Neighbourhoods, marriage, and divorce in Southern Sweden 1924-2015.

Topic

Aside from the family environment, neighbourhoods in childhood provide an important environment affecting the timing and substance of partnering decisions (South and Crowder 1999; South 2001; Deutscher 2020). They can affect partner choice through peer relationships, role models and institutional presence, the availability of marriageable partners and the norms and values surrounding marriage and partnership (Wilson 1987; South and Crowder 1999). Social context may also constrain partner choice or deteriorate relationship quality leading to higher divorce risks (South 2001). The context for the transition to adulthood has changed from the 1960s, youth remained in school longer, married and started their families later, cohabitation and non-marital single-motherhood became more common (Furstenberg 2010, Ohlsson-Wijk 2020), but the literature on neighbourhoods has seldom focused on the role of neighbours in the diffusion of behaviours like divorce and marriage delay.

Longitudinal studies of early fertility and marriage (South and Crowder 1999) and divorce risks (South 2001) established the foundational associations between neighbourhood deprivation and non-normative family formation and marriage dissolution. More recently, the increased availability of large datasets has led to progress in the estimation of causal effects in the neighbourhood literature (Chetty 2018), and specifically on the role of teenage peers in fertility and marriage behaviour later in life, and studies using fixed effects have also questioned the importance of socioeconomic conditions on divorce in some contexts (Lyngstad 2011). However, these studies have often used large administrative units, which introduce the modifiable areal unit (Fotheringham and Wong 1991) and the uncertain geographic context problems (Kwan 2012). US studies have focused on the negative consequences of poverty (South and Crowder 1991, South 2001) and dealt with metropolitan contexts, but recent literature has highlighted that advantaged neighbours can be just as if not more influential to later life outcomes (Hedefalk and Dribe 2020; Malmberg and Anderson 2019; Chetty et al. 2018) and most of the world's population lives in smaller and less segregated cities. Recent literature has also shown that appropriate scales of measurement have the potential to identify neighbourhood effects where they were previously believed to be absent (Türk & Östh, 2019). Nearly all of these studies have focused on recent periods and potential changes in the role of neighbours over time have received less attention (but see Hedefalk and Dribe 2020; Hedefalk et al. 2022).

I study developmental effects of residing in a neighbourhood in childhood on the age at first marriage and the likelihood of ever-divorcing using cohorts born 1924-1966 who resided in a midsize industrial town in Southern Sweden and follow them up in adulthood regardless of where in the country they reside 1968-2015. I construct neighbourhood measures based on the social class of nearby neighbours of similar ages throughout childhood using geographic weighting, which better proxies social interactions. My research design combines dynamic and fine-scale measures of neighbourhood exposure with long-term follow-up, which allows me to study ages beyond early adulthood, while avoiding stayer bias. The literature has often focused on early adulthood, female outcomes, and income measures, but recent research has highlighted the need to study heterogeneity in neighbourhood effects, for example, gender, race, socioeconomic status, and age at exposure (Lucero et al. 2018; Small and Feldman 2012). Therefore, the outcomes of men and women of different social class who grew up in a variety of social settings over a period of profound changes in family formation are considered.

Theoretical focus

Neighbourhood effects are often understood as characteristics of the physical and social environment which shape individual behaviour both in an immediate sense, but also in a developmental way. The neighbourhood can be seen as a place for a process of collective socialization, where adult role models play a defining role in youth behaviour (Wilson 1987) and adult supervision contributes to safety and a good environment for childrearing (Sampson 2012). Others have focused on the destabilizing role of

peers (Crane 1991), the importance of institutions (Hellerstein et al. 2008), or the mediating role of parental stress on the ability to educate and supervise children (Wang et al., 2020).

Neighbourhood context can impact family formation and divorce through *mainstream*ing of behaviour or social imitation (Wilson 1987), according to which individuals follow family formation patterns common in their surroundings. In terms of divorce, the balance in the marriage market, population density, economic conditions in the community have been highlighted (South 2001; Lyngstad 2011). It has also been associated with non-normative transitions (South & Crowder 1999), and increased risk of divorce (South, 2001), while neighbours attitudes are associated with age-at-marriage and the proportion remaining single (Yabiku 2006). Community influences on divorce risk were found for the sex ratio of spousal alternatives and the aggregate level of education in a Norwegian context, but income level was not a significant predictor in a fixed-effects model (Lyngstad 2011), and there is causal evidence of place effects on transitions into marriage and fertility in Australia (Deutscher 2020).

Data

The data comes from the Scanian Economic Demographic Database (SEDD) (Bengtsson 2022) and the Landskrona Geocoded Sample (Hedefalk and Souza-Maia 2023). SEDD includes longitudinal data on demographic events and occupations on the entire population of Landskrona, a medium-sized port town in Southern Sweden undergoing rapid industrialisation, from 1905 to 1967. The geocoded sample contains place of residence information at the address level from 1939-1967. These records are linked to national registers from 1968 to 2015, where birth histories, civil status and educational attainment are recorded. This data allows me to construct neighbourhoods dynamically by choosing the appropriate scale to study social interactions across the entire age range of childhood.

