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Working Paper

Homemade citizens: The development of political interest during adolescence and young adulthood

SOEPPapers on Multidisciplinary Panel Data Research, No. 693

Provided in Cooperation with:

German Institute for Economic Research (DIW Berlin)

Suggested Citation: Neundorf, Anja; Smets, Kaat; García Albacete, Gema M. (2014) :
Homemade citizens: The development of political interest during adolescence and young
adulthood, SOEPPapers on Multidisciplinary Panel Data Research, No. 693, Deutsches Institut
für Wirtschaftsforschung (DIW), Berlin

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693-2014

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of Political Interest During Adolescence
and Young Adulthood**

Anja Neundorf, Kaat Smets and Gema M. García-Albacete

SOEPPapers on Multidisciplinary Panel Data Research at DIW Berlin

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ISSN: 1864-6689 (online)

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Homemade Citizens: The Development of Political Interest During Adolescence and Young Adulthood¹

(Published in *Acta Politica*, 2013, Vol. 48, 1, 92–116)

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Abstract

Despite being among the most important indicators of political participation, relatively little is known about the origins and the development of political interest over the life span. The formative years between childhood and adulthood are generally considered a crucial phase in which future electors form and strengthen political habits. The aim of this research is to better understand this important stage by examining the way in which parental socialization and life-cycle events affect the formation and growth of political interest during adolescence and young adulthood. While parental influences are expected to take place during childhood and persist over-time, life-cycle events are considered to influence development in early adulthood for those adolescents who did not grow up in a highly politicized environment. We assess these assumptions by applying latent growth curve modeling and using the German Socio-Economic Panel, which spans from 1984-2007. Our findings confirm strong parental socialization effects on interest levels during teenage years. While life-cycle events are not found to strongly affect the development of political interest during the formative years, the transition to adulthood is indeed a more critical period for those individuals who did not acquire high levels of interest from their family.

Key words: Political interest; young adulthood; parental socialization; life-cycle events; latent growth curve analysis; panel data.

Political interest is an important precondition for democratic citizenship (e.g. van Deth, 1989: 276; van Deth and Elff, 2004: 478). Not only are interested citizens more knowledgeable about political affairs, they are also more susceptible to mobilization efforts by political parties and interest groups. Unsurprisingly, people with high levels of political interest are consistently found to have higher levels of turnout and to participate more in other forms of political participation (e.g. Milbrath, 1965: 40; Verba, Schlozman and Brady, 1995: 334). While the existence of a relationship between political interest and political engagement is uncontested, much less is known about the origins of interest in politics and its development over the life span.

Recent debates regarding a growing distance between citizens and the traditional institutions of representative democracy have resulted in a revival of political socialization studies directed to update our understanding of the origins and development of political orientations. The context in which citizens grow up is assumed to be central for the development of political involvement. Traditionally, family and the school environment are considered primary socializing agents influencing the formation of political engagement already throughout childhood. Socialization experiences during the impressionable years are thought to matter disproportionately, after which their impact reduces as political attitudes stabilize during early adulthood.

Indeed, in a recent publication, Markus Prior (2010) finds political interest to be remarkably stable over the life span, leading him to conclude that from a young age onwards ‘you either got it or you don’t’. A more careful reading of his work shows, however, that in two out of three data sources levels of political interest among those aged less than 30 years are less stable over time than among older age groups (Prior, 2010: 763). This implies that while the development of political interest may start during childhood already, such development is not entirely concluded by the time adolescents make the transition into adulthood.

The political life-cycle model, rather than emphasizing the persistence and stabilization of childhood and adolescent experiences, assumes that citizen’s levels of political interest will increase with age and particularly during the transition from adolescence to adulthood (van Deth,

1989: 303, 309). Young people are thought too busy preparing their careers or forming their families (Glenn and Grimes, 1968: 563-566) or considered not yet to be aware of the relevance of politics in their life (Lane, 1959: 218). This line of reasoning implies that interest in politics rises as adult roles are assumed in the early adulthood years (van Deth, 1989: 303).

More specifically, following a suggestion by Jennings et al. (2009) we expect patterns of development to vary according to the level of parental transmission. Jennings et al. find that adolescents who embrace their parents' political views have more stable patterns of political attitudes during young adulthood which they point out to be "a time of enormous change and challenge to young adults, including new endeavors, personal relationships, residential locations, and "adult-level" contact with the political world" (ibid: 793). Adolescents who do not come from politicized families, on the contrary, are far more vulnerable to the new experiences in young adulthood and therefore more susceptible to change.

To study the formation and development of political interest between childhood and adulthood, and more specifically the role that parental socialization and life-cycle events play in this process, it is necessary to use panel data that 1) enables to follow individuals during their early adult years and 2) permits matching parents and their offspring. The German Socio-Economic Panel (SOEP) – held annually and covering an exceptionally long period from 1984 to 2007 – offers both. Latent growth curve (LGC) analysis is employed to model (changes in) individual trajectories of political interest. Contrary to other techniques, LGC allows to measure *inter* and *intra* individual variability and therefore to assess how the endurance of parental influences and the subjection to life events affect the starting level and growth of political interest in the young adulthood years from 17 to 35.

