

## We the elite, they the people: Educational identity and perceived polarisation

Authors	Muis,Quita
Published in	Acta Sociologica
DOI	<a href="https://doi.org/10.1177/00016993261428798">10.1177/00016993261428798</a>
Publication Date	2026-03-08
Document Version	publishersversion
Link	<a href="https://research.tilburguniversity.edu/en/publications/185a42f8-349b-47b8-9cdb-95c800b91f94">https://research.tilburguniversity.edu/en/publications/185a42f8-349b-47b8-9cdb-95c800b91f94</a>
Citation	Muis, Q 2026, 'We the elite, they the people : Educational identity and perceived polarisation', Acta Sociologica. <a href="https://doi.org/10.1177/00016993261428798">https://doi.org/10.1177/00016993261428798</a>
Download Date	2026-05-17 12:52:11
Rights	<p>General rights</p> <p>Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.</p> <ul style="list-style-type: none"> <li>- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.</li> <li>- You may not further distribute the material or use it for any profit-making activity or commercial gain</li> <li>- You may freely distribute the URL identifying the publication in the public portal"</li> </ul> <p>Take down policy</p> <p>If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.</p>

# We the elite, they the people: Educational identity and perceived polarisation

Acta Sociologica

1–20

© The Author(s) 2026



Article reuse guidelines:

[sagepub.com/journals-permissions](https://sagepub.com/journals-permissions)

DOI: 10.1177/00016993261428798

[journals.sagepub.com/home/asj](https://journals.sagepub.com/home/asj)



Quita Muis 

## Abstract

The importance of education in the ‘schooled society’ leads to expectations of strong educational polarisation. Although the claim of educational polarisation receives little scientific support, this phenomenon still seems to be subjectively perceived. The social identity theory predicts that these perceptions are especially strong among the higher educated compared to the lower educated, due to their more powerful educational identity, and that these perceptions particularly concern cultural rather than economic distinctions between the two groups. Expectations are tested based on structural equation modelling of Dutch survey data (2019), and results confirm that the higher educated perceive more polarisation than the lower educated due to stronger educational identification. Although economic inequality between educational groups is still perceived as larger than their differences in cultural attitudes, only perceptions of the latter are affected by educational identities. This can lead to conflict in a society that is increasingly defined by the knowledge economy and politically occupied with cultural issues, failing to address the economic divide between the educational worlds.

## Keywords

Perceived polarisation, educational status, social identity theory, schooled society, new politics

## Introduction

Education is ingrained in the current ‘schooled society’ (Baker, 2014). Having resulted from societal modernisation, educational expansion is now crucial in shaping the organisation and culture of contemporary societies. As Baker (2014: 8) stated: ‘the schooled society is a wholly new social order where dimensions of education reach into and define nearly every facet of human life’. Education’s dividing character leads to expectations of strong educational polarisation, in the sense that educational groups are increasingly disagreeing about how society should develop (e.g., Inglehart and Norris, 2016; Kriesi et al., 2006). However, there is little scientific evidence of educational groups moving apart

---

Tilburg University, Tilburg, the Netherlands

### Corresponding author:

Quita Muis, Sociology Department, Tilburg University, PO Box 90153, 5000 LE Tilburg, the Netherlands.

Email: [q.muis@tilburguniversity.edu](mailto:q.muis@tilburguniversity.edu)

towards more extreme, opposite attitudes (e.g., Bramson et al., 2017; Dekker and Den Ridder, 2019; Muis et al., 2022). This seems to suggest that educational polarisation is subjectively perceived, rather than actually occurring (Lelkes, 2016).

Paradoxically, Baker (2014) claims that the significant influence of education is not always salient to people, exactly because it is omnipresent and so strongly ingrained in society. At the same time, he states that education is an important source of social identification and status attainment nowadays, arguably because of the value that is being attached to knowledge and cognitive skills in the seemingly meritocratic schooled society (Sandel, 2020). Indeed, in European countries with a large share of citizens in tertiary education, the educational gap in feelings of misrecognition is substantially wider (Van Noord et al., 2023).

American studies show that social identities play a significant role in various forms of polarisation other than attitudinal divergence (e.g. Bakker et al., 2020; Bougher, 2017; Iyengar et al., 2012; Levendusky and Malhotra, 2016). Therefore, I will use the social identity theory (SIT) (Tajfel and Turner, 1979) to argue that perceived educational polarisation exists due to the strong salience of educational identities. More specifically, I expect that the higher educated generally perceive more educational polarisation than the lower educated because of their stronger educational identification. I further explore whether this perceived polarisation is primarily economic or cultural in nature, in light of the shift from 'old' to 'new politics' (Dalton, 2013; Stubager, 2009), which seems to be rooted in educational differences (Van der Waal et al., 2007).

Based on the Dutch LISS panel data (Centerdata, 2019), the following research question will be answered: *to what extent can education-based group identification explain perceptions of educational polarisation?* The Netherlands has proven to be a good case for studying educational differences because of its early tracking system, which separates children into different levels at an early age and in turn reveals educational differences more clearly (Bovens and Wille, 2017; Koçer and Van de Werfhorst, 2012). The country also has one of the largest shares of tertiary-educated citizens in Europe (Eurostat, 2024). Moreover, research suggests that education-based group identification is strong among the Dutch – especially among the higher educated – as reflected in geographical segregation, 'elite schools' and social homogeneity (Bovens, 2012; Ketellapper, 2020; Vermeij and Thijssen, 2023). This seems to strengthen perceptions of conflict beyond mere disagreement between educational groups (Dekker and Den Ridder, 2019). Such subjective perceptions increase the risk of polarisation becoming a self-fulfilling prophecy: when perceived polarisation induces distinctive attitudes and behaviour, it can in turn deepen affective and actual divides (e.g., Adams et al., 2014; Hartevelde, 2019; Iyengar et al., 2019; Levendusky and Malhotra, 2016). According to some, the current educational cleavage even resembles past eras of Dutch consociationalism, as education is now as dividing as political ideology and religion once were (Bovens, 2024).

## Theoretical framework

### *Perceived polarisation*

As polarisation refers to 'the extent of disagreement' (DiMaggio et al., 1996: 692), educational polarisation can be considered the extent of disagreement between educational groups. In political research, perceived polarisation is defined as 'the degree to which the mass public perceives the parties and their followers to be polarised' (Lelkes, 2016: 399). Applying this definition to educational polarisation, I define perceived educational polarisation as the degree to which the mass public perceives educational groups to be polarised or in disagreement. This indicates that I will approach perceived polarisation as a state rather than a process (Bramson et al., 2017; Dimaggio et al., 1996; Lelkes, 2016).

Furthermore, the subjective nature of this kind of polarisation indicates that polarisation does not actually have to occur in order for perceived polarisation to exist (Dimaggio et al., 1996). As Somer

and McCoy (2019: 13) phrase it: 'It is not growing difference itself that produces severe polarisation. It is how this difference is interpreted and used by some actors and groups to create an antagonistic "us" vs. "them" perception of other groups'. Yet perceiving differences or disagreement between groups is not the same as perceiving these groups to be in antagonistic conflict (although both perceptions are often related; see Levendusky and Malhotra, 2016; Mason, 2016). This is well demonstrated by Dekker and Den Ridder (2019), who show that the Dutch public perceives substantially more disagreement than conflict between the lower and higher educated. Generally, educational distinctions are perceived as non-conflictual because they are presented as indefinite (because of lifelong learning possibilities), legitimate (due to their meritocratic nature) and inevitable (because of international competition) (Spruyt and Kuppens, 2015a: 297). Nevertheless, the perception of educational conflict is stronger than before (Dekker and Den Ridder, 2019), which may be due to the educational hierarchy being viewed as more impermeable and illegitimate (Hornsey, 2008; Inspectorate of Education, 2021; Sandel, 2020) or to the disagreement between educational groups being perceived as too large and therefore no longer compatible (DiMaggio et al., 1996). In the current study, I will focus on perceived educational disagreement rather than educational conflict, as the former still seems to be stronger than and can further impact the latter. This approach is also in accordance with the fundamental definition of polarisation (DiMaggio et al., 1996).

### *Educational identity salience*

A growing body of literature points to the important role of group-based identification in explaining forms of polarisation other than attitudinal divergence (e.g., Bakker et al., 2020; Bougher, 2017; Iyengar et al., 2012; Levendusky and Malhotra, 2016). This role can be explained by the SIT: an influential framework for intergroup relations (Hornsey, 2008; Tajfel and Turner, 1979).

The SIT focuses on how intergroup relations are affected by their social context (Tajfel and Turner, 1979). When distinctions between groups are salient in a certain context, they can become a source of social identification, which enhances the idea that people in the ingroup are similar to each other, while people in the outgroup are different. In turn, people start perceiving each other in terms of 'us and them', magnifying the already existing differences (Hornsey, 2008: 206). Whether a social group forms the basis for self-categorisation is dependent on cognitive 'accessibility' and 'fit' (Oakes, 1987). A social identity is more accessible when someone is frequently confronted with their group membership or has strong motivation to identify with this group; social identification is more fitting when the contrast between ingroups and outgroups is perceived as stark due to small intragroup and large intergroup differences, based on stereotypical assumptions of group attributes, norms and behaviour. Both the accessibility and fit are context dependent (Hornsey, 2008; Oakes, 1987).

