

EDUCATION AND POLITICAL ATTITUDES: THE POWER AND LIMITS OF FIELD THEORY

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Abstract

A growing body of research suggests that a person's field of study in college shapes their political worldview. Yet basic questions remain unanswered. How strongly is field associated with political attitudes relative to income, gender, ethnicity, and most importantly, level of education? Which political orientations are most closely linked to field of study, and which are not? Using original and public surveys from the United States and Europe, we show that the human-centeredness of a field of study is strongly related to liberal positions on a wide range of political attitudes. The association with field is comparable to, and sometimes larger than that with level of education. However, the theory we propose has clear scope conditions: field of study is not systematically associated with interest in politics, efficacy, participation, or affective party identification.

A growing body of research is moving beyond level of education to examine how the substantive content of what people study shapes political attitudes and vote choice. Recent papers using panel data find that a person's field of education actually has a causal effect, and is not merely a proxy for prior influences that lead a person to study a particular subject (Goldstein and Kolerman Shemer 2025; Hooghe et al. 2025; Kamphorst et al. 2025; Martin et al. 2025). However, the panel data required for causal inference cover a limited set of political attitudes and a small number of national contexts which makes them ill-suited for assessing how broadly, and how selectively, educational field is related to political attitudes. Rather than re-estimating causal effects, this paper draws on cross-sectional data covering a wide range of political attitudes in Europe and the United States to assess which political attitudes are systematically associated with educational field, and which are not.

This paper addresses fundamental questions concerning the scope, power, and generality of educational field theory:

- Scope: Which kinds of political attitudes are systematically related to field of study, and which are not?
- Power: How strongly are political attitudes related to different fields of study, and how does this compare with that between fields of study and income, gender, ethnicity, and level of education?
- Generality: Do these patterns hold across all Western democracies, or are they limited to specific countries or systems of higher education?

To understand which political attitudes are related to field of study, we need to reverse the conventional approach to political behavior. Existing research tends to isolate one or two outcomes, often producing statistically significant effects for particular attitudes or behaviors, such

as immigration (Almstedt Valldor 2024; Eger et al. 2025), ideological self-placement (Goldstein and Kolerman-Shemer 2025), or voting on the socio-cultural divide (Attewell and Zollinger 2025; Hooghe et al. 2025; Martin et al. 2025). This is valuable information, but it leaves open whether the observed relationships fit a broader pattern with distinct scope conditions. Rather than isolating a narrow set of outcomes, we map how field covaries with a wide range of political objects: economic preferences, cultural views, political identities, democratic norms, and political engagement.

We begin from the premise that academic disciplines are cognitive environments in which students are socialized into distinct modes of reasoning (Hooghe and Marks 2022; Lazarsfeld and Thielens 1958; Ladd and Lipset 1975). Drawing on attribution theory (Heider 1958; Weiner 1985; Guimond et al. 1989; Guimond and Palmer 1990), we argue that fields vary in whether they encourage contextual or individual-centered attribution. To what extent do they engage empathy, care, and social complexity rather than technical control, efficiency, or market rationality? Human-centered fields – those engaging the social, cultural, and emotional dimensions of human experience – encourage interpretive judgments conducive to liberal political views. In contrast, material-centered fields, oriented toward technical or economic thinking, encourage interpretive judgments aligned with more conservative worldviews grounded in individualism and accountability.

The theory we propose has scope conditions that specify both where it applies and where it does not. Attribution theory is concerned with how a person interprets the motivations of others; it does not address how politically involved a person chooses to be. While attributional judgments encompass a broad range of political attitudes, there is little reason to expect them to determine the intensity of political commitment or the incidence of political behavior. Hence, we do not

expect field of study to shape attitudes related to political engagement – that is, a person’s interest in politics, sense of efficacy, propensity to participate, or emotional identification with political parties.

Assessing these claims calls for conceptual precision. Most importantly, we need to move beyond a categorical treatment of academic disciplines. Existing research on field of study relies on nominal indicators that obscure the underlying logic of variation. Our theoretical argument calls for a continuous measure that reflects the degree to which each field emphasizes human-related concerns. In addition, we need reliable, up-to-date data to construct such a measure. Existing continuous measures – most notably the skill-content typology developed in the Netherlands in the late 1990s (van de Werfhorst 2001; van de Werfhorst and Kraaykamp 2001) – are valuable but outdated, and they may not reflect how fields have evolved in response to social and economic change.

To address these conceptual and empirical challenges, we construct a new continuous measure of field human-centeredness using original data from contemporary surveys in the United States and the Netherlands. The resulting measure provides a common scale for comparing disciplines – from anthropology to engineering, from linguistics to business – based on the extent to which they emphasize communicative and cultural understanding. This enables us to model field as a continuous predictor rather than as a set of unrelated nominal categories.

We use the term *predictor* advisedly. Prediction is not a synonym for causal effect; it refers to the conditional expectation of an outcome under a given set of covariates (Shmueli 2010). In prior work we and other authors have used panel surveys to show that a person’s field of education has a causal effect during post-secondary education that cannot be attributed to self-selection into a particular major (Goldstein and Kolerman-Shemer 2025; Hooghe et al. 2025; Kamphorst et al.

2025). Our purpose here is different. We probe what field theory implies for which attitudes are associated with field difference and which are not. This requires that we use cross-sectional surveys that tap a far wider range of political attitudes, values, and engagement than available in extant panel surveys. While we cannot replicate prior analyses that infer the causal effect of studying in a particular field, our goal in this paper is to examine a key empirical implication of field theory across a wide range of contexts.

Our findings are twofold. First, the human-centeredness of a field of study is strongly and consistently associated with liberal views on a wide range of political attitudes: redistribution, immigration, racial inequality, gay marriage, foreign aid, and environmental protection. These are precisely the domains where attributional reasoning and moral appraisal shape political judgment. Those with human-centered education are also much less willing to endorse Christian nationalism and extra-legal political behavior.

Second, we find no comparable pattern of association of field with political engagement. The human-centeredness of a person's field does not predict how interested they are in politics, whether they feel efficacious, whether they vote, or how strongly they identify with or feel toward political parties. This null finding is theoretically meaningful, for it suggests that field is associated with how individuals interpret the political world but not with the extent to which they choose to enter or engage with it.

In the following section we explain why it is valuable to take the content alongside the level of education seriously and we outline the principal empirical implications of a theory of field of education. We then introduce our measure and assess our expectations using surveys of political attitudes in the United States and ten European countries.

