were conducted in the respondent's mother tongue (Turkish), and the majority of interviews were conducted in the respondents' homes, although some were held in the workplace of the respondent. Interviews were audiorecorded and transcribed verbatim into Turkish and then translated into English by the first author, whereas the second author consulted on the readability of the English translation. All the names appearing below are pseudonyms.

# Participants

The mothers participating in this study were between the ages of 24 and 43. All respondents were born in Turkey, although not all were of Turkish ethnicity; the sample also included a minority of ethnic Kurdish and Arab women. The participants differed widely in educational level, ranging from basic schooling to postgraduate degrees. They also differed in employment status. Among the currently employed, many worked in occupations such as teaching, health care or white-collar office work, and factory work. Although the majority of women had education and training for a specific occupation, fewer than half were currently working; the majority of participants had left the workforce either temporarily or permanently or had never been employed following graduation. Although many of the nonworking mothers took time off work to care for young children but sought to return to work once the children began school, a considerable number who left work (12 mothers total) were not expecting to return to the workforce at the time of the interview, reporting that balancing work life and family commitments was unmanageably difficult. Interestingly, four of these mothers reported that they left the workforce at the time of marriage; that is, even before entering parenthood, anticipating that it would be difficult to devote time to family commitments when entering motherhood.

Women in the study who left the workforce either temporarily or permanently did not report any perceptions of judgment in departing the workforce because this choice is consistent with the social norms assigning women the primary caregiver and homemaker roles. Turkey has one of the lowest female employment rates in the world, with only 26% of the adult women in Turkey participating in the labor market. With a lack of adequate policy measures to address this dearth, the overall trend in women's labor force participation rate may even decline (İlkkaracan, 2012). Extensive research emphasizes the long-standing gendered division of labor playing a stronger role in preventing women from greater participation in the workforce in Turkey (Dayioglu, 2000; İlkkaracan, 2012; Özbilgin & Healy, 2004). Moreover,

Table 1. Demographic characteristics of interview participants (N = 51)

Age	
20–30	20
31-40	29
41–50	2
Marital status	
Married	49
Divorced	2
Widowed	-
Educational attainment	
Primary school	4
Middle school	8
High school	17
University graduate	18
Postgraduate degree	4
Employment status	
Working	26
Temporarily out of the workforce	12
Permanently out of the workforce	13
Monthly household income (Turkish Lira)	
1,001–2,000	20
2,001-4,000	12
4,001–6,000	13
6,001-8,000	2
10,000+	4
Number of children	
1	23
2	20
3	7
4	1

as research shows, the traditional division of labor is supported by the women themselves. According to a relatively recent Turkish Demographic and Health Survey more than half of the women interviewed (52%) endorsed the view that "women with preschool children should not work outside the home" (Yüksel-Kaptanoğlu, Cavlin, & Akadlı-Ergöçmen, 2013).

As shown in Table 1, our sample evinced significant diversity with respect to age, region of residence, educational level, and employment status. Although we did not attempt to select on these characteristics, our interviews revealed diverse demographic characteristics. No doubt the considerable heterogeneity of our sample was reflected in these women's social interactions and childbearing decisions, as we discuss this in the next section.

## Analysis

Our analysis aimed to explore various mechanisms through which personal networks affect fertility decision-making. To explore this issue, we looked for common themes in women's narratives. An initial reading of the transcriptions was followed by thematic analysis and coding of the transcripts (Strauss & Corbin, 2015). After careful scrutiny, the codes most relevant for the study purpose were chosen and sorted into conceptual divisions and subdivisions in accordance with their content and meaning. Finally, the coded quotations were analyzed to generate a conceptual framework. The chosen codes and quotations were repeatedly compared against the original text to minimize any potential confusion.

#### RESULTS

Our results suggested that social support, social pressure, social influence, and social learning were important factors through which personal networks influence fertility. Our data also revealed that employment status, age, income, and region were also associated with personal networks and fertility decision-making. Although employment status and income level had a differential association with a mother's reliance on social support and the way reproductive choices are shaped by this mechanism, a mother's education level, employment status, region of residence, and the stage of life course varied responses to social pressure and influence and thus were determinants of fertility decision-making.

## Social Support: The Importance of the Grandparents

One of the substantive mechanisms emerging from the data concerned social support. The data showed that while socioeconomic factors including employment status, low wages, and the increasing cost of having children are prevailing reasons for couples to rely on social support, cultural factors are also important motivators. In fact, the narrative accounts clearly exhibited that childbearing was not a conjugal event consequential only to the parents but was a holistic event that concerned other members in the extended family and the wider social community. In this study, for the most part, the supportive relevant others specifically consisted of the parents of the woman and her husband. Importantly, our data revealed that assistance provided by grandparents or other family members could take various forms including child-care provision, money lending, and other means (e.g., providing food, lending a car, etc.). Also included was assistance with a variety of other household activities during pregnancy or in the postpartum period. Although the paucity of data germane to emotional help did not permit an in-depth investigation, we considered it to be embedded in the social support received from kin with whom there is an emotional connection and frequent contact. We speculated that the emotional help inherent in social support may reinforce the motivation of these women to rely on family support. Also, it may provide family members, and particularly grandparents, sanctioning power to exert pressure on daughters' fertility plans (see Keim et al., 2009).