In the schooled society, the accessibility and fit of educational categories are arguably high. Educational expansion has enabled people from different backgrounds to climb the educational ladder, as long as they have the cognitive capabilities to do so. Therefore, educational credentials are now considered to be based on merit and the attached social status to be 'primarily achieved' rather than 'primarily ascribed' (Kuppens et al., 2015: 1261). The perception of education as a legitimate indicator of status and skills makes education an impactful predictor of many life outcomes and hence a key element of social inequality (Kuppens et al., 2018; Spruyt and Kuppens, 2015a; Spruyt et al., 2018), for example, when it comes to employment opportunities (Solga, 2002), job precariousness (DiPrete et al., 2006), poverty (Hofmarcher, 2021), housing (Kurz, 2004) and health (Ross and Wu, 1995).

So educational credentials are distinctive in society, but are they also salient enough in people's social lives to form the basis for identification? According to several studies, people do indeed identify with their educational level, at similar levels as with their ethnicity, nationality and sexuality (Kuppens et al., 2015, 2018; Scharfbillig et al., 2021; Stubager, 2009; Van Noord et al., 2019). Europeans even rank their education as a substantially more important source of identification than their political orientation, religion or beliefs (Scharfbillig et al., 2021).

According to the SIT, objective group membership becomes a social identity when individuals internalise the stereotypical attributes, norms and behaviours of the group they have categorised themselves into, due to emotional attachment (Hornsey, 2008; Tajfel and Turner, 1979). Even though individuals with the same educational level can be extremely diverse in other characteristics – especially since education has become more meritocratic and people from various backgrounds can follow higher education – evidence shows that educational groups function as sources of social identification due to shared attributes, norms, behaviours and emotional attachment (Bovens et al., 2014; Van Noord et al., 2023). For example, Scott (2022) shows that socialisation in higher education influences cultural outlook: students are more liberal when they leave university compared to when they entered, likely (partly) due to identity formation. Furthermore, the lower and higher educated have shown to have very distinct cultural tastes, for example, in music, food, clothing and humour (Bourdieu, 1984; Bovens et al., 2014; Stubager, 2009). These distinctions are also evaluated differently, as the cultural attitudes and tastes of the higher educated are receiving more social recognition than those of the lower educated, which are being looked down upon (Bovens et al., 2014). So, regardless of the heterogeneity in other characteristics, educational groups are respectively praised or stigmatised as one homogeneous group (Van Noord et al., 2023). The recognition and evaluation of these group characteristics are also used in neighbourhood and school choices (Ketellapper, 2020; Van Noord et al., 2023; Vermeij and Thijssen, 2023), as well as in finding friends and partners, especially among the higher educated (Bovens, 2012, 2015). They are, for example, more likely to contact each other on online dating platforms (Skopek et al., 2011).

It is likely that the mentioned differences are also partly due to cognitive differences between the groups. Yet again, cognition also seems to be part of the distinctive educational identities. In accordance with the stereotype content model (Cuddy et al., 2009: 33), the higher educated mostly describe themselves in terms of capability and skills, while the lower educated avoid such competence-related attributes by describing themselves in terms of sincerity and friendliness (Spruyt, 2014; Spruyt and Kuppens, 2015b). These categorisations also trigger different intergroup emotions (Cuddy et al., 2009). Overall, these differences in stereotypical attributes, norms and behaviours form the foundation of educational identities and cause social distance between educational groups (Bovens et al., 2014).

Especially in the Netherlands, the early tracking system causes socialisation to take place separately, at different levels, which makes people aware of their educational level at a young age (Stubager, 2009; Van Noord et al., 2019). This displays how schools are ‘sorting machines’ (Domina et al., 2017: 315). After finishing school, people are also frequently confronted with their educational level, as it functions as a gatekeeper for several social places, such as the labour market (Solga, 2002; Spruyt and Kuppens, 2015a). Furthermore, the sharp rather than gradual distinction between educational groups (i.e., low vs. high) is frequently used in the media and in politics to discuss social problems (Spruyt et al., 2018). Debate is ongoing in the Netherlands about changing these labels to ‘practically’ and ‘theoretically’ educated in order to reduce their normativity, but sharp distinctions remain, and stereotypical attributes are hard to change (Pleijers and De Vries, 2021).

So, both the accessibility and fit of educational categories are assumed to be high in the context of the schooled society. However, they may arguably be higher among the higher educated.

### *Lower versus higher educated*

Central to the SIT is the notion of a positive self-concept (Hornsey, 2008; Tajfel and Turner, 1979). At the individual level, our self-concept consists of attitudes and behaviour that make us distinct from other individuals (i.e. ‘personal identity’). On the group level, our self-image is built upon the social categories we belong to and the attributes, norms and behaviour that result from this (i.e. ‘social identity’) (Hornsey, 2008: 206). When our group-level self-concept is activated, we start evaluating the ingroup compared to relevant outgroups. After all, ‘groups are not islands; they become psychologically real only when defined in comparison to other groups’ (Hornsey, 2008: 207). Differences between the ingroup and the outgroup are mentally enhanced and are sometimes accompanied by a negative evaluation of the

outgroup, because we want the comparison to lead to a positive self-image.<sup>1</sup> Even when reality tells otherwise, our ingroup bias leads to a more positive perception of our own group (Bougher, 2017; Mason, 2015). Hence, social identification has two components: the acknowledgement of being a member of the group and the positive evaluation of this group membership (Bougher, 2017; Stubager, 2009). When group identification is strong, people are ‘motivated to emphasise the distinct identity of those groups, and to uphold, protect, or enhance the value afforded to those groups and their members’ (Ellemers and Haslam, 2012: 382). This happens through both cognitive and actual enhancement of the stereotypical group differences in attributes, norms and behaviour (Hornsey, 2008). Those who retrieve a positive self-image through group membership are thus more likely to identify with their social group and will, in turn, perceive more group differences in those areas that further enhance this positive self-concept.

Given today’s schooled and meritocratic context, the higher educated, especially, benefit from education-based identification because their higher educational level indicates more competence and status, leading to a more positive self-image (Kuppens et al., 2015, 2018; Stubager, 2009). For the lower educated, less competence and a lower social status are attached to their identity. They are defined by something they do *not* have or have *less*, instead of something they *do* have or have *more*, which generates less self-esteem (Kuppens et al., 2015).<sup>2</sup> Moreover, as described in the previous section, the stereotypical attributes, norms and behaviours of the higher educated are generally valued higher in society than those of the lower educated, motivating the higher rather than the lower educated to emphasise intergroup differences. This holds particularly true for their differences in (the cognitive reasoning behind their) cultural attitudes, as these function as a source of distinction (Bourdieu, 1984; Bovens et al., 2014; Scott, 2022; Stubager, 2009). Hence, due to their stronger social identification, the higher educated are more likely to perceive educational disagreement and thus polarisation. This argument following from the SIT is in accordance with empirical research showing that the higher educated identify more with their educational level, view their attitudes as superior and display more intergroup bias than the lower educated (Bovens et al., 2014; Hartevelde, 2019; Kuppens et al., 2015, 2018; Stubager, 2009).

This does not mean that the lower educated do not have any educational awareness. In fact, their awareness is what is causing them to identify less, because they recognise the lower social status attached to their educational level, which leads to a less positive self-image (Spruyt and Kuppens, 2015a). Nevertheless, according to the mechanisms of the SIT (Tajfel and Turner, 1979), those lower educated who do strongly identify with their educational level will also perceive more educational polarisation, as they may, for example, perceive their attitudes as more friendly or sincere (Spruyt, 2014; Spruyt and Kuppens, 2015b). They are, therefore, motivated to further emphasise the differences between them and the higher educated. Moreover, some level of identification and intergroup bias among the lower educated can be useful and is therefore not unlikely, since they can benefit more from intergroup conflict by challenging their lower social status (Hornsey, 2008; Kuppens et al., 2018). The higher educated, on the other hand, gain more by distinguishing themselves in a non-conflictual way, as this enables them to remain socially dominant without much challenge from the lower educated (Spruyt, 2014). Especially in a time where the number of higher educated is increasing, this group benefits from emphasising differences but not creating conflict, as their form of distinction is already under threat. Indeed, the status of higher education seems to be especially high in countries with a large share of higher educated (Van Noord et al., 2019).

In sum, I assume that educational distinctions are salient in the schooled society. The view on education as meritocratic legitimises the social status of higher education. Because group identification is more likely to occur when it leads to a better self-image, the higher educated are more likely to identify strongly with their educational level than the lower educated. Further distinction is particularly likely along the lines of (supposedly well-reasoned) cultural attitudes, and the former will thus perceive stronger polarisation to emphasise these differences. This leads to the following hypothesis:

H1: The higher educated have a stronger perception of educational polarisation than the lower educated because the former identify more strongly with their educational level.

## *The nature of perceived polarisation*

Up until now, I have argued that educational identification and the resulting perceived polarisation is most likely to occur based on educational differences in cultural attitudes because such attitudes are an important source of distinction. While educational level is also still strongly linked to economic resources and such economic inequality remains a significant source of polarisation (Gidron et al., 2019; Hartevelde, 2019), perceived educational polarisation seems to be more cultural than economic in nature indeed. First of all, Baker (2014: 2) has called educational expansion ‘a cultural phenomenon more than a material or political one’, which has created new cultural ideas about humans and society. Van Noord et al. (2019) confirm that the subjective social status derived from higher education in the schooled society goes beyond one’s material resources. When it comes to income and class, luck is seen as an important factor in succeeding, while education is more often viewed as a personal responsibility, emphasising the perceived meritocratic nature of education (Kuppens et al., 2018).

