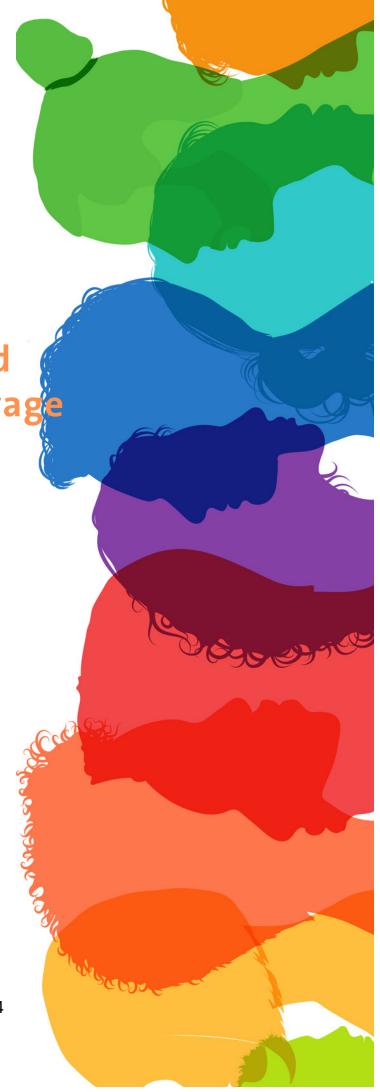


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Social Networks and the Education Cleavage

Delia Zollinger David Attewell



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# Social Networks and the Education Cleavage

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## Social Networks and the Education Cleavage

Delia Zollinger and David Attewell<sup>1</sup>

Abstract Education is widely recognized as structuring emerging political divides between the new left and the far right (Stubager 2009; Häusermann and Kriesi 2015; Abou-Chadi and Hix 2021; Marks et al. 2022). However, there is ongoing uncertainty about the mechanism through which the education cleavage operates, particularly in the absence of mobilizing organizations. We fielded a survey in Germany in October 2022 (to be followed by Switzerland and the UK) to explore the hypothesis that patterns of social segregation by education create social networks which foster common identities, political attitudes, and voting behavior (consolidating key aspects of an emerging cleavage). We offer descriptive evidence that individuals tend to be embedded in educationally-distinct social networks. In turn, our preliminary findings show that network composition in terms of both level and field are associated with social identities, political attitudes, and vote choice, above and beyond individual educational characteristics.

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#### Introduction

Education is widely recognized as structuring emerging political divides between the new left and the far right (Stubager 2009a; 2009b; Häusermann and Kriesi 2015; Maxwell 2019; Maxwell 2020; Abou-Chadi and Hix 2021a; Attewell 2021; Marks et al. 2022). Groups with and without higher education are frequently identified as key winners and losers of structural economic and social transformations (Kriesi et al. 2008; Inglehart and Norris 2019). However, there is ongoing uncertainty around the *mechanism* through which educational differences at the individual level are translated into political cleavages.

Historical accounts of cleavage formation emphasize the central importance of organizations such as unions and religious organizations in mobilizing social groups in political opposition to one another (Lorwin 1971; Rokkan 1977; Korpi 1983; Kalyvas 1998; Bartolini 2000; Bellucci and Heath 2012). While educational divides appear to be durably rooted, they have no clearly identifiable organizational basis.<sup>2</sup> There are no powerful member-organizations which articulate the competing political interests of, for example, the vocationally educated or university graduates. How does education so strongly structure political attitudes and behavior without such mobilizing organizations?

To shed light on this puzzle, we explore the hypothesis that patterns of social segregation by education create social networks which foster common political outlooks. Social networks are crucial sites of political socialization (Zuckerman et al. 2007) and discussion (Minozzi et al. 2020). The composition of social networks can thus reinforce or moderate the effects of social

<sup>&</sup>lt;sup>2</sup> Of course, this is true of other contemporary cleavages beyond education, which persist despite a period of declining participation in civil society, religious, and party organizations (Dalton and Wattenberg 2000). We are thus not the first to turn towards social networks as a mechanism for contemporary cleavages, both in terms of explaining their roots in social structure and their stability over time (see Bornschier et al. 2022).

position on political attitudes and voting behavior and stabilize vote choice over time, processes central to cleavage theory (Lazarsfeld et. al 1948; Santoro and Beck 2017; Lindh et al. 2021). Different education systems might foster homogeneous networks, social closure, and hence more categorical forms of inequality to a similar degree, but through different mechanisms (e.g. through direct or indirect forms of educational stratification).