Our research confirms recent reevaluations of the parental transmission model corroborating that early acquisition of the parental characteristics influences the subsequent nature of adult political development (Jennings et al., 2009; Kroh and Selb, 2009). Parental socialization explains levels of interest at the age of 17. However, its influence on the growth of political interest thereafter is

minimal. Contrary to the assumptions of the life-cycle model, individual life events have next to no influence on the development of political interest during young adult years. Our results do confirm the intuition of Jennings et al. (2009: 796) that political interests' levels of those who are socialized in highly politicized families are more stable during early adulthood, while there is more room for growth for those individuals who "leave home without it".

Persistence and change during the life-cycle: The development of political interest during young adulthood

Theoretical models concerning the development of political attitudes and behavior are usually divided into two groups: those that make an argument for the lifelong plasticity of political attitudes (c.f. Alwin and Krosnick, 1991) and those that focus on persistence of political attitudes developed in childhood and/or adolescence (c.f. Easton and Dennis, 1969). The persistence hypothesis is based the idea that childhood learning is relatively enduring throughout life and the notion that basic orientations acquired early in life structure later political orientations and beliefs (see Searing et al., 1973; 1976). Early research assumed the enduring character of basic political orientations acquired during childhood, however, subsequent research showed that their effect on adult's attitudes had been overestimated (Searing et al., 1976: 113). Likewise, in their overview of evidence supporting the persistence hypothesis, Kinder and Sears (1985: 724) conclude that the more plausible view is one that combines the persistence and impressionable years hypotheses with the possibility of small but still noticeable levels of change thereafter.

The role of the family in the formation of political interest

Scholars have emphasized the impact of the family as one of the main socialization agents in the transmission of basic political orientations (Jennings and Niemi, 1968, 1981; Dalton, 1980; Jennings et al., 2009). The determinant influence of parental socialization has mostly been

stressed in conjunction with the development of party identification (Taylor et al., 1994: 519; c.f. Campbell et al., 1960; Jennings and Niemi, 1974; Krob and Selb, 2009), political ideology (Percheron and Jennings 1981) and political participation (Beck and Jennings, 1982; Verba et al., 2005).

Parents are considered to influence the development of their children's political orientations in at least two ways. Firstly, parental socio-economic status (SES) can contribute to political involvement due to a direct effect on children's socio-economic status. Parents with higher socio-economic statuses have children that are more likely to have high levels of education. Children's levels of education, in turn, influence levels of political interest and knowledge. Parental SES, moreover, can contribute to the development of class-specific political orientations as well as encourage civic attitudes and involvement (Beck and Jennings, 1982: 96-97; Verba et al., 2005: 97; Jennings et al., 2009: 790).

A second way in which parents may influence their children's levels of political interest is through the explicit political characteristics of family life (Jennings and Niemi, 1968; Beck and Jennings, 1982). Highly politicized parents may foster positive civic orientations that stimulate engagement in politics (Beck and Jennings, 1982: 98). Moreover, Jennings and his colleagues (2009: 790), offer evidence that successful parent-child transmissions occur more often when the family environment is more politicized, arguing that in this case parents provide consistent signals about where they stand politically. The presence of role models, parents in particular, may lead to imitation and subsequently even adoption of behaviors and attitudes.

Concluding, we expect that higher levels of parental political interest will serve as a predictor of higher political interest levels among their offspring. While this process already starts during childhood, the persistence of parental influences on the development of political interest is considered to only fully stabilize during young adulthood (Prior, 2010: 748). Hence, the role of parental socialization is expected to have an enduring influence in early adulthood years. Building

on Jennings et al. (2009), we expect different growth levels according to levels of political interest of the family. We will elaborate on this hypothesis in the next section.

Life-cycle events and the development of political interest during young adulthood

According to the life-cycle model, political attitudes and behavior differ across the various stages of life. Each phase contains specific experiences and situations that may trigger or obstruct political interest levels. Although the life-cycle model has mainly been discussed in connection with political participation (see van Deth, 1989: 303 for the same observation), the assumption that young people are not interested in politics due to their phase of life is at the core of the life-cycle argument.

Young people, it is argued, are politically inexperienced and have little political interest, skills and knowledge due to a lack of attachment to civic life (Strate et al., 1989: 443). Going through education, looking for a partner, moving to attend college, and establishing a career, adolescents are too occupied building their lives to also have the time to become interested and involved in politics (Glenn and Grimes, 1968). Political involvement is, however, thought to develop and ultimately stabilize at higher levels as citizens experience certain life events that mark the transition into adulthood: buying a house, starting a full-time job, forming a family, settling down in a community, etc. While many of these events demand time and resources, they are associated with activities (involvement in organizations, associations, or the community) that tend to enhance political interest due to increased motivation, mobilization, skills, and pressure (Strate et al., 1989: 444). In addition, adult roles increase social needs, and therefore, raise political awareness (Lane, 1959: 218). Summarizing, assuming adult roles and settling down in a community are considered to boost levels political interest which may explain the continuing increase in political interest levels during the early adulthood years (Prior, 2010).

In accordance with Jennings et al. (2009), we expect patterns of development to be influenced by the political character of the family respondents are exposed to during childhood. Individuals that

grow up in a highly politicized family will not only develop higher levels of interest in politics but should also develop them earlier and show more stability during early adulthood. Political interest levels of those individuals whose socialization took place in a less politicized family environment will be more permeable to external influences during early adulthood.

