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Citation for the original published paper (version of record):

Dahl, V. (2017)

Reducing Adolescents' Approval of Political Violence: The Social Influence of Universalistic and Immigrant-Friendly Peers.

Zeitschrift fur Psychologie mit Zeitschrift fur angewandte Psychologie, 225(4): 302-312

<https://doi.org/10.1027/2151-2604/a000298>

Access to the published version may require subscription.

N.B. When citing this work, cite the original published paper.

Permanent link to this version:

<http://urn.kb.se/resolve?urn=urn:nbn:se:oru:diva-63378>

Reducing Adolescents' Approval of Political Violence: The Social Influence of Universalistic and Immigrant-Friendly Peers

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Abstract

This study examines the role of peers in adolescents' development of universalistic values and positive sentiments toward immigrants, and the extent to which a network of more universalistic or immigrant-friendly peers can reduce approval of violent political means among adolescents. Using longitudinal data on 997 adolescents, the study employed a social network approach to examine these aspects. Results showed no peer influence and peer selection effects for how adolescents develop universalistic values but that peers transfer positive immigrant sentiments to other adolescents over time and also that adolescents tend to select peers with similar sentiments toward immigrants. In addition, whereas peers' positive sentiments toward immigrants were found not to reduce adolescents' approval of violent political means over time, such a reducing effect was found for universalistic values. However, further studies are needed to better understand the role of peers with regard to mechanisms underlying adolescents' development of political orientations.

Keywords: violent political means, universalism, positive immigrant sentiments, social network analysis, adolescents

Introduction

Nowadays, citizens all over Europe express more intolerant and anti-immigrant attitudes than they did few years ago. Evidence of spreading intolerance comes from the recent European parliamentary elections (European Parliament, 2014), which show increasing support for far-right parties with anti-immigrant policies (Mudde, 2013). This rise in intolerance has led to a harsher political climate. Irrespective of position on the ideological left-right continuum, inflexible ideological opinions have gone hand-in-hand with violent and illegal political confrontations and protests (Flyghed, 2013; Hjerm, 2005). Given that the teenage years are a period when influences from peers seem to peak (Berndt, 1982; Buhrmester & Furman, 1987), adolescence is a suitable period for examining: 1) the role of peers in adolescents' development of universalistic values and positive immigrant sentiments and, 2) the extent to which influences from a more universalistic and immigrant-friendly network of peers can reduce adolescents' approval of violent political means.

Peer influence and selection

Social learning theory states that people's political orientations are products of influences from significant others (Bandura, 1977; Côté & Erickson, 2009). These influences may be the result of political discussions, attempts to conform to a social norm, or the imitation or reinforcement of one another's attitudes and behaviors (Kandel, 1978; Knoke, 1990). Usually, scholars interested in the extent to which young people influence each other turn to adolescent-peer similarities. If adolescents become more similar to their peers over time, it is suggested that this is the result of peer influence (Veenstra, Dijkstra, Steglich, & Van Zalk, 2013). The idea is that political discussion or reinforcement of attitudes or behaviors will, over time, make

adolescents more similar to their peers with regard to certain specific attributes. In short, the argument is that peer influence can explain adolescents' development of political orientations.

When empirically examining peer influence effects, it is crucial also to study the process of peer selection. Peer selection is an alternative process, which suggests that adolescent-peer similarities are present not because of peer influence, but because people tend to find new friends among those with similar attitudes and behaviors (Byrne & Nelson, 1965; Lazarsfeld & Merton, 1954). Several explanations are given to why people tend to appreciate the company of similar others. Uncertainty reduction theory, for example, suggests that people tend to befriend similar others because such friendships make communication easier and more predictable (Berger & Calabrese, 1975). The reinforcement-affect hypothesis suggests that similarities attract because it is likely that they will reinforce the opinions and attitudes associated with personal contentment (Clore & Byrne, 1974). Hence, in cases where adolescents develop political orientations in parallel with their peers, the similarities between them can be a result of either peer influence or peer selection, or of both.

That similarities attract is a widespread observation that applies to many different behaviors (for a review, see McPherson, Smith-Lovin, & Cook, 2001). Cross-sectional studies have considered practices where influences from social networks have been found to be important sources of positive views on immigrants (Harell, 2010). However, by virtue of their cross-sectional nature, these studies do not permit any conclusions to be drawn about whether attribute-similarity in a social network is the effect of influence or selection. In addition, when longitudinal data have been used to study the role played by peers (Meuleman, Davidov, & Billiet, 2009) in enhancing immigrant sentiments over time, peer selection processes have not been examined (for an exception, see Van Zalk, Kerr, Van Zalk, & Stattin, 2013). Therefore, to

adequately study the role of peers in adolescents' development of political orientations, there is a need to disentangle influence and selection processes. To accomplish this, research needs to use longitudinal data, and to model peer influence and selection effects simultaneously.