Study data demonstrated that although child-care provision as a social support was vitally important for working mothers, financial help was more important for nonworking mothers. In addition, irrespective of employment status and socioeconomic level, some mothers emphasized as important help with household chores. Mothers' retrospective accounts, as well as reports of future reproductive intentions, demonstrated that parents' presence and support in women's network circles has an impact on fertility decision-making. We next discuss how women receive support from parents (both of the mother and her spouse), its meaning, and the ways in which the supportive relationship with parents shaped decisions for higher order births.

In the Turkish setting, fertility-related social support is almost exclusively provided by extended family members, and the most critical support is child care. In this study, the majority of working mothers of preschoolers relied on a family member-usually the child's grandmother-for child care while they work. This strong reliance on grandmother care was not surprising given the general trend in Turkey, with 32% of working women reporting reliance on grandmother care and another 13% relying on other relatives according to the Turkish Demographic and Health Survey (Yüksel-Kaptanoğlu et al., 2013). As demonstrated in the following discussion, mothers across the socioeconomic spectrum used grandmother care for their children and as the narratives illustrated, these women framed fertility intentions according to the presence of this child-care assistance. Nevertheless, we should note that there was an increased reliance on grandmothers, particularly among low-income groups. Because financial necessity does not permit these women to leave the workforce to care for their children, child-care support provided by the grandmother becomes even more critical for these women's fertility decisions. Data also revealed that this kind of family support played a more significant role in mothers' decision-making regarding parity progression than in the transition to parenthood.

For low-income working mothers, grandmother care played a vital role for the financial stability of the family and was a determinant for the decision to continue childbearing. Ezgi's case provided an example. Hardship began even before childbirth for Ezgi, a factory worker aged 29, who continued to work until 1 week before her delivery, as use of maternal leave before childbirth would lead to a substantial wage decrease. In the postpartum period, Ezgi's mother-in-law began providing child care for the newborn and continued thereafter for 5 years, a significant support for Ezgi and her husband because it enabled Ezgi to remain in the workforce during this period. She appreciated her mother-in-law's support and described it as "lifesaving." Knowing that her mother-in-law was there to support her with child care in the event that she had a second baby was a relief and a determinant for Ezgi as she considered having a second child, as she believed is "the ideal thing for a woman to feel the sense of a complete family." Not all women's stories had a positive outcome, however. Three other low-income mothers in our study were obliged to leave their jobs because they simply could not afford child care, and grandmother help was unavailable.

In contrast to low-income mothers, obtaining child care from grandparents was accompanied by a different dynamic for middle-income and higher income mothers and as the narratives illustrated, the absence of grandparent child-care support can impact fertility plans, discouraging many from higher parity. For most of these mothers in this study, the issue of trust was a more significant barrier to nonfamily child care than the financial cost. They spoke explicitly of how leaving their children with their grandmothers or with a family member they fully trusted made their lives easier and gave them peace of mind while separated from their children for employment. This was the primary reason why these mothers dismissed the possibility of a nanny or child-care facility even though these options were affordable. In fact, five working mothers in this study reported a willingness to leave the workforce if unable to secure grandparental child care.

Another important reason why mothers in this study reported a preference for family-provided child care was the increased flexibility not otherwise available in a formal child-care arrangement, and this was particularly true for those women employed full-time. As these women reported, grandparents not only offered care for babies and toddlers but continued support thereafter, picking children up from school, providing care during school holidays, and stepping in to provide emergency care. Such family support impacted mothers' framing of fertility plans. One respondent, unable to obtain child-care assistance from family, noted:

It is very hard when you don't have family members around. We work and the kids grow up in daycare; this is so sad. You have to think about other things as well. State schools are half-day but we work all day, so you have to send your child to a private (full-day) school, which is exactly what I did. Then, you also have to consider your financial situation and think twice before having another child. You see why I keep thinking about it? I am waiting for the right conditions to emerge. Otherwise, if they are here to help you (parents or in-laws), it doesn't matter when you have the first, second or third child. (Hediye, aged 31, X-ray technician)

Importantly, as mothers' accounts indicated, child-care arrangements were not always straightforward, specifically when geographical proximity was a hindrance. The mothers in this study used a variety of strategies to handle the challenges stemming from geography. In three study cases, to ease the commute, the couple moved to a rental in the same neighborhood as the grandmother. In a more extreme case, one working mother, Handan (aged 34, beauty advisor), convinced her husband to sell their house and buy another house within walking distance to her mother, yet further away from her workplace. Such a long-term arrangement was likely one step in securing child care for an anticipated second child, even though the cost to Handan's well-being was significant.