Empirical Implications of Field Theory

Why should the field that someone studies shape their political worldview? We draw on attribution theory to argue that academic training indicates how individuals explain the causes of social phenomena – what psychologists call causal attributions. Classic attribution theory holds that individuals tend to explain behavior either in terms of internal dispositions related to effort, morality, or talent (person-blame) or they do by invoking social constraints or structural factors (system-blame) (Heider 1958; Jones and Nisbett 1972; Ross 1977).

We posit that academic fields cultivate distinct repertoires for understanding human behavior and social outcomes. Some fields emphasize situational and structural causes; we term these *human-centered* (see also Surridge 2016; Kunst 2020). Students in these disciplines routinely encounter theories that emphasize historical context, social influence, inequality, and constraint on human-behavior. *Material-centered* fields of study are those that do not engage human behavior at all, or if they do, they are more likely to promote dispositional reasoning and individual responsibility.

Experimental research supports this distinction. Guimond and colleagues (1989; 1990; 1996) find that students in different fields vary in how they explain poverty and unemployment: social science students are more inclined toward system-blame, while business students lean toward person-blame, with engineering/applied science occupying a middle ground. Engineering graduates tend to display a “penchant to seek simple and unambiguous explanations of the social world and its ills” (Gambetta 2016, p. 147). Importantly, these differences are not reducible to anticipated earnings or career outlooks, suggesting a role for field-based socialization in shaping explanatory styles.

If field of study influences how people assign causes and responsibilities, it should shape political judgments that require attributional reasoning. Many political beliefs hinge not only on values, but on causal accounts: Do people succeed because of effort or luck? Is poverty the result of bad choices or structural disadvantages? Are immigrants responsible for social problems, or are they victims of exclusion? Such questions are attributional as well as ideological.

This logic extends beyond cultural liberalism. Issues like race, gender, and immigration clearly engage attributional reasoning. Redistribution preferences often do as well – especially when debate centers on judgments of deservingness (Cavaillé 2023). As Attewell (2021, p. 615) notes, “perceptions of the deservingness of welfare state beneficiaries hinge on mechanisms of social affinity and empathy.” Are recipients judged as unlucky or irresponsible; are they socially deviant or constrained by forces beyond their control? Situational thinking fosters empathic support for redistribution, whereas dispositional reasoning may lead to skepticism or resistance.

The preceding discussion yields two core empirical implications which translate the logic of attributional socialization and field-based reasoning into testable claims about political attitudes.

H1: The human-centeredness of a person’s field of study systematically predicts political and ideological attitudes that require interpretive judgment.

An attributional theory of educational field encompasses a wide range of political attitudes, but it is not limitless. The theory is bounded by its focus on interpretive questions that require individuals to locate causes – whether in personal failings and choices or in social constraints and structural forces. The mechanisms that link field of study to political attitudes operate through how people explain social outcomes and assign responsibility, not whether or how they act on such judgments.

Hence, we do not expect field of study to shape attitudes related to political engagement – a person’s interest in politics, sense of efficacy, propensity to participate, or emotional

identification with parties. These dispositions are about how much time, energy, or resources a person invests in politics, and this depends on the intensity of their political attitudes alongside their sense of political efficacy, resource endowments, and other factors weakly related, if at all, to the substantive content of their political attitudes.

This aligns with the classic argument that civic engagement depends on time, money, and civic skills, capacities that are associated with level rather than field of education (Brady et al. 1995). A recent study of level of education finds that the strongest effects are on voting, protest, political interest, and activism, precisely the outcomes we theorize as less susceptible to attributional reasoning (Apfeld et al. 2024, chs. 4-5). Weaker effects are observed for cosmopolitanism, cultural attitudes, party identification, and economic attitudes, where we expect attributional reasoning to be consequential.

Our theory therefore predicts an asymmetry: the field effect will be pronounced for attitudes that depend on attributional reasoning, and weak or negligible for attitudes that capture political engagement, affect, or moralized partisanship.

H2: Field of education has little or no predictive power for attitudes that reflect political motivation, affect, or engagement.

Measurement and Data

Our analysis investigates how the content of higher education – specifically, the field of study – shapes a range of political attitudes and forms of engagement. Our core explanatory variable is the human-centeredness of a person’s field of education, a measure that we develop using original data from two surveys and apply across two major external datasets. This section details the data

sources we use, how we construct the human-centeredness index and map it onto existing surveys, and how we operationalize our dependent variables.

Data sources

Our analysis draws on four data sources that vary in scope, population, and mode of data collection:

- **US Field Survey (2024).** The authors fielded this original survey in February 2024, administered by TGM, to U.S. adults with population quotas for gender, age, region, education, and urban/rural location (N=6,435).
- **Dutch Field Survey (2024).** The authors fielded this original survey in Fall 2024, administered by CloudResearch, to college-educated Dutch citizens with population quotas for gender and age (N=1,000).
- **General Social Survey (GSS) (2012-2022).** The GSS is a nationally representative cross-sectional survey of U.S. adults conducted since 1972 (Davern et al. 2024). The GSS collects detailed field-of-study information (college majors) from 2012 to 2022 (N=17,272; college-educated N= 7,324).
- **YouGov Europe Survey (2023).** Conducted by a research team at the European University Institute in ten western European democracies, with items on field of education supplied by the authors (N=16,798) (Hemerijck et al. 2023).

Measuring human-centeredness in fields of study

To estimate the human-centeredness of academic fields, we replicate a schema introduced by van de Werfhorst and Kraaykamp (2001) which categorizes skills in four domains:

- **Cultural skills:** Historical analysis, artistic expression, writing and reading, arts and literature.
- **Economic skills:** Management, accounting, commercial thinking, law.
- **Communicative skills:** Public speaking, group discussion, teaching, social psychology.
- **Technical skills:** Mechanization and production processes, automation and computing, calculus, tests and experiments.

Communicative and cultural skills emphasize the contextual conditions of human behavior, whereas economic and technical skills are concerned with the physical world or with the material incentives underlying human behavior (Elchardus and Spruyt 2009; Surridge 2016). Van de Werfhorst and Kraaykamp (2001: 299) observe that behavioral sciences which focus on social issues and human interaction train students in skills that “make students aware of other people's standpoints and motives.” Cultural skills in history, literature, and the creative arts sensitize students to the diversity of human norms and ways of life (Maxwell 2020; van de Werfhorst and De Graaf 2004). Conversely, there is an elective affinity between person-blame attribution and technical and economic skills. Technical skills (production processes, calculation, testing) train students to transpose materials into products; economic skills (accounting, commerce, management, law) focus on instrumental cost/benefit analysis and profit maximization. These skills direct attention to how humans can command nature or take control over their own fate.