Methods

Neighbourhood shares of white-collar, medium-skilled and lower-skilled workers are constructed based on an adaptive bandwidth centred on an individual's residential location at a specific point in time. Class origin data on the 25, 50 and 100 nearest neighbours of the same age in this *bespoke* neighbourhood are collected and weighted according to a distance decay function which gives exponentially lower weights to neighbours who live further away. The process of calculating these shares is repeated twice per year and the values over childhood are averaged. These measures better approximate cumulative exposure since they capture variation in neighbourhood context of individuals who live in a particular class context (for instance, predominantly white-collar) throughout their childhood versus individuals who may live in these areas for short periods of time. The assumption is that using the shares of nearby neighbours of a specific class origin and using children of similar age, one approaches a measure of the social environment in which an individual grows up and maximizes the likelihood that these children and their parents interacted in the local neighbourhood and went to the same school class.

For the statistical analysis, I use OLS regressions on the age at first marriage and linear probability models on the likelihood of ever-divorcing, controlling for birth cohort, physical characteristics of the neighbourhood, childhood and household characteristics, class origin and educational attainment. The neighbourhood share is standardised to reflect changes in one standard deviation in the share of neighbours.

Preliminary findings

Figure 1 shows binned scatterplots of the two outcome variables. There are associations between the neighbourhood exposure variable and the age at first marriage for both women and men, though men's are stronger. In terms of divorce, there is a negative association for women with signs of nonlinearity, while men seem to have little to no association.

Table 1 shows our preliminary regression results: age at first marriage increases with the share of white-collar neighbours living in the neighbourhood. One standard deviation increase in the share of white-collar neighbours (14%) leads to 0.26 years increase in age at first marriage for women and 0.43 years for men in the unadjusted model, and 0.35 and 0.64 years in model 4, which includes class

origin, but not education. Probability of ever-divorcing shows weaker associations. There were no changes in the probability of divorce for men regardless of choice of covariates, while for women there was a modest decrease of 3 percentage points per standard deviation in the share of white-collar neighbours (2 p.p. in the adjusted models).

The final version of the paper will include the regression analyses with non-linear specifications and alternative model specifications for the divorce variable, robustness tests and a comparison between the estimated effects of the neighbourhood exposure with other predictors of marriage and divorce discussed in the literature.

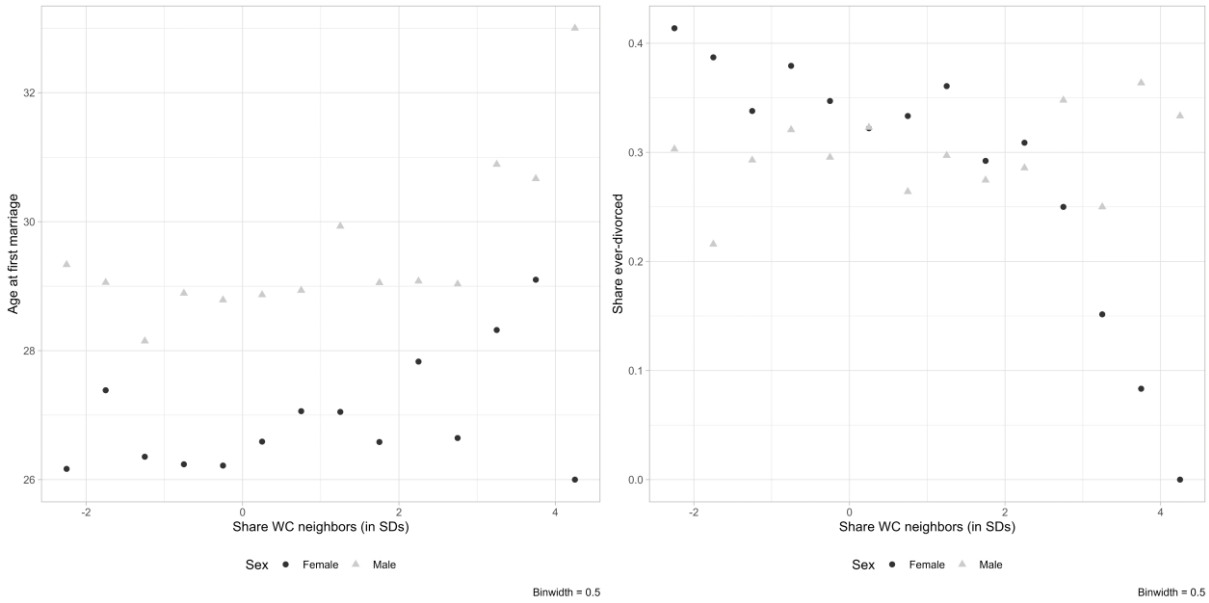

Figure 1: Binned scatterplot of age at first marriage (left) and share of ever-divorced (right) by the share of white-collar (WC) neighbours in childhood.

Table 1: Regression results

	Model				
Outcome	(1)	(2)	(3)	(4)	(5)
Women					
Age at first marriage	0,26+	0.34*	0.31*	0.35*	0.25
	(0.15)	(0.16)	(0.16)	(0.16)	(0.16)
Share ever-divorced	-0.03**	-0.03**	-0.02*	-0.02*	-0.02*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Men					
Age at first marriage	0.43**	0.64***	0.63***	0.64***	0.56**
	(0.16)	(0.19)	(0.19)	(0.19)	(0.19)
Share ever-divorced	0.00	0.00	0.00	0.00	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Controls					
Birth cohort	X	X	X	X	X
Physical characteristics		X	X	X	X
Childhood and household			X	X	X
Class origin				X	X
Educational attainment					X

Notes: p < 0.001***, 0.01**, 0.05*, 0.1+. Standard errors in parentheses. Neighborhood variable has been standardized to reflect the effect of 1 standard deviation change.

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