Changes in late adolescents' voting intentions during the election campaign: Disentangling the effects of political communication with parents, peers, and media

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Published in European Journal of Communication:

Šerek, J., & Umemura, T. (2015). Changes in late adolescents' voting intentions during the election campaign: Disentangling the effects of political communication with parents, peers, and media. European Journal of Communication, 30(3), 285-300.

http://dx.doi.org/10.1177/0267323115577306

This version is an original submission to the journal with revisions after peer review accepted by the editor.

Abstract

This article investigates the effects of political discussions with parents, political discussions with peers, and exposure to political news during an election campaign on the voting intentions and behaviour of first-time voters. Longitudinal data collected in the Czech Republic is employed in the main analysis (N = 223). Results show that young people who frequently discuss politics with their peers are characterized by higher voting intention and subsequent electoral participation. On the other hand, political discussions with parents and exposure to political news have no such effects. Furthermore, although it does not have an impact on voting intentions, more frequent political discussions with parents predict increased frequency of political discussions with peers. Overall, our results underscore the importance of peers in late adolescents' political socialization.

Keywords: First-time voters, political discussions, political news, political socialization, voting intention.

Introduction

Compared to previous generations, today's young people are less engaged in conventional political participation, such as voting (Norris, 2003; Putnam, 2000). A clear cut example is that in the Czech Republic, only one half of 14-year-olds indicate their future voting in national election (Kerr et al., 2010). Although the lower voter turnout among young people might be partially compensated by their greater involvement in unconventional activities, such as demonstrations (Norris, 2003), it still poses a problem if a large part of young generation does not participate in the selection of political representatives and governmental policies. This trend is troublesome particularly because fundamental political habits and attitudes are formed during this young age and often remain stable over the course of a lifetime (Krosnick and Alwin, 1989; Sears and Levy, 2003). Therefore, it is important to understand how young individuals develop their voting intentions and what factors influence their actual voting behaviour.

Previous studies have found that young people's intentions to participate in politics are strengthened by personal involvement in political discussions with parents (e.g., Zukin et al., 2006), their political discussions with peers (e.g., Ekström and Östman, 2013), and their exposure to political news in media (e.g., Pasek et al., 2006). Because the effects of political communications are particularly strong during election campaigns (Valentino and Sears, 1998), it is expected that individuals who have been exposed to these three socialization agents during a pre-election period are more likely to intend to vote, compared to people who have not. In addition, it has been suggested that these forms of political communication with different socialization agents are positively associated with each other (Amnå et al., 2009; McLeod, 2000; McLeod and Shah, 2009). For instance, the effect of exposure to political news on political participation is mediated by interpersonal political discussions, during which participatory intentions are developed (e.g., Cho et al., 2009; Shah et al., 2005). However, some processes still remain unclear. Specifically, more evidence is needed on whether parents or peers are more important agents for young persons' development of voting intentions during an election campaign. In addition, it is unclear whether young individuals' political discussions with their parents provoke their later political discussions with peers or vice versa. Similarly, little is known about whether following politics in the media stimulates political discussions with parents, peers, or both. To better understand the developmental processes of voting intentions in young people during political campaigns, this study employs panel data from first-time voters, questioned three months before, several days before and one month after a national election in the Czech Republic.

The effects of political discussions and media on youth political participation

Involvement in political discussions plays an important role in youth political socialization. Previous research has consistently shown that young people who discuss politics with others are more likely to participate in politics and civic organizations, compared to those not involved in political discussions (McIntosh et al., 2007; Richardson, 2003; Zukin et al., 2006). However, since most of the above-mentioned evidence comes from cross-sectional studies, the causality of these associations has been occasionally questioned (e.g., Amnå et al., 2009; McLeod, 2000). To understand whether young persons' involvement in political discussion results in their greater political participation or whether young people who are already active in politics tend to discuss politics, several longitudinal and quasi experimental studies have been conducted more recently (Klofstad, 2007; 2010; Lee et al., 2013; Shah et al., 2005). The results of these studies have supported the causal link from young individuals' political discussions to an increase in their subsequent political participation. Thus, taking part in political discussions seems to have consequences for political participation in youth.