To test this hypothesis, we have fielded a survey in Germany (to be extended shortly to Switzerland and the UK) to measure the educational composition of individuals' networks, and the effects of such networks on individuals' social identities, political attitudes and voting behavior. This paper first offers a theoretical rationale for why the education cleavage has emerged across very different skill regimes, and then sets out analyses from our German survey. These preliminary results offer tentative evidence of social closure between education groups. In turn, educational network composition is associated with attitudes, identities, and voting propensity for radical right and green parties.

#### From Skill Regimes to Schooled Societies

Political economists and sociologists of education have devoted considerable attention to the ways in which national education systems distribute material benefits and social status in sharply divergent ways. Variation in the importance of private education spending creates national differences along the dimension of *decommodification*, while variation in the use of educational tracking differentiates countries in terms of direct *stratification* (Iversen and Stephens 2008; Busemeyer 2014; Thelen 2014; Domina et al. 2017). Taken together, different

clusters across these dimensions constitute distinct skill regimes, with different patterns of socioeconomic inequality.<sup>3</sup>

Nonetheless, the education cleavage is remarkably widespread in developed democracies, emerging to encompass countries in all skill regimes (Marks et al. 2022: 7, 9). Differences in political attitudes by education are at least as strong as those by social class, and are fairly consistent across wealthy democracies (Kalmijn and Kraykaamp 2007). Educational divides have also become less correlated from those related to traditional definitions of social class in terms of their political effects. In the mid-20<sup>th</sup> century, education and income were strongly correlated in their effects on political behavior, with higher education associated with voting for parties of the right and lower education associated with voting for parties of the left (Gethin et al. 2022: 16). Today, this pattern has reversed in almost all developed democracies (Ibid: 18; Abou-Chadi and Hix 2021). Given that education has emerged as a powerful predictor of political behavior, why has this occurred across institutional contexts which create educational categories and affect educational (and downstream labor market) outcomes?

As a starting point, there is a well-developed literature which puts forward competing mechanisms linking education to political attitudes and voting behavior. Some researchers argue that education itself socializes students into a certain set of social and political perspectives, either directly via classroom instruction (Stubager 2009: 329-332; Gelepithis and

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<sup>&</sup>lt;sup>3</sup> Liberal regimes combine higher levels of private spending with low levels of educational stratification and little employer involvement in providing skills (e.g. the U.S., the U.K., Australia, Ireland, New Zealand), statist regimes have low levels of private spending and little educational stratification (e.g. Sweden, Norway, Iceland, Finland), collective regimes feature low amounts of private spending but strong employer involvement in developing skills (e.g. Germany, Austria, Switzerland, and Denmark), while mixed regimes combine various aspects of each of the other clusters (Busemeyer 2014: chapter 3).

<sup>&</sup>lt;sup>4</sup> Exceptions such as Ireland and Portugal appear not to share institutional features of their education system along these dimensions. Busemeyer (2014: 129) attributes Ireland's lower tertiary educated share to brain drain, while Gethin et al. (2022: 19) ascribes the lack of a strong education cleavage in both countries to late industrialization.

Giani 2017; Cavaillé and Marshall 2019) or through interactions with classmates (Mendelberg et al. 2017). Alternatively, the impacts of variation in educational attainment on economic outcomes could lead to "allocation effects" which sort individuals into different groups after education is complete (Stubager 2009: 333; Marshall 2016; Bullock 2020). In contrast, other scholars use panel data to argue that education effects on political attitudes such as support for/opposition to immigration (Lancee and Sarrasin 2015) and European integration (Kuhn et al. 2016) are based on *selection into* education. This evidence suggests individuals do not become more cosmopolitan over the course of their education; they instead self-select into or out of education largely on the basis of the socio-structural characteristics of their parents. Those who pursue higher education tend to have educated parents and are socialized into a more cosmopolitan value structure, and vice-versa.