A decrease in desire to have an additional child also emerged due to lack of child care from an extended family member, as the prospect of raising a child without reliable child care from a family member or a relative discouraged many of these employed mothers from higher parity. When asked about the motivation for limiting higher parity, a sizeable number of study participants mentioned a lack of reliable child care. The following response from Cansu, a 30-year-old teacher and mother of one, was representative of this kind of reaction:

Interviewer: "Do you intend to have another child?"

Participant: "No, no never, I do not intend on one more, no! As a matter of fact, I love kids so much....But we are living away from our families, there is no one to care for our children, and I am not one of those who can entrust a baby to a person they don't even know (i.e., a nanny). Also, I don't have the option to quit my job as many lucky women do. So then under these conditions, I am not thinking of having another child."

Active involvement of grandmothers in the fertility decision-making process was also associated with the extent to which future child-care assistance can be secured. A significant number of participants framed fertility intentions according to their own mothers' availability to provide child care. This finding will be explored in more detail in the subsequent section.

Importantly, although it may seem that the mechanism of social support, particularly in the form of child-care provision, was no longer relevant for nonworking women, data revealed that grandmother support was still an important mechanism affecting fertility decision-making as well. Although relatively fewer in number, nonworking mothers in our sample highlighted the importance of the availability of grandmother support both retrospectively in initial childbearing decision-making and motivations for higher order births. For example, some of these mothers reported the necessity of grandmothers to provide respite care in the face of full-time child care or in emergent situations, and thus parental proximity in the network cycle was critical. One nonworking mother, Melis (aged 28), illustrated this phenomenon. She reported that her mother is the only person to step in when she needs to break from "babysitting all day," allowing her to be able to go out

to socialize with friends. This assistance constituted an important support in her life, without which, she says, "I would never ever think of having another baby." Another nonworking woman and mother to three girls, Hazal (aged 34), was agreeable to continued childbearing to meet her husband's aspiration to have a son on the condition that the couple moved to a flat very close to her mother's so that she could receive child-care assistance. With this compromise recently realized, the study interview took place in this new flat just one floor above her mother's, as Hazal was preparing for a fourth child.

Another recurrent theme among nonworking mothers was monetary support provided by grandparents and the way it motivated fertility decision-making. In one case, Gonca (aged 33), a low-income nonworking mother of two, highlighted financial help from her husband's parents, provided either in cash for utility bills or in food provisions. Her case, however, indicated that inadequate social support was also a determinant for fertility decision-making because in her case even though this help was important for the family's subsistence, for Gonca it was not "enough to consider an additional child." Conversely, Hatice (aged 35), recounted that despite her husband's precarious job condition, the purchase of a house by her father-in-law encouraged her to progress to a third child. Moreover, the following quotation evinced the role family support plays in fertility decision-making even more explicitly. In this quotation, Tülay (aged 32), a nonworking woman, expressed her views about the best possible conditions that would enable her to realize her higher order fertility intentions:

Honestly, I am thinking of having a third child, because there is no reason not to think of it, you know. My mom lives just a street away from our house, my in-laws support us financially whenever we are in need, and we are living in our own house. I think that we are fine considering a third child but my husband doesn't want to, so we keep discussing it. If he had wanted to, I would have had a third child by now.

## Social Pressure: Parental Bargain Matters for Fertility Decisions

The mothers in this study provided accounts highlighting the particular social pressure exerted by their parents in decisions to transition to parenthood or a higher order parity. In the context of the Turkish family, where parents are extensively involved in children's important life course decisions, it follows that parents are influential in reproductive decision-making as well. The inevitability of the parents' influential role in their children's reproductive choices is enhanced by residency that is typically geographically proximate and facilitates frequent social contact, which was the case for the majority of the respondents in this study. Parents typically want grandchildren and exert pressure on adult children to produce offspring; there is evidence for this phenomenon in many different social settings and a number of studies refer to associated consequences, particularly for the transition to parenthood (e.g., Barber & Axinn, 1998). Among the women participating in the study, there were several instances where parental pressure was the sole reason for the timing of the first child. One young mother, Lale (aged 25, housewife), blamed her mother-in-law for pressuring her to have her first child early at the age of 19. Thinking back, she shared how upset she felt about experiencing childbearing at such an early age:

Well, I don't really know what I felt, what I thought about having my first child. I was young and she [her mother-in-law] kept talking about it [having a child]. I didn't understand anything. It was like a family duty, you know, they [one's mother and mother-in-law in general] expect you to do it.