There are several reasons why involvement in political discussions leads to greater political participation. First, taking part in political discussions brings about a greater likelihood that others will persuade a person to participate (Gerber and Green, 2000; Green et al., 2003; Teorell, 2003). Second, through political discussions, people learn about political attitudes and behavioural intentions that are present in their social environment. In turn, those who perceive a supportive atmosphere for political participation are likely to engage in political activity (Glasford, 2008; Glynn et al., 2009). Finally, by discussing politics with others, individuals gain greater knowledge about politics (Eveland et al., 2005; Eveland and Thomson, 2006), which has been regarded as an important resource for facilitating political participation (Glasford, 2008). For instance, greater knowledge about the electoral system, candidates and their political programs – all of which can be gained through political discussions – may increase individuals' motivation to vote.

Besides, many studies have found a positive relation between exposure to political news in the media (e.g., Internet, television, newspaper) and political participation of young people (Bakker and de Vreese, 2011; Pasek et al., 2006; Quintelier and Vissers, 2008). However, in terms of enhancing political participation, exposure to political news may be a *less* important factor than political discussions. Previous studies revealed that personal conversation increased citizens' voter turnout more strongly than did direct mails and telephones (Gerber and Green, 2000; Green et al., 2003). The authors of these studies found that face-to-face persuasion (e.g., personal conversation) is more effective for boosting citizens' political participation than non-face-to-face forms of persuasion. Since political discussions occur during face-to-face communications, whereas exposure to political news does not, political discussions may be more efficacious than exposure to political news as a way to increase political participation of the youth.

Discussions with parents versus peers

Regarding the effect of political discussions on participation, a question arises about with whom a person discusses politics. In research on political socialization, parents have been considered to be the main socialization agents (e.g., Gallatin, 1980; Jennings, 2004; Sears, 1975). However, as young people move from adolescence to adulthood, parental influence on adolescents generally diminishes, which is accompanied by spending less time with parents and developing greater personal autonomy (Arnett, 2006; Smetana, 2011). Simultaneously, adolescence is characterized as an important developmental period in which individuals learn about egalitarian communication styles through their interactions with peers. In these peer interactions, adolescents acquire dispositions that are relevant to their political participation, such as understanding moral concepts of reciprocity and equality (Piaget, 1965), a sense of collective political efficacy (Beaumont, 2010), and trust in their fellow citizens (Flanagan, 2003). Moreover, young people also often prefer to discuss politics with peers than with adults. For instance, research that involved qualitative interviews with young political activists found that young activists stress the importance of political socialization in their peer groups while being critical of adults' attempts to structure their political development (Gordon and Taft, 2011). Thus, discussing politics with peers may be more important than discussing politics with parents in terms of the effect on first-time voters' political participation.

Although previous studies have separately demonstrated that political discussions with parents (e.g., Zukin et al., 2006) and peers (e.g., Klofstad, 2007) are linked to political participation, few studies have examined these two types of discussions simultaneously. Hence, a unique contribution of political discussions with each social agent (i.e., parents and peers) to young persons' political participation remains unclear. For instance, Richardson (2003) studied parental and peer discussions; however, because she analysed them separately, the unique contribution of political discussions with parents versus peers was not tested. Lee et al. (2013) distinguished between discussions with peers and discussions with *adults outside the family*, but did not measure the frequency of discussions with *parents* in their study. McDevitt and Kiousis (2007), in their longitudinal analysis, showed the effects of political discussions with parents on adolescents' voting, and of political discussions with peers on adolescents' political protest; however, they did not assess both types of discussion in one common model. The most evidential comparison of parental and peer discussions comes from Eström and Östman (2013), who showed that several civic outcomes, including expected formal political participation, were more strongly related to civic talk with peers than civic talk with parents in 13- to 17-year-old students. However, their findings were limited by their use of cross-sectional data and their focus on expected (not actual) political participation. Therefore, our study aims to overcome these limitations by employing longitudinal design and measuring actual political behaviour to analyze the effects of political discussions with parents versus peers.