Despite the suitability of this skills schema for our purpose, there is the concern that the survey was conducted in 1998 in the Netherlands and is consequently dated or Dutch-specific. In response, we fielded a population-representative survey in the United States in Spring 2024 that asked college-educated respondents to evaluate the extent to which their major emphasized specific skills. In Fall 2024, we replicated this in the Netherlands. Each respondent rated on a five-

point scale how much their program of study emphasized each of 16 skills. We compute average scores across respondents for each skill and skill domain for 80 fields of study.

A field's *human-centeredness* score is the proportion of cultural and communicative skills relative to the total of all four domains across all respondents in a field of study, where n is the number of individuals i in a field of study j , and so for each j :

$$\text{Human - centered field}_j = \frac{1}{n} \sum_{i=1}^n \left(\frac{\text{communicative}_{ij} + \text{cultural}_{ij}}{\text{cultural}_{ij} + \text{economic}_{ij} + \text{communicative}_{ij} + \text{technical}_{ij}} \right)$$

This estimate is rescaled so that it ranges from 0 (fully material-centered) to 1 (fully human-centered).

Psychometric analyses confirm the reliability and structure of this measure. All four skill scales have high internal consistency (Cronbach's α between 0.76 and 0.83 for the US survey and between 0.77 and 0.86 for the Dutch survey), and a principal components analysis yields four robust factors corresponding to the four domains. These patterns are consistent across demographic subgroups (gender, cohort). Further, analysis of variance reveals that field of education is by far the strongest predictor of skill emphasis, exceeding occupation, education level, income, gender, or age. Online Appendix G provides detailed documentation and replication materials.

Cross-walking the index to external datasets

We use these field-level human-centeredness scores to construct respondent-level variables in two large secondary datasets: the US General Social Survey (GSS) and the 2023 YouGov survey in Europe. Each dataset includes information on respondents' field of study, which we match to the closest ISCED-aligned category in our US field survey:¹

- In the GSS (2012–2022), 80 majors are matched to fields in the US field survey to assign a unique human-centeredness score.

- In the YouGov Europe survey (2023), respondents report their main subject from a list of 21 fields. We align these to the most similar fields in the US field survey. We repeat this exercise with field scores derived from the Dutch field survey and find that these correlate at 0.93 with scores from the US field survey.

This converts a series of dichotomies, one for each field of study, into a single continuous measure that taps the human-centered content in a person’s education.

For descriptive purposes and robustness, we also construct a trichotomous variable for educational experience: (1) individuals with no college education (high school or below), (2) those with a college degree in a low human-centered field (score < 0.5), and (3) those with a college degree in a high human-centered field (score \geq 0.5). This categorical operationalization allows us to compare field-based differences with the more familiar college or diploma divide (level of education).

Dependent variables

The dependent variables in this study comprise the following political outcomes:

- **Political identity:** ideological self-placement, party identification.
- **Political attitudes:** redistribution, immigration, environment, racial discrimination, gay marriage, Christian nationalism, extralegal norms.
- **Political engagement:** political participation, political efficacy, political interest, party affect, expressive partisanship, affective polarization, moral disengagement.

Table 1 lists these variables alongside abbreviated survey questions. All non-categorical variables are rescaled from 0 to 1 for comparability, with 0 maximum opposition and 1 maximum support, except in the cases of ideological self-placement and party identification. We estimate multiple

regressions, controlling for level of education, gender, income, ethnicity, rural or urban residence, age, religiosity, and relevant country/year fixed effects. For full wording of survey questions and variable construction, see Online Appendix A.

[Table 1 about here]

Table 1: Political attitudes and political engagement in the US and Europe

Variable	Question wording
UNITED STATES	
Political identity	
Ideological self-placement	The political views that people might hold from extremely liberal to extremely conservative ^a
Party identification	Strong Democrat to Strong Republican ^a
Political attitudes	
Pro redistribution	Government should reduce income difference between rich and poor ^a
Race discrimination a problem	Government has a special obligation to help Black people improve their living standards ^a
Pro gay marriage	Homosexuals should have the right to marry one another ^a
Pro immigration	Number of immigrants nowadays should be reduced/increased ^a
Pro environment	The greenhouse effect is a danger to the environment ^a
Pro foreign aid	The government is spending too much, about right, too little on foreign aid ^a
Pro Christian nationalism	The federal government should advocate Christian values ^b
Pro extralegal norms	Patriotic Americans have to take the law into their own hands; we may have to use force to save the traditional American way of life ^b
Political engagement	
Political participation	Voted in the previous presidential election ^a
Political interest	How interested are you in politics and national affairs? ^b
Political efficacy	I have a pretty good understanding of the important political issues ^a
Party affect	Highest temperature for Republican, Democrat, Independent, Trump supporters ^b
Expressive partisanship	Average of four items tapping in/outparty feelings ^b
Affective polarization	Absolute difference in the temperature for Democrats and Republicans ^b
Moral disengagement	[Outparty] are not just worse for politics – they are downright evil ^b
EUROPE	
Political identity	
Ideological self-placement	Where people would place themselves from very left-wing to very right-wing
GAL/TAN party identification	Feels most closely to a party with an extreme GAL (social-liberal) to extreme TAN (traditional-nationalist) position
Political attitudes	
Left/Right party identification	Feels most closely to a party with an extreme economic left to extreme economic right position
Pro redistribution	Government should redistribute income from those who are better off to those who are worse off
Pro immigration	One of the three most important issues facing you and your family (reversed)
Pro environment	One of the three most important issues facing you and your family
Political engagement	
Political participation	Voted in the last national election
Party affect	Respondent's like or dislike of supporters of the party they feel closest to

Affective polarization

Absolute difference in like for supporters of closest party and like for supporters of furthest party

Note: The superscripts ^a and ^b refer to data from GSS and the 2024 US field survey respectively; all data on attitudes and engagement in Europe come from the 2023 YouGov survey.

Results

We present our findings in three steps. First, we examine the relationship between field of education and a range of political attitudes. We distinguish between outcomes where attributional reasoning is expected – or not expected – to play a major role. This analysis focuses on college-educated individuals, for whom we have detailed data on fields of specialization. While our primary focus is the United States, we also demonstrate that the human-centeredness of a field of study is similarly associated with political attitudes in Europe. In a second step, we broaden the scope of our analysis by comparing political divides within the college-educated population to those between college graduates and individuals with a high school education. Finally, we consider two potential confounders of the human-centered nature of fields of study: the income associated with a field and the sex composition of a field.

