

Policymakers should influence what happens in the family to reduce teen births



Family matters

A girl is more likely to have a teenage pregnancy when her older sister has had a teen birth

THE IMPACT OF friends, colleagues and family members – peer effects – are clearly central to social life. But quantifying the causal effect of peers is difficult. Peers operate in the same social environment, so are affected by the same common outside influences, and the impact of behaviour between two (or more) individuals is generally two-way – if two people are friends, it is likely that each affects the other's behaviour. This makes isolating the effect of one person on another very difficult.

Social scientists have spent their time devising ingenious ways of trying to measure peer effects. A favourite among US social scientists is to exploit the fact that individuals at university in the US generally share rooms and that allocation of roommates is often random within gender. This has allowed them to examine peer effects in smoking, underage drinking, religious beliefs and mental health. But these studies are limited by the fact that US college students are a special group. In addition, the college roommate design does not allow examination of the effect of a very important group of peers: siblings. The time siblings spend with each other is far larger than the time even close friends spend together.

Siblings spend much more time together than close friends

Recent research undertaken between the ESRC Centre for Market and Public Organisation at the University of Bristol, and the University of Bergen, has tried to estimate the effect of siblings on each other's behaviour. Specifically, the researchers were interested in whether having an older sister who has a teen birth increases the chance that her younger sister has a teen birth too.

Teen birth is an important issue and it is clear that these run in families. So isolating the effect of peers from other shared influences, such as family income, attitudes and the more general social environment, is also important.

To quantify the effect of an older sister, the research exploits an educational reform.

In Norway in the 1960s the minimum school leaving age was raised from 14 to 16. But in contrast to many other European countries this did not happen all at once. Instead it was rolled out, pretty randomly, across local areas (municipalities) over a 13-year period. This meant that at any one point during this period, there were some children who could leave school at 14 while others, who had very similar backgrounds and lived in similar areas, had to stay on until 16.

Exploiting this 'natural experiment', earlier research found that the extra years of education reduced the chance of a girl having a teen birth. So essentially this provided a 'natural experiment' in teen births. Using this the researchers looked at the effect of the reforms on the probability that an older sister would have a teen birth, and then of this teen birth on the chances that her younger sister would also have a teen birth.

INFLUENCES IN THE FAMILY

The research found large effects: having an older sister who had had a teen birth raised the chance of her younger sister having one too from around one in five to two in five. This effect was larger when the sisters were close in age and where families had fewer resources. This all makes sense: closer-age sisters are more likely to spend time together, and girls in families with lower resources have more to gain from sharing the costs of having a child (for example, child care).

Finally, the positive peer effect dwarfed the negative effect of an extra two years at school on teen births. This suggests that if policymakers want to reduce teen births, they must influence what happens in the family. ■

www.bristol.ac.uk/cmppo/publications/papers/2011/abstract262.html