Interrelations among political communications with different socialization agents

Moreover, the causal order, in which interactions with one socialization agent provokes interactions with another, still needs to be fully comprehended (McLeod, 2000; McLeod and Shah, 2009). Recent studies have shown that the exposure to political information outside the family context (e.g., schools) can motivate young people to initiate political discussions with their parents (McDevitt and Chaffee, 2000; McDevitt, 2006; Saphir and Chaffee, 2002). However, these studies focused on younger adolescents who were not eligible to vote and who might be more inclined to approach parents, compared to older adolescents. Moreover, it is not sure whether the effect works in the opposite direction as well; young people's political discussions with their parents can serve as "playgrounds," in which young people practice their abilities to hold political discussions before they start to discuss politics in more public settings (Kiousis et al., 2005; McDevitt and Chaffe, 2002). The positive effect of adolescent-parent political discussions on adolescents' involvement in political discussions with peers was shown in the study conducted by Kiousis et al. (2005). However, the cross-sectional design of their study renders it unable to provide convincing evidence on the causality between parental and peer discussions. Thus, one unique contribution of our study is to examine the causal order in which political discussions with parents and peers occur, using longitudinal data.

Furthermore, the causal order between exposure to political news in media and political talk has been a subject of interest in the recent years. Several studies have shown that the effect of exposure to political news on greater political participation is only indirect, mediated by greater involvement in political discussions with others, as well as by interactive online messaging with others (Cho et al., 2009; Lee et al., 2013; Shah et al., 2005; Shah et al., 2007). This model, referred to as a *citizen communication mediation model*, suggests that informational uses of media stimulate interpersonal political communication, through which participatory intentions are formed; however, it is not clear whether informational media use stimulates political discussions with parents or peers. Most studies guided by the citizen communication mediation model focus on adult populations (Cho et al., 2009; Shah et al., 2005; Shah et al., 2007) and therefore do not include discussions with parents in their studies. Although one study employed adolescents (ages 12-17), it did not include political discussions with parents (Lee et al., 2013). A study by McDevitt (2006) showed that exposure to political news motivated middle-school adolescents to initiate political discussions with their parents; yet, political discussions with peers were not explicitly examined in his study. Moreover, older adolescents might tend to address their parents less frequently than do younger adolescents. Thus, the present study examines whether exposure to political news in media longitudinally influences late adolescents' involvement in political discussions with parents, peers or both.

The present study

This study aims to investigate the effects of young people's involvement in various forms of political communication on their political participation. More specifically, our overarching goal is to understand how first-time voters' intentions to vote and actual voting behaviours change during a pre-election period as a consequence of their political discussions with parents, political discussions with peers, and exposure to political news in media. This goal encompasses three specific questions. First, previous research has not conclusively differentiated between the effects of parental and peer political discussions; therefore, we examine whether changes in voting intention and voting are induced by political discussions with parents or with peers (expecting a greater impact of peers). Second, the causal order between political talk with parents precedes political talk with peers, or vice versa. Finally, previous research has suggested that following politics in the media stimulates one's greater involvement in political talk, but political discussions with peers and parents have not been differentiated from each other; therefore, we examine how exposure to political news affects political talk when discussions with parents and peers are considered separately.

Method

Participants and procedure

We employ a subset of data from a larger panel study conducted in the Czech Republic. This study was originally designed to examine changes in late adolescents' sociopolitical attitudes, Internet use and personal relationships over a one-year period. Participants completed online questionnaires five times within one year (i.e., February, May, June, October, and December, 2010). Since the national parliamentary elections were held at the end of May 2010, the present study uses pre-election data from February (T1) and May (T2) as well as post-election data from June (T3). Recruited participants were in their third and fourth years of Czech secondary education, which usually lasts four years and is completed at the age of 19. Because Czech citizens gain the right to vote in national elections at the age of 18, our participants were potential first-time voters. A stratified multistage random sampling method (i.e., districts, schools, classes) was used to obtain e-mail contacts of 1,000 young people living in the South Moravian region. After being contacted via e-mail, 657 persons confirmed their willingness to participate in the study, and 479 participated in the first wave of data collection. Out of these participants, 21% lived in a big city (with a population about 400,000), while 79% lived in smaller towns and villages; 52% students were from academically oriented grammar schools, while 48% were from vocationally oriented secondary schools. Overall, the data collection was affected by sample attrition as some participants dropped out the study or did not participate in all waves of data collection (290 students participated in the second wave; 276 in the third). Ten participants younger than 18 were excluded from all analyses.