As Lale's case indicated, age at first birth was an important factor triggering parental pressure on women's transition to motherhood. Although parental pressure was expressed by mothers of varying age, women who transitioned to motherhood at earlier ages frequently pointed to the role of parental pressure in this decision. Such accounts demonstrate that lack of experience in childbearing and less human capital (e.g., lower education, lack of employment) emanating from a young age diminished reproductive agency and increased vulnerability to such pressure. The following report from another young mother evinced this phenomenon:

I wasn't thinking of having a baby, neither was my husband, but because of my mother-in-law's extreme pressure on me...we had a lot of debt and all we could think about was paying that debt, but she (her mother-in-law) kept talking about it and told me that if I postpone having my first child, I might never have one. She somehow instilled this in my mind.... I changed my mind soon after I got pregnant but it was too late. (Keriman, aged 31, registrar at a clinic)

In contrast to the pressure young mothers in particular faced vis-á-vis a first birth, the respondents reported parental pressure regarding parity progression somewhat differently. That is, although in many of the cases parents encouraged adult children to transition to parenthood, they were not universally willing to exert pressure upon children for additional grandchildren. In this study, several working mothers reported that their own mothers, in particular, discouraged them from having more children:

Mom's ideal number is two for herself [laughs]; for us, she says, "One is enough." She keeps saying how as a matter of fact two is the ideal number but seeing us [respondent and her sister] and the fact that we are having lots of difficulties in combining work and child care, she says, "One is more than enough for you two!"

As a mother of four children, Derya's mother advised her to limit her fertility: "Mom keeps telling me that two is just fine for me. I mean, health-wise, she tells me that I should be more concerned about my body, my health" (Derya, 36, manages her own department store).

The social pressure exercised by these parents demonstrated limited idealization of a large family for their daughters, with mothers of multiple children facing the most discouragement from their own mothers for additional children. One reason for this negative influence may have originated from parents' past experiences with childrearing and the difficulties that accompany a large family. Another reason why these parents were not as eager to have additional grandchildren concerned their ability to offer child-care support equally among adult children. Yasemin (aged 27, paramedic technician) was a full-time working mother receiving child-care support from her own mother for her first-born child. However, her mother informed her that she would likely not be caring for a second child because she wanted to ensure equality in the child-care assistance she provided to her adult children, with a reminder that Yasemin's brother's marriage was imminent, and the grandchild anticipated from this new union would need her care in the near future.

As the vital role played by mothers in their daughters' child-care arrangements gives them

an immense power to determine their daughters' reproductive plans, in some cases grandmothers explicitly used their bargaining power, with childrearing and child-care assistance as currency to negotiate the timing and in some cases the number of children daughters have. Thus, women facing this negotiation may need to make a strategic trade-off by changing their plans accordingly in return for eventual child-care support. In other words, women relinquish agency and bequeath the final decision to their mothers in exchange for child-care support. One young mother, Perihan, aged 33, provided a quintessential example of this negotiation. Perihan received her mother's help during her pregnancy, when lengthy bedrest was required due to the risk of miscarriage. In the postpartum period, her mother was the primary child-care provider when she returned to work as a kindergarten teacher and continued to care for her daughter until she began school at 6 years of age. This milestone was a threshold that Perihan wanted to cross before planning for her second child. However, in the course of this study, she reported having to postpone a second child until her mother approved of the timing such that she would again be available to provide child care. Perihan shared that she was worried that a delay may lead to difficulties in conceiving. However, she felt compelled to wait until her mother affirmed her plans. Perihan's experience is shared by a number of women participating in this study. The following extract provided another telling example:

Interviewer: "Are there people around you asking you about when you plan to have a second child?" Participant: "Yeah, there are, but because I gave all the responsibility to my mother, I just tell them that they should ask Mom! [laughs]." (Ebru, aged 31, engineer)

Although in many ways these women are pressured to conform to their mothers' wishes regarding their reproduction plans, the fact that they chose this trade-off with a particular objective made it a satisfactory agreement. Conversely, the data also revealed cases where women hand over their agency of fertility decision-making to "the elders" without negotiation or any benefits in return, such as in the case of Lale. In Lale's case, there was no benefit for her in return for her compliance with her elders' wishes. As she recounted, she endured the difficulties and emotional distress of childbearing and childrearing of her four children by herself.

Importantly, Lale's case also demonstrated that the notion of parental pressure varies regionally in Turkey. In eastern Turkey, Lale's home, marriage occurs at a young age, after which a woman joins her husband's parental house, and the young couple is expected to obey the husband's parents. Taking these norms for granted, young mothers in this context relinquish control over their reproductive behavior because of the convention. Moreover, ceding control helps them to maintain positive relationships with family elders. During the study interviews, it was clear that such respondents accepted the idea that elders have the right to shape childbearing decisions, as another respondent living in eastern Turkey, Gülay (aged 36, cleaning staff), reported:

Interviewer: "When you were considering your third child, did you think about the age gap between your second and third child?" Participant: "Well, no, we have elder women [in Urfa], who said that if you have a desire [for additional children], it is better if you have one right after another so they all grow up together. I listened to them."