Each of the above mechanisms theorized to link education to political attitudes could imply some degree of educationally distinct social networks. Socialization explanations assign a central role to the educational background of parents or to classmates in school, while allocation effects imply that education will sort people into educationally homogenous networks due to their occupational trajectories, wealth, and lifestyles (Blossfeld 2009: 518-519). Geographical sorting of educational groups in increasingly knowledge-based economies – notably high-skilled workers clustering in core cities – may further reinforce the educational homogeneity of social networks (Iversen and Soskice 2019). All of these mechanisms may be jointly at work: recent evidence based on panel data from the Netherlands is consistent with the notion that sorting into education, education itself, and related work experiences later on in life all contribute to shaping voting preferences on a new left/far right divide, leading to political divergence between educational groups over the life course (Hooghe, Marks, and

Kamphorst 2022.) We thus explore the hypothesis that patterns of social segregation by education create social networks which foster common political outlooks.

Mass educational expansion has occurred across skill regimes. The strong legitimation of educational inequalities by institutions understood as meritocratic has left stark divides in subjective social status and feelings of societal recognition between the non-tertiary and tertiary educated (Kuppens et al. 2015; Van Noord et al. 2019). Socioeconomic transformations such as the transition to the dual breadwinner household model and the rise of income inequality have coincided with rising levels of *educational homophily* and *educational assortative mating*—the tendency for individuals to associate with and form relationships/marriages with those with a similar level of education (Blossfeld 2009; Smith et al. 2014; Mijs and Roe 2014). Skill regimes which differ in fundamental ways may thus offer distinct pathways to the formation of educationally homogenous networks of friendship, marriage, and association.

Social networks should matter politically because they are crucial sites of political socialization (Zuckerman et al. 2007) and political discussion (Minozzi et al. 2020). The composition of social networks can thus moderate or reinforce the effects of individuals' social position on their attitudes and voting behavior, and anchor vote choice across successive elections (Lazarsfeld et. al 1948; Santoro and Beck 2017; Lindh et al. 2021). In this vein, researchers studying the effects of social class on politics have found that the class background of individuals' parents and the class composition of one's neighborhood, workplace, and social networks more generally are linked to class identity and subjective "images" of class conflict,

<sup>5</sup> Meanwhile, status differences between those with lower and middle levels of education—historically stark in collective skill regimes in sharp contrast to liberal regimes—have diminished (Ibid).

attitudes towards redistribution, party identification, and vote choice (e.g. Parkin 1967; Stephens 1979; Lindh et al. 2021; Paskov and Weistanner 2022; Ares and Van Ditmars 2022).

In societies with high levels of tertiary education, individuals' attitudes and voting behavior may vary according to the composition of their educational networks, regardless of the skill regime in which they live. We can think of the educational composition of social networks along two different dimensions. Traditionally, literature on the education cleavage has focused on the *level* of education, which speaks both to education's role as a status divide and to the length of exposure to socialization in educational settings (Stubager 2009; Marks et al. 2022). Levels of educational attainment are consistently negatively associated with radical right voting and positively associated with universalistic attitudes and voting for new left parties (Stubager 2009; Stubager 2010; Häusermann and Kriesi 2015).

However, a growing body of literature also argues that *field* of education has different effects on political socialization—a degree in business (or having parents or friends with a degree in business) does not expose individuals to the same normative environment as a degree in sociology (Ladd and Lipset 1975; Van de Werfhorst and Kraaykamp 2001; Van de Werfhorst and de Graaf 2004; Damhuis 2020; Hooghe, Marks, and Kamphorst 2022). Using a Bourdieusian framework, Damhuis (2020: 209) aggregates education fields into categories of degrees which cultivate general/theoretical cultural capital (e.g. art, humanities, teacher training, science/mathematics/etc., social and behavioral sciences) from those which focus on applied cultural capital (e.g. technical and engineering, economics and business, public order and safety, law and legal services). Educational fields associated with general/theoretical cultural capital are more closely linked to voting for new left and particularly green parties, while educational fields associated with applied cultural capital are more closely linked to

voting for parties of the right and radical right. Relatedly, others have focused on educational degree's so-called CECT content – whether they reward economic/business or cultural/artistic expertise, and whether they are communicative or technical – showing that people with cultural-communicative education tend to be to the left of and more progressive than those with more economic-technocratic education (Van de Werfhorst and de Graaf 2004; Hooghe, Marks, and Kamphorst 2022).

Building on this literature and combining it with a cleavage perspective, we expect that the educational composition of voters' social network will be associated with their group identities (H1), political attitudes (H2), and vote choice (H3). In other words, if education indeed to some extent does what churches and unions used to do by way of facilitating group formation, we would expect educational networks to relate not just to the political expression of a cleavage opposing the new left and the far right (i.e. to voting), but to the attitudes associated with it, as well as to a sense of group identity and social closure along group boundaries (Bartolini and Mair 1990, Bornschier et al. 2021). Our hypotheses hence encompass a deeply sociological understanding of contemporary educational divides centered on group formation, rather than an instrumental one focused on the individual.