Moreover, ‘old politics’ concerning economic inequalities has made room for ‘new politics’, primarily concerning cultural issues (Dalton, 2013; Stubager, 2009). Educational disagreement on issues such as multiculturalism and law and order are now more salient and more important for voting behaviour in the Netherlands (Adams et al., 2012; Bovens et al., 2014; Inglehart and Norris, 2017). Dutch citizens also mention such cultural issues as the main cause of societal disagreement nowadays (Dekker and Den Ridder, 2019). This is strongly rooted in the current importance of education compared to class (Van der Waal et al., 2007), again emphasising how educational distinction is primarily cultural in nature. It is also more beneficial to the higher educated political elite to emphasise cultural attitudinal disagreement rather than economic inequality. The former can be framed in a largely non-conflictual way based on educational stereotypes (Spruyt, 2014), as such attitudes supposedly are the result of more knowledge, better cognitive skills and cultural superiority. Economic inequality is, however, way more complex, and addressing the educational differences in economic resources – which are more luck than merit based (Kuppens et al., 2018) – would threaten the educational hierarchy by eliciting group conflict due to its partial illegitimacy (Hornsey, 2008).

Combined, both the salience of educational identities and the distinction between educational groups is more strongly rooted in cultural differences, and therefore, perceptions of educational polarisation are expected to be more strongly based on cultural attitudes compared to economic resources. This leads to the following hypothesis:

H2: Perceptions of educational polarisation are based on cultural rather than economic differences between educational groups because educational identities are more strongly rooted in cultural compared to economic distinctions.

## **Data and methods**

### *Data*

In order to test the hypotheses, I analysed data retrieved among respondents of the Dutch LISS panel (Longitudinal Internet Studies for the Social sciences) (2019), administered by Centerdata (Tilburg University, the Netherlands). The sample consisted of panel members who participated online in the last wave of the Dutch European Values Study and was randomly drawn and representative for the Dutch population. With a response rate of 73.3%, the initial sample consisted of 1275 respondents. I selected only those respondents with no missing values on all included variables, which eventually led to a sample size of 1184 respondents (92.9%). The relatively small percentage of missing values (7.1%) was spread over multiple variables and did not necessitate more advanced imputation methods.

## Variables

*Perceived polarisation.* To measure perceived polarisation, the approach of Dekker and Den Ridder (2019) was followed, asking respondents: ‘In your opinion, how large is the disagreement between lower and higher educated in the Netherlands?’. Answer options included (1) no disagreement; (2) very small disagreement; (3) small disagreement; (4) large disagreement; and (5) very large disagreement. A higher score thus indicated stronger perceived polarisation. Most of the respondents answered this question with ‘large disagreement’, and the data were thus highly, negatively skewed ( $-1.27$ ) with strong kurtosis ( $2.09$ ).<sup>3</sup>

*Cultural and economic distinctions.* To further investigate the nature of perceived polarisation, respondents were asked a follow-up question: ‘Could you indicate on a scale from 1 to 5 to what extent the following matters influence this disagreement?’, where 1 meant ‘not of influence’ and 5 meant ‘of very strong influence’. The first item included ‘differences between educational groups in how they think about society’, and the second item included ‘differences between educational groups in (economic) resources’. Both items were moderately skewed ( $-0.69$  and  $-0.51$ , respectively), and the first item, especially, showed strong kurtosis ( $1.50$  and  $0.76$ , respectively). Due to the survey design of Centerdata, only a part of the respondents was presented with these two questions (61.6%). This selection was completely random. Therefore, the items were not taken into account in the eventual respondent selection (based on listwise deletion), and only the respondents who answered both questions were included in the corresponding analyses ( $N = 737$ ).

*Educational level.* In accordance with the ISCED categorisation, the educational level of respondents was assigned based on the six categories of Statistics Netherlands (CBS) (2016), namely, (1) *basis* (primary); (2) *vmbo* (lower secondary); (3) *havo/vwo* (higher secondary); (4) *mbo* (post-secondary, non-tertiary); (5) *hbo* (tertiary, higher vocational); and (6) *wo* (tertiary, university). These levels were recoded into three categories: lower educated (1 and 2), middle educated (3 and 4) and higher educated (5 and 6).<sup>4</sup> The categories contained 31.1%, 37.0% and 31.9% of the respondents, respectively.<sup>5</sup>

*Educational identity.* To measure to what extent respondents identified with their educational level, the recommendation of Kuppens et al. (2015) was followed, to use more than one item, to capture multiple aspects of identification. Contrary to many studies – but in line with sociopsychological research on social identification – respondents were not asked whether they identified with either lower or higher educated people (or neither), because the lower educated are less likely to respond to such ‘forced-choice’ questions (Kuppens et al., 2015). Rather, they were presented with the following statements: ‘I feel connected to people with the same educational level as myself’ and ‘My educational level forms an important part of my identity’.

These statements refer to the theoretical concepts of the ‘fit’ and ‘accessibility’ of a social identity, respectively (Oakes, 1987). As elaborated in the theoretical section, the former is strong when intragroup cohesion is perceived as high, and the latter is strong when people are motivated to see group membership as part of their identity. While both elements have proven to be good indicators of self-categorisation, there exists a complex relationship between the two (e.g. Blanz, 1999). Therefore, both items are modelled separately as indicators of the latent variable ‘educational identity’.

To both statements, respondents could answer (1) totally disagree; (2) disagree; (3) agree, nor disagree; (4) agree; and (5) totally agree. A higher score thus meant stronger identification. Both items were normally distributed, with a skewness of  $-0.39$  and  $-0.30$  and a kurtosis of  $0.26$  and  $-0.39$ , respectively. The two items showed a Pearson correlation of  $0.50$  and a Kendall’s tau-*b* of  $0.44$ .

*Control variables.* A number of control variables were added to the models, namely, *gender* (0 = male, 1 = female), *age* (in years), *income* (0 = no income, 12 = more than 7500 euros net income per month) and *urbanity* (1 = not urban, 5 = very strongly urban).<sup>6</sup> These control variables are common in research into educational differences, to account for spuriousness (e.g. Koçer and Van de Werfhorst, 2012; Scott, 2022; Spruyt and Kuppens, 2015b; Stubager, 2009). Income is especially important in this regard, as I try to capture educational identity beyond economic resources (Kuppens et al., 2018; Van Noord et al., 2019).<sup>7</sup> See Table 1 for a descriptive overview of all the included variables.

**Table 1.** Descriptive statistics.

	N	Min–max	Mean	Standard deviation
Perceived polarisation	1184	1–5	3.55	0.87
Cultural differences	737	1–5	3.83	0.77
Economic differences	737	1–5	3.98	0.72
Education				
Lower	1184	0–1	0.31	
Middle	1184	0–1	0.37	
Higher	1184	0–1	0.32	
Educational identity				
Connectedness	1184	1–5	3.28	0.90
Part of identity	1184	1–5	3.13	0.99
Gender (female)	1184	0–1	0.50	
Age	1184	19–92	50.1	18.2
Income	1184	0–12	3.68	2.09
Urbanity	1184	1–5	2.89	1.44

Source: LISS panel (Centerdata, 2019), weighted data (except for N).

## Analytical strategy

To investigate if higher educated individuals have a stronger perception of polarisation than lower educated individuals and whether this is due to higher levels of group identification, I performed structural equation modelling (SEM) with maximum likelihood estimation and NLMINB optimisation. SEM was chosen because it enables the estimation of a latent mediator variable based on multiple observed indicators – as is the case for educational identity – thereby reducing measurement error. It also allows for the simultaneous estimation of both direct and indirect paths within one model, which is essential for testing the hypothesised mediation.<sup>8</sup>

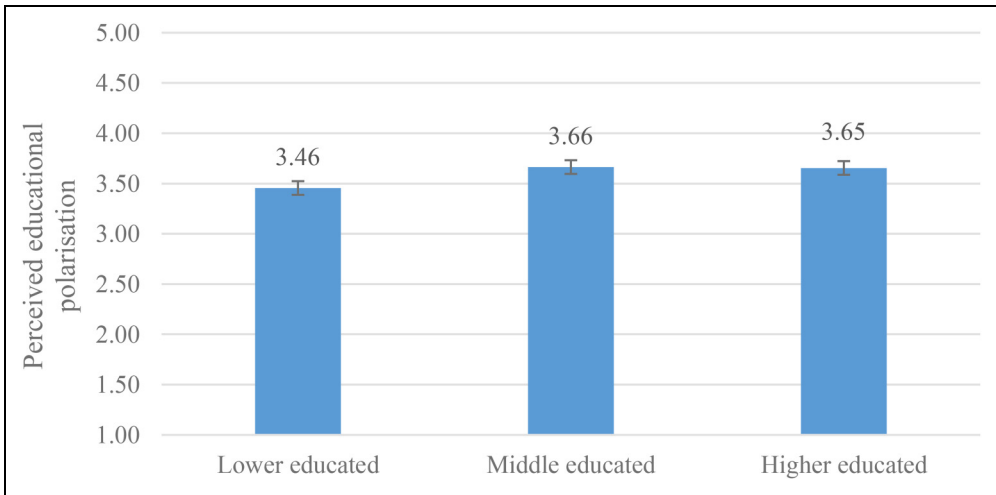
By using the R package *Lavaan*, perceived educational polarisation was defined by education, gender, age, income and living area. Educational identity was included as a latent variable with two indicators and modelled as a mediator. Because not all the items were normally distributed, I looked at the robust, corrected fit statistics. According to the global and incremental fit indices, the model explains the data well [ $\chi^2(6) = 10.41$ ,  $p = .11$ ; comparative fit index (CFI) = 0.98; Tucker–Lewis index (TLI) = 0.95], and also the absolute fit indices indicate a good fit of the model [standardised root mean square residual (SRMR) = 0.01 and root mean square error of approximation (RMSEA) = 0.03] (Schreiber et al., 2006). After inspection of the modification indices, no further adjustments were made to the model.<sup>9</sup>

Thereafter, I performed a paired-sample *t*-test to see whether perceived polarisation is primarily based on economic or cultural differences between educational groups. Additional structural equation models were estimated as described above, to investigate the role of identity in perceived cultural and economic differences, respectively. Post-stratification weights were applied to all analyses to correct for the Dutch population's distribution of gender, age and education.