Moreover, contrary to the attitudes of those grandmothers who negotiated with their daughters about limiting fertility as discussed in the previous section, grandmothers in the Eastern context request more children because in the eastern setting, having many children is not a burden or a liability but, rather, a large family is an asset in and of itself:

There is this thing in Urfa, I mean the more children you have, the more valuable you are in the eyes of people, especially in the eyes of your husband.... People in our society love a large number of people in a family. They say [the elders], in sickness and in health you need your own people. (Figen, aged 41, babysitter)

## Social Influences on Fertility Decisions: Discussions of Parity With Friends

Friends' influences on fertility decisions were mentioned by a large fraction of respondents in this study. As research shows, the social influence of a friend is context specific and therefore is not as consistent as that of parents, who have closer contact with their children, control resources, and can provide more significant social support as well as exert social pressure, which we define as stronger than social influence (Keim et al., 2009). However, this is not to say that friends always have minimal influence. Data collected in this study demonstrated that friends were also influential, but the nature and extent varied across the stages of the fertility process. In light of respondents' narratives, we limited our examples of social influence to friends as the primary nonfamily source of the transmission of social influence.

A recurring theme was the influence of friends during parity progression. The vast majority of the mothers in this study mentioned parity progression as a popular topic in everyday conversation with friends. Without exception, mothers who mentioned friends' influence reported that these discussions encouraged the transition to a second child and to even higher order births. Because friends share similar social contexts and life course experiences, these relevant partners have a significant impact on each other's ideas.

The structure of friends' conversations showed variation, however, as in some cases friends gave advice to each other regarding the appropriate timing and spacing, whereas at other times they simply shared their own experiences, both positive and negative. Common rhetoric featured in these conversations included such phrases as the following: "Kids need a sibling"; "Three to four years is the best time for spacing"; and "If you are thinking of having a second child, don't put it off, so the kids grow up together." For mothers, such statements were valuable because they are buoyed by lived experiences, considered as fact, and followed as such. For example, Ipek, a mother of two, reported that she followed her friends' advice without consideration of her own context:

They [my friends] say that when you space your children apart more than three years, you get used to your comfortable life, like it was before, and you start sleeping all night again, so it will be difficult for you to make that decision [to have the second] and change your comfortable life again. I heard this a lot and I think that if affected me. I spaced my kids thus, two years and nine months! (İpek, aged 39, administrative assistant)

Women in the study shared another interesting way in which discussions with friends influenced parity when noting the impact of friends' confessions of regret for not having more than two children, with friends' grief a strong motivator for parity progression. This was particularly the case among younger mothers in this study, where evidence suggested a reshaping of fertility intentions upon listening to an older friend with such regrets. As many as four respondents reported this phenomenon.

One example is provided by Efsun, a doctorate student and a young mother of two children. Efsun (aged 33) thought that having two children was just the right number for an academic. However, her friend's continuous lamenting that she should have a third child played on her mind as she reconsidered her reproductive plans. Interestingly, she thought that higher order births were particularly necessary for a young mother:

My friend Habibe, her regret is really touching to me. Her daughter is a university student now and her son is in 7th grade and she is just over 40. When they [the children] leave and begin their own lives in a couple of years, she will be alone with her husband. However, if she had given birth to a third child, she wouldn't be alone as soon. Well, as a young mother too, I think that I might feel the same fear of loneliness, yeah. Whenever I think about her situation, I say to myself that I will have a third child.

Importantly, even for those mothers who did not intend to have a third child, friends' remorseful statements about losing the opportunity to have one more child led some women to reconsider childbearing decisions. This sentiment was best illustrated in the case of Feryal (aged 28, factory worker):

Participant: "For one thing, all those women who are older than us, one thing they keep saying is to have a third one. 'We didn't have a third and we are regretting it, we now want to have a third child but it is too late'. I happen to listen to this conversation very often. So, I simply say what if I have the same regret?"

Interviewer: "So, you may feel regret over time?" P: "I don't know, maybe, so many people say that they do. I don't want to have one more child right now, but maybe over time I may feel differently, who knows? I am now 28, when I am 35 or so, maybe."

### Social Learning

Previous research cites the mechanism of social learning as a substantive channel influencing fertility decision-making. The literature documents social learning as primarily occurring among peers and colleagues (e.g., Keim et al., 2009, 2012; Pink et al., 2014). In this study, however, mothers' accounts revealed that social learning happened almost exclusively within the family, regardless of the mother's employment status. A vast majority of study mothers reported that the predominant personal networks was composed of family, including parents, siblings, or extended family such as aunts and cousins by blood as well as marriage. For example, one mother, Kezban, emphatically related how the exchange of ideas with siblings helped her progress smoothly through the childrearing process "without any problems at all." Ezgi, another mother, stated that as an inexperienced mother, she simply imitated her elder sister's pregnancy and childrearing experiences to minimize the risks of a misstep.