Previous research on universalism, immigrant sentiments, and approval of violent political means

The first concern of this study is universalistic values. In general, values have been understood as abstract, basic motivations that function as guiding principles for people's behaviors. Universalistic values are self-transcendent, and refer to the extent to which people are prepared to move beyond themselves and their own needs (Schwartz & Boehnke, 2004). Similarly, the motivational goal of universalistic values involves "understanding, appreciation, tolerance, and protection for the welfare of *all* people and for nature" (Schwartz, 1994, p. 22). Research has shown that young adults report similar levels of universalism as their peers (Steca, Monzani, Greco, & D'Addario, 2012). However, the cross-sectional nature of their data prohibited from examining whether the resemblances were due to peer influence or selection.

The second aspect under consideration is positive sentiments toward immigrants. Attitudes are generally conceptualized as having evaluative, affective, and cognitive components. Attitudes can be expressed as tendencies to favor or disfavor a particular object, and, because of their proximity to the object, attitudes are more specific than values (Olson & Zanna, 1993). This study follows the line of thinking that emphasizes that positive and negative sentiments toward immigrants should be understood as separate dimensions (Van Zalk et al., 2013). This is because, whereas positive sentiments toward immigrants derive from abstract, pro-democratic considerations of equality, inclusion, and empathetic concerns, anti-immigrant

sentiments, by contrast, stem from perceptions of difference that are rooted in fear (Hjerm, 2005; Paluck & Green, 2009). Empirically, cross-sectional studies have shown that adolescent-peer similarities in sentiments toward immigrants (Kuhn, 2004) and also peer network diversity are important for developing positive sentiments toward immigrants (Côté & Erickson, 2009; Harell, 2010). Using longitudinal data, research has also shown that adolescents with a more immigrant-friendly peer network will become more positive toward immigrants over time (Van Zalk et al., 2013). In sum, peers are important for how positive sentiments toward immigrants develop, and these sentiments should be understood in terms of a distinct concept that refers to tendencies to favor immigrants based on abstract notions of equality and inclusion.

The third aspect is approval of violent political means. Approval of violent political means entails that some people will consider using violence to try to achieve political goals (Kuhn, 2004). Studies show that individuals with radical political opinions, such as having a violent-disposing political agenda, tend to isolate in small groups (Bosi & della Porta, 2012; McCauley & Moskalenko, 2008). And membership of a potentially inaccessible social group has implications for how approval of violent political means develop. Additionally, mid-adolescence is the time when peers' influence can be expected to be most important (Berndt, 1982; Buhrmester & Furman, 1987) and approval of violent political means most prevalent (Watts, 1999). For instance, prior research has found that universalistic values inhibit violent behavior in adolescence (Knafo, Daniel, & Khoury-Kassabri, 2008). Generally, however, there is a lack of knowledge about how values and attitudes within peer networks affects adolescents' preferences for violent political action. To examine this further, this study will explore the extent to which adolescents' approval of violent political action can be reduced by a more universalistic or immigrant-friendly peer network.

Finally, education, gender, immigrant status, and socioeconomic status (Borgonovi, 2012; Hjern, 2005; Kuhn, 2004) have previously shown to impact the aspects reviewed above. Therefore, all examined models in this study controlled for these features for both adolescents and peers.

Research hypotheses

As mentioned above, both universalistic values and positive sentiments toward immigrants are linked to substantive principles of democracy, and can therefore be expected to be at odds with a preference for political violence. The premise of this study is therefore that adolescents with a more universalistic or immigrant-friendly peer network should be influenced by their peers, and thereby become less eager to approve of violence as a political means over time. Beyond their similarities, universalistic values and positive sentiments toward immigrants also differ in two important regards. First, whereas values are higher-order evaluations used to legitimize decisions and behaviors across many situations, attitudes are specific and closely related to certain phenomena (Roccas & Sagiv, 2010). This values-attitudes relation is highlighted in one well-established conceptual model of how values and attitudes are linked: values are located before attitudes, and, in turn, attitudes before behaviors, in a hierarchical value-attitude-behavior model (Homer & Kahle, 1988). Second, values are relatively stable over time (Döring, Daniel, & Knafo-Noam, 2016), but attitudes, at least weak attitudes, are more susceptible to change (Erber, Hodges, & Wilson, 1995). In this study, the hypotheses are motivated by three suppositions: 1) both universalistic values and positive sentiments toward immigrants have a pro-democratic character, 2) values are further away from behaviors than attitudes, and 3) values are less likely to change over time. Hence, following this reasoning, and

with the ambition further to clarify the processes of peer influence and selection, this study examines the following specific hypotheses:

Hypothesis 1a: adolescents in more universalistic peer networks will become more universalistic over time.

Hypothesis 1b: adolescents in more immigrant-friendly peer networks will become more immigrant-friendly over time.

Hypothesis 2a: adolescents in more universalistic peer networks will become less prone to approve of violent political means over time.

Hypothesis 2b: adolescents in more immigrant-friendly peer networks will become less prone to approve of violent political means over time.