Field of study and political attitudes among college graduates

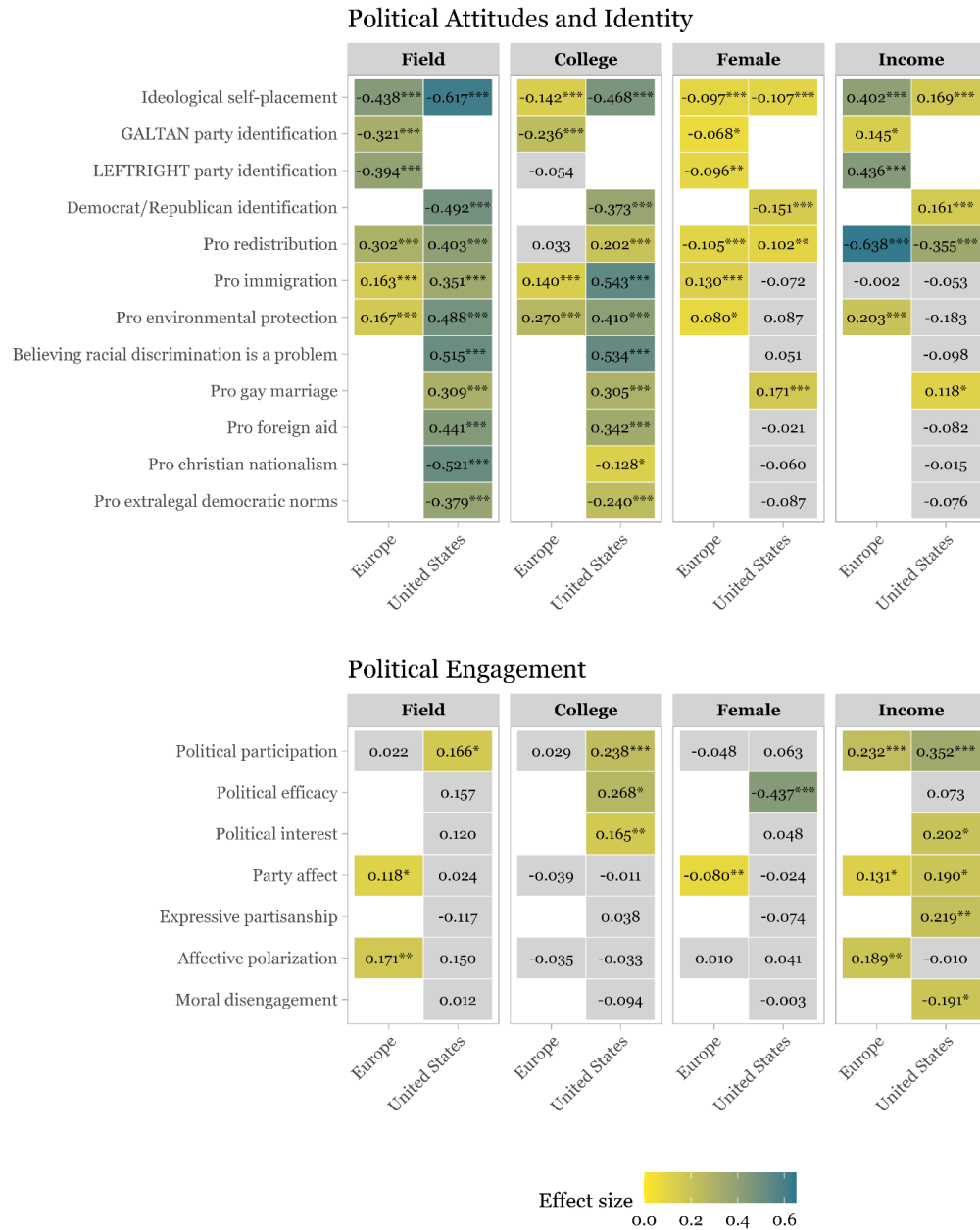
Figure 1 summarizes standardized regression coefficients for a range of political attitudes and political engagement outcomes (listed on the y-axis) across Europe and the United States. The figure presents results from multivariate regression models separately by predictor:

- **Field:** human-centeredness of a field of study
- **College:** advanced graduate degree (MA or PhD) vs. 2-year college degree
- **Female:** female vs. male
- **Income:** deciles rescaled to range from 0 to 1

The purpose is to evaluate whether even after accounting for variables that are commonly correlated with political outcomes, field of study retains explanatory leverage. Each panel shows a predictor – field, college, gender, income – and columns within each panel display coefficients for Europe (left) and the United States (right). All predictors are rescaled from 0 to 1, and coefficients are standardized differences in the outcome (in standard deviations) between observations at the minimum versus maximum of each covariate. Putting estimates on a common scale allows readers to compare the relative magnitude of associations among field, gender, income, rural–urban location, religiosity, and race, without treating these variables as causal interventions. Cell shading signals the magnitude of statistically significant coefficients, ranging from light yellow (smaller) to dark green (larger). Light-grey cells denote non-significant coefficients. Unshaded cells indicate that no data are available for that covariate-outcome pair.

[Figure 1 about here]

Figure 1: Comparing standardized coefficients for field, college, gender, and income across political outcomes



Note: The figure reports standardized regression coefficients from a single multivariate model for four predictors (panels) on a range of outcomes (y-axis). Dependent variables are z-standardized (mean 0, SD 1), and independent variables are rescaled 0 to 1. Coefficients therefore represent the expected difference in the outcome (in standard deviations) between observations at the minimum versus maximum value of each predictor in the sample. Light-grey coefficients are not statistically significant. Online Appendix B reports regression tables. * $p < 0.01$, ** $p < 0.001$, *** $p < 0.0001$. Figure B.1 shows that results are similar when excluding covariates that could be endogenous to field choice (income, urban/rural, age).

We begin with the United States, with results reported in the second column of each panel (full regression results in Online Table B.1a-b and B.2). The top-left panel indicates that the human-centeredness of a person's field of study is a strong and statistically robust predictor across a range of political attitudes (H1).

The association with political identity is highly significant ($p < .00001$) and substantively meaningful. A one-unit shift on field – from material-centered such as mechanical engineering or accounting to human-centered such as history, education, or sociology – is associated with a 0.617 standard-deviation change towards liberalism. This is equivalent to moving from moderate to strongly liberal on the standard ANES ideological self-placement scale, and it is larger than the difference between completing a two-year college degree and doing a graduate degree (0.468, first cell in the fourth column). A one-unit shift on the field scale also predicts a 0.492 standard-deviation move on party identification – comparable to moving from weak Republican to Independent, or from weak Democrat to strong Democrat on the 7-point scale. On political identity, the substantive effect of field exceeds that of educational level, gender, and income.

Respondents from human-centered fields also express greater support on income redistribution (+0.403 standard deviation change), government obligation to reduce racial inequality (+0.515), gay marriage (+0.309), immigration (+0.351), and they are more likely to find the greenhouse effect a dangerous threat to the environment (+0.488).