Hypothesis 1 (identities): Individuals with more educationally homogenous social networks will be more likely to share identities with others with their level (field) of education.

Hypothesis 2 (political attitudes): The political attitudes of individuals with more educationally homogenous social networks will more likely to share political attitudes with others with their level (field) of education on a given item.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> This means that we expect individuals with low (high) levels of education in more homogenous social networks in terms of level of education to be more pro (anti) redistribution, more negative (positive) in terms of deservingness perceptions, and more negative (positive) towards immigration, the EU, and gender equality.

Hypothesis 3 (vote choice): Low (high) education individuals or those with a background in applied (general/theoretical) fields of education in homogenous social networks will have a higher predicted probability of voting for radical right (green) parties, relative to their counterparts in educationally diverse social networks.

#### Survey

#### Case selection

We fielded the survey in October 2022 in Germany, are in the process of cleaning and analyzing data from surveys fielded in Switzerland and the UK. The goal is twofold. First, we aim to cover a range of different skill regimes (liberal in the UK, coordinated in Germany and Switzerland). Second, we seek to include in our sample countries where new left versus far right opposition – and hence, supposedly, also group formation – varies in terms of strength and consolidation. Switzerland is an example of a consolidated, socially-structured, and highly polarized divide between the new left and radical right (Zollinger 2021; 2022). By comparison, the consolidation of a new cleavage is less advanced in Germany and the UK.

Independent variables: network composition

Lindh et al. (2021) use two complementary forms of measurement to assess the class segregation of social networks, which we repurpose to study educational segregation. The "name generator" method asks the respondent to name the friends and acquaintances with whom they spend the most time in their leisure time, which we adapt to record their level and field of education (Ibid: 7)<sup>7</sup>. We ask for three to four such strong ties, which our survey data indicates closely approximates the median number of four close friends respondents report having. This allows us to generate variables containing the number of strong ties respondents have to individuals in each educational level and field.

<sup>&</sup>lt;sup>7</sup> We further ask about close contacts' gender, age, occupation, proximity in residence, and supposed party preference.

In analyses so far, we have operationalized network composition in terms of education level by measuring the mean education level among reported strong ties. To distinguish respondents' educational network field composition, we assign each strong tie reported from the name generator a CECT-score which classifies fields according to a dimension running from *economic-technical* (e.g. commerce, engineering) to *cultural-communicative* (e.g. pedagogy; arts) fields of education, using data from Hooghe et al. (2022: Appendix pp. 5). We then take the mean CECT score of the respondents' 3-4 reported strong ties.

The "position generator" method asks respondents to report if they have a friend, acquaintance, family member, or relative in different occupations, which were selected so as to also map onto different levels and fields of education (Ibid: 6).8 These items can be used to generate variables containing the number of weak ties respondents have to individuals in each educational level and field. In combination, these two methods allow us to measure the educational composition of the respondent's social networks, including both weak and strong social ties. We are still in the process of coding the position generator variables, so the pre analyses below will draw only on the strong ties measures represented by the "name generator" method.

#### Dependent variables: social identities

Collective identities are the glue which cleavage theorists argue connect social groups in conflict with one another to stable patterns of vote choice. Along these lines, there is some evidence that individuals with different levels of education have education-based group identities (Stubager 2009; Kuppens et al. 2015). More generally, objective differences

<sup>8</sup> Asking more directly about social ties – including looser ones – in educational categories would have felt less natural here, and such questions would supposedly have been harder to respond to.

<sup>&</sup>lt;sup>9</sup> One potential complication is that education-based status orders are seen as *legitimate*. Ergo those with lower levels of education face stigma, and may well seek alternative categories of identification (such as "down-to-earth" people or nationals) to maintain self-esteem (Kuppens et al. 2015; Bornschier et al. 2021). Given this possibility, we measure respondents' closeness to other kinds of groups and can analyze the effects of educational composition of social networks on the articulation of other group identities (Bornschier et al. 2021).

between educational groups have been shown to translate more indirectly into antagonistic notions of group belonging, e.g. into subjective differences between national versus cosmopolitan group belonging, ''down-to-earthness'' versus ''open-mindedness'' etc. (Bornschier et al. 2021; Zollinger 2022).

