



Friendship network in the classroom: Parents bias on peer effects



Fabio Landini^{a,e}, Natalia Montinari^b, Paolo Pin^{c,*}, Marco Piovesan^d

^a *LUISS University, Department of Political Science, Viale Romania, 32, 00197 Roma, Italy*

^b *Lund University, Department of Economics, Tycho Brahes vag, 1, Lund S-22363, Sweden*

^c *Bocconi University, Department of Decision Sciences and IGIER, Via Roentgen 1, 20136 Milano, Italy*

^d *University of Copenhagen, Department of Economics, Øster Farimagsgade 5, Copenhagen DK-1353, Denmark*

^e *Bocconi University, ICRIOS, Via Roentgen 1, 20136 Milano, Italy*

ARTICLE INFO

Article history:

Received 28 February 2014

Received in revised form 19 May 2016

Accepted 20 May 2016

Available online 2 June 2016

JEL classifications:

D85

I21

Z13

Keywords:

Social networks

Primary school

Friendships

Parents' bias

Homophily

Peer effects

Bonacich centrality

ABSTRACT

We interview both parents and their children enrolled in six primary schools in the district of Treviso (Italy). We study the structural differences between the children network of friends reported by children and the one elicited asking their parents. We find that the parent-reported network has a bias that is consistent with the following explanation: parents expect peer effects on school achievement to be stronger than what they really are. Thus, parents of low-performing students report their children to be friends of high-performing students. Our numerical simulations indicate that when this bias is combined with a bias on how some children target friends, then there is a multiplier effect on the expected school achievement.

© 2016 Elsevier B.V. All rights reserved.

1. Introduction

Are parents aware of who are the friends of their children? Are parents biased toward particular types of children that they want as friend for their children? What are the economic consequences of this bias? In this paper, we study the structural differences between the children network of friends reported by children and the network elicited asking their parents. In particular, we investigate whether parents of young children have a correct representation of their children social network and, in case differences are observed, if such differences are systematic. With this aim in mind we elicit the network of friends of 452 children between 6 and 11 years old enrolled in six primary schools in the district of Treviso (Italy). We interview separately both parents and their children to study the structural differences between the two networks. We find that indeed the parent-reported network has a bias and we explain it as follows: parents expect peer effects on school

* Corresponding author.

E-mail address: paolo.pin@unibocconi.it (P. Pin).

achievement to be stronger than what they really are. Thus, parents of low-performing students report their children to be friends of high-performing students.

We think that to verify if parents are biased and to study possible negative effects of this bias is crucial to design policy and interventions that promote better decisions. For instance, we know that parents with a more accurate knowledge of their child's network of friends¹ have children with better school achievements (Muller, 1993) and with a lower probability of antisocial and risky behaviors (Ary et al., 1999; Veronneau and Dishion, 2010). Parents have also a strong influence on their children network of friends (MacDonald and Parke, 1984; Brown et al., 1993; Rubin and Sloman, 1984). Therefore, biased parents may make wrong and/or ineffective decisions even if they have good intentions.

In this paper, we study if parents have a biased representation of their children network of friends, and what are the possible consequences of this bias. Think for instance to the choices related to education: parents choose the neighborhood where to live and what school or kindergarten to enroll their children (Aronson, 1998); parents also choose (or influence) extra school activities (Ladd and Pettit, 2002) and give advice about who to be friend with (Keijsers et al., 2012; Mounts, 2002). We also know that in choosing the school for their children, parents attach more importance to the peer group rather than to the good management of the schools (Willms and Echols, 1992): expected peers effects influence parents' decision about the school sometimes more than school's curricula or teacher quality (Holme, 2002; West and Varlaam, 1991; Gewirtz et al., 1995). Lai et al. (2009) show that children's school outcomes can be negatively affected by the poor choices their parents make during the school selection process.

Thus, if parents are biased, their decisions may be biased too: parents may have a biased perception of the peer effects on school achievements, overestimating or underestimating them.²

Our paper reports four main results. First, we show that the network reported by children and the network reported by parents systematically differ. Second, we provide evidence that the network reported by children more likely approximates the *true* network, since it exhibits a higher degree of reciprocation. Third, we show that the network reported by parents is biased, and this can occur if parents of low-performing students report their children to be friends of high-performing students, since they expect peer effects on school achievement to be stronger than what they really are. Fourth, using numerical simulations we show that when the parents' bias is combined with a bias on how some children target friends, there is a multiplier effect on the expected school achievement, with these two biases reinforcing each other and distorting the expectations of parents.

In our study, we decided to focus on this particular age range for two reasons. First, the young age of our sample allows us to capture the most important network of friendship in the child's life: children of this age spend most of their day at school (from about 8.30 to 16.30 in our sample)³ and the network of friends they have at school is the only one they have. Second, we think that the difference between the network reported by children and their parents should be the smallest. In fact, for children of this age, parents are (more) aware of whom their children are interacting with and they are actively involved in the development of friendships (organizing their children extra school activities or arranging the meetings with other children outside the school time).

The remainder of this paper is organized as follows. Section 2 provides a description of the dataset and Section 3 discusses the differences between the self-reported and the parent-reported networks, providing evidence that the first one is close to the true network. Section 4 analyses why parents may have a bias in knowing their children's friends, both proposing a model and results from empirical tests. Some robustness checks to exclude alternative explanations for the bias are performed in Section 5. Section 6 analyzes the bias on peer effects perception due to parents' biased perception of the network. Section 7 discusses policy implications and concludes.

¹ The measurement of parental knowledge has been operationalized in many different ways (e.g., some studies measure it as actual knowledge while others as perceived knowledge) and measured on the basis of the information reported by parents, child or both; see Patock-Peckham et al. (2011) and Stattin and Kerr (2000). For a review see Crouter and Head (2002).

² Peer effects occur when 'the propensity of an individual to behave in some way varies with the prevalence of that behavior in some reference group containing the individual' (Manski, 1993, p. 531), as, for example, in the case of classroom, neighborhood and more in general, many settings characterized by social interactions. The estimation of peer effects on school achievement is one of the most fascinating challenges for the researchers in economics of education (for a discussion see Manski, 1993). Several studies have presented convincing evidence about peer effects across race (Angrist and Lang, 2004), gender (Hoxby, 2000; Lavy and Schlosser, 2011), ability (Sacerdote, 2001) and country of origin of immigrants (Gould et al., 2009). More recent studies have investigated if these results hold when we consider smaller reference groups and they have stressed the crucial role that friendship networks have on peer effects (Babcock, 2008; Carrell et al., 2013; Nathan 2008; Patacchini et al., 2011). This vast literature is however far from been conclusive and the peer effects seem to be of concern first for parents, but also for most of the actors involved in education including policy makers and teachers. Carrell et al. (2013) find that reassigning student groups changes observed peer effects since it changes the social dynamics of the groups themselves; on the same line, Babcock (2008) and Nathan (2008) find that cohorts that have higher connectedness in terms of friendships also have students that have more years of schooling compared to other students in the same school. Patacchini et al. (2011) show that peer effects in education are not only strong but also persistent over time, with the most relevant peers represented by the friends people make in grade 10–12, from when they are around 15 years old. In particular, Calvó-Armengol et al. (2009) show that the network structure and the student position within the network is crucial for the intensity of these peer effects.

³ For this reason, most studies on childhood peer relationships are conducted in classrooms, for a review see Gifford-Smith and Brownell (2003).

Download English Version:

<https://daneshyari.com/en/article/883408>

Download Persian Version:

<https://daneshyari.com/article/883408>

[Daneshyari.com](https://daneshyari.com)