These associations are statistically significant at $p < .00001$. On redistribution, the field effect is comparable to the difference between holding a neutral position on whether “the government in Washington ought to reduce income differences between rich and poor” and expressing moderate support for a government role. For the environment, a one-unit increase in field leads to an increase of roughly 0.6 points on the five-point scale. For immigration, field is

moderately strongly associated with support, with a one-unit increase in field producing a 0.351 standard-deviation difference in the outcome.

We draw on our 2024 US field survey for the last two attitudes in the US panel on political attitudes. Christian nationalism refers to the demand that the US federal government impose Christian religious-nationalist values (Djupe et al. 2023; Whitehead and Perry 2020). “Extralegal norms” taps a willingness to disregard the rule of law in favor of extralegal action and averages responses on two items: “A time will come when patriotic Americans have to take the law into their own hands” and “The traditional American way of life is disappearing so fast that we may have to use force to save it” (Bartels 2020). We find that an individual who studied a human-centered field is significantly less supportive of Christian nationalism ($p < .00001$) and of extralegal norms ($p < .00001$).

These associations are substantively large (Table B.2 in the Appendix). The effect of field on support for Christian nationalism, for example, is more than half the size of the religiosity coefficient, widely seen as the predominant predictor for religious authoritarianism (Whitehead and Perry 2020; Shady et al. 2024). Graduates of human-centered disciplines are about 19 percentage points less likely to agree that the federal government should advocate Christian values compared to those trained in material-centered fields. And they are about 12 percentage points less likely to endorse extralegal norms.

Further, we find that among college graduates the magnitude of field-based differences (panel 1) is comparable to the magnitude of differences associated with educational attainment (panel 2), and a formal Wald equality test indicates that the association with educational field is significantly larger than the association with educational level for ideological self-placement,

redistribution, and Christian nationalism (Table B.4 in the Appendix). The exception appears on immigration, where the association with educational level is larger than that with field.

Coefficients on field are also consistently larger than those for gender (panel 3), income (panel 4), rural/urban residence, and age (Tables B.1a-b and B.2). Only ethnicity (for party identification and race discrimination) and religiosity (for gay marriage, ideological self-placement, and Christian nationalism) have larger coefficients.

We address potential heterogeneity across subgroups by running 32 models that regress political identity and political attitudes on the interaction between field and each of four group variables: gender (men and women), age (younger than 45 or older), religiosity (practicing at least several times a year or secular), and ethnicity (Whites and minority citizens). We find that in 59 of the 64 analyses, the estimated marginal association with educational field is statistically significant at the 0.05 level or stronger (Tables C.1-C.2 in the Appendix).

We now extend the analysis to ten West European countries (left column of each panel). To our knowledge, this YouGov survey is the only recent cross-national source that includes both respondents' field of study and a broad set of political attitudes. Where available, we match attitudes examined in the U.S. analysis. Results are reported in the first column of each panel.

The first three variables in the top-left panel examine the association between human-centered field and political identity. Left/right self-identification is the standard ideological self-placement measure in Europe. Party identification is measured by asking respondents which party they feel closest to. For comparability we locate European parties in an ideological space consisting of a socio-cultural or GAL/TAN² dimension and an economic left/right dimension (Marks and Steenbergen 2004; Kriesi et al. 2008). Using the Chapel Hill expert survey of 2023

(Hooghe et al. 2023), we assign each party a position along both dimensions. Respondents are then placed at the ideological coordinates of the party they feel closest to.

The results closely mirror what we observe in the United States. A one-unit shift on human-centered field produces a 0.438 standard-deviation shift on left/right self-placement, a 0.321 standard deviation shift to a GAL party and a 0.394 shift to an economically left party. These results are substantively large: across the full range of the human-centeredness scale, the implied contrast is about 0.68 ($\approx 11\%$) on the 6-point left/right self-placement scale. Holding all other variables at their means, a person educated in a human-centered field such as the arts or humanities feels closest to a party located at 4.3 on the 11-point GAL/TAN dimension and at 4.7 on the left/right dimension. This contrasts with 5.1 on GAL/TAN and 5.5 on left/right respectively for an engineer or a business major. High and low human-centered college graduates tend to inhabit political worlds at opposing sides of the European median voter.

The effects of field on redistribution, and to a lesser extent, immigration and the environment are also highly statistically significant (H1). This aligns with research suggesting that human-centered education fosters greater moral concern for systemic inequality and individual vulnerability (Guimond et al. 1989; Graham et al. 2009; Bročić and Miles 2021).

It is worth emphasizing that, as in the United States, these associations are not reducible to educational attainment.³ Level of education – whether a respondent holds a 2-year college degree or an advanced graduate degree – has a smaller substantive effect than field of education for five of six outcomes, and a Wald equality test indicates that this difference in the magnitude of association is significant for ideological self-placement, left-right party identification, and redistribution (Online Appendix, Table B.4). For economic left/right party identification and redistribution, the association with education operates almost entirely through field of study, while

level is insignificant. Environmental concern is the only attitude for which level of education exhibits a larger substantive association than field of education, though the difference is not significant. In all, these findings underscore a recurring theme: if you wish to predict a person's political identity and attitudes, the content of their education is a better guide than the duration of their education.

What are the scope conditions of field of study? A principal objective of our inquiry is to identify in which political domains field of study may *not* structure outcomes. Attribution theory suggests that causal attribution is unlikely to be consequential for political engagement – how often, how cognitively informed, or how emotionally invested a person is in politics (H2). In this domain, level of education has been shown to be influential (Apfeld et al. 2024; see also Videbæk Jensen 2024).

Moving to the bottom panels of Figure 1, again focusing first on the United States in the second column, we find no statistically significant association with field for seven engagement outcomes: political participation; political interest; political efficacy (Niemi et al. 1991); party affect, i.e. the extent to which someone holds a warm emotional evaluation towards their party (Iyengar et al. 2012); expressive partisanship, i.e. the extent to which someone is emotionally invested in their party identity (Huddy et al. 2015); affective polarization, i.e. the tendency to view opposing partisans negatively and co-partisans positively (Iyengar et al. 2019); and moral disengagement, i.e. willingness to blame, harm or vilify partisan outgroups (Kalmoe and Mason 2022). We do find a statistically significant association for level of education on political participation ($p < .0001$) and political interest ($p < .001$), but not for any measure of emotional engagement. In Europe, no outcome reaches marginal significance at $p < .001$ or lower on either field or level (see Appendix, Table B.5 for Wald tests of equality of marginal means).

In sum, the human-centeredness of field of study strongly predicts political attitudes among college graduates in both the US and Europe. Its influence is particularly pronounced for attitudes rooted in attributional reasoning – political identity, redistribution, and cultural views – but much weaker for political engagement, including political interest, voting, and party affect. Overall, field exerts influence that is comparable to level of education for many attitudinal outcomes among college graduates, but its influence is much weaker on political behavior.⁴

We now ask whether this pattern holds when we widen the comparison to include the non-college educated.