Finally, a third hypothesis focuses on how influences from more universalistic and more immigrant friendly peer networks can be expected to differ when it comes to adolescents' decreases in approval of violent political means.

Hypothesis 3: As values are more abstract, basic motivations compared with attitudes – which are specific and closer to a certain object than values – the rationale of the hierarchical value-attitude-behavior model suggests that adolescents in more immigrant-friendly peer networks are more likely to become less disposed to approve of violent political means over time than adolescents in more universalistic peer networks.

Method

Participants and procedure

Participants were adolescents from a Swedish city of about 135,000 inhabitants. The targeted city is similar to the national average on income, population density, and unemployment

rate. Only the proportion of young inhabitants (15–24 years) with foreign background in the city was slightly higher than the national average (24% vs. 20%) (Statistics Sweden, 2014). The data comprised the questionnaire responses of all students in grade 11 at Time 1 and grade 12 at Time 2 in three schools from annual assessments gathered in 2011 and 2012 collected for the database of the Political Socialization Program (PSP) (Amnå, Ekström, Kerr & Stattin, 2009). The schools were selected to capture adolescents of different socioeconomic and ethnic backgrounds. This resulted in a sample of adolescents from households where parental income ranged from 10,000 to more than 60,001 SEK, and where 22.7% of respondents had at least one parent born outside the Nordic countries. The study targeted 997 adolescents on the first measurement occasion and 916 on the second (response rates: T1=81.0%; T2=81.8%). The final network comprised adolescents who participated in at least one measurement ($N=997$; 50.6% girls; $M_{\text{age T1}}=17.6$; $SD=.7$).

The data collections took place during school hours, were administered by trained research assistants, and were approved in advance by the Regional Ethics Board in Uppsala. No teachers were present during the data collections, and participants were informed about the items in the questionnaire and that their taking part in the study was voluntary. Participants received no individual reward for participation, but each class received a reimbursement of approximately 100 EUR.

Measures

Approval of violent political means. This measure was created within the project for the purpose of assessing adolescents' approval of violence as a means to exert political influence. The stem question read: "What is your opinion concerning breaking rules to change societal

matters? If I think that something is wrong...” Respondents were asked to choose between three response options: 1 “I will stay within the law. The Swedish law declares what is right. We must stick to decisions we make together. If something should be changed, that should be done within the boundaries of the law (T1 = 48.9%; T2 = 47.9%),” 2 “I can consider breaking the law. If decisions taken by politicians are wrong, then it is right to break the law. I will consider breaking the law if needed (T1 = 43.9%; T2 = 48.6%),” and 3 “I can consider breaking the law even if other people get hurt. When the law is completely wrong, drastic means are sometimes necessary (T1 = 7.2%; T2 = 3.6%).” For the upcoming stochastic actor-based model, a binary variable was created with the first and second categories merged into one category (0), and the third category – measuring approval of violent political means – in the other category (1).

Universalistic values. Universalistic values were measured using a shorter and altered version of Schwartz’s (1994) universalism values inventory. The stem question for this scale was: “How important is the following to you?” Respondents answered on a five-point Likert scale 1 “not at all important” to 5 “very important” to five statements about universalism. Examples of items: “a peaceful world, free from war and conflict,” “social justice, fighting injustice, and caring about the less fortunate in society,” and “equality, equal opportunity for all.” The items were averaged to create a mean index (T1: $M=4.21$, $SD=.67$, $\alpha=.82$; T2: $M=4.17$, $SD=.67$, $\alpha=.84$).

Positive sentiments toward immigrants. This measure assessed adolescents’ positive sentiments toward immigrants (Van Zalk et al., 2013). The stem question read: “What are your views on people who have moved here from other countries?” Thereafter, respondents rated four statements on a four-point Likert scale 1 “don’t agree at all” to 4 “agree completely”: “Our culture is enriched when people from other countries move here,” “In the future Sweden will be

a country that offers exciting encounters between people from different parts of the world,” “Having people moving to Sweden is good for the Swedish economy,” and “We should welcome people who have fled from problems in the countries they come from.” Also for this measure, the items were averaged to create a mean index (T1: $M=2.75$, $SD=.69$, $\alpha=.78$; T2: $M=2.79$, $SD=.69$, $\alpha=.78$).

Peer nominations. Adolescents were asked to identify up to eight peers that they hang out with in school: “At most schools there are groups of young people that hang out, talk, and do things together. Write below the first and last names of those you hang out with at school the most.” Siblings and romantic partners were not excluded from these nominations. However, structural zeros were used to indicate instances where adolescents nominated a peer outside their own school. Previous research has employed similar measures with good results (Van Zalk et al., 2013).

Education. Parents’ highest level of formal education was measured on an ordinal five-point scale ranging from 1 “less than nine years of school” to 5 “college/university”. The responses of mother and father were combined to create a joint measure of parental education ($M=4.02$, $SD=.91$, $r=.38$).