To shed light on the relationship between collective identities and the educational composition of social networks, we include items which tap the closeness of respondents to an array of different groups including field and level-based education groups (specifically, we rely on a reduced battery of the identity items from Bornschier et al. 2021). As a measure of social closure, we further include a battery of items asking how comfortable respondents would feel talking politics with or dating people of different field and level-based education groups. Lastly, to get a more general sense of whether people can place educational groups politically, we ask them to assess different educational profile's preferences on immigration and redistribution.

#### Dependent variables: political attitudes

The second set of dependent variables tap how the educational composition of social networks is associated with attitudes along different attitudinal dimensions relevant to the education cleavage. We include a battery of questions related to attitudes towards redistribution and deservingness perceptions (Marshall 2016; Bullock 2020; Gelepithis and Giani 2020; Attewell 2021), as well as attitudes towards immigration, the EU, and gender roles more strongly associated with the socio-cultural dimension (Stubager 2010; Dolezal 2010; Cavaillé and Marshall 2019; Dancygier 2020; Abou-Chadi et al. 2021).

Dependent variables: vote choice

The final set of dependent variables regards vote choice. We collect information on prospective

vote choice and propensity to vote (PTV) for all parties. Of particular theoretical interest is

prospective vote choice/PTV for new left or radical right parties, which form the poles of the

education cleavage (Stubager 2010; Dolezal 2010; Hooghe and Marks 2018; Attewell 2021;

Marks et. al 2022). In the German context, the Greens are the most prominent example of a

new left party, while the AfD represents the radical right pole.

Additional Items and Controls

We also collected information for individuals' education level and field, as well as their

parents' and partners educational and occupational background, in addition to the standard

battery of controls including income, occupation, rural/urban location, work status, migration

background, age, gender, and religious attendance.

**Modelling** 

To model the effects of social networks on individuals' position within the education cleavage,

we regress measures of respondents' network composition on our dependent variables,

controlling for respondents' own level (field) of education, their father's level (field)10 of

education, age, gender, household income, and rural-urban location. 11 Dependent variables

tapping identities and attitudinal variables are all continuous variables ranging from 0-10,

which we predict using OLS regression. Vote choice is operationalized dichotomously using

<sup>&</sup>lt;sup>10</sup> Given the collinearity between father's education, mother's education, partner's education and respondent's education described in the results section below, we do not introduce them all into our models simultaneously.

<sup>&</sup>lt;sup>11</sup> Some other key controls we plan to include are individual income and occupation, but we have yet to clean these variables.

logistic regression (with 1 being the Greens or radical right AfD and 0 being all other parties or non-voting), or continuously (propensity to vote scores from 0-10) using OLS.

#### Results

Describing the Segregation of Education Networks

Figures 1a and 1b display the mean education level and CECT score of individuals' social network by respondent's education—a rough way of visualizing the educational homogeneity of social networks. Network means represent the mean education level or CECT of the three to four strong ties listed by the respondent in the name generator method. Both paint a similar picture— individuals with different levels and fields of education on average have networks which look similar to their own level and field of education and statistically significantly different from respondents whose educational profiles differ.

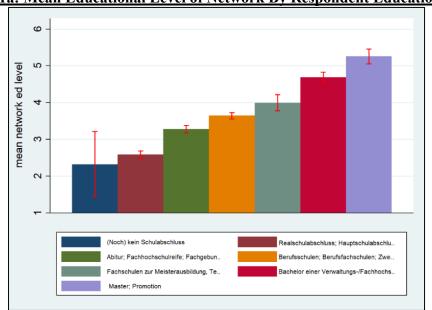


Figure 1a: Mean Educational Level of Network By Respondent Education Level

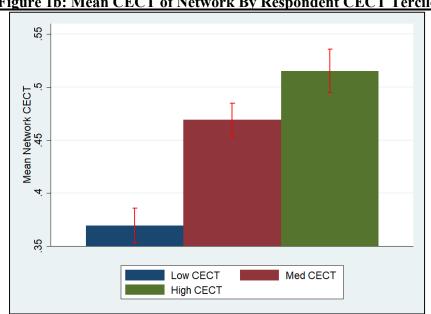


Figure 1b: Mean CECT of Network By Respondent CECT Tercile

The correlation matrices found in Tables 1 and 2 below show that the mean field (level) composition of respondents' social networks, respondents' own (field) level of education, parents' (field) level of education, and partner's (field) level of education, are all closely interrelated. Correlations are markedly stronger for education level relative to CECT, but it is noteworthy that there is still a moderately strong correlation between respondent's CECT and the mean CECT of their networks. Overall, this underlines the intergenerational persistence of educational trajectories, as well as educational homophily in both partnerships and the wider social network, already indicating that mechanisms of social closure are at work.