Evaluating the Field Divide and the Diploma Divide

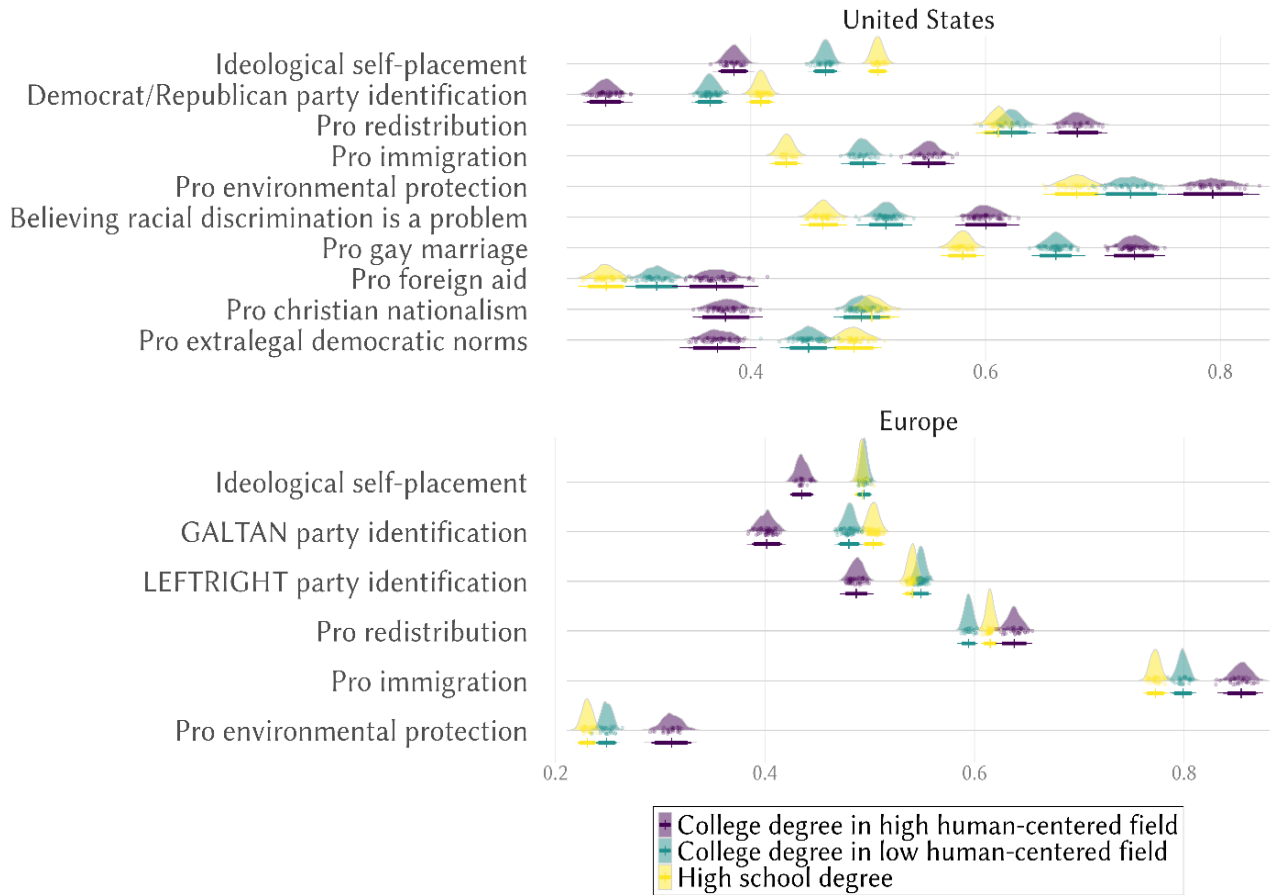
Much literature on education and political behavior focuses on the “diploma divide” – the consistent finding that individuals with college degrees tend to adopt more liberal political positions than those without (Apfeld et al. 2024; Grossman and Hopkins 2024). **Figure 2** compares this expectation to the content of education. It visualizes the average predicted values for three educational groups: people with a high school degree or less (yellow), college graduates from low human-centered fields (green), and college graduates from high human-centered fields (purple).

[Figure 2 about here]

With few exceptions, college graduates are more liberal: more supportive of gay marriage, immigration, preserving the environment, amending race discrimination, foreign aid, and less willing to endorse extralegal norms. In the United States, college-educated also tend to self-identify more as liberal and as Democrat; in Europe, they identify more with parties that take GAL positions.⁵

However, the chief take-away from Figure 2 is that this conventional divide by level of education ignores deep differences among college-educated. For almost every outcome, college graduates from high human-centered fields are considerably more liberal, left, GAL, or Democratic than both other groups.⁶

Figure 2: Field of education and political attitudes across three educational groups



Note: Average predicted values by education group, based on bootstrapped regression estimates (1000 resamples) from linear regressions of level/field, averaging over all other covariates according to their observed distribution in the dataset. All outcomes are rescaled from 0 to 1. Respondents are grouped into those with a high school degree (yellow), a college degree in a low human-centered field (green), and a college degree in a high human-centered field (purple). The top panel shows results for the United States and the bottom panel for Europe. Marginal means are computed using the *emmeans* package in R. Intervals beneath each distribution represent the 90%, 95%, and 99% CIs (Table D.1 in the Appendix). Table D.2 and Figure D.2 in the Appendix show that these conclusions hold when removing controls that may be endogenous to field choice (income, age, and rural-urban).

This contrasts with what we find for political engagement (H2), where high- and low-CECT college graduates are not measurably different (Appendix, Figure D.3). However, in the United States (but not in Europe) we confirm substantively large differences between the two

college groups and high schoolers for political participation, political efficacy, and political interest.

The most striking take-away from Figure 2 is the distinctiveness of college graduates in high-human-centered fields.⁷ They lean more liberal than their peers in low human-centered fields, and considerably more liberal than high school graduates. In Europe, there is no statistically significant ideological or partisan difference between high schoolers and low-human centered college graduates; in the US, low-human centered college graduates are, on average, less conservative and less Republican than high schoolers, but the substantive distance with high schoolers is smaller than with high-human centered college graduates (Table D.1). In short, computing engineers and business graduates are closer to the political views of lower-educated voters than social scientists or teachers.⁸

Together, these findings challenge a deeply entrenched assumption in political behavior research: that what is decisive about education is how long individuals attend school or college.