For the present study, analyses were conducted based on 223 young individuals (73% women) who participated in the study in both T1 and T2. In these waves, they completed the questionnaires regarding voting intention, political discussions with parents, political discussions with peers, and exposure to political news in media. Out of the 223 participants, 182 young people reported information about their actual voting behaviour at T3.

However, if participants with some missing data are completely excluded from analyses (i.e., listwise deletion), that can result in biased parameter estimates if the patterns of missing data are not completely random (Enders and Bandalos, 2001). The above-mentioned 223 participants who were included in the main analyses did not differ significantly from the 256 participants who were excluded due to missing data in terms of their urban versus rural backgrounds, but they did differ significantly in terms of their educational track (i.e., a greater proportion of students from vocational schools had missing data). Therefore, we also recomputed our final model using all available data from 454 participants (69% women) who had participated in at least at one wave and completed at least some target measures (missing data were treated by a full information approach; Enders and Bandalos, 2001). Results of all available data are presented in brackets next to the main results.

Measures

Voting intention (T1 and T2). The strength of participants' intention to vote was measured by one question: "A parliamentary election will be held this year to decide on a new government for our country. Are you going to take part in this election?" A three-point response scale (0 = no; 1 = I'm not sure; 2 = yes) was used ($M_{T1}=1.58$, $SD_{T1}=0.67$; $M_{T2}=1.67$, $SD_{T2}=0.66$).

Political discussions with parents (T1 and T2). Participants were asked one question: "In the last month, how often did you discuss political issues with your parents?" A five-point response scale (0 = never; 1 = once a month; 2 = several times a month; 3 = several times a week; 4 = daily or almost daily) was employed ($M_{T1}=1.58$, $SD_{T1}=1.09$; $M_{T2}=1.86$, $SD_{T2}=1.16$).

Political discussions with peers (T1 and T2). Involvement in political discussions with peers was measured by one question: "In the last month, how often did you discuss political issues with your friends or classmates?" The response scale was the same as the one used for parental discussions (M_{T1} = 1.90, SD_{T1}= 1.07; M_{T2} = 2.11, SD_{T2}= 1.10).

Exposure to political news in media (T1 and T2). The frequency of exposure to political news was measured with regard to three types of media: 1) TV or radio, 2) newspaper or journals, and 3) the Internet. Specifically, the question was as follows: "In the last month, how often did you follow political news on TV or radio?" The same questions were asked for newspapers or journals and for the Internet. Five-point response scales were used (0 = never; 1 = less than once or twice a week; 2 = once or twice a week; 3 = three or

four times a week; 4 = daily). A total scale was computed by averaging all three items (Cronbach alphas were .68 at T1 and .74 at T2; $M_{T1}=2.15$, $SD_{T1}=0.85$; $M_{T2}=2.18$, $SD_{T2}=0.92$).

Voting (T3). After the election, participants were asked a dichotomous question about whether they actually voted: "A parliamentary election took place at the end of May. Did you vote?" (0 = no; 1 = yes). Voting turnout in our sample was 80%.

Data analysis

In a preliminary analysis, we tested whether there were any associations between the initial level of voting intention and political communication at T1 and voting at T3. Since the outcome variable was binary, logistic regression models were used.

Next, to examine indirect effects from political communication to voting behaviour, a cross-lagged model depicted in Figure 1 was estimated. Longitudinal paths of voting intention, political discussions with parents, political discussions with peers, and exposure to political news were estimated from T1 to T2. Relations of the same variables between T1 and T2 were controlled as autoregressive paths (*a*), and relations among distinct variables from T1 to T2 were estimated as cross-lagged paths (*b*). In addition, longitudinal paths from the T2 variables to voting behaviour at T3 were estimated. Concurrent correlations among the variables at T1 were freely estimated as well as residual correlations among the variables at T2. Because one of our outcome variables – voting intention – was ordinal, we estimated parameters using a polychoric correlation matrix, which is typically used for analyses with ordinal outcomes (Kline, 2011; Muthén and Asparouhov, 2002). A weighted least square estimator with mean- and variance-adjusted χ^2 statistic (WLSMV) was used because of its robustness to eventual non-normal distributions of the data.