Immigration status. Respondents’ immigration status was measured by assessing the birth country of their parents. Adolescents with both parents born in Sweden or in a Nordic country were given the value zero (77.3%); adolescents with one parent born in Sweden or a Nordic country and the other parent born outside were given the value one (5.5%); and adolescents with both parents born outside Sweden or a Nordic country were given the value two (17.2%).

Socioeconomic status. Adolescents’ socioeconomic status (SES) was assessed using five items, such as: “How is the economic situation in your family?” and “Does your family have

more or less money than other families where you are living?” The scale was positively coded so that higher values indicated better SES ($T1\alpha=.83$).

Analytic Strategy

The hypotheses in this study were addressed in stochastic actor-based models using the Simulation Investigation for Empirical Network Analyses (SIENA) computer program (Snijders, 2001). The software provides an opportunity to estimate several effects simultaneously in a single model. A simultaneous analysis of this sort is required when aiming to examine whether adolescent-peer similarities on an attribute are due to peer influence or selection, or both.

The strength of SIENA is that it provides the possibility to examine the potential of peer influence and selection processes simultaneously while also controlling for additional effects that might explain why adolescents and peers report similarities in the attributes under consideration. If peer influence is present, this shows by adolescents having acquired, at T2, attributes more similar to what their peers reported at T1. If selection is present, this shows by adolescents, at T2, nominating peers with similar (or the same) attributes to themselves. Due to the simultaneous simulation that characterizes the SIENA software, the effects examining influence and selection will give indications of how to best understand the process by which adolescents develop their social network and their political orientations.

Commonly when addressing network dynamics, an actor making a decision is labelled an *ego* and an actor affected by such a decision is labelled an *alter*. The stochastic actor-based model handles binary or ordinal discrete variables only, which is why the indices created for universalism and positive sentiments toward immigrants were recoded into ordinal four-category variables. Moreover, SIENA assumes continuous time-development, which means that changes

in network and behavior dynamics are presumed to occur in unobserved micro-steps, or states, between observed measurements which emanate from each actor within the network and are simulated as changes in either an actor's social network or as changes in the attribute in question. The simulation is an iterative process which, at each micro-step, provides one random actor the opportunity to adjust their social relations or their attributes. At any such opportunity, an actor has the option to: 1) nominate a new friend (create a new tie) or unfriend someone (break a tie to another network member), 2) increase or decrease on the attribute in question, or 3) make no changes in their social relations or attributes. Each actor in the network may thereby: choose new peers, be the potential peer choice of others, be a peer who influences, and be a peer who is influenced by someone else. All these four roles can be analyzed simultaneously which provides the possibility to disentangle processes of peer influence and selection. In essence, the analysis uses the observed data on both the network configuration and the studied attributes at Time 1 and Time 2 to simulate the most probable choice that each actor would make when given the opportunity. Readers interested in additional model description and specification are referred to Snijders, Steglich, and colleagues (Snijders, 2001; Veenstra, et al., 2013).

There are several ways to model influence in SIENA. This study examined how the average level of an attribute (universalism, positive sentiments toward immigrants, and approval of violent political means) in an adolescent's peer group at T1 was adopted by that adolescent at T2; so called *average alter effects*. As adolescent-peer similarities can also be the result of selection, selection effects of the same attributes were also entered into the model. To ensure that influence and selection effects were not confounded, these influence and selection effects were controlled for adolescents' background characteristics (education, gender, immigration and socioeconomic status). Additionally, to examine tendencies of adolescents with peers, who are,

on average, higher in universalism or positive sentiments toward immigrants, to decrease in approval of violent political means over time the analysis also modeled a *universalism average alter effect* and a *positive sentiments toward immigrants average alter effect*.

Adolescents' decreases in approval of violent political means can have other sources than adolescents conforming to influences of universalistic or immigrant-friendly peers. Therefore, to be able to accurately interpret the main effect, the model included three additional effects: peers' approval of violent political means, gender, and peer selection. Moreover, the analysis also modeled selection based on adolescents' approval of violent political means (*similar approval of violent political means*). Finally, since adolescents are likely to befriend friends' friends, the model controlled for the extent to which adolescents tended to befriend peers from the same class or school. See Table 4 for SIENA terminology and further interpretation of the effects used in this study.

There were two sources of missing data: item-nonresponse (respondents skipping some items on an otherwise completed survey) and attrition (respondents no longer taking part in the study at the second measurement). The SIENA option of mode and mean imputation was used to deal with missing data (Ripley, Snijders, Boda, Vörös, & Preciado, 2016). Whereas the possibility of incoming and outgoing ties to adolescents who did not attend school by the time of the second measurement was ruled out through the use of structural zeros, outgoing ties to respondents present at the second measurement, but who did not finish school, were treated as missings. Because adolescents could only nominate peers within their own school, structural zeros were used to indicate instances where adolescents attended different schools. By means of this procedure, the three schools could be collapsed into a global network in which all parameter estimates were estimated simultaneously. In addition, the analysis followed the suggestion to

keep, in the network, participants with data from at least one wave of collection (Huisman & Steglich, 2008).