For some mothers, however, communicating with close family members did not necessarily induce a learning process that was completely positive. In some cases, the overall experience of family members' childrearing, especially if replete with problems, may have had a considerable impact on reproductive plans. Hasibe (aged 27, teacher's aide), mother of two children, provided an example of this kind of influence. Hasibe observed her siblings' parenting experience from very early on, as they had children while living on a low income and exposing their children to the financial hardships they bore, leading her to consider financial matters more seriously before having children herself. Most important, she learned from her elder siblings' experience that when a couple believes that they cannot afford a child, they should not have children at all. This is one of the primary reasons why she forfeited having a third child. As she explicitly stated:

Like it or not, somehow you are influenced. I observed their [her elder siblings] problems with financial matters, kids' schooling, and all the other educational pieces, and clothing.... Yeah, this might have had an impact on me. You know, my biggest fear is not being able to afford my kid's needs. This has always been in the back of my mind.

Another recurring theme emerging from the data was the acquisition of social learning through assistance to a family member with child care at some point in the life course. Nearly one in five respondents reported such experience prior to personally stepping into parenthood. One such respondent, Gülay (aged 36, babysitter), who lived with her brother's family when she was young, summed up the views of many:

Well, we were living in the same household, and I was helping them with the care of the baby. I was rocking the cradle, changing diapers, preparing baby food and feeding and all sorts of things, actually. I wasn't really willing to help out, I was just a kid, you know, and I wanted to play outside. I was getting angry that they were having me care for the baby.

Gülay provided child care while she was very young, although she was not a voluntary caregiver. As one living in a joint family, Gülay was simply caught up in the dynamics of her brother's household and found herself a regular babysitter for her brother's baby. Despite this involuntary assistance, her experience of childrearing before her actual transition to motherhood led to a higher degree of self-confidence compared with her friends when she had her first baby. Gülay's experience was echoed by other study members, whose accounts conveyed the idea that such first-hand child-care experience induced a full-fledged social learning acquisition, that is, an experimental process before the transition to parenthood.

However, although the self-confidence emanating from early child-care experiences related by mothers in this study would seem to have positive implications for future mothering, our data did not provide an indication that it impacted fertility decision-making positively. That is, although these women reported a sense of self-confidence in their mothering capabilities, this did not necessarily translate into aspirations for a large family. Conversely, our data indicated that such an early experience may have dissuaded these mothers away from early childbearing or large families. Although we noted that it was very difficult to specify and disentangle various other factors causing lower fertility among these mothers, nevertheless, as Table 2 demonstrates, the fact that most of these mothers with early child-care experiences had low fertility rates at the time of data collection, with very few reporting a desire for higher order births and two mothers having a relatively late transition to parenthood, led us to consider that early childcaring experience may play a role.

Table 2. The Fertility of Respondents With Previous
Familial Child-Care Experience Prior to the Transition to
Parenthood

Participant	Number of children	Age at first birth	Intention for an additional child
Aygül, 40, customer representative	1	25	No
Ayse, 30, left work temporarily	2	25	No
Feyza, 30, salesperson	1	25	Yes
Gülay, 36, babysitter	3	18	No
Hümeyra, 35, housewife	2	22	No
Nazlı, 34, housewife	2	23	No
Safiye, 31, academic	1	30	Yes
Seher, 31, housewife	1	27	No

We speculate that one potential reason for this low and postponed fertility may be related to the fact that these experiences prior to a woman's transition to motherhood were overwhelming, and women find that having yet another child is a daunting prospect. One participant, Seher (aged 31, housewife), who had experience with child care early in life but had her own child as an older mother, provided such an example:

I cared for both of my nieces, I was the main caregiver, you know...because I took care of them a lot, I did not want to have a child myself. Well, of course, I was too young, and because I was spending so much time with them [the nieces], I saw it, I saw that it is a huge responsibility. I told myself that I would not have a child until I felt mature enough, like when I was 35 or so.

It is also possible that the exposure to the benefits as well as difficulties of childbearing before their own transition to parenthood leads to the preclusion of the excitement and surprise brought by one's own newborn. One mother's narrative, Nazlı (aged 34) provided an example of this kind of influence. Throughout the interview, Nazlı stressed the difficulties of childbearing and her overall exhaustion, providing an indication that her past experience of child care of her niece and her own two children might have caused fatigue. For example, when posed with the general question of what it means to have a child, which participants generally answer with more emotional tones, Nazlı just stressed the difficulties:

It is very hard work. I mean you really work hard. It is like you end up forgetting yourself, you always take care of them....You know, I am really sick and tired of this business...sometimes I ask myself is it like, I was born to this world just to care for kids? Housework, child care, plus you want to raise them well and there are financial things, on the other hand, all very tough.

#### DISCUSSION

In this article, we aimed to extend the previous research by exploring the mechanisms through which social ties affect fertility decision-making in Turkey, a setting little studied, thereby contributing both to a better understanding of the country as well as to a comparative perspective. Our research has contributed important information to our understanding of the link between personal networks and fertility decision-making and the operationalization of personal networks by examining four social mechanisms, including social support, social pressure, social influence, and social learning, in a non-Western, low-fertility context with strong family norms and a collectivistic culture, which shapes family relationship in important ways.