--- Figure 1 ---

Results

Descriptive statistics

Bivariate correlations between study variables are presented at Table 1. Many participants intended to vote during the pre-election periods and actually went to vote. Specifically, at T1, 68% (n = 152) of participants intended to vote, 22% (n = 49) were undecided, and 10% (n = 22) intended not to vote. At T2, 78% (n = 173) of participants intended to vote, 12% (n = 26) were undecided, and 11% (n = 24) intended not to vote (5 participants did not answer this question at T2). At T3, 80% (n = 145) went to vote, whereas 20% (n = 37) did not.

Voting intentions between T1 and T2 were moderately correlated (r = .57). The correlation between voting intentions at T1 and actual voting at T3 was also moderate (r = .49), and the correlation between voting intentions at T2 and actual voting at T3 was strong (r = .80).

As expected, correlation analyses also showed that voting intentions as well as actual voting behaviour were positively linked to greater involvement in political discussions with parents and with peers, and to a higher frequency of exposure to political news in media (see Table 1).

--- Table 1 ---

Preliminary analysis

A greater likelihood of voting was strongly predicted by having a positive voting intention at T1. Over and above the effect of voting intention, a greater likelihood of voting was predicted by a greater frequency of discussions with peers, but not by discussions with

parents or exposure to political news (see Table 2). Hence, our results implied that some forms of political communication (particularly political discussions with peers) were positively associated with voting behaviour.

--- Table 2 ----

A cross-lagged model predicting voting intention and voting

The estimated model showed a good fit to the data ($\chi^2_4 = 2.17$, p = .70; CFI = 1.00; RMSEA = 0.00 [$\chi^2_4 = 2.71$, p = .61; CFI = 1.00; RMSEA = 0.00]). As presented in Table 3, autoregressive paths (*a* paths in Figure 1) of participants' voting intentions, political discussions with parents, discussions with peers and the frequency of exposure to political news were all significant between T1 and T2. Their standardized coefficients were all moderate to strong (i.e., ranged from .40 to .56 [from .39 to .56]), suggesting that these variables were relatively stable from T1 to T2.

--- Table 3 ---

Regarding voting intentions and behaviour, changes in voting intentions at T2 were positively predicted by the frequency of political discussions with peers at T1, but not by political discussions with parents or by exposure to political news at T1 (see Table 3). Young individual's voting intentions at T2 strongly determined participants' actual voting behaviour at T3, but political discussions (both with parents and with peers) and exposure to political news at T2 had no additional effect on voting behaviour at T3 (see Table 3). To assess whether young people's political communications at T1 had indirect effects through their voting intentions at T2 on their actual voting behaviour at T3, 95% confidence intervals of standardized indirect effects were examined. Regarding political discussions with peers, 95% confidence intervals of standardized indirect effect were from 0.09 to 0.42 [from .11 to .40], suggesting that political discussions with peers at T1 predicted increased voting intentions at T2, which turned into actual voting at T3. In contrast, political discussions with parents (95% standardized CI from -.03 to .31 [from -.02 to .29]) and exposure to political news (95% standardized CI from -.07 to .25 [from -.10 to .21]) had no indirect effect on actual voting.

Relations among political discussions and exposure to political news

In the model, although involvement in political discussions with parents did not induce changes in voting intentions, discussions with parents at T1 were found to predict more frequent political discussions with peers at T2. Besides, political discussions with parents at T1 marginally predicted a higher frequency of exposure to political news at T2. On the other hand, political discussions with peers did not predict more frequent political discussions with parents or more frequent exposure to political news at T2. Exposure to political news did not predict political discussions with parents or peers (see Table 3).

Discussion

This study of first-time voters revealed three important findings. First, first-time voters' intentions to vote are predicted by political discussions with their peers but not with their parents during an election campaign. Next, although political discussions with parents are not directly related to changes in voting intention, they predict political discussions with peers. Finally, exposure to political news in media does not predict changes in late adolescents' voting intention or in their political discussions during a pre-election period.