Table 1: Correlations Between Respondent's Education Level and Education of Close Ties	Table 1: Correlations	Between Respon	ndent's Educatio	n Level and	Education of	Close Ties
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	Mean Ed. Of Network	Resp. ed.	Fathers' ed.	Mother's ed.	Partner's ed.
Mean Ed. Of Network	1.00				
Resp. ed.	.60	1.00			
Fathers' ed.	.41	.38	1.00		
Mother's ed.	.39	.27	.56	1.00	
Partner's ed.	.52	.45	.37	.34	1.00

Table 2: Correlations Between Respondent's CECT and CECT of Close Ties

	Mean CECT	Resp.'s	Father's	Mothers'	Partner's
	Of Network	CECT	CECT	CECT	CECT
Mean CECT Of	1.00				
Network					
Resp.'s CECT	.34	1.00			
Father's CECT	.16	.14	1.00		
Mothers'	.09	.01	.16	1.00	
CECT					
Partner's CECT	.09	.01	.09	.01	1.00

#### Education Networks and Social Identities

Our social identity items captured the extent to which respondents felt close to ten different social groups from 0-10. For the sake of parsimony, we summarize the results of each OLS regression model in Table 3 below.

Of particular interest, having a more highly educated network on average is associated with greater feelings of closeness towards university degree holders, but not with lesser feelings of closeness towards vocational degrees. The opposite is true for network CECT, which is associated on average with feeling less close to those with *vocational degrees*, but not feeling closer to *university graduates*. In terms of the rural/urban divide, network education level is associated with feeling close to *urban people*, but not feeling less close to *rural people*. Higher network CECT is associated with feeling less close to *rural people* but not feeling closer to *urban people*. Higher network education level – but not network CECT – was further associated with closeness to *cosmopolitans*. *Feminists* were the only group for which both network education level and network CECT were statistically significantly positively associated. Interestingly, this can be seen as the most explicitly political group identity that we asked about.

Finally, our two measures of education networks had no relationship to feeling close to Germans, people with a migration background, people of humble means, and wealthy people,

at least controlling for individual's and father's education. Results for the former two groups were surprising and perhaps evidence of social desirability bias, while the latter two may be more strongly associated with income and class than with education.

Table 3: Predicted Closeness to Social Groups by Educational Network Composition

	Mean Network Ed Level	Mean Network CECT Level
People with university degrees	+	0
People with vocational degrees	0	-
Cosmopolitans	+	0
Germans	0	0
Urban people	+	0
Rural people	0	-
Feminists	+	+
People with a migration background	0	0
People with humble means	0	0
Wealthy people	0	0

<sup>+:</sup> positive and statistically significant at the p<.05 level, -: negative and statistically significant at the p<.05 level, 0: not statistically significantly related. Cells summarize model results controlling for individual education level/CECT, father's education level/CECT, age, gender, household income, and rural-urban location.

# Education networks and social prejudice

We find little evidence that people are more uncomfortable talking politics with or potentially dating someone on the basis of their education level or field. The lone exception was network CECT being negatively associated with willingness to date *people with a vocational degree in commerce/business*.

#### Education Networks and Political Attitudes

Similarly, for parsimony's sake, we summarize the results of our OLS models using our network measures to predict political attitudes. In Table 4, we see that network composition in terms of both higher level and CECT is associated with more liberal attitudes towards immigration and gay adoption, controlling for individual characteristics and parental background. A more highly educated social network also appears to be associated with preferences for education spending (most directly related to the conflict, policy-wise, and an item representative of preferences for *social investment* more generally). There is a more mixed picture for issues related to economic egalitarianism—both higher network education levels and network CECT are negatively associated with the perception that social benefits burden the economy, but have no association with attitudes towards income differences or childcare spending.