One of the aims of this paper is to assess the impact that *single* life-cycle events have on the development political interest rather than using age as a proxy to determine the life-cycle stage of a respondent – an approach adopted in many studies. The following two subsections describe in more detail how various life events are expected to influence the development of political interest. For organizational purposes we have divided the events in work-related and family-related experiences.

Work-related events and changes in political interest

Leaving education is one of the first steps towards entering the adult world. Being in school, from a theoretical perspective is considered a characteristic of childhood and a distraction from becoming involved in political affairs (Strate et al., 1989; Highton and Wolfinger, 2001). Empirical research of political participation demonstrates the contrary, however, observing a positive and significant relationship between ‘being in education’ and turnout (Highton and Wolfinger, 2001; Tenn, 2007). Young people that are still in school, it is argued, find themselves in a much more stimulating environment than those that have left education. Extending these arguments to the development of political interest, leaving school may either trigger or depress levels of political interest.

Employment is an important milestone after leaving education. Although it is clear that in the adult world work functions as a political socialization agent, the way in which it influences political engagement is less clearly spelled out (Sigel, 1989; Sigel and Hoskin, 1977). Sigel (1989) is one of the few to give a more detailed account of the causal mechanisms that link the work environment to political interest. Firstly, certain jobs bring citizens in touch with socio-political

attitudes in a direct way (think e.g. of social workers, journalist, people in the military). In a more indirect way, the work environment may also have a function as a socialization agent through the status that is linked to certain occupations (c.f. Verba and Nie, 1972; Brady, Verba and Schlozman, 1995). Employees – especially blue collar workers – are historically well-organized and in collaboration with unions advocate a variety of social welfare issues. Such mobilization efforts are expected to trigger levels of political interest.

As far as the impact of unemployment on political involvement is concerned, two competing hypotheses are present in the literature. One point of view is that economic hardship boosts political interest and participation. Those that are under economic strain may blame the government for their situation and turn to political action in order to try to influence public policy (Lipset, 1969: 187; c.f. Schlozman and Verba, 1979: 18). Rosentone (1982), on the other hand, has shown that unemployment, poverty and decline in financial well-being depress political participation. Economic adversity reduces resources and increases the costs of political involvement, both of which affect levels of political interest. Building onto previous studies, we expect employment to boost interest, whereas unemployment is hypothesized to have either a positive or a negative effect on political interest.

Family-related events and changes in political interest

Turning from the work environment to the private sphere, we take a look at the way in which family-related life events can be linked to the development of political interest over the life span. Borrowing from the literature on political behavior, the potential mediating function of a spouse is believed to foster political involvement as partners can learn from each other and benefit from being motivated by a politically active spouse (Stoker and Jennings, 1995: 422). Denver (2008) argues that married citizens adhere to more traditional values. This may lead married people to be more likely to conform to the idea of ‘good citizenship’. Taking these arguments together, we expect that being married is likely to have a positive effect on interest. While similar arguments

can be used in the case of two cohabitating partners, the SOEP unfortunately does not allow taking this type of coexistence into account.

Forming a family, lastly, not only signals the transition to adulthood, but also affects political involvement in specific ways. Having children increases the awareness of social needs, such as education, health, playgrounds, and even the responsibility to perform as a ‘good’ role model (Lane 1959: 218). It can also be interpreted as a sign of stability, and therefore, stronger links to the community. Having children is therefore expected to foster the development of political interest.

Measuring the development of political interest over the life-cycle

As discussed by Plutzer (2002: 44), cross-sectional data is not sufficient to measure life-cycle effects at the individual level. It is necessary to use panel data enabling to follow the very same individuals over a longer time period. The German Socio-Economic Panel (SOEP), a unique yearly household database, covers an exceptionally long period between 1984 and 2007. As each individual in the household is questioned through face-to-face interviews, it is possible to match adolescents on the verge of entering adulthood (included in the household panel from 17 years onwards) and their parents. This allows us to also assess parental socialization influences on levels and development of political interest levels of the offspring.²

The SOEP is mainly interested in (changes in) the socio-economic status of German households and its members. It therefore offers a variety of indicators on life-cycle events of interest for this research. The period covered in this study is 23 years: from 1985 – when political interest was first asked – to 2007. As we want to avoid adding context effects, such as the change of regime in East Germany and differences in socialization experiences in the two very different political

² For more information on the SOEP contents and structure see Hasiken-DeNew and Frick (2005) and Wagner et al. (2007).

regimes in East and West Germany, we limit our analysis to West Germans, which gives us a more homogeneous group of respondents.

Our dependent variable is political interest measured by the question ‘Generally speaking, how much are you interested in politics?’, which ranges from 1 ‘not at all’ to 4 ‘very interested’, ‘no answer’ and ‘don’t know’ were set to missing. Our set of independent measures consists of two groups: parental characteristics and life-cycle events experienced by the respondent herself.

We assess our hypotheses by distinguishing between maternal and paternal influences on the political interest of their children. In order to measure the average political interest level of the parents, we calculated the mean interest of the mother and the father during the childhood of the offspring (until the age of 17, when children of a household are first included in the survey themselves). Traditionally, children spend more time with their mother than with their father and the direct transmission of political orientations between mother-child pairs was found to be higher in the 1960s already (c.f. Jennings and Langton, 1969). The impact of parental levels of political interest through educational attainment and social class³ on the contrary is measured through *paternal* levels alone, as in Germany fathers are still considered the breadwinners of the nuclear family.⁴

To study the effects life events have on the development of political interest during young adulthood, we distinguish between two types of life-cycle events – work-related and family-related events. Using ‘voluntarily’ or ‘intentionally’ not working (i.e. being in education, stay-at-home parents, and those very sporadically employed) as the reference category, allows us to examine the effect of any of the following changes in one’s life on the development of political

³ We use the mode class position of the father during the childhood of our respondents.