Overall, findings from this study in Turkey corroborated the previous literature positing the importance of personal networks in explaining processes of fertility decision-making. The data collected in this study revealed that such social mechanisms as social support, social pressure, social influence, and social learning are important factors through which personal networks had influence on fertility. Although nonfamily network partners stimulated social influence, social support and social pressure exclusively operated through family members and, in particular, through a woman's parents or in-laws. Most women in this study preferred for child care to occur within the family network and to seek help particularly from parents. Moreover, although procuring family child care was universally important to women's fertility decisions in this study, it was particularly critical for low-income mothers. Financial support was also a significant component of social support and critical particularly to nonworking mothers with respect to their fertility decision. In return for child-care assistance and financial

support, these parents exerted considerable pressure on women's reproductive decisions. Moreover, the majority of social learning occurred within the family. Therefore, our study points to the substantial role played by family networks in women's fertility behavior.

The influential role played by the familial network in Turkey stands in contrast to that in Western countries (e.g., Sweden, Norway, France) where high-quality subsidized child care is provided by the state, making the availability of child care from the extended family less relevant for individuals' fertility intentions or realizations (e.g., Goldscheider, Bernhardt, & Branden, 2013). Moreover, our findings are consistent with studies using data from Eastern European countries with minimal state provision of child care (e.g., Bulgaria, Russia, Poland, and Hungary), which document the significance association between supportive networks and women's intentions to have additional children (Bühler & Fratczak, 2007; Bühler & Philipov, 2005; Philipov et al., 2006).

Our study also contributed to research on personal networks with regard to the difficulty in delineating network boundaries and disentangling the various social mechanisms because in some cases they may overlap or function "close enough to be grasped under a unique concept" (Rossier & Bernardi, 2009, p. 472). In our study, we found two mechanisms-social support and social pressure-intertwined in the phenomenon of respondents' complex relationship with their mothers. As discussed previously, the vital role that mothers played in daughters' child-care arrangements confers bargaining power in shaping reproduction plans, and daughters responded to this pressure by modifying plans in return for future child care. Therefore, a strategic trade-off occurred between these women and their mothers, illustrating how the mechanisms of social support and social pressure overlap and function concurrently to shape women's fertility decision-making.

The data also facilitated an examination of how different network partners operate through these mechanisms and impact both the transition to parenthood as well as parity progression. Limited attention has been paid to this aspect; indeed, we are aware of only one study that examined whether two mechanisms (social capital and sibling interactions) are operationalized differentially for first versus higher order births (Balbo & Mills, 2011). Our study contributed to the research in that we identified the differential influence of kin and nonkin network partners on specific stages of the fertility process by examining a greater number of social mechanisms. Our findings highlighted that although participants' parents exerted pressure over the couples' transition to parenthood and parity progression, siblings and extended family members, on the other hand, influenced the transition to parenthood. The data also revealed the influence of friends in the determination of higher order parity. Women changed their reproductive behaviors as a result of interaction with their peers whom they share similar work and life experiences and characteristics. An important dimension of this influence on parity progression was related to the regret of mothers' friends over not having had more children, with this discontent becoming a strong motivator for parity progression for a significant number of mothers in this study.

As reported in Table 1, the study sample displayed considerable variation with respect to such demographic characteristics as the region of residence, employment status, income, education level, and age. We found that some of these characteristics are associated with decision-making. For example, our data suggested that regional differences matter in fertility choices of the women in this study. Attitudes toward childbearing and childrearing varied by region, with the eastern areas of Turkey represented by early marriage, high fertility, low levels of female educational attainment and labor force participation, and increased prevalence of patriarchal attitudes when compared to the western areas of the country. The study data attested to the discrepancies between the eastern and western regions; participants from eastern Turkey had more children and less agency over reproductive choices, exemplified in the narratives of Lale, Gülay, and Figen, which illustrated how social pressure exerted by the family networks was associated with fertility outcomes. The majority of study mothers living in the eastern context yielded to such pressure and consequently suffered from unwanted pregnancies and the accompanying hardships stemming from early motherhood, rearing multiple children spaced close in age, and little external child-care assistance. In contrast, participants living in western Turkey generally enjoyed greater agency over the reproductive process, exhibited in such activities as ther development of strategies and negotiations with their own mothers regarding the timing of pregnancies and subsequent child-care assistance.

Irrespective of the region of residence, a woman's age emerged as another important dynamic in the operationalization of the mechanisms of both parental social pressure and friends' social influence. In this study, young mothers readily submitted to parental (or in-law) pressure to transition to parenthood at a young age. Our data suggested that lower educational attainment and unemployment diminish agency over fertility decision-making and lead to increased susceptibility to such pressure. Younger study mothers also stressed the impact of older friends' expressions of regret for not having additional children on their fertility intentions.