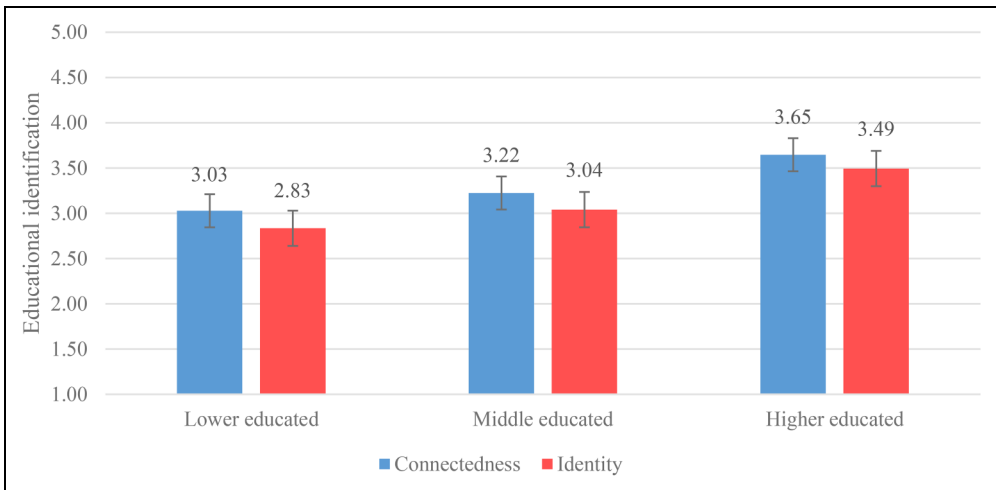
## Results

### Educational identity and perceived polarisation

I first inspected the descriptive association between educational level and perceived educational polarisation and between educational level and educational identification. Figure 1 shows that educational polarisation is generally perceived as large, and this holds for every educational group. The higher and middle educated both perceive significantly more polarisation than the lower educated [ $t(664) = 3.12$ ,  $p < .001$ , and  $t(695) = 3.16$ ,  $p < .001$ , respectively] but do not differ from each other [ $t(738) = -0.17$ ,  $p = .43$ ].



**Figure 1.** Mean perception of educational polarisation by educational group (standard errors).  
 Source: LISS panel (Centerdata, 2019), weighted data.



**Figure 2.** Mean educational identification by educational group – connectedness and identity (standard errors).  
 Source: LISS panel (Centerdata, 2019), weighted data.

Figure 2 indicates that, for every educational group, the level of connectedness to people with the same educational level is higher than the importance of education to one’s identity. The higher educated feel more connected to similar others than both the lower [ $t(664) = 9.73, p < .001$ ] and middle educated [ $t(738) = 6.62, p < .001$ ], and this also holds for the importance of their educational identity [ $t(664) = 9.15, p < .001$ , and  $t(738) = 6.44, p < .001$ , respectively]. The middle educated also feel more connected [ $t(695) = 2.89, p < .01$ ] and identify more strongly [ $t(695) = 2.76, p < .01$ ] than the lower educated, although not substantially.

To test Hypothesis 1, I performed SEM and first inspected the total effects, meaning the effects of the independent variables on perceived educational polarisation, without controlling for identification. Table 2 shows that the higher educated, as well as the middle educated, have a significantly stronger

**Table 2.** Perceived educational polarisation and the mediating role of educational identification – coefficient estimates from structural equation modelling (standard errors between parentheses).

	Perceived polarisation	Educational identity	Indirect effect	Total effect
Education (ref. = lower)				
Middle	0.262* (0.112)	0.126 (0.079)	0.028 (0.020)	0.290** (0.106)
Higher	0.162 (0.108)	0.530*** (0.083)	0.119** (0.039)	0.281** (0.102)
Gender (female)	-0.075 (0.084)	0.004 (0.067)	0.001 (0.015)	-0.074 (0.078)
Age	0.006* (0.003)	-0.003 (0.002)	-0.001 (0.000)	0.005* (0.003)
Income	0.001 (0.021)	0.021 (0.017)	0.005 (0.004)	0.005 (0.019)
Urbanity	0.071** (0.027)	0.019 (0.021)	0.004 (0.005)	0.075** (0.025)
Educational identity	0.225** (0.066)			
R <sup>2</sup>	.072	.137		

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

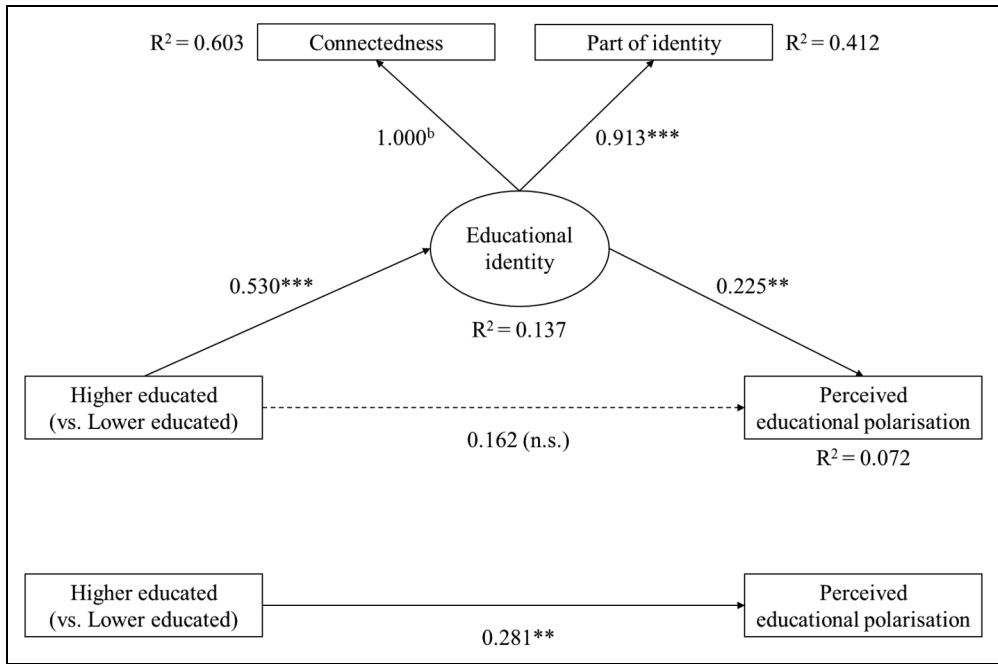
Source: LISS panel (Centerdata, 2019), weighted data.

perception of educational polarisation than the lower educated. Notably, the difference in perception is roughly the same between the middle and the lower educated ( $b = 0.29$ ,  $SE = 0.11$ ,  $p < .05$ ) and between the higher and the lower educated ( $b = 0.28$ ,  $SE = 0.11$ ,  $p < .01$ ). The control variables have little to no effect on perceived educational polarisation, although perceptions are somewhat stronger in more urban areas ( $b = 0.08$ ,  $SE = 0.03$ ,  $p < .01$ ) and among the elderly ( $b = 0.01$ ,  $SE = 0.00$ ,  $p < .05$ ).

Concerning education-based identification, the results first of all show a significant factor loading for the identification item ( $\lambda = 0.91$ ,  $SE = 0.11$ ,  $p < .001$ ) (the factor loading of the first connectedness indicator is fixed to 1, to set the scale of the latent variable). The latent factor explains 60.3% of the variance in educational connectedness and 41.2% of the variance in seeing education as part of one's identity.

The middle educated do not identify significantly more strongly with their educational level than the lower educated ( $b = 0.13$ ,  $SE = 0.08$ ,  $p = .11$ ), which in turn means that their levels of identification cannot account for their differences in polarisation perceptions ( $b = 0.03$ ,  $SE = 0.02$ ,  $p = .16$ ).<sup>10</sup> The higher educated, on the other hand, identify much more strongly with their educational level than the lower educated ( $b = 0.53$ ,  $SE = 0.08$ ,  $p < .001$ ). This difference in identification significantly mediates the relationship between educational level and perceived polarisation (indirect effect:  $b = 0.12$ ,  $SE = 0.04$ ,  $p < .01$ ) and explains 42.3% of the association between education and perceived differences. The direct effect is no longer significant after including educational identification ( $b = 0.16$ ,  $SE = 0.11$ ,  $p = .13$ ). See Figure 3 for a graphical representation of this mediation effect. Overall, effects range from small to moderate, with standardised estimates between 0.06 and 0.35 (Cohen, 1988). The relatively little explained variance (7.2% and 13.7%) shows that other factors play a role in perceived polarisation and education-based identification that have not been included in this study.