⁴ For example, 51% of the mothers in our sample are out of regular work compared to 20% of the fathers. It is also interesting to note that there is a clear gender divide in terms of education. Only 15% of the mothers have a higher education than their husbands. On the other hand, 41% of the men have a higher educational attainment than their wives. We therefore expect the father’s level of education and social class to be a valid measure of the overall socio-economic status of the family household. Unreported results replicating the models presented below confirm that only the father’s social position matters. The coefficients of mother’s occupation and education are found to be insignificant and negligible.

interest: leaving education, being unemployed or having a job. To measure the effects of family-related events information on respondents' marital status and whether they have children is used. The first group includes the comparison between those being single or divorced (reference category), and those being married. We further include a dummy variable to measure whether a respondent has children, which takes the value 0 until the first child is born and a 1 thereafter.

We concentrate our analyses on respondents up until the age of 35 years. The crucial "impressionable years" are often situated between the ages of seventeen and twenty-five (Jennings and Niemi, 1981: 7-8; Lambert, 1972), however, both a clear definition and operationalization are lacking and political socialization is certainly not confined to these years. We expect that life events during early adulthood will influence the development of political interest. Delays in the transition to adulthood imply that restricting the focus to a too young age group entails to miss out on a number of important life-cycle changes (Iacovou, 2002: 42; Council of Europe, 2005). Therefore, our examination concentrates on the period between 17 (when respondents are first interviewed) and 35 years.

In order to account for the model identification, we select respondents for which we have at least five valid answers on the political interest question between 1983 and 2007 (c.f. Meredith and Tisak, 1990; Bollen and Curran, 2006). These prerequisites give us a final sample of 1,367 respondents. For a summary of the data used to estimate our final analyses, see appendix A.

Latent growth curve models

For our research, we are not interested in the average effect of parental socialization and life events on the political interest of young adults. Rather, we want to assess how political interest *develops* during young adulthood, which implies an *intra*individual variability. The development of political interest, furthermore, differs from one person to the other. Some have a very high level of political involvement from an early age onwards. Others might have little political interest when they are young, but become more interested over time.

<FIGURE 1 ABOUT HERE>

Figure 1 clearly demonstrates the differences in trajectories for 10 random young adults in our data set. The bold line shows the average estimated regression line of political interest among these respondents. This graph illustrates that the initial level of political interest (*intercept*) differs substantially among 17 year olds, the lowest cut-off age of our data. Moreover, the direction and the rate of change of the development of interest over time (*slopes*) vary. In order to account for this *intra*individual (within person) and *inter*individual (between person) variability, as well as to assess how socialization effects and life-cycle events affect these trajectories, latent growth curve models are applied.

Latent growth curve (LGC) modeling is a statistical methodology that permits each respondent to have a unique trajectory as they age (as illustrated in Figure 1) through the estimation of random slopes and random intercepts. These random coefficients are incorporated in a structural equation framework by considering them as latent variables (c.f. Bollen and Curran, 2006; Preacher et al., 2008). The actual scores of the dependent variable (e.g. the level of political interest) over the life span are not of interest. Rather repeated individual observations are used to estimate an underlying trajectory or line that best describes this growth of political interest for *every individual* in the sample.

When estimating trajectories, four main questions are crucial: Firstly, what is the mean starting level and further development of political interest for the entire sample? This is captured by the mean intercept and mean slope, illustrated with the bold line in Figure 1. Secondly, is the growth function linear or does it have another functional form? Thirdly, to what extent do individual trajectories deviate from the mean? The graph above clearly demonstrates how respondents vary in their development of political interest in comparison to the average trajectory. Lastly, how can we explain this variation? The latter can be done through the incorporation of explanatory variables to better understand the variability observed in individual trajectories. For the present paper these questions can be re-formulated as follows: What is the average trajectory of political

interest over-time in our sample of young adults and what is its functional growth form? Is there significant individual level variance in the intercepts and slopes? And most importantly, to what extent do parental socialization and life-cycle events explain these individual differences?

In order to answer these questions we first need to examine the overall development of political interest and establish the growth function (question 1-3) and subsequently include covariates into the model to predict the individual trajectories (question 4). LGC models assume the existence of continuous underlying latent trajectories, which track how the political involvement for each person changes as they grow older. The following is the trajectory equation for an *unconditional LGC model*, which does not consider covariates affecting the latent trajectories (see Appendix B for a more detailed description of the model):

$$y_{ia} = \alpha_i + \lambda_\beta \beta_i + \varepsilon_{ia}$$

where y_{ia} is the observed value of the variable y – in our case political interest – for the i th case at age a , α_i is the random intercept, representing the initial level of political interest for respondent i . β_i is the slope for i , measuring the ‘true’ rate of change for each individual as they grow older. λ_β is a vector that measures the functional form of the time or aging process.

In a first step, we assume a fixed (linear) parameterization of the growth function of political interest during the young adulthood years. As a result we get a constrained rate of change in the repeated measures of political interest that is constant across all periods. In a second step, we challenge this linearity assumption by testing a parametric, non-linear aging effect, where the growth parameters λ_β are estimated statistically (c.f. Bollen and Curran, 2006).