In line with our expectations, the results showed that political discussions with peers before the election were associated with young people's enhanced voting intentions, which in turn increased their voting turnout, whereas political discussions with parents did not have such effects. There are at least three complementary explanations for these discrepant findings regarding peer and parental discussions. First, previous studies have suggested that political discussions enhance individuals' voting behaviours in multiple ways. For example, during political discussions, people can directly persuade each other (e.g., Green et al., 2003; Gerber and Green, 2000), perceive social support for their voting (Glasford, 2008; Glynn et al., 2009), and increase their political knowledge (Eveland et al., 2005; Eveland and Thompson, 2006). Although all of these aspects appear in political discussions with both peers and parents, transitions from adolescence to adulthood are characterized by the decreasing influence of parents on adolescents' socio-political orientations (Arnett, 2006; Vollebergh et al., 2001). At the same time, peer relationships gain growing importance in this life period (Fraley and Davis, 1997; Kobak et al., 2007). Thus, for late adolescents, peer discussions are more likely than parental discussions to have substantial impacts on their voting behaviours. Specifically, late adolescents may accept their friends' political ideas more readily than their parents', and take political information from peers as more valid than such information from their parents.

Second, the impact of peer political discussions might be because young individuals prefer to discuss politics with peers who encourage their voting, rather than with peers who do not. Although adolescents tend to make relationships with peers who are attitudinally similar to themselves, they also prefer to establish contacts with peers from whom they can learn and gain new insights (Kerr et al., 2003; LaFontana and Cillessen, 2002). Applying this idea to the political domain, we suppose that young individuals may be likely to discuss politics with those peers who have above-average positive attitudes regarding politics in order to engage with more relevant and intriguing ideas. Such friends are, in turn, likely to give direct persuasion, positive attitudes, and additional political information to young individuals – all of which enhance voting. In contrast, since most adolescents have the same parental figures throughout their lives and parents tend to have stable attitudes toward voting (Krosnick and

Alwin, 1989; Sears and Levy, 2003), no selection among alternative discussion partners is possible and the influence of parents on adolescents' voting may be quite stable.

Finally, political discussions with peers and parents might be characterized by different prevailing communication patterns related to future political participation. Specifically, previous studies on family communication have differentiated between socioand concept-oriented communicational dimensions (e.g., Chaffe, McLeod and Atkin, 1971). The former dimension entails sustaining harmony, deferring to authority, and avoiding controversy. Due to the lack of free exploration, socio-oriented communication is not expected to be an ideal circumstance for young people to increase their interests in politics. On the other hand, the latter dimension is characterized by free exchange of ideas and exposure to controversy and disagreement, and is expected to be positively related to political interest (Hively and Eveland, 2009). From this perspective, it is possible that political discussions with peers entail more concept-oriented and less socio-oriented features than political discussions with parents. In general, parent-adolescent interactions are characterized by greater asymmetry and avoidance of controversy than peer-adolescents interactions. For example, in comparison to peers, parents often prefer to explain their own views over listening adolescent's views (Hunter, 1985); conflicts with parents, compared to those with peers, involve greater coercion and negative affect afterward (Adams and Laursen, 2001); and adolescents avoid discussing controversial issues with their parents more than with their peers (Moore and Rosenthal, 1991). Consequently, young people might perceive political interactions with peers as more intriguing and stimulating, which can have positive impact on their voting intention.

Although our study found no significant longitudinal effect of parental discussions on young people's voting intention during the three-month *short-term* pre-election period, it is possible that political discussions with parents may in the long run still have effects on adolescents' voting intentions. In fact, we found positive correlations between these variables. Previous studies have shown that young people who grow up in a politicized family environment (i.e., in which parents engage in political activities and discuss politics in their family) have a greater tendency to learn political values and habits that support political participation (Plutzer, 2002; Zukin et al., 2006). However, these socialization processes usually proceed gradually over a long period of time, not within short time periods, such as the one captured in this study. In contrast to our findings on the effects of political discussions with peers, family discussions may have a more *gradual* effect on young people's voting intentions, whereas peer discussions may have a more *immediate* effect.