Income and Sex as Potential Confounders

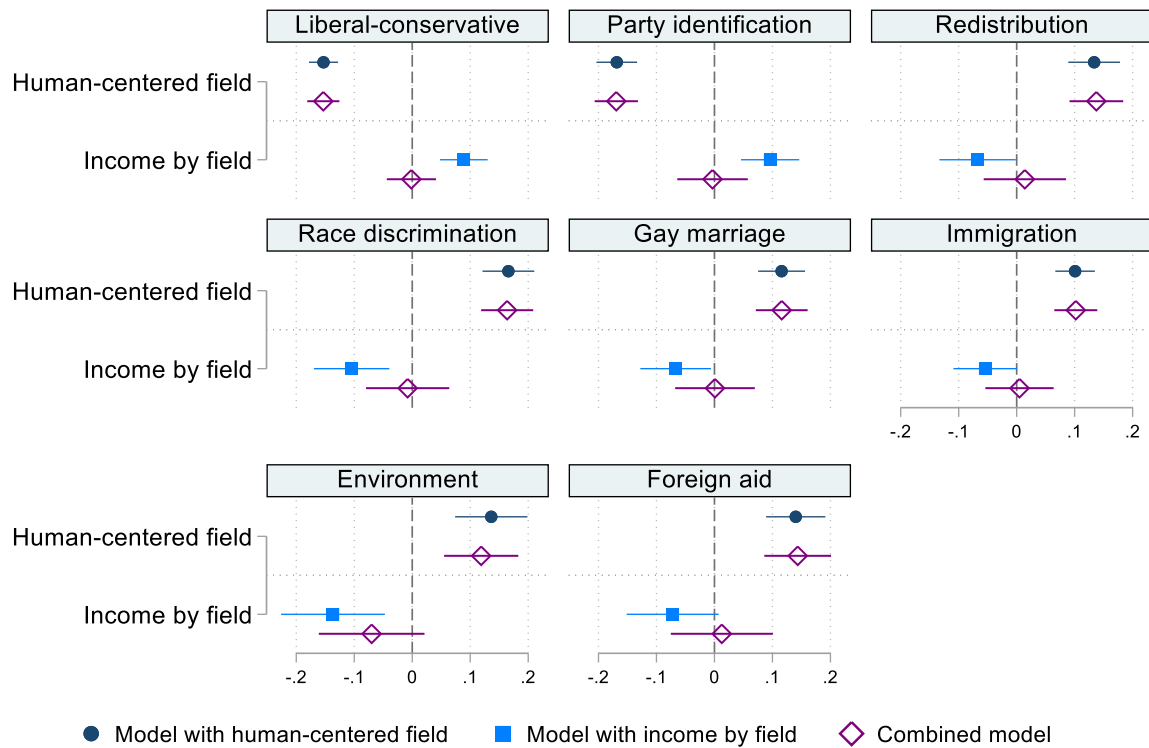
Two plausible objections to our argument concern income and sex. First, the association of field and attitudes may reflect the material incentives of choosing a high- versus low-income major (Kim et al. 2015; Marginson 2019; Roksa and Levey 2010). Second, it may be driven by the sex composition of educational fields, given the gendering of majors (Peri and Anelli 2015; van de Werfhorst 2017) and women's more liberal political orientations on average (Schafer and Steiner 2025; van Ditmars and Shorrocks 2024).

We begin by testing whether the association between field of study and political attitudes is confounded by income, operationalized as the average income of respondents who report a

degree in each specialization. We label this variable *income by field* to distinguish it from our standard operationalization of field as the human-centeredness of the skills conveyed in a field of study.

[Figure 3 about here]

Figure 3. Comparing coefficients for human-centered field and income-by-field across political outcomes



Note: GSS (2012–2022). Points show regression coefficients with 95% confidence intervals from linear models estimated on 500 bootstrap resamples. Outcomes and predictors are rescaled 0 to 1; coefficients represent the model-implied difference in the outcome between the minimum and maximum of each predictor. Circles indicate estimates from a model with human-centered field only; squares from a model with income-by-field only; diamonds from a combined model (Tables E.2a–E.2b). All models include full controls.

Figure 3 contrasts three models: a model with the standard human-centered field variable, a model with income by field, and a model with both variables – each under full controls. Graduates from higher-earning fields tend to be more conservative in models with only income by field (squares), and in some cases, this matches the association with human-centered field (circles).

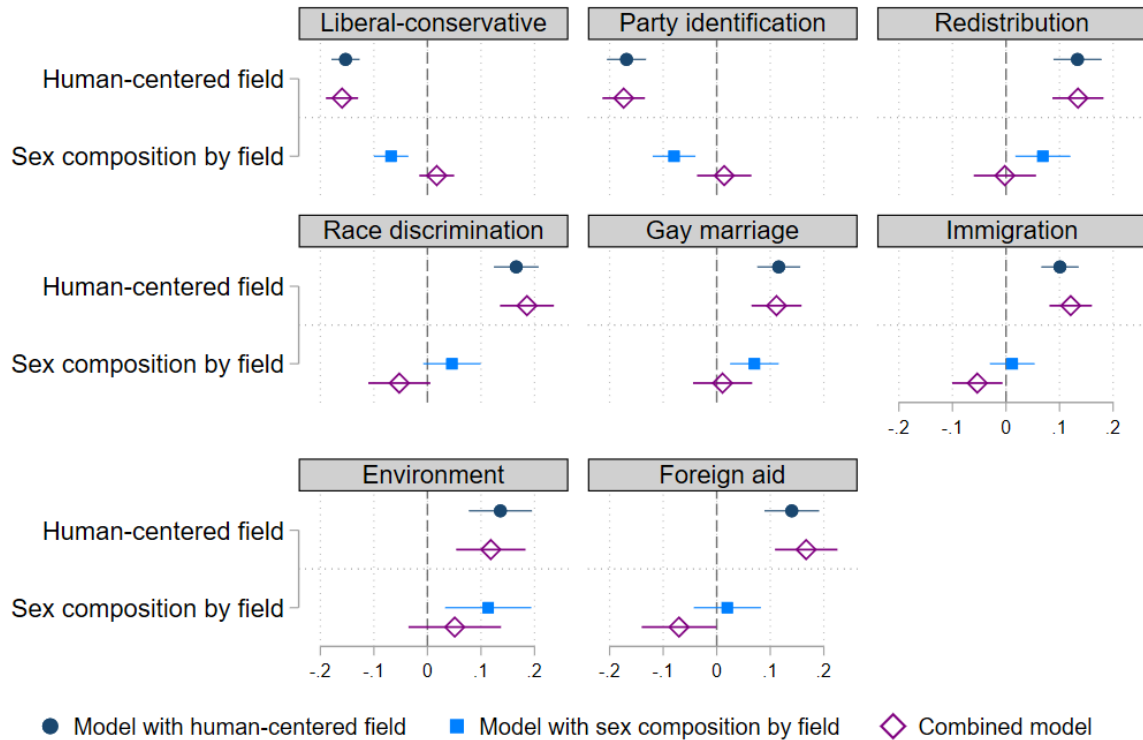
If income by field were the primary explanation for field differences, the association with income by field should be retained when both variables are included. However, in the combined model (diamonds), the association with income by field loses statistical significance while the association with human-centered field remains strong and statistically significant across political attitudes. These results suggest that the observed associations between educational field and political attitudes are not primarily accounted for by income differences across fields.