Besides the growth factor λ_β , the variances of the intercept ($\Psi_{\alpha\alpha}$) and the slope ($\Psi_{\beta\beta}$) are important components in a LGC model. They provide a measure of the variability of individuals on this growth function. The larger these variances are the more people differ with regard to their development of political interest. If we want to try to explain these individual differences we can

include covariates (X), such as parental characteristics and life-cycle events. The aim is to estimate the effect these factors have on the unobserved, underlying (latent) trajectory of political interest.⁵ An important feature of LGC models is the initial intercept capturing the original starting value of political interest (Bollen and Curran, 2006; Preacher et al., 2008). To account for individuals' initial political interest – which we try to explain by parental socialization – we concentrate on those young people that came fresh into the survey at age 17.

Summary of specification and expectations

Table 1 provides an overview of our hypotheses in light of latent growth curve modeling terminology focusing on the two important factors in LGC models: the intercept and the slope coefficient. As argued above, parental socialization is expected to affect the intercept positively (+); the higher the political interest and social status of the parents, the higher the initial level of political interest of the children observed at age 17 should be. This also implies that those inheriting the political interest of their parents should be less affected by later life experiences. Hence their growth in political engagement should be rather flat, which implies a negative slope effect (-). This does not mean that the growth in interest is in fact negative, but rather that the trajectories are flatter for those having high politically interested parents than for those respondents coming from politically less engaged families. The latter should have a steeper growth function instead, as they will be more influenced by transitional events during early adulthood.

<TABLE 1 ABOUT HERE>

Life-cycle events are assumed to have no effect on the intercept or the initial status of political interest. As these events usually only occur later in life, the effects of (X) on the intercept are

⁵ One advantage of the LGC models is the treatment of a serious panel problem – missing values. Respondents enter and drop out of the study, which causes a high number of missing observations on our variable of interest. Panelists that have missing data in some waves can still be included. *Mplus*, the program used to estimate the LGC models, provides maximum-likelihood single imputation estimation under the assumption the variables and cases are missing at random (Muthén and Muthén, 2007).

assumed to be zero. However, life-cycle theory clearly expects life events to affect the development and hence the slope of political interest. The mechanisms through which each event can be linked to a growth political interest were discussed in detail above. For example, the effect of unemployment is expected to be uncertain. On the one hand it could have a positive effect (+) on the development of political interest, as this life experience raises the awareness of politics. On the other hand, one could argue that unemployment leads to economic deprivation and a disconnection from the political community and hence the experience suppresses (-) the growth in political interest.

In order to separate the effect life events have on political interest, it is crucial to control for important covariates, which affect the level of political interest as well. Therefore, education (measured by the years a respondent reported to have spent in the education system) and gender are included as control variables. Educated and male respondents are assumed to have a higher propensity to already be politically interested at the age of 17. Therefore we expect positive intercept effects (+).

Results

Mean trajectory of political interest and the individual variation

To investigate the general development of political interest in young adulthood years, we estimate two different types of unconditional (excluding covariates) latent growth curve models – assuming fixed and random effects. The results are presented in Table 2. The fixed effects model, which can be read as an OLS regression, confirms the presence of an overall positive linear relationship between age and political interest in our sample. At the age of 17, our panelists seem not very interested in politics, as their average score is only 1.88 on a scale between 1 and 4. With every year aging, their political interest increases by .02 points on that scale. Therefore, we can

conclude that political interest continues to develop during young adulthood – even though the magnitude of the growth is not spectacular.

<TABLE 2 ABOUT HERE>

The small slope coefficient may either be the result of a true shallow development of political interest during the formative years or, alternatively, emerge because young adults significantly differ in their trajectory of political interest, with some showing a steep increase whilst others witness a decrease in levels political interest as they age. The next step is therefore to explore the extent to which we can distinguish individual variance from the mean sample trajectory. The random effects models in Table 2, which allow the intercept and slope to differ for each respondent, help to answer this question.

Just as in the fixed effects model, the mean intercept and the mean slope are positive and significant in the linear growth random effects model. However, the model also shows positive and significant coefficients for the intercept and slope variance indicating that there indeed is variation in the development of political interest among individuals. Note that the variance of the initial level of political interest is much larger than the variance of the growth of it as respondents age.

The fixed effects model clearly fits the data much worse. The RMSEA (.048) of the random effects model is in the accepted range as a good fit measure. We can hence already show that *inter*individual variability exists in the development of political interest. However, we further need to establish the correct growth process of political interest during the formative years. The first two columns in Table 2 assume a linear growth process. In a next step, the time constraint of linearity is relaxed and the growth parameters λ_{β} are estimated freely.⁶

<FIGURE 2 ABOUT HERE>

⁶ In order to specify such a non-linear model, the first loading remains to be set to zero ($\lambda_{\beta 1} = 0$) to account for the initial status of the first observation at the age of 17. Meredith and Tisak (1990) further suggested setting the second observation to 1 ($\lambda_{\beta 2} = 1$) to set the metric of the latent growth factor. The remaining $\lambda_{\beta \text{page}}$ (age=19, 20, ..., 35) can then be freely estimated and the true development of political interest can be revealed.