Moreover, we found that political discussions with parents lead to more frequent political discussions with peers. This finding supports the idea that political discussions in the families serve as "playgrounds" where young people may develop their political opinions and practice their discussion skills before initiating discussions in other contexts (Kiousis et al., 2005; McDevitt and Chaffe, 2002). Moreover, family is a more protected place in which parents play the role of a secure base from which their children confidently explore to learn about the world (Bowlby, 1982). Therefore, through political talk with parents, young people may develop self-confidence and political competences that are necessary in order to initiate political discussions with parents may not be the arenas where young people primarily develop their participatory intentions, but parental discussions seem to serve as a safe realm within which young people may develop the confidence to participate in more public political discussions.

Surprisingly, our study found no effect of late adolescents' exposure to political news during the pre-election period on their voting behaviour. This finding seems to contradict the findings of previous studies that a positive relation exists between exposure to political news in various media and political participation among young people (Bakker and de Vreese, 2011; Pasek et al., 2006; Quintelier and Vissers, 2008). However, these studies were crosssectional; hence, they could suggest only associations but not causal effects between exposure to political news and participation. In contrast, one recent longitudinal study showed no causal effect between adolescents' exposure to political news in newspapers, on television or online and their political participation (Lee et al., 2013), which is consistent with our findings. Thus, it is possible that both exposure to political news and political participation arise from some common characteristics of adolescents, such as their political interest, but they do not affect each other. Moreover, exposure to political news is a passive form of media use; however, several studies have shown that more *active* media uses predict political participation in young people. For instance, Quintelier and Vissers (2008) found that the strongest predictor of adolescents' political participation, among various online activities, was their forwarding of political e-mails. Similarly, the above-mentioned study by Lee et al. (2013) showed that adolescents' online active political messaging (i.e., expressing their political views through emails, text messages, Web links or social networking sites) predicted their political participation. Hence, we believe that adolescents' media use may have a causal link to their voting intentions, but this effect applies to active rather than passive forms of media use.

Several limitations should be mentioned in regard to this study. First, voting intentions and political communications were measured at only two time points before the election. Taking measurements at more times would strengthen the evidence on the studied effects and their directionality. Second, we measured only the frequency of political discussions and political media use; however, other characteristics of these political communications might be relevant too, such as who initiated the discussions, what communication patterns dominated in the discussions, and whether political media were used passively or actively. Third, our sample included only first-time voters who attended

secondary education; it did not include those who had not gone to secondary school and were working or unemployed. Compared to students, young workers and the unemployed might belong to and communicate with relatively different peer networks, and thus political discussions with peers may have different effects on these groups. Therefore, our results should be generalized only carefully to non-student youth.

The major strength of this study consists in its utilization of longitudinal data. Based on this approach, we were able to find that political discussions with peers not only were associated with voting intentions and behaviour but also predicted their changes during the pre-election period. Likewise, we were able to identify that political discussions with parents led to increased frequency of political discussion with peers. Compared to cross-sectional designs, our longitudinal analyses provided much stronger evidence for causal links from political discussions to voting behaviour. Yet, more precise factors of political discussions that are supportive of voting intentions as well as broader community-related predictors of political discussions still need to be explored in future studies. At the same time, our results draw attention to the fact that the impact of exposure to political news in media on adolescents' political participation might be overestimated by studies that use only crosssectional data. For further research in this area, employing longitudinal and (quasi)experimental designs would be highly desirable.

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Tables and figures

	1.	2.	3.	4.	5	6.	7.	8.
1. Voting intention T1								
2. Discussions with parents T1	.24							
3. Discussions with peers T1	.23	.37						
4. Exposure to political news T1	.24	.39	.47					
5. Voting intention T2	.57	.30	.33	.27				
6. Discussions with parents T2	.30	.46	.22	.23	.25			
7. Discussions with peers T2	.26	.34	.49	.27	.30	.53		
8. Exposure to political news T2	.35	.37	.34	.65	.35	.42	.43	
9. Voting T3	.49	.21	.34	.24	.80	.20	.32	.27

Table 1. Bivariate correlations.

Note. Ns = 223, except Voting T3 (N = 182). All correlations were significant at the .01 level.

Table 2. Logistic regression analysis predicting voting at T3.