Analyses with the two educational identity indicators separately yielded similar results (see Appendix A). More specifically, the higher educated feel significantly more *connected* to similar others than the lower educated ( $b = 0.50$ ,  $SE = 0.08$ ,  $p < .001$ ), and their educational level is also a more important part of their *identity* ( $b = 0.55$ ,  $SE = 0.10$ ,  $p < .001$ ). Both *connectedness* ( $b = 0.13$ ,  $SE = 0.04$ ,  $p < .01$ ) and *identification* ( $b = 0.09$ ,  $SE = 0.04$ ,  $p < .05$ ) positively affect perceived polarisation. In turn, this leads to significant mediating effects of *connectedness* ( $b = 0.06$ ,  $SE = 0.024$ ,  $p < .01$ ) and *identification* ( $b = 0.05$ ,  $SE = 0.020$ ,  $p < .05$ ). Separately, *connectedness* and *identification* explain, respectively, 22.8% and 17.4% of the differences between the lower and the higher educated in perceived polarisation (which are  $b = 0.22$ ,  $SE = 0.10$ ,  $p < .05$ , and  $b = 0.23$ ,  $SE = 0.10$ ,  $p < .05$ , respectively, after controlling for the mediation effect). Similar to the original analyses, the middle educated do not significantly differ from the lower educated in their *connectedness* ( $b = 0.10$ ,  $SE = 0.08$ ,  $p = .23$ ) or *identification* ( $b = 0.17$ ,  $SE = 0.09$ ,  $p = .06$ ). None of the effects of *connectedness* and *identification* significantly differ from each other, indicating that the fit and accessibility of an identity are equally important to the causes and consequences of self-categorisation.<sup>11</sup>



**Figure 3.** The mediating role of educational identity in perceived polarisation differences between the higher and lower educated – coefficient estimates from structural equation modelling.<sup>a</sup>

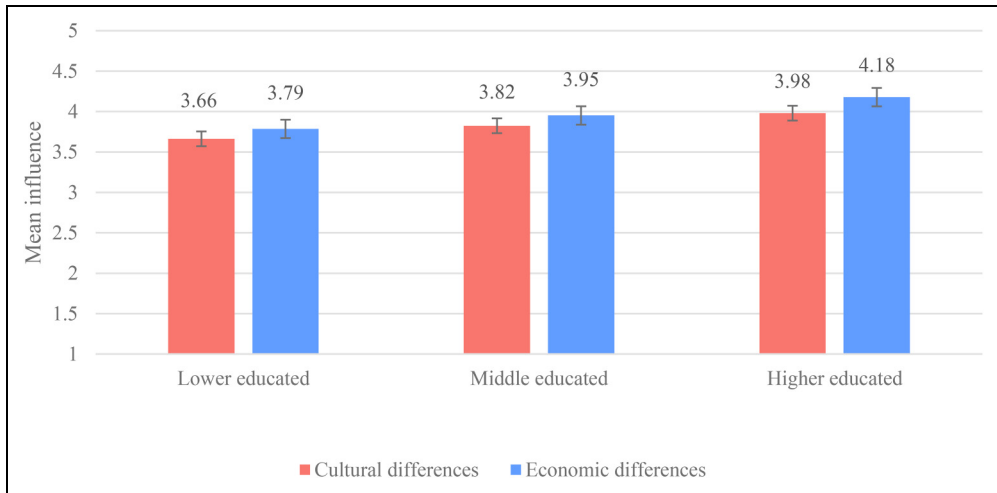
<sup>a</sup>Controlled for middle versus lower educated, gender, age, income and urbanity. <sup>b</sup>Parameter fixed to 1 to set the scale of the latent variable. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ; n.s. = not significant. Source: LISS panel (Centerdata, 2019), weighted data.

Combined, the findings confirm Hypothesis 1: the higher educated have a stronger perception of educational polarisation than the lower educated, because the former identify more strongly with their educational level.

### The nature of perceived polarisation

Contrary to the expectation, the paired-sample *t*-test regarding the cultural versus economic nature of perceived educational polarisation showed that people see differences in economic resources between educational groups as more divisive than their cultural attitudes. The means of the two items already indicated a somewhat stronger perception of economic ( $M = 3.98, SD = 0.72$ ) compared to cultural distinctions ( $M = 3.83, SD = 0.77$ ) (see Table 1), and this difference turns out to be significant [ $t(720) = -5.12, p < .001$ ]. These findings also hold for every educational group separately [lower:  $t(240) = -2.19, p < .05$ ; middle:  $t(282) = -2.56, p < .01$ ; higher:  $t(240) = -4.25, p < .001$ ], with the strongest difference being among the higher educated (see Figure 4). These results already contradict the first part of Hypothesis 2: perceived educational polarisation is in fact more economic than cultural in nature.

However, when we look at the role of education-based identification in perceived cultural and economic polarisation (see Appendix B), results reveal that identification has a positive effect on perceived cultural differences ( $b = 0.21, SE = 0.06, p < .01$ ), but no significant effect on perceived economic differences ( $b = 0.12, SE = 0.06, p = .06$ ). In turn, educational identity significantly explains 34.3% of the differences between the lower and higher educated in perceived cultural polarisation ( $b = 0.11, SE = 0.04, p < .01$ ) but cannot significantly explain their differences in perceived economic polarisation ( $b = 0.06, SE = 0.03, p = .06$ ) (see Figure 5). For the middle educated, no differences were found in perceived cultural polarisation compared to the lower educated ( $b = 0.14, SE = 0.09, p = .12$ ), but they do perceive more



**Figure 4.** Mean cultural and economic influence on perceived polarisation by educational group (standard errors). Source: LISS panel (Centerdata, 2019), weighted data.

economic differences between educational groups ( $b = 0.20$ ,  $SE = 0.10$ ,  $p < .05$ ). Overall, effects range from small to moderate, with standardised estimates between 0.04 and 0.33 (Cohen, 1988). The control variables affected neither cultural nor economic perceived polarisation.

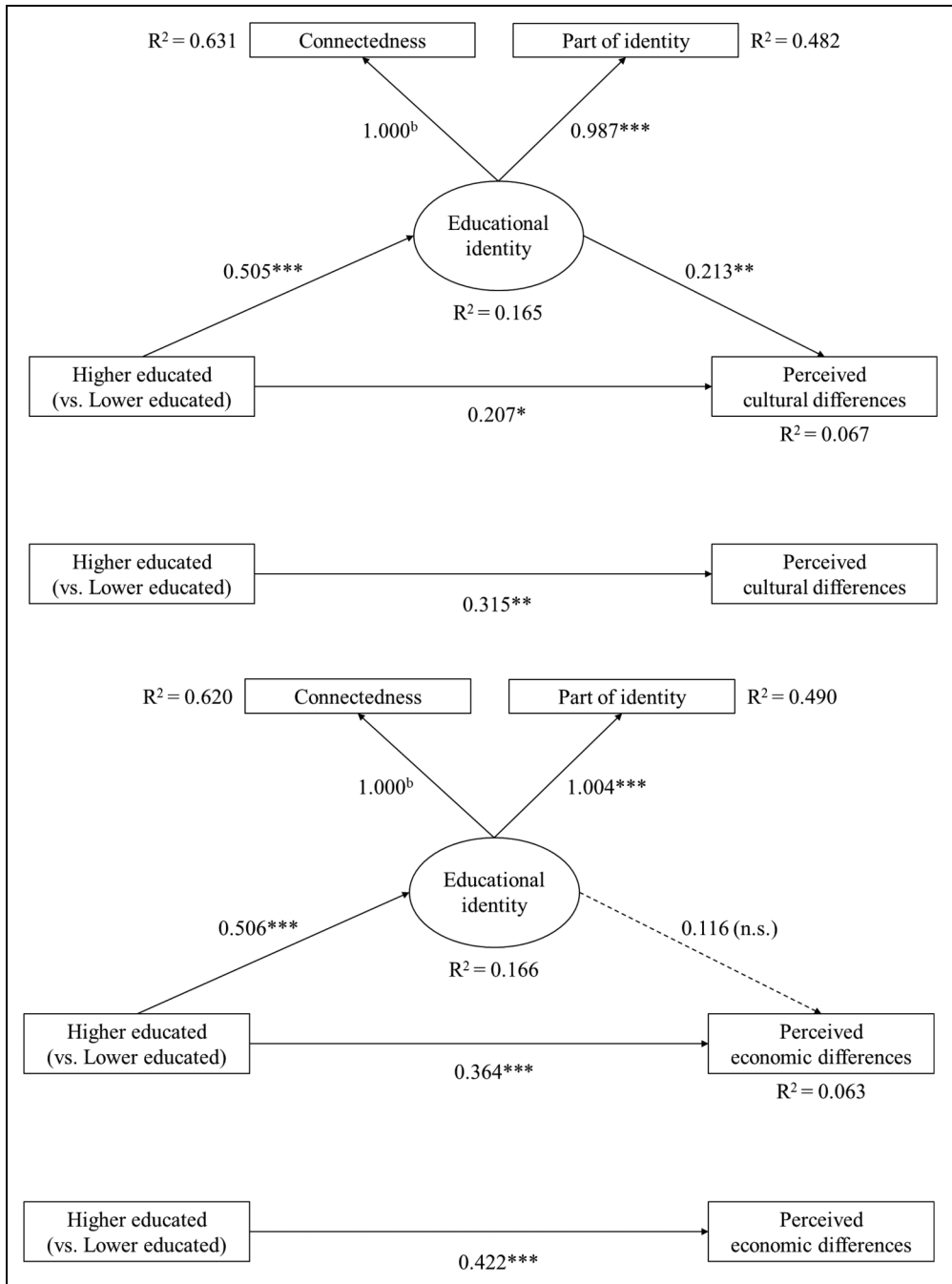
Combined, these results partly confirm Hypothesis 2: educational identities are indeed more strongly rooted in cultural compared to economic distinctions, but this does not make people perceive more cultural than economic polarisation between educational groups.