**Table 4: Predicted Political Attitudes by Educational Network Composition** 

	Mean Network Ed Level	Mean Network CECT Level
Immigration is bad for DE	-	-
Benefits burden economy	-	-
Unemployed people don't	-	0
try to find a job Income differences should be small	0	0
State should spend more on childcare	0	0
State should invest more in	+	0
public higher education Gay couples should be able	+	+
to adopt  No more need for policies	-	0
against gender discrimination		

<sup>+:</sup> positive and statistically significant at the p<.05 level, -: negative and statistically significant at the p<.05 level, 0: not statistically significantly related. Cells summarize model results controlling for individual education level/CECT, father's education level/CECT, age, gender, household income, and rural-urban location.

#### Education Networks and Vote Choice

We first briefly describe some descriptive evidence linking the composition of social networks to party politics. Appendix Figure A1 shows that individuals report discussing politics with their close ties. Though the frequency of political discussion decreases monotonically with the order the contact was mentioned in, a majority of respondents report talking about politics at least sometimes with all four close contacts. Appendix Figure A2 shows that a large minority of respondents report not knowing who their close contacts would vote for. Nonetheless, those with higher education are more likely than those with lower levels of education to have close contacts they believe to be green, FDP, or CDU supporters, and less likely to have close contacts they believe to be AfD supporters or non-voters. In sum, we have initial evidence that the educational composition of networks form a part of the everyday political contexts in which individuals are embedded.

We now test whether network composition is associated with vote choice, under statistical controls. Figure 3a shows the predicted propensity to vote for the Greens across the range of network education, while Figure 3b below shows the same for network CECT.<sup>12</sup> Both show a clear trend—at the 10<sup>th</sup> percentile of network education level and CECT the self-reported propensity to voting green is estimated at around 3.5/10, while at the 90<sup>th</sup> percentile it is around 5/10.

4.7

<sup>&</sup>lt;sup>12</sup> Specifically, the x-axis shows the network measure at the 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup> percentile.

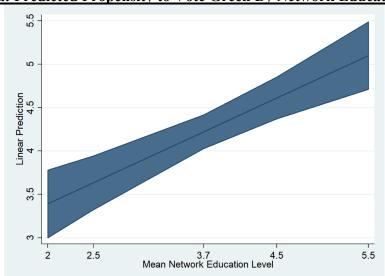
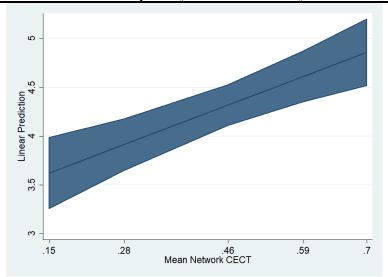


Figure 3a: Predicted Propensity to Vote Green By Network Education Level

Figure 3b: Predicted Propensity to Vote Green By Network CECT

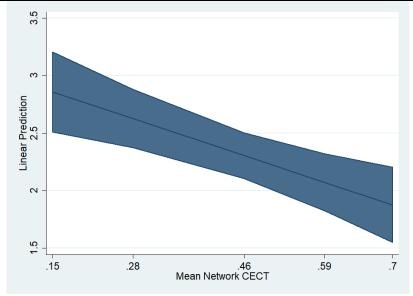


Figures 4a and 4b display the predicted self-reported propensity to vote for the AfD across the range of mean network education level and network CECT, under controls. We see a clear trend in the opposite direction. Respondents with networks with a low mean education level or low mean CECT are predicted to have a disproportionately higher propensity to vote AfD on

average at about 3/10, while this is estimated to fall to about 2/10 at high levels of mean education or CECT.

Figure 4a: Predicted Propensity to Vote AfD By Network Education Level





#### **Discussion and Conclusion**

In sum, we find preliminary evidence consistent with H1, H2, and H3. Individuals are embedded in educationally-distinct social networks. In turn, network composition in terms of both level and field appear to be associated with social identities, political attitudes, and vote choice, above and beyond individual educational characteristics. In extending our survey to the

UK and Switzerland, our original data aims to shed light on how the education cleavage has emerged across different institutional contexts.

Understanding the political effects of social networks is also relevant to one of the broader puzzles of contemporary cleavage formation; the persistence of socially structured divides in politics in the absence of strong civil society organizations. The power of homogenous social networks to strengthen and stabilize attitudes and mobilize voters harkens back to the study of classic cleavages. Yet it also offers a potential explanation for the structural rootedness of contemporary political conflict, even in the absence of strong organizational participation.

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## **Appendix A: Political Discussion and Association Among Close Ties**

**Appendix Figure A1: Reported Frequency of Political Discussion Among Close Ties** 