A similar logic applies to gender. Some fields – especially those in the arts, humanities, and care professions – attract more women. Could the observed association with human-centered field simply reflect the sex composition of majors?

Figure 4 addresses this possibility, again by visualizing the coefficients from three models. Women who graduated from female-dominated fields lean more liberal when only sex composition by field is included in the model (squares). However, this association becomes statistically insignificant when both sex composition and human-centered field are included, with human-centeredness remaining large and statistically robust. This pattern is consistent with the view that gender sorting across majors is not likely to account for the main results. Instead, the results align more closely with an interpretation emphasizing the content of what is taught and learned.

[Figure 4 about here]

Figure 4. Comparing coefficients for human-centered field and sex-composition-by-field across political outcomes



Note: GSS (2012–2022). Points show regression coefficients with 95% confidence intervals from linear models estimated on 500 bootstrap resamples. Outcomes and predictors are rescaled 0 to 1; coefficients represent the model-implied difference in the outcome between the minimum and maximum of each predictor. Circles indicate estimates from a model including human-centered field only; squares from a model including sex composition by field only; diamonds from a combined model (Tables E.2a–E.2b). All models include full controls.

Field of education stands out as a robust correlate with political attitudes that persists after adjustment for two major covariates – income and gender. The field coefficient is therefore unlikely to be simply capturing who studies which subjects or the average earnings associated with different majors; rather, it appears to reflect systematic differences across fields in the kinds of interpretive frameworks and modes of reasoning they emphasize.

Conclusion

Across four datasets, sixteen outcomes, and both sides of the Atlantic, this study documents strong and consistent evidence that the content of higher education – specifically, the human-centeredness of a field of study – is systematically associated with a wide range of political attitudes. Although our analyses are cross-sectional, they connect to longitudinal work suggesting that field of study is not a mere proxy for selection effects but can be a site of political socialization. Here, our focus is the predictive and descriptive leverage of field of study: if we know what major a person completed, how well can we predict differences in their political attitudes later in life?

While prior research has emphasized the liberalizing effect of university education, our findings suggest that it is not just the duration of education but also the kind of education that matters. Field of study and its relative emphasis on human-centered versus material-centered skills is strongly associated with attitudes on economic distribution, ideological orientation, party identity, and a range of socio-cultural attitudes.

These associations are substantial. The size of field coefficients is comparable to, and in several cases larger than, that of well-established correlates of political behavior, including gender, income, rural vs. urban location, and religiosity. Moreover, field is not accounted for by compositional differences in income or gender, nor is it accounted for by educational attainment. Indeed, the divide between human- and material-centered fields among the college-educated is often as large as, or larger than, the gap between college graduates and those without a college degree. This finding challenges a deeply entrenched assumption in political behavior research: that education can be reduced to its extent.

Instead, our findings point towards a more differentiated theory of education – one that takes seriously the content of what is taught alongside the duration of exposure. Attribution theory

posits that academic fields foster distinct interpretations of human motivation and responsibility. Human-centered fields are associated with more liberal views on redistribution, race, LGBTQ+, immigration, the environment, and stronger support for a secular state and the rule of law. Material-centered fields, by contrast, are associated with a more individualistic and instrumental cognitive style and more conservative positions on those same issues.

At the same time, field theory specifies limits to its reach. While educational content aligns with a wide range of attitudes, it is not consistently associated with political engagement, affective attachment to parties, or moral polarization. These outcomes reflect “what now?” decisions – whether to act, participate, invest attention, or express partisan passion – rather than the “why?” questions most directly related to attributional reasoning.

The implications are far-reaching. Human-centered academic disciplines have become politically contested and public funding for the humanities and social sciences is increasingly under scrutiny. If what students study is systematically related to their worldview, then curricular decisions and funding allocations are far from politically neutral. Efforts to restrict or defund certain disciplines may be motivated as much by political calculus as by labor market considerations. As higher education becomes a site of cultural and partisan conflict, the content of academic training – and who controls it – may become a lightning rod in democratic contestation (Neundorf et al. 2024).⁹

In short, political scientists cannot afford to treat education as a black box. What people study matters – not just for labor market outcomes, but for the democratic health of societies. Educational field theory offers a framework for understanding how political attitudes develop over a person’s life, and at the aggregate level, how political cleavages are formed, reinforced, and contested.

Endnotes

¹ The International Standard Classification of Education (ISCED) framework was created by UNESCO to classify education programs and levels by field of study. The current list dates from 2011 and contains 88 categories.

² GAL stands for green/alternative/libertarian and TAN stands for traditional/authoritarian/nationalist (Hooghe et al. 2002).

³ Section B in the Online Appendix shows that using a continuous more fine-grained variable for level of education (GSS: years of education: US field and YouGov: 5-step level of education) does not substantially change the results for field or level.

⁴ Figure B.3 in Appendix presents an alternative version of Figure 1 that focuses on changes in adjusted *R*-squared when adding each focal variable to the baseline model with controls. The patterns mirror those in Figure 1: field of study contributes the most incremental explanatory power across a range of outcomes, particularly ideological self-placement and party identification.

⁵ Wald equality tests that assess the difference in marginal means between college-educated and high-school educated can be obtained from the authors.

⁶ These differences are statistically robust and consistent across all three education groups (Appendix, Table D.1). Table E.1 breaks this down for each of ten European countries.

⁷ Because field is measured only among college graduates and we are comparing two different samples (college educated and full sample), we are unable to estimate whether differences in magnitude between the field and college coefficients are statistically significant. However, cross-sample comparison highlights that field-of-study differences among college graduates are

comparable in magnitude to differences between college-educated and non-college adults. For several outcomes, the field coefficient is larger (Appendix, Table D.5).

⁸ Supplementary analyses show that the magnitude of the field coefficient is similar among graduates of low and high human-centered fields, indicating no evidence of an asymmetric field influence (Appendix D.6).

⁹ One month after these words were written, the University of North Carolina at Chapel Hill, a public university in a gerrymandered Republican-controlled state, decided to close six area studies centers, including one founded by one of the authors.

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