Besides a linear growth function, Figure 2 illustrates the predicted shape factor, which can be understood as the growth function estimated from the data disclosing the ‘true’ development of political interest through young adulthood for respondents in our data set. The figure clearly demonstrates that the trajectory of political interest departs from linearity after the age of 25, when the level of political interest seems to stabilize and the growth in political interest slows down significantly. This is a very interesting finding in itself, as it suggests that up to the age of 25 young people develop political interest in a consistent (linear) fashion. However, whatever has been influencing young adults until this age has a weaker influence as people grow older and growth rates slow down. Note that taking into account the non-linear growth process of political interest diminishes the significant variability of the slope coefficient (last column in Table 2). The non-significant variance components reflect that when taking into account a more precise growth function there are no individual differences in the non-linear growth of political interest between the age of 17 and 35 anymore.

Concluding, we have seen that the development of political interest weakens a couple of years into adulthood. The question remains whether we can explain the positive linear trend up to the age of 25 by the experience of certain life events, which is assessed the next step.

Explaining individual variation with parental transmission and life-cycle events

Building on the non-linear, random effects model presented in Table 2, we further include parental characteristics and life events as independent variables in order to predict individual trajectories of political interest over the life-span. Table 3 presents the results for three conditional LGC models testing these two sets of independent variables separately and combined.

<TABLE 3 ABOUT HERE>

Starting with Model 1, we first include variables measuring the parental political interest and the social status of the family, as well as the two control variables years of education and gender of

our respondents. As expected the model confirms strong parental socialization effects on the offspring's starting level of political interest. For example, with every point respondents' mothers are more interested in politics the interest of the children in political affairs is 0.16 points higher at the age of 17. The effect of maternal political interest is twice as large as that of the father. This demonstrates that research on political socialization from the 1960s, which found a stronger influence of the mothers on the children, appears to be still valid today. Overall Model 1 supports the hypothesis that parental socialization affects the formation of political interest. However, the model does not support the hypothesis that children of higher politicized families develop their political interest mainly through their families and not so much thereafter, which would be indicated by a negative slope coefficient of high parental political interest. The question hence remains what explains the development in political interest after the age of 17?

The next step is to look at the impact of life-cycle events on the *development* of political interest beyond the age of 17. In order to treat life events in a dynamic way, Model 2 includes life-cycle events at the age when a respondent experienced a certain event. To facilitate the presentation of results, the age variable (ranging from 17 to 35 years) is broken down into four different categories: 17-20, 21-25, 26-30, and 31-35 years. As an example, 6.3 per cent of the young West Germans experienced unemployment between 17 and 20, 11.7 per cent between 21 and 25, 5.6 per cent in the age of 26 and 30, and then it goes down to 3.0 per cent. Using age categories, we account for life events being time variant, without running into sparseness problems due to too few observations per observed age. As could be seen in Figure 2, the growth process of political interest is linear until the age of 25 and thereafter seems to stabilize. Therefore it is particular interesting to see whether certain life experiences have a different impact depending at what age they occur.

A first glance at Table 3 shows that most life events seem not to influence the development in political interest (slope effects) to a great extent. Only finishing education among those aged 31 to 35 has a suppressing effect on growth in political interest. Turning to the family-related events

it is surprising that none of these has a significant effect on the development of political interest, despite when they occurred.

The inclusion of life events experienced in teenage years (17-20) tests the hypothesis that life events do not affect the initial level of political interest, as they only occur later in life. However, experiencing work-related events in teenage years has a significant effect on the intercept of individual trajectories. For example, becoming unemployed in teenage years reduces the starting level of political interest by .153 points on the four-point scale even when controlling for educational level.

As already illustrated in Figure 1 and confirmed by the strong and significant intercept variance, heterogeneity concerning young adults' level of political interest seems to be associated to varying levels of political interest at the age of 17 rather than the growth of it thereafter. The development of political interest is similar for most people, which is indicated by the very small variance of the slope.

The highly significant variance of the initial level of political interest is further investigated in the combined Model 3, which allows assessing the relative impact of parental socialization and life-cycle events on the formation and growth of political interest. Taking into account the parental characteristics diminishes the significant intercept effects of working and unemployment, while the political interest levels and social status of the parents remain to strongly affect the level of political interest when their children are aged 17. Similar to the results of Model 1, the mother seems to execute a stronger influence on the offspring than the father. Furthermore, once we account for life-cycle events, children that follow their mother's political interest have a flatter development in their later years, which is indicated by the significant negative slope coefficient.⁷

This finding supports our hypothesis developed above.

⁷ One could argue that the father's own political interest is also transmitted through his educational attainment or class position. However, the intercept and slope effects of mothers' political interest remain stronger and more significant than those of fathers if we exclude these social characteristics of the family.

Overall, our conditional LGC models cast serious doubts about the individual impact of life-cycle events on the development of political interest during the formative years. Our empirical analyses do confirm strong parental socialization effects. Children who grew up in highly politically interested families are more likely to be interested in politics during their teenage years. On the other hand, they are more settled in their level of political engagement and their growth in political interest slows down.

Conclusion and discussion

Despite the vital role of political interest for the functioning of democracy we do not know much about how citizens' curiosity in politics develops. While there seems to be agreement on the importance of the formative years between childhood and adolescence for the development of political attitudes and behavior, this development is not abruptly terminated as citizens enter adulthood. This paper has aimed to cast light on the development of political interest during this stage of life by examining the extent to which parental socialization and life-cycle events affect the formation and development of political interest during early adulthood.