## Discussion and conclusion

In the current schooled society, educational differences are an important source of social identification and status attainment, which could explain (false) perceptions of educational polarisation. I turned to the SIT to investigate this role of education-based identification in perceived educational polarisation, as well as the nature of these perceptions.

Based on Dutch LISS panel data (Centerdata, 2019), I conclude that the higher educated perceive more educational polarisation than the lower educated, and this is partly due to their differences in education-based identification. These findings emphasise the robustness of the classic SIT (Tajfel and Turner, 1979), which continues to prove its validity in different times and contexts. According to this framework, the higher educated are more likely to identify with their educational level because the social status and power attached to it lead to a more positive self-image. For reasons of distinction, the identification with their social group generates perceptions of small intragroup and large intergroup differences and thus of polarisation. Furthermore, the results regarding the middle educated deviated from the other educational groups. This shows the exceptional position of the middle educated, which is often ignored in studies on educational differences (admittedly, also largely so in the current study) but deserves more attention in future research (see, for example, Engbersen et al., 2017). Such research should also be conducted in countries other than the Netherlands, as educational differences may be less salient and perceived polarisation thus less substantial.

As recommended in a previous work (Kuppens et al., 2015), I used two indicators to capture educational identification, namely, the extent to which people feel connected to others with the same educational level and the extent to which they see their educational level as an important part of their identity. These items tap into the 'fit' and 'accessibility' of social identities (Oakes, 1987). Because these



**Figure 5.** The (absent) mediating role of educational identity in perceived cultural (top) and economic (bottom) differences between the higher and lower educated – coefficient estimates from structural equation modelling.<sup>a</sup> <sup>a</sup>Controlled for middle versus lower educated, gender, age, income and urbanity. <sup>b</sup>Parameter fixed to 1 to set the scale of the latent variable. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ; n.s.: not significant. Source: LISS panel (Centerdata, 2019), weighted data.

concepts have a complex relationship (Blanz, 1999), they were added as separate indicators. Eventually, the items turned out to have similar effects on perceived polarisation and explained educational differences equally well. Future research should note the importance of using multiple indicators but could consider combining these into one measure.

A number of other methodological limitations could be addressed in future research, such as the measurement scale of perceived polarisation. The scale was treated as continuous, but in an open question included in the survey, some respondents indicated that they missed a middle-answer option ('small differences is somewhat too less, yet large differences is too exaggerated'), which may indicate that the distance between the answers was not always perceived as equal and that some respondents felt forced to give more extreme answers, leading to skewed results. Furthermore, the risk of omitted variable bias in interpreting the results could not be prevented due to limited item availability in the used dataset. Future research could focus on other possible explanations of perceived educational polarisation, for example, in the political sphere. The use of cross-sectional data to investigate mediation effects could have affected the interpretation of the results as well, for example, in terms of reversed causality. While the SIT (Tajfel and Turner, 1979) argues that stronger identification leads to stronger perceived polarisation, the opposite is (also) true in light of the optimal distinctiveness theory (Brewer, 1991). Taking this into account may give more insight into what makes educational groups particularly distinct.


Regarding the nature of perceived polarisation, I conclude that educational differences in economic resources are perceived as greater than differences in cultural attitudes, although educational identities are more strongly rooted in cultural compared to economic distinctions. This is in accordance with earlier research showing that the status attached to educational identities goes beyond material resources and class (Kuppens et al., 2018; Van Noord et al., 2019). It seems especially beneficial to the higher educated to distinguish themselves from the lower educated based on cultural attitudes. In line with educational stereotypes, they can be portrayed as largely non-conflictual, resulting from more knowledge, better cognitive skills and cultural superiority (Spruyt, 2014). Recognising and addressing economic inequality, on the other hand, could threaten the educational hierarchy by eliciting group conflict due to its partial illegitimacy (Hornsey, 2008; Kuppens et al., 2018). Although these findings contribute to the scientific debate on the nature of educational identities and perceived polarisation, the large unexplained variance shows that more is to be discovered. This is preferably done by qualitative research, because of the subjective nature of identification and polarising perceptions.

The findings also ask for more research into perceived polarisation as a process rather than a state, as it remains unclear whether educational polarisation perceptions have increased or decreased over time due to the rise of the schooled society (Baker, 2014). It has become clear that educational differentials are still highly salient in society and still form an important source of social identification. However, this could (have) change(d) over time, due to the growing share of the higher educated in society. Being higher educated has become less unique, which could reduce the positive contribution to the self-image of higher educated individuals. This could in turn decrease their level of identification and thus their perceived polarisation. Contrarily, it could also lead to stronger intergroup bias and need for distinction, exactly because the higher educated must uphold their positive self-concept and social status (Van Noord et al., 2019). They could do so by increasingly emphasising negative characteristics of the lower educated through intergroup comparison (Hornsey, 2008), such as their knowledge and cognitive skills, as these have become key features in schooled societies (Baker, 2014). In turn, conflict perceptions may rise among the lower educated, as educational inequalities will increasingly be seen as illegitimate yet definite (Spruyt and Kuppens, 2015a). The higher educated may increasingly perceive the worldviews of the lower and higher educated as incompatible, also eliciting conflict perceptions (DiMaggio et al., 1996).

Moreover, as politicians (e.g. Iyengar et al., 2012) and media (e.g. Levendusky and Malhotra, 2016; Spruyt et al., 2018) make educational identities salient, social and political debate is mostly dominated by cultural issues, as strong educational identification influences perceptions of cultural differences but does not affect perceptions of economic differences. In a context of culturalised new politics (Dalton, 2013; Stubager, 2009), this will leave less attention for economic inequalities, even though these are recognised

across all educational levels, and even most strongly so among the politically powerful elite. This disregard will only widen the (perceived) gap between them and ‘the people’ and lead to ever less trust in the diploma democracy (Bovens and Wille, 2017).

## ORCID iD

Quita Muis  <https://orcid.org/0000-0002-7566-6507>

## Funding

The author received no financial support for the research, authorship and/or publication of this article.

## Notes

1. Bougher (2017) points to the important differentiation between ingroup liking and outgroup derogation: mere categorisation leads to ingroup liking, rather than outgroup derogation. When comparison leads to the perception of significant differences, this could in turn lead to outgroup derogation.
2. This changes when the earlier mentioned labels of ‘practically’ and ‘theoretically’ educated are used, but concerns are that the stigma remains (Pleijers and De Vries, 2021).
3. The continuity of the scale is debatable since the distance between scores 3 and 4 may be interpreted differently than the difference between the other scores.
4. In line with the discussed literature, this study focuses on the distinction between the lower and higher educated. Nevertheless, the middle educated are included in the analyses to ensure a more nuanced and comprehensive representation of the population. Including this group avoids an artificial dichotomisation and provides further insight into whether the middle educated align more closely with one side or hold a distinct position.
5. Due to weighing, this is in accordance with the distribution of education among the Dutch population: of people aged 15 years and older in 2019, 31.1% was lower educated, 37.7% was middle educated, and 31.2% was higher educated (CBS, 2019). Note that the youngest respondent in the sample was 19 years old.
6. Control variables were primarily demographic in nature and missed other, more substantial indicators, which could lead to omitted variable bias. However, the dataset lacked suitable items to serve this purpose, such as political ideology. A measure most closely related to political ideology included in the dataset was a value scale from 1 (conservative) to 10 (progressive), constructed based on five items measuring the justification of homosexuality, abortion, divorce, euthanasia and suicide (Inglehart and Baker, 2000). However, including this variable led to a worse fit of the model ( $\chi^2(7) = 17.93$ ,  $p < .05$ ; CFI = 0.96; TLI = 0.88; SRMR = 0.01; RMSEA = 0.03), and the variable itself did not have any significant influence on educational identification ( $b = 0.01$ ,  $se = 0.01$ ,  $p = .523$ ) nor on perceived polarisation ( $b = 0.01$ ,  $se = 0.01$ ,  $p = .329$ ). It was therefore decided to not include it in the eventual models.
7. Even though the inclusion of income is theoretically justified, we should be cautious of possible endogeneity effects, as income is partly a consequence of education (Kohler et al., 2024). Not including income led to a similar yet slightly worse fit of the model ( $\chi^2(5) = 11.49$ ,  $p < .05$ ; CFI = 0.98; TLI = 0.93; SRMR = 0.01; RMSEA = 0.03). All identity-related effects were somewhat stronger than in the original model, but the same interpretation applied.
8. Referring to statistical (in)direct ‘effects’ is common in SEM, but I recognise that one should be careful with causal interpretations of these models (see Chapter 3 of Bollen, 1989).
9. Estimating the model with WLSMV instead of ML estimation to account for the ordinal nature and non-normality of the data led to a similar fit:  $\chi^2(6) = 10.78$ ,  $p = .10$ ; CFI = 0.99; TLI = 1.00; SRMR = 0.00; RMSEA = 0.03. Conclusions were identical, although estimates were overall more conservative with ML compared to WLSMV.
10. Given the way the question about perceived polarisation was phrased, these findings do make sense in light of the SIT. If the middle educated identify with their own educational level, which is not lower or higher educated, it is not surprising that this identification does not strongly influence their perception of differences between two

other groups with different educational levels than themselves. Had they been asked about their perception of differences between themselves and, for example, the higher educated, findings may have been different.