Results

Adolescent-peer similarities

Evidently, irrespective of time-point, peers and adolescents seemed to express quite the same disposition toward universalism ($r=.59-.70^{***}$), sentiments toward immigrants ($r=.71-.74^{***}$), and approval of violent political means ($r=.63-.65^{***}$). Stated differently, adolescent-peer similarities seemed to be present and there was reason to examine these resemblances further.

Social network analysis

Table 1 shows that the average number of peer nominations increased over time (T1: 4.290; T2: 4.369). The peer relation dynamics showed that 27% of the ties present at the second time point were newly formed, 34% had been dissolved over time, and 38% persisted between the first and the second time points. Finally, Table 1 also shows that some adolescents changed in their universalism and their positive sentiments toward immigrants between the two waves (universalism: increasing=28%; decreasing=24%; positive sentiments toward immigrants: increasing=27%; decreasing=22%). The figures show that 17% increased and 19% decreased in approval of violent political means. These are important observations, since they indicate that there are changes in the data that can be analyzed by modelling.

[Table 1 about here]

Peers' role in adolescents' development of universalism and positive sentiments toward immigrants

It is crucial to note that the SIENA framework simulates dynamics in both the adolescents' social network and in the attributes investigated. For this study, this entails that there are four dependent variables subject to simultaneous analysis over the two time points: 1) changes in the peer network, 2) changes in universalism, 3) changes in positive sentiments toward immigrants, and 4) changes in approval of violent political means. Table 2 shows peer selection effects based on positive sentiments toward immigrants ($\hat{\beta}_k = 0.41$, $SE = 0.14$, $p < 0.01$), but not based on universalism ($\hat{\beta}_k = -0.04$, $SE = 0.15$, $p > 0.05$). The coefficients of these selection effects refer to adolescents' tendencies to select others on the basis of their similarity in universalism or immigrant sentiments. Hence, adolescents seem to befriend peers with similar levels of positive sentiments toward immigrants but not with similar levels of universalism.

Table 3 shows effects on over-time changes in the attributional aspects of the social network analysis. The analysis predicts over time increases in positive sentiments toward immigrants among adolescents with, on average, a more immigrant-friendly peer network. Calculating the exponential function of this effect may enhance its interpretation ($\hat{\beta}_k = 0.45$, $SE = 0.15$, $Odds\ ratio = 1.57$, $p < 0.01$). So, when matching two individuals who in all regards are equal, except for the peers of the first individual being on average 1 point higher on the positive-sentiments-toward-immigrants scale, the odds of increasing in positive sentiments toward immigrants compared with no change are 1.57 times higher for the first individual than for the second. There were no indications of such a socialization effect with regard to universalism ($p > 0.05$). Only one of the attributional effects had a significant impact on universalism and positive-sentiments-toward-immigrants dynamics. This was a negative gender effect on

universalism ($\hat{\beta}_k = -0.31$, $SE = 0.10$, $p < 0.01$), which suggests that adolescent girls are more likely than boys to become universalistic over time. In sum, peers seem to function both as socialization agents and as targets for peer selection when it comes to adolescents' positive sentiments toward immigrants. By contrast, the role of peers in adolescents' development of universalism was found to be non-significant.

[Table 2 about here]

The reducing effects of universalistic and immigrant-positive peers on adolescents' approval of violent political means

It was also of interest to examine the extent to which adolescents' approval of violent political means increased if they were surrounded by peers who were more inclined to approve of violent political means. No such effect was detectable (average alter effect, $p > .05$, Table 3). Further, the analysis also modeled whether adolescents' gender had an effect on changes in violent political means. A negative effect of gender ($\hat{\beta}_k = -0.59$, $SE = 0.35$, $p < 0.05$) was present, suggesting that girls are more likely to increase in approval of violent political means over time.

With regard to the role of a more universalistic or immigrant-friendly peer network in adolescents' approval of violent political means, the analysis gives no support for the idea that a more immigrant-friendly peer network reduces adolescents' approval of political violence ($p > .05$). In predicting changes in adolescents' approval of violent political means, the analysis supports the presence of peer influence from more universalistic peers ($\hat{\beta}_k = -1.11$, $SE = 0.62$, $Odds\ ratio = 3.03$, $p < 0.05$). This effect suggests that when matching two individuals who in all regards are equal, except that the peers of the first individual are on average 1 point higher on the

universalism scale, the odds of increasing in approval of violent political means compared with no change are 3.03 times lower for the first individual than the second. Stated differently, the analysis supports the idea that a more universalistic peer network may reduce adolescents' approval of violent political means. Although there was no peer influence effect of positive sentiments toward immigrants, the model analyzed in this study suggests that after taking into account structural and attributional effects, influences from a more universalistic peer network may dampen adolescents' approval of violent political means over time.