Prior (2010) recently showed that the levels of political interest are pretty stable across the life span, but that important variations are found among individuals already at an early age. In addition to corroborating these findings, our results add knowledge on where political interest originates and how it develops, and makes important additions to the literature on political socialization, life-cycle development, and political interest.

Our findings first indicate that on average political interest increases up to the age of 25, after which it stabilizes. Parental socialization has a strong influence on young citizens' levels of political interest as our analyses revealed a large direct effect of parental levels of interest on their offspring's curiosity about politics during their teenage years. In addition, higher parental socioeconomic status also positively affects political interest at a young age.

Contrary to the expectations of the life-cycle model, our results demonstrate that life events such as entering the labor market, experiencing unemployment, starting a family, or getting married do not directly affect the growth of political interest observed directly following the adolescent years. We can, however, confirm the intuition by Jennings et al. (2009) that those adolescents that come from strongly politicized families are less affected by the transitions into adulthood. Their trajectories of political interest during the early adult years are flatter than those of respondents that have grown up in less politicized families. The latter group does not have parental socialization experiences to fall back on and is therefore be more strongly affected by the assumption of adult roles.

Our study, thus, indicates that much of what determines people's growth of political interest over the life span is acquired at an early age and is highly influenced by the family. Further research should be directed at examining the role of other socialization agents such as the school or peer groups on this early development. While our results indicate that *individual* life-cycle events do not play a role in increasing (or decreasing) political curiosity, there is a possibility that experiencing a *combination* of various life-cycle events does influence levels political interest. Our paper did not take the latter into consideration and we therefore believe it is too soon to dismiss the influence of the life-cycle model altogether. The few significant effects of life experiences found here mainly suppress the growth in political interest. Apparently at a young age the phrase 'being busy with building one's life' indeed applies. Young people – it seems – cannot be bothered with politics as they concentrate on building a stable life. On the other hand, these findings do not indicate that working or getting married *per se* have a negative effect on political interest. They simply imply that at a young age e.g. entering the job market distracts people from all things political. A more careful examination of the differentiation between long-term and short-term effects of life-cycle events on the development of political interest can perhaps be performed in future research.

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Tables

Table 1: Summary of Expected Effects

	Expected Effect on	
	<i>Intercept (α)</i>	<i>Slope (β)</i>
<u>Parental Socialization</u>		
Political Interest: Father	+	-
Political Interest: Mother	+	-
Education: Father	+	-
Class Position: Father	+	-
<u>Work-related events:</u>		
Leaving Education	0	+/-
Working	0	+
Unemployment	0	+/-
<u>Family-related events:</u>		
Marriage	0	+
Children	0	+
<u>Control Variables:</u>		
Education (in years)	+	NH
Gender (male)	+	NH

Note: +/- = expected positive/negative effect; 0 = expected null effect; NH = no hypothesis.

Table 2: Unconditional latent growth curve models of political interest

	Unconditional Models		
	<i>fixed effects</i>	<i>random effects</i>	
	(linear growth)	(linear growth)	(non-linear growth)
μ_{α} (Mean intercept)	1.88***	1.87***	1.85***
μ_{β} (Mean slope)	.02***	.03***	.04***
$\psi_{\alpha\alpha}$ (Variance intercept)		.34***	.36***
$\psi_{\beta\beta}$ (Variance slope)		.01***	.01
Number of respondents	1,367	1,367	1,367
Log-Likelihood	-14,647.2	-10,944.1	-10,566.1
RMSEA [90% c.i.]	.181 [0.178; .184]	.048 [.044; .052]	.044 [.041; .048]

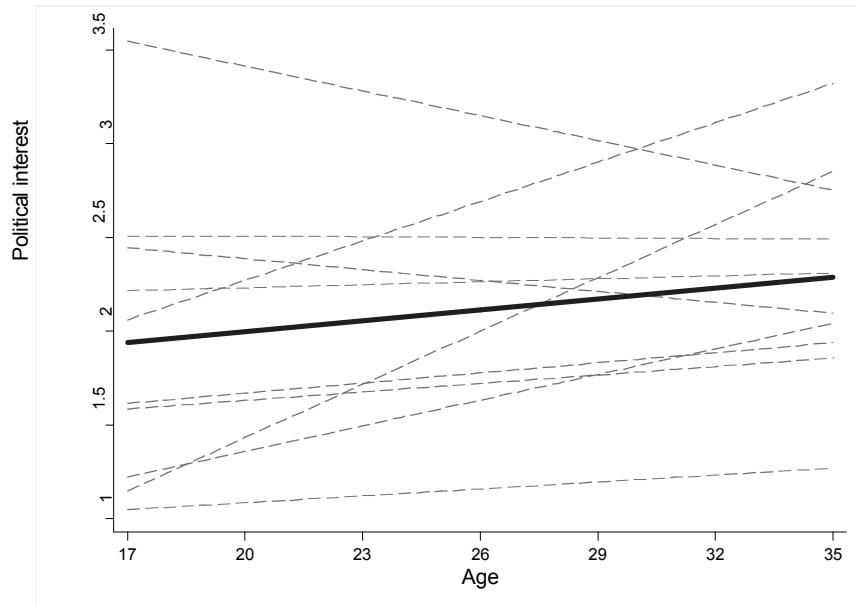
Note: b coefficients from LGC analysis; * p<0.10, ** p<0.05, *** p<0.01