Moreover, the data collected indicated that social support mechanism effects on fertility varied for women in different socioeconomic levels. Among women of high socioeconomic status, availability of family-provided child care as a criterion in fertility decision-making was rooted in the desire to have a reliable caregiver, whereas among women of low socioeconomic status, the source of family preference was the prohibitive cost of child care. Interestingly, for some nonworking mothers, grandparental child-care assistance was also a relevant force determining future reproductive choices, indicating that reliance on family networks for child care cuts across socioeconomic ranks and employment statuses among these mothers. Our data also stressed the role of parental financial support in the intention for an additional child, particularly for the nonworking population, a finding consistent with previous research (e.g., Bühler & Philipov, 2005).

It is at this juncture that the findings of this study provide useful information about relevancy and the demand for changes to public policy with regard to the provision of child-care services, particularly for working women. Women's reliance on the social support extended family help and frequent withdrawal from the workforce are evidence of the fact that there is an alarming demand for an appropriate public policy designed to support employed mothers with quality and accessible child-care services, enabling mothers to remain in the workforce. Also, as our data indicated lack of state provision for appropriate child-care services as one of the factors discouraging continued childbearing for working women, this policy action would be an important step in encouraging women to realize their desired number of children.

The qualitative methodology used for this study provided several advantages. First, using semistructured interviews provided the opportunity to understand women' reflections about childbearing decisions and future intentions in the context of their personal networks (Keim et al., 2009). Second, the semistructured interviews allowed for a more thorough understanding of women's reports of fertility-related interactions with network partners. In addition, even though this study design was cross-sectional, the mode of data collection used for this study also allowed us to collect rich and retrospective data to identify the relevant mechanisms through which personal networks affect fertility. For example, we learned from those women who performed child care prior to motherhood that helping a family member afforded them a unique form of social learning, providing critical child-care experience prior to the transition to parenthood. However, as our analyses highlighted, this prior experience did not translate to an early transition to parenthood or an increase in higher order births.

We acknowledge that the study design sample selection introduced a limitation in that it produces data exclusively from mothers' narratives. As we noted previously, this means that we were unable to analyze the effects of the social mechanisms on fertility decisions from the perspectives of women who have not experienced childbearing. A sample composition restricted to women with children is highly likely to yield very different results than if we had considered childless women too. For example, given Turkey's familistic culture where having a child within the confines of marriage is an expected social standard, we expect that all the social mechanisms we examined in this study are likely to operate differently among nonmothers. Clearly a study cannot be considered to be fully accounting for the mechanisms influencing the fertility decisions of a given population without considering childless women, who are also making a fertility decision even if their decisions may include postponing childbearing or forgoing to have children.

Similarly, our study excluded fathers, which again emanates from our original study design.

Indeed, men's ideas about fertility are consequential and their networks are sufficiently relevant to embed in an analysis of personal networks effects on fertility decision-making. Future research must continue to expand the focus on perceptions of social influence from the perspective of the couple.

A final limitation concerns the difficulty embedded in the analyses of retrospective accounts related to a sensitive topic. There is evidence that retrospective accounts of childbearing decision-making and recollection of intentions are vulnerable to measurement error (Groves et al., 2001; Sudman, Bradburn, & Schwarz, 1996; Williams, Abma, & Piccinino, 1999). Despite these limitations, we argue that mothers' retrospective accounts provided us with sufficient data to understand the impact of network partners during the fertility decision-making process because these mothers yielded data drawing on lived experiences regarding network partners in actual decision-making. Moreover, we also investigated mothers' intentions for continued childbearing, which allowed us to capture data regarding the current impact of personal networks on mothers' fertility decision-making. Nevertheless, we advocate that for a more complete picture, subsequent studies should include women of childbearing age who are not mothers in the study design, as well as women's partners, and consider longitudinal design to analyze how the reported associations between network partners and anticipated fertility intentions are realized in future years.

To conclude, the overarching finding of this study is that the personal networks have effects on fertility decisions in Turkey, demonstrating once again that "fertility choices are not made in a vacuum but embedded to family and peer networks" (Balbo & Mills, 2011, p. 23). We found that all of the social mechanisms studied influence the women's perceptions of childbearing, with each of these mechanisms channeling personal networks' effects in various ways depending on the social context. We also found that family networks play a substantial role in women's fertility decision and behavior in Turkey. Our findings pointed to the role of the social and cultural context of the Middle Eastern setting where childbearing is a substantive issue that matters to extended family and the community and supportive relationships among family members are important determinants of fertility

decision-making. It is important to note that the findings of this study can also be used in terms of policy development with regard to the provision of child-care services, particularly for working women. We close by stressing the importance of investigating the personal networks–fertility relationship in different social contexts to generate new and comparative data and explore cross-national variation in the role of various social mechanisms through which personal networks affect fertility decisions.

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