[Table 3 about here]

Discussion

This study examined the role of peers in adolescents' development of universalistic values and positive sentiments toward immigrants, and, further, the extent to which more universalistic and immigrant-friendly peer networks can reduce approval of violent political means among adolescents. With regard to Hypothesis 1a, the analysis found that adolescents did not seem to acquire universalistic values via peer influence. Nor did adolescents seem to befriend peers based on universalism. However, the analysis supported peers as a valuable source of adolescents' development of positive sentiments toward immigrants: the analysis reported peer influence effects (Hypothesis 1b) but also peer selection effects based on positive sentiments toward immigrants. Additionally, the analyses also showed that a more universalistic peer network has a potentially reducing effect on adolescents' approval of violence as a means of political influence (Hypothesis, 2a). The results did however not support such a reducing effect of adolescents' approval of violent political means from more immigrant-friendly peer networks

(Hypothesis, 2b). From these findings, it is evident that Hypothesis 3 is not supported. Contrary to initial expectations, compared with adolescents in more universalistic peer networks, adolescents in more immigrant-friendly peer networks were not more likely to reduce their approval of violent political means over time. In sum, the analysis suggests that peers have, on the one hand, a socializing role and function as targets for selection based on positive sentiments toward immigrants. On the other, universalism is highlighted with regard to adolescents' approval of violent political means, where a more universalistic peer network appears to have the ability to dampen adolescents' approval of political violence over time.

In line with prior studies, this study shows that adolescents seem to express similar sentiments toward immigrants as their peers. However, few are the exceptions that examine the underlying processes via which adolescents acquire these attitudes. This study contributes to knowledge in the field by showing that having positive sentiments toward immigrants seems to be something that young people learn from their environment but that adolescent-peer similarities seem to be the result of both socialization and selection. By contrast, the analyses in this study did not support the view that universalistic values are being transferred in the same way. The question is why one and not the other. A likely explanation is that values operate at a different level of abstraction from attitudes (Homer & Kahle, 1988), which makes universalistic values less prone to influence from peers than sentiments toward immigrants. In addition, to possess a universalistic value disposition is to embrace a democratic compass far broader than that entailed by positive sentiments toward immigrants. Hence, compared with having an immigrant-friendly environment, adolescents surrounded by more universalistic peers are likely to be exposed to a wider spectrum of democratic arguments that reject violence as a means of political influence.

Recent European Parliament elections show increasing support for far right-wing parties with anti-immigrant and intolerant policies (European Parliament, 2014). At the same time, xenophobic and anti-immigrant attitudes have increased in most European countries and also, the support that far right-wing parties have acquired over the last decades has changed political discourse and pushed the political agenda and policy ambitions on immigration further to the right (Mudde, 2013). In light of these political changes, the fact that peers are vital to adolescents' development of positive sentiments toward immigrants is an important finding which is in line with the research that treats social norms and peer discussions as imperative for a reduction of intolerance and prejudice (for a review, see Paluck & Green, 2009). In addition, the increasing tendencies of late adolescents to maintain their friendships (Poulin & Chan, 2010), alongside the fact that positive immigrant sentiments constitute a socially valued attitude within the Swedish society (Hjerm, 2005), may explain the findings suggesting that there is a reciprocal influence of positive sentiments toward immigrants among peers in already formed social networks.

Thus, universalistic values and immigrant-friendly attitudes do not develop in a vacuum, and nor does approval of violent political means. Prior research has shown that confrontational political behaviors peak in mid-adolescence, and decline continuously thereafter (Watts, 1999). Such age-related development is associated with how people conform to social norms, and, for the most part, approval of violent political means is a non-legitimate stance in most Western democracies (della Porta & Diani, 1999). In line with previous studies of universalistic values, the current study shows that universalistic values go counter with violence (Knafo, Daniel, & Khoury-Kassabri, 2008). But, going beyond previous knowledge on this relation, the study also

shows that peers may have a reducing role to play with regard to adolescents' approval of violent political means.

Furthermore, the social network analysis gave no support for the idea that more immigrant-friendly peer networks function in the same way. Hypothesis 3 is that *adolescents in more immigrant-friendly peer networks are more likely to become less disposed to approve of violent political means over time than adolescents in more universalistic peer networks*. Given that the analysis gave no support for a more immigrant-friendly peer network having a socializing effect on adolescents' approval of violent political means, it seems that, in this case, the proximity of attitudes and behavioral dispositions hypothesized by the hierarchical value-attitude-behavior model, is trumped by the level of abstraction and broadness of democratic orientations of universalistic values. Another aspect related to this is that more universalistic peer networks seem unable to increase adolescents' universalistic values while at the same time able to reduce adolescent' approval of violent political means. Potential reasons for this was not examined in this study but public conformity of universalistic values may be a valid explanation. The exact reason why this is the case must nonetheless be examined empirically to properly conclude further about this mechanism.