11. Because both items seemed to be equally important, a robustness check was conducted by taking the mean of the two items. This new 'educational identity' item was then used to conduct the same analysis. Results were largely similar and did not lead to different conclusions (see Appendix A).

## References

- Adams J, De Vries CE and Leiter D (2012) Subconstituency reactions to elite depolarisation in the Netherlands: An analysis of the Dutch public's policy beliefs and partisan loyalties, 1986–98. *British Journal of Political Science* 42(1): 81–105.
- Adams J, Ezrow L and Somer-Topcu Z (2014) Do voters respond to party manifestos or to a wider information environment? An analysis of mass-elite linkages on European integration. *American Journal of Political Science* 58(4): 967–978.
- Baker D (2014) *The Schooled Society: The Educational Transformation of Global Culture*. Stanford: Stanford University Press.
- Bakker BN, Lelkes Y and Malka A (2020) Understanding partisan cue receptivity: Tests of predictions from the bounded rationality and expressive utility perspectives. *The Journal of Politics* 82(3): 1061–1077.
- Blanz M (1999) Accessibility and fit as determinants of the salience of social categorizations. *European Journal of Social Psychology* 29(1): 43–74.
- Bollen KA (1989) *Structural Equations with Latent Variables*. New York: John Wiley & Sons.
- Bougher LD (2017) The correlates of discord: Identity, issue alignment, and political hostility in polarised America. *Political Behavior* 39(3): 731–762.
- Bourdieu P (1984) *Distinction: A Social Critique of the Judgement of Taste*. Cambridge: Harvard University Press.
- Bovens M (2012) Opleiding als scheidingslijn: Van oude en nieuwe maatschappelijke breukvlakken. *Oratie Van Doornlezing* 2012: 1–44.
- Bovens M (2015) Opleiding als nieuwe sociale scheidingslijn. *Sociologos. Tijdschrift voor Sociologie* 36(3): 264–275.
- Bovens M (2024, November 29) *Opleiding als nieuwe verzuiling*. Farewell address at Universiteit Utrecht.
- Bovens M, Dekker P and Tiemeijer W (2014) *Gescheiden werelden? Een verkenning van sociaal-culturele tegenstellingen in Nederland*. Den Haag: Sociaal Cultureel Planbureau & Wetenschappelijke Raad voor het Regeringsbeleid.
- Bovens M and Wille A (2017) *Diploma Democracy. The Rise of Political Meritocracy*. Oxford: Oxford University Press.
- Bramson A, Grim P, Singer DJ, et al. (2017) Understanding polarisation: Meanings, measures, and model evaluation. *Philosophy of Science* 84(1): 115–159.
- Brewer MB (1991) The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin* 17(5): 475–482.
- CentERdata (2019) European Values Study 2019: Additional measure on European values. LISS Panel Data Archive [Database]. Retrieved from <https://www.lissdata.nl/>
- Cohen J (1988) *Statistical Power Analysis for the Social Sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cuddy AJ, Fiske ST, Kwan VS, et al. (2009) Stereotype content model across cultures: towards universal similarities and some differences. *British Journal of Social Psychology* 48(1): 1–33.
- Dalton RJ (2013) *Citizen Politics: Public Opinion and Political Parties in Advanced Industrial Democracies*. Washington, D.C.: CQ Press.
- Dekker P and Den Ridder J (2019) *Burgerperspectieven*. Sociaal en Cultureel Planbureau (Report No. 2019-1). Den Haag: Sociaal en Cultureel Planbureau.
- DiMaggio P, Evans J and Bryson B (1996) Have American's social attitudes become more polarised? *American Journal of Sociology* 102(3): 690–755.
- DiPrete TA, Goux D, Maurin E, et al. (2006) Work and pay in flexible and regulated labor markets: a generalized perspective on institutional evolution and inequality trends in Europe and the US. *Research in Social Stratification and Mobility* 24(3): 311–332.

- Domina T, Penner A and Penner E (2017) Categorical inequality: schools as sorting machines. *Annual Review of Sociology* 43(1): 311–330.
- Ellemers N and Haslam SA (2012) Social identity theory. In: Van Lange PAM, Kruglanski AW and Higgins ET (eds) *Handbook of Theories of Social Psychology*. Thousand Oaks: Sage Publications, 379–398.
- Engbersen G, Snel E and Kremer M (2017) *De val van de middenklasse? Het stabiele en kwetsbare midden*. Den Haag: Wetenschappelijke Raad voor het Regeringsbeleid.
- Eurostat (2024) *Educational attainment statistics*. Eurostat: Statistics Explained. Available at: <https://ec.europa.eu/eurostat/statistics-explained>.
- Gidron N, Adams J and Horne W (2019) Who dislikes whom? The drivers of affective polarisation in multi-party systems. In: Paper presented at APSA annual meeting, Washington.
- Harteveld E (2019) Affective polarisation and social sorting: a comparative study. In: Paper presented at APSA annual meeting, Washington.
- Hofmarcher T (2021) The effect of education on poverty: A European perspective. *Economics of Education Review* 83: 1–16.
- Hornsey MJ (2008) Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass* 2(1): 204–222.
- Inglehart R and Baker WE (2000) Modernization, cultural change, and the persistence of traditional values. *American Sociological Review* 65(1): 19–51.
- Inglehart R and Norris P (2016) *Trump, Brexit, and the rise of populism: Economic have-nots and cultural backlash* (HKS Faculty Research Working Paper No. RWP16-026).
- Inglehart R and Norris P (2017) Trump and the populist authoritarian parties: The silent revolution in reverse. *Perspectives on Politics* 15(2): 443–454.
- Inspectorate of Education (2021) *De Staat van het Onderwijs 2021*. Dutch Ministry of Education, Culture and Science. Den Haag.
- Iyengar S, Lelkes Y, Levendusky M, et al. (2019) The origins and consequences of affective polarisation in the United States. *Annual Review of Political Science* 22: 129–146.
- Iyengar S, Sood G and Lelkes Y (2012) Affect, not ideology: A social identity perspective on polarisation. *Public Opinion Quarterly* 76(3): 405–431.
- Ketellapper O (2020, January 8) Het probleem van de eliteschool: ‘Kansenongelijkheid neemt toe’. *Het Parool*.
- Koçer RG and Van de Werfhorst HG (2012) Does education affect opinions on economic inequality? A joint mean and dispersion analysis. *Acta Sociologica* 55(3): 251–272.
- Kohler U, Class F and Sawert T (2024) Control variable selection in applied quantitative sociology: A critical review. *European Sociological Review* 40(1): 173–186.
- Kriesi HP, Grande E, Lachat R, et al. (2006) Globalization and the transformation of the national political space: Six European countries compared. *European Journal of Political Research* 45(6): 921–956.
- Kuppens T, Easterbrook MJ, Spears R, et al. (2015) Life at both ends of the ladder: Education-based identification and its association with well-being and social attitudes. *Personality and Social Psychology Bulletin* 41(9): 1260–1275.
- Kuppens T, Spears R, Manstead AS, et al. (2018) Educationism and the irony of meritocracy: Negative attitudes of higher educated people towards the less educated. *Journal of Experimental Social Psychology* 76: 429–447.
- Kurz K (2004) *Home Ownership and Social Inequality in Comparative Perspective*. Redwood City: Stanford University Press.
- Lelkes Y (2016) Mass polarisation: Manifestations and measurements. *Public Opinion Quarterly* 80(S1): 392–410.
- Levendusky M and Malhotra N (2016) Does media coverage of partisan polarisation affect political attitudes? *Political Communication* 33(2): 283–301.
- Mason L (2015) ‘I disrespectfully agree’: The differential effects of partisan sorting on social and issue polarisation. *American Journal of Political Science* 59(1): 128–145.
- Mason L (2016) A cross-cutting calm: How social sorting drives affective polarisation. *Public Opinion Quarterly* 80(S1): 351–377.