Table 3: Conditional latent growth curve models of political interest (young adults only)

	Conditional Models					
	Model 1		Model 2		Model 3	
	effect on α	effect on β	effect on α	effect on β	effect on α	effect on β
Political Interest: Mother	0.163***	-0.007			0.162***	-0.008*
Political Interest: Father	0.079***	0.002			0.080***	0.002
Education: Father	0.015*	-0.002			0.015**	-0.002
Class Position: Father	0.040***	-0.003			0.039***	-0.004
<i>Work-related events:</i>						
Leaving			0.070**	-0.002	0.056*	-0.001
Education: aged 17-20 (55.4)						
Education: aged 21-25 (25.2)				0.003		0.001
Education: aged 26-30 (8.5)				0.007		0.009
Education: aged 31-35 (1.1)				-0.032*		-0.030
Working: aged 17-20 (51.5)			-0.095**	0.003	-0.031	-0.002
Working: aged 21-25 (71.6)				-0.002		-0.002
Working: aged 26-30 (78.7)				-0.009		-0.010*
Working: aged 31-35 (84.1)				-0.005		-0.004
Unemployed: aged 17-20 (6.3)			-0.153**	0.006	-0.074	0.002
Unemployed: aged 21-25 (11.7)				-0.005		-0.006
Unemployed: aged 26-30 (5.6)				0.001		0.001
Unemployed: aged 31-35 (3.0)				0.011		0.011
<i>Family-related events:</i>						
Married: aged 17-20 (1.8)			-0.123	-0.026	0.031	-0.033
Married: aged 21-25 (10.2)				-0.010		-0.011
Married: aged 26-30 (20.0)				0.001		0.002
Married: aged 31-35 (20.0)				-0.003		-0.004
Child: aged 17-20 (2.9)			0.137	-0.001	0.130	-0.002
Child: aged 21-25 (10.0)				0.010		0.010
Child: aged 26-30 (18.3)				-0.004		-0.004
Child: aged 31-35 (18.2)				0.012		0.012
<i>Control variables:</i>						
Gender (1=female)	-0.262***	-0.006	-0.259***	-0.008	-0.267***	-0.008
Years of education	0.066***	0.000	0.084***	0.001	0.064***	0.001
μ_{α} (Mean intercept)	0.327***		1.013***		0.350**	
μ_{β} (Mean slope)	0.072***		0.055**		0.088**	
$\Psi_{\alpha\alpha}$ (Variance intercept)	0.277***		0.310***		0.277***	
$\Psi_{\beta\beta}$ (Variance slope)	0.004		0.004*		0.004*	
Number of respondents	1,367		1,367		1,367	
Log-Likelihood	-27,794.8		-17,926.9		-25,876.7	
RMSEA [90 per cent c.i.]	0.036 [0.033; 0.039]		0.029 [0.026; 0.031]		0.027 [0.025; 0.029]	

Note: b coefficients from LGC analysis, assuming a non-linear growth function;
 Numbers in parentheses behind the age categories are proportions in %. * p<0.10, ** p<0.05, *** p<0.01

Figures



Note: political interest: 1=not at all; 4=very interested. Lines show fitted values of a linear regression of age on political interest for 10 random respondents.

Figure 1: Development of political interest for 10 random respondents

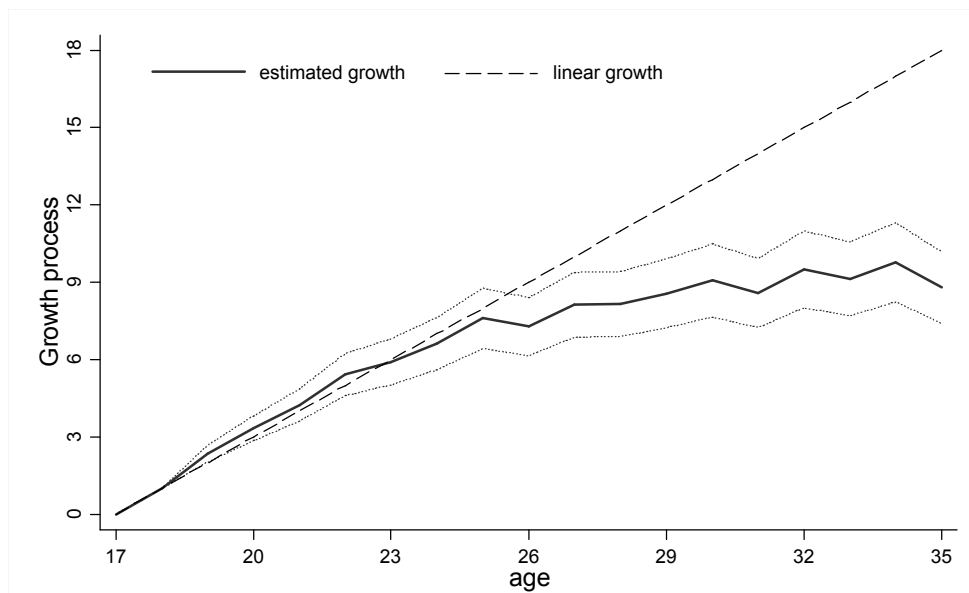


Figure 2: Estimated growth function of political interest by age