The context of this study – Sweden – has over the recent years acquired a foreign population size-wise comparable with the share in, for instance, France and the UK (Hooghe, Trappers, Meuleman, & Reeskens, 2008). Although recent numbers show that something might be changing, the share among Swedes who are critical to a welcoming of more immigrants have continuously decreased during the last decades (Sandberg & Demker, 2013). Considering violent political means, Swedish experiences of confrontational politics do exist but are perhaps limited in comparison with other European countries. In protests during the Swedish electoral campaign

of 2014, groups on both extremes of the ideological left-right continuum were involved in a series of confrontational political events. Directly or indirectly, these violent political encounters were often the prolonged result of pro- or anti-immigrant demonstrations. Thus, how Swedish adolescents acquire their perceptions of universalism, positive sentiments toward immigrants, and means of political change should be understood in a context where universalism and tolerance are highly valued social norms. Hence, these particularities illustrates that one should be cautious about generalizing these findings to adolescents in other contexts.

Certain limitations of this study should be discussed. First, respondents' ideological preferences are likely to impact their perceptions of immigrants, equality, and social justice, especially when such preferences are at either end of the left-right continuum. Simply put, whereas both radical-right and left-wing sympathizers have been shown to approve of violence as a means for political change – albeit with vastly different motives – adolescents on the extreme right are likely to be less positive toward immigrants than their ideological counterparts on the left (van Hiel, 2012). As such, the picture of the relations between universalism, sentiments toward immigrants, and approval of violent political means, may well be more complex than initially modeled in this study. Second, to emphasize the different levels of abstraction that discerns values from attitudes, this study turned to the value-attitude-behavior model. Although no direct link between peers' positive sentiments toward immigrants and adolescents' approval of violent political means appeared in the social network model, future studies should examine the possibility that positive sentiments toward immigrants have a mediating effect on the relation between peers' universalistic values and adolescents' approval of violent political means.

Despite these limitations, this study also has certain strengths. First, this is one of the few studies to make use of a social network approach to address the development of political values and attitudes among adolescents. Adolescence is a critical time for the development of political values, attitudes, and behaviors, and given that this is a period crucial to political learning, the key strength of this study was the opportunity it gave to simultaneously address processes of peer influence and selection. With the longitudinal sample used, it was possible to examine processes underlying adolescent-peer similarities between three vital aspects of political socialization: universalistic values, positive sentiments toward immigrants, and approval of violent political means. A second strength lies in the opportunity it gave to test the social learning hypothesis while simultaneously controlling for several background attributes of the participants. Controlling for factors such as education and socio-economic background is essential because they are often put forward as important explanations for people's development of sentiments toward immigrants (Côte & Erickson, 2009). Given these stringent controls, the influence effect found for adolescent-peer similarities in positive sentiments toward immigrants, and the cross-influence effect of peers' universalism on adolescents' approval of violent political means, pave the way for an understanding of peers as key socializing agents in adolescents' learning of democratic characteristics, such as equality, fairness, inclusion, and peaceful means of political change.

What one can see from this study is that immigrant-friendly peers are an important source of influence for adolescents' learning of sentiments toward immigrants. It is also imperative to note that universalistic peers seem to have a potentially reducing role in adolescents' approval of violent political means. Consequently, peers are a strong source for a more humanistic, democratic, and culturally diverse society. Given the increasingly anti-immigrant attitudes of and

support for far-right parties in Europe, further understanding of the processes and mechanisms underlying pro-democratic perceptions and young people's approval of violent political means is of crucial importance

Acknowledgments

This study was made possible by access to data from the Political Socialization Program, a longitudinal research program at YeS (Youth & Society) at Örebro University, Sweden. Professors Erik Amnå, Mats Ekström, Margaret Kerr, and Håkan Stattin were responsible for the planning, implementation, and financing of the collection of data. The data collection and the study were supported by grants from Riksbankens Jubileumsfond. The author greatly acknowledges Maarten van Zalk for his helpful comments on previous versions of this manuscript.

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Table 1. Descriptive statistics on peer networks, universalism, positive sentiments toward immigrants, and approval of violent political means at two time points (T1 and T2)

	T1	T2
Network characteristics		
Participants	997	997
Number of ties	4,074	3,286
Average degree	4.290	4.369
Formed ties ($0 \rightarrow 1$)		27%
Dissolved ties ($1 \rightarrow 0$)		34%
Stable ties ($1 \rightarrow 1$)		38%
Jaccard index (stability)		38%
Universalism		
Frequency		
1	194	191
2	240	131
3	181	230
4	201	179
Missing	181	266
Percentage stable adolescents		48%
Percentage increasing adolescents		28%
Percentage decreasing adolescents		24%

Positive sentiments toward immigrants

Frequency

1	193	169
2	225	189
3	206	205
4	159	160
Missing	214	274

Percentage stable adolescents 51%

Percentage increasing adolescents 27%

Percentage decreasing adolescents 22%

Approval of violent political means

Frequency

1 – I will stay within the law...	387	349
2 – I can consider breaking the law...	347	354
3 – I can consider breaking the law even if other	57	26

people get hurt...