- Muis Q, Reeskens T and Sieben I (2022) Verschillend van elkaar, eensgezind onder elkaar? Opleidingspolarisatie in sociale en politieke opvattingen. In: Dekker P (ed) *Politieke Polarisation in Nederland*. Utrecht: Het Wereldvenster, 40–53.
- Oakes PJ (1987) The salience of social categories. In: Turner JC, Hogg MA, Oakes PJ, et al. (eds) *Rediscovering the Social Group: A Self-Categorization Theory*. Oxford, UK: Blackwell, pp.117–141.
- Pleijers A and De Vries R (2021) *Invulling praktisch en theoretisch opgeleiden Een bruikbaar alternatief voor de huidige indeling van onderwijsniveau*? Den Haag: Centraal Bureau voor de Statistiek (CBS).
- Ross CE and Wu CL (1995) The links between education and health. *American Sociological Review* 60(5): 719–745.
- Sandel MJ (2020) *The Tyranny of Merit: What's Become of the Common Good?* London: Penguin UK.
- Scharfbillig M, Smillie L, Mair D, et al. (2021) *Values and Identities – A Policymaker's Guide*. Luxembourg: Publications Office of the European Union.
- Schreiber JB, Nora A, Stage FK, et al. (2006) Reporting structural equation modeling and confirmatory factor analysis results: a review. *The Journal of Educational Research* 99(6): 323–338.
- Scott R (2022) Does university make you more liberal? Estimating the within-individual effects of higher education on political values. *Electoral Studies* 77: 1–10.
- Skopek J, Schulz F and Blossfeld HP (2011) Who contacts whom? Educational homophily in online mate selection. *European Sociological Review* 27(2): 180–195.
- Solga H (2002) 'Stigmatization by negative selection': Explaining less-educated people's decreasing employment opportunities. *European Sociological Review* 18(2): 159–178.
- Somer M and McCoy J (2019) Transformations through polarisations and global threats to democracy. *The ANNALS* 681: 8–22.
- Spruyt B (2014) An asymmetric group relation? An investigation into public perceptions of education-based groups and the support for populism. *Acta Politica* 49(2): 123–143.
- Spruyt B and Kuppens T (2015a) Education-based thinking and acting? Towards an identity perspective for studying education differentials in public opinion and political participation. *European Journal of Cultural and Political Sociology* 2(3–4): 291–312.
- Spruyt B and Kuppens T (2015b) Warm, cold, competent or incompetent? An empirical assessment of public perceptions of the higher and less educated. *Current Sociology* 63(7): 1058–1077.
- Spruyt B, Kuppens T, Spears R, et al. (2018) Talking politics? Educational category salience reinforces differences in people's willingness to participate in deliberative initiatives. *Political Psychology* 41(3): 461–478.
- Statistics Netherlands (CBS) (2016) *Standaard onderwijsindeling (Editie 2016/'17)*. Den Haag: Centraal Bureau voor de Statistiek.
- Statistics Netherlands (CBS) (2019) *Bevolking; hoogstbehaald onderwijsniveau en onderwijsrichting*. Den Haag: Centraal Bureau voor de Statistiek.
- Stubager R (2009) Education-based group identity and consciousness in the authoritarian-libertarian value conflict. *European Journal of Political Research* 48(2): 204–233.
- Tajfel H and Turner JC (1979) An integrative theory of intergroup conflict. In: Austin WG and Worchel S (eds) *The Social Psychology of Intergroup Relations*. Monterey, CA: Brooks/Cole, pp.33–47.
- Van der Waal J, Achterberg P and Houtman D (2007) Class is not dead – It has been buried alive: class voting and cultural voting in postwar western societies (1956–1990). *Politics & Society* 35(3): 403–426.
- Van Noord J, Spruyt B, Kuppens T, et al. (2019) Education-based status in comparative perspective: The legitimization of education as a basis for social stratification. *Social Forces* 98(2): 649–676.
- Van Noord J, Spruyt B, Kuppens T, et al. (2023) In the shadow of the schooled society: Feelings of misrecognition and the education ladder. *Social Problems* 70(3): 831–848.
- Vermeij L and Thijssen L (2023) *De leefwerelden van arm en rijk. Sociaal en Cultureel Planbureau*. Den Haag: Sociaal en Cultureel Planbureau, 1–53.

### Author biography

**Quita Muis** is an assistant professor in Sociology at Tilburg University. She studies polarisation, particularly regarding values and identity development in relation to politics and society. She contributes to the European values study.

## Appendix A. Educational identity: Connectedness and identification

**Table A1.** Perceived educational polarisation and the mediating role of educational connectedness (one item) – coefficient estimates from structural equation modelling (standard errors between parentheses).

	Perceived polarisation	Educational connectedness	Indirect effect	Total effect
<i>Education (ref. = lower)</i>				
Middle	0.277** (0.105)	0.098 (0.081)	0.013 (0.012)	0.290** (0.106)
Higher	0.217* (0.100)	0.495*** (0.080)	0.064** (0.024)	0.281** (0.102)
Gender (female)	-0.080 (0.077)	0.041 (0.068)	0.005 (0.009)	-0.074 (0.078)
Age	0.006* (0.003)	-0.005* (0.002)	-0.001* (0.000)	0.005* (0.003)
Income	0.003 (0.019)	0.022 (0.017)	0.003 (0.002)	0.005 (0.019)
Urbanity	0.072** (0.025)	0.019 (0.021)	0.002 (0.003)	0.075** (0.025)
Educational connectedness	0.130** (0.041)			
R <sup>2</sup>	.061	.084		

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Source: LISS panel (Centerdata, 2019), weighted data.

**Table A2.** Perceived educational polarisation and the mediating role of educational identification (one item) – coefficient estimates from structural equation modelling (standard errors between parentheses).

	Perceived polarisation	Educational identification	Indirect effect	Total effect
<i>Education (ref. = lower)</i>				
Middle	0.274** (0.106)	0.172 (0.093)	0.015 (0.010)	0.290** (0.106)
Higher	0.232* (0.103)	0.552*** (0.098)	0.050* (0.020)	0.281** (0.102)
Gender (female)	-0.068 (0.077)	-0.070 (0.075)	-0.006 (0.007)	-0.074 (0.078)
Age	0.005* (0.003)	0.001 (0.002)	0.000 (0.000)	0.005* (0.003)
Income	0.004 (0.019)	0.017 (0.018)	0.002 (0.002)	0.005 (0.019)
Urbanity	0.073** (0.025)	0.016 (0.025)	0.001 (0.002)	0.075** (0.025)
Educational identification	0.090* (0.035)			
R <sup>2</sup>	.054	.063		

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Source: LISS panel (Centerdata, 2019), weighted data.

**Table A3.** Perceived educational polarisation and the mediating role of educational identification (mean of connectedness and identification item) – coefficient estimates from structural equation modelling (standard errors between parentheses).

	Perceived polarisation	Educational identity	Indirect effect	Total effect
<i>Education (ref. = lower)</i>				
Middle	0.270* (0.105)	0.135 (0.074)	0.020 (0.013)	0.290** (0.106)
Higher	0.204* (0.101)	0.523*** (0.076)	0.077** (0.025)	0.281** (0.107)
Gender (female)	-0.072 (0.077)	-0.015 (0.061)	-0.002 (0.009)	-0.074 (0.085)
Age	0.005* (0.003)	-0.002 (0.002)	-0.000 (0.000)	0.005* (0.003)
Income	0.003 (0.019)	0.021 (0.015)	0.003 (0.002)	0.005 (0.021)
Urbanity	0.072** (0.025)	0.018 (0.020)	0.003 (0.003)	0.075** (0.027)
Educational identity	0.147** (0.043)			
R <sup>2</sup>	.062	.092		

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Source: LISS panel (Centerdata, 2019), Weighted data.

## Appendix B. Perceived cultural and economic differences

**Table B1.** Perceived cultural differences and the mediating role of educational identification – coefficient estimates from structural equation modelling (standard errors between parentheses).

	Perceived cultural differences	Educational identity	Indirect effect	Total effect
<i>Education (ref. = lower)</i>				
Middle	0.126 (0.090)	0.084 (0.101)	0.018 (0.022)	0.144 (0.092)
Higher	0.207* (0.087)	0.505*** (0.104)	0.107** (0.036)	0.315** (0.092)
Gender (female)	-0.108 (0.070)	0.020 (0.086)	0.004 (0.018)	-0.103 (0.072)
Age	-0.000 (0.002)	-0.006* (0.003)	-0.001 (0.001)	-0.001 (0.002)
Income	-0.022 (0.015)	0.040 (0.021)	0.008 (0.005)	-0.014 (0.016)
Urbanity	0.025 (0.022)	0.008 (0.027)	0.002 (0.006)	0.026 (0.023)
Educational identity	0.213** (0.062)			
R <sup>2</sup>	.067	.165		

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Source: LISS panel (Centerdata, 2019), weighted data.

**Table B2.** Perceived economic differences and the (absent) mediating role of educational identification – coefficient estimates from structural equation modelling (standard errors between parentheses).

	Perceived economic differences	Educational identity	Indirect effect	Total effect
<i>Education (ref. = lower)</i>				
Middle	0.192* (0.094)	0.086 (0.100)	0.010 (0.012)	0.202* (0.095)
Higher	0.364*** (0.096)	0.506*** (0.104)	0.059 (0.032)	0.422*** (0.096)
Gender (female)	-0.055 (0.066)	0.018 (0.086)	0.002 (0.010)	-0.053 (0.067)
Age	0.003 (0.002)	-0.006* (0.003)	-0.001 (0.001)	0.002 (0.002)
Income	-0.006 (0.016)	0.039 (0.021)	0.005 (0.003)	-0.001 (0.016)
Urbanity	0.022 (0.021)	0.007 (0.027)	0.001 (0.003)	0.023 (0.022)
Educational identity	0.116 (0.061)			
R <sup>2</sup>	.063	.166		

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

Source: LISS panel (Centerdata, 2019), weighted data.