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Predictors	В	SE	OR	95% CI for OR		
Voting intention T1	1.46	0.31	4.32**	2.37; 7.86		
Discussions with parents T1	0.13	0.23	1.14	0.73; 1.78		
Discussions with peers T1	0.68	0.26	1.97**	1.19; 3.27		
Exposure to political news T1	0.00	0.33	1.00	0.52; 1.93		
$100 \text{ D} 100^{2} \text{ O} 1/0^{2}$	0 0 11	20 AT 11	1 \			

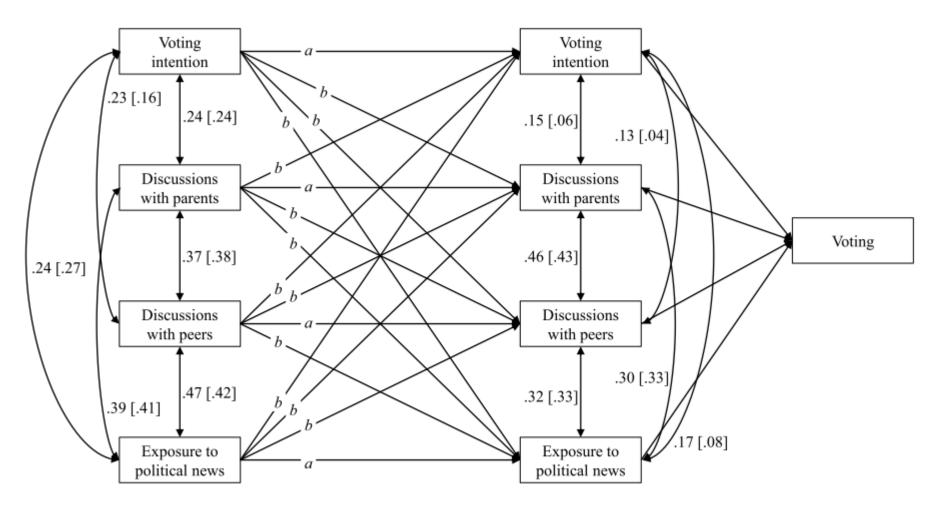
Note. N = 182. Pseudo $R^2 = .24$ (Cox & Snell), .38 (Nagelkerke).

	В	SE	β
Voting intention T2			
Voting intention T1	0.97 [0.98]	0.16[0.15]	.47**[.49**]
Discussions with parents T1	0.18[0.18]	0.11[0.11]	.14[.14]
Discussions with peers T1	0.33[0.33]	0.12[0.11]	.26**[.27**]
Exposure to political news T1	0.14[0.09]	0.14[0.13]	.09[.06]
Discussions with parents T2			
Voting intention T1	0.33[0.32]	0.11[0.10]	.19**[.19**]
Discussions with parents T1	0.43[0.40]	0.06[0.06]	.41**[.39**]
Discussions with peers T1	0.02[0.05]	0.07[0.07]	.02[.05]
Exposure to political news T1	0.02[-0.01]	0.08[0.08]	.02[.00]
Discussions with peers T2			
Voting intention T1	0.22[0.29]	0.09[0.10]	.13*[.18**]
Discussions with parents T1	0.16[0.15]	0.06[0.06]	.16**[.15*]
Discussions with peers T1	0.41 [0.41]	0.06[0.06]	.40**[.41**]
Exposure to political news T1	-0.01 [0.01]	0.08[0.09]	01[.00]
Exposure to political news T2			
Voting intention T1	0.27[0.27]	0.08[0.08]	.19**[.20**]
Discussions with parents T1	0.09[0.05]	0.04[0.04]	.10*[.06]
Discussions with peers T1	0.00[0.05]	0.05[0.06]	.00[.06]
Exposure to political news T1	0.61 [0.60]	0.06[0.06]	.56**[.56**]
Voting T3			
Voting intention T2	2.77 [2.31]	0.95[0.56]	.98**[.95**]
Discussions with parents T2	-0.47 [-0.14]	0.45[0.32]	14[05]
Discussions with peers T2	0.48[0.29]	0.37[0.29]	.14[.10]
Exposure to political news T2	-0.30[-0.19]	0.35[0.31]	07[05]

Table 3. Predictors of voting intention, discussions with parents, discussions with peers, and exposure to political news at T2, and voting at T3.

Note. ** p < .01. * p < .05. Coefficients predicting voting intention T2 and voting T3 are probit regression coefficients.

Figure 1. Longitudinal path model predicting voting.



T1

T2

Т3