Missing	206	268
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Percentage stable adolescents 64%

Percentage increasing adolescents 17%

Percentage decreasing adolescents 19%

Note: The average degree score reports the average number of peer nominations. Formed, dissolved, and stable ties refer to the ties that were new, ended, and continued between the two time points, respectively.

Table 2. Estimates, standard errors, and *t*-values for the evolution of peer relations (*N* = 997).

	Unstandardized parameter estimates	Standard errors	<i>t</i> -values
Network dynamics			
Outdegree (density)	-4.16***	0.06	-68.06
Reciprocated relationships	1.53***	0.07	23.45
Triadic relationships	0.40***	0.01	27.45
Gender (0 = female, 1 = male)			
Gender alter	0.12***	0.05	2.69
Gender ego	-0.12***	0.05	-2.57
Same gender	0.12***	0.05	2.57
Education			
Education alter	-0.04	0.03	-1.51
Education ego	-0.02	0.03	-0.83
Similar education	0.48***	0.16	2.99
Socioeconomic status (SES)			
SES alter	0.01	0.03	0.14
SES ego	0.07***	0.02	2.75
Similar SES	0.22***	0.08	2.62
Immigration status			

Immigration status alter	0.12***	0.03	3.68
Immigration status ego	0.15***	0.03	4.39
Similar immigration status	0.44***	0.07	6.40
Same school	0.79***	0.05	14.91
Same class	0.80***	0.05	16.11
Universalism			
Universalism alter	0.06*	0.03	2.01
Universalism ego	0.03	0.03	0.95
Similar level of universalism	-0.04	0.15	-0.25
(selection)			
Positive sentiments toward immigrants			
Toward immigrants alter	0.05*	0.03	1.73
Toward immigrants ego	0.00	0.03	0.12
Similar level of positive sentiments	0.41***	0.14	2.97
toward immigrants (selection)			
Approval of violent political means			
(AVPM)			
AVPM alter	0.11	0.07	1.53
AVPM ego	-0.10*	0.06	-1.83
Similar level of AVPM (selection)	0.19	0.20	0.95

Note: * = $p < .05$, *** = $p < .001$. All p -values are one-tailed.

Table 3. Estimates, standard errors, and *t*-values for the evolution of universalism, tolerance, and approval of violent political means ($N = 997$)

	Unstandardized parameter estimates	Standard error	<i>t</i> -values
Universalism dynamics			
Shape: linear	0.07*	0.04	1.68
Shape: quadratic	0.13***	0.04	2.87
Universalism average alter	0.20	0.15	1.34
Effect of gender (0 = female, 1 = male)	-0.31***	0.10	-3.06
Effect of education	0.08	0.06	1.31
Effect of socioeconomic status	0.07	0.06	1.19
Effect of immigrant status	0.04	0.07	0.69
Positive sentiments toward immigrants dynamics			
Shape: linear	0.08	0.05	1.54
Shape: quadratic	0.03	0.05	0.66
Positive sentiments toward immigrants average alter	0.45***	0.15	2.97
Effect of gender (0 = girl, 1 = boy)	-0.16	0.12	-1.32
Effect of education	0.09	0.08	1.23

Effect of socioeconomic status	0.04	0.07	0.57
Effect of immigrant status	0.13	0.09	1.61

AVPM Dynamics

Shape: linear	-0.18	0.13	-1.46
Shape: quadratic	-1.61***	0.38	-4.22
Approval of violent political means average alter	-0.27	0.93	-0.29
Effect of adolescents' gender (0 = female, 1 = male)	-0.59*	0.35	-1.65
Peers' universalism average alter	-1.11*	0.62	-1.79
Peers' positive sentiments toward immigrants average alter	-0.06	0.43	-0.14

Notes: The linear-shape effect represents adolescents' relative tendency of the attribute in question. The quadratic-shape effect represents the relative tendency for adolescents with high values on a dependent variable to become even more inclined to that attribute. Note also that the quadratic effect is dependent on the adolescent's initial level of the attribute in question. * = $p < .05$, *** = $p < .001$. All p -values are one-tailed.

Table 4. Estimated effects and their SIENA labels

Effect label	SIENA label	Interpretation
Outdegree	Outdegree	Adolescents' tendency to select peers randomly (negative values means that peers are not nominated at random)
Reciprocated relationships	Reciprocity	Peers' tendency to reciprocate adolescents' peer nomination
Triadic relationships	Transitive triplets	Adolescents' tendency to nominate peers that are already nominated by their peers
[Attribute] alter	Alter	Peers' tendency to nominate adolescents based on adolescents' mean levels of the attribute variable
[Attribute] ego	Ego	Adolescents' tendency to nominate peers based on adolescents' mean levels of the attribute variable
Similar [attribute]	Covariate similarity effect	A positive parameter implies that actors prefer ties to others with similar values on this variable
Same [attribute]	Same covariate effect	Tendency of the actors to be tied to others with exactly the same value on the attribute