Values and Political Preferences in Childhood*

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Studies of youth political development focus primarily on political socialization and salient events, while paying relatively less attention to important individual differences among children themselves, such as values. We administer an original survey to a sample of 10-to-12-year-olds and show that children's value priorities strongly predict their political preferences, and that one dimension of value priorities continues to predict political preferences even after adjusting for parental values and political preferences. Taken together, our findings suggest that pre-teens already use their own value priorities to organize their political attitudes, which emphasizes the importance of children's independent attributes in their political development, and lends support to the idea that personal values provide a foundation for political ideology.

Introduction

The study of political development during childhood, adolescence, and early adulthood typically focuses on factors external to the individual, including "the relative and differentiated contributions of various socializing agents" (Jennings and Niemi 1968:169) and the influence of major societal events and cultural changes during one's impressionable years (Sears and Brown 2023).[1] Clas-

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[1]Conceptualizing political events as "catalysts for preadult socialization" (Sears and Valentino 1997), this work argues that shared historical experiences and salient exogenous shocks during adolescence and early adulthood leave durable traces in political orientations (Bartels and Jackman 2014; Erikson and Stoker 2011; Ghitza, Gelman, and Auerbach 2023; Sears and Valentino 1997; but see Green, Davenport, and Hanson 2019 for evidence against long-term persistence).

sic socialization research emphasizes direct parental transmission of attitudes.[2] Hyman (1959), for example, argues that "a man is born into his political party just as he is born into probable future membership in the church of his parents" (74). Similarly, Greenstein (1967) suggests that "the process [of party identification] doubtless is similar to the development of ethnic and religious identifications" (73).[3] In more recent work, Tyler and Iyengar (2023) find that adolescents mirror the affective polarization of their parents, and conclude that their "findings confirm the earlier literature documenting the primacy of the family as an agent of socialization". More generally, Ojeda and Hatemi (2015:1151) note:

> The majority of research on political value transmission continues to rely almost exclusively on models that present an asymmetric relationship between parents and children. These models propose that children observe and imitate the behaviors of authority figures, most commonly parents, with little control over what is learned.

Yet, there is reason to question the simple direct transmission model, and to think that children are more than passive recipients of external influence (Dinas 2014; Gash and Tichenor 2022; McDevitt and Chaffee 2002; Ojeda and Hatemi 2015; Reifen-Tagar and Cimpian 2022; Westholm 1999). Work inspired by social learning theory (Bandura 1969) shows that transmission is enhanced by household politicization (Beck and Jennings 1991) and by consistency and repetition in parental signals (Jennings, Stoker, and Bowers 2009), at least in part because children in such households are likely to have more accurate perceptions of their parents' views (Westholm 1999). The extent of parental transmission thus varies in magnitude across families, and within families across issues (Jennings et al. 2009). For example, Carlos (2018) argues that many second-generation immigrants are "left to find their own path to partisan attainment" (381), because of low political involvement among their first-generation parents.[4] In these families, it is often the children who teach their parents about politics (Carlos 2026; Wong and Tseng 2008). More generally, research suggests that children critically consider assess their parents' views (Ojeda and Hatemi 2015), increasingly diverge from their parents' partisanship as they move from adolescence through adulthood (Niemi and Jennings 1991), and that political socialization is often reciprocal, with children having a mean-

[2] This is not to say that parents are the only source of socialization. A robust literature demonstrates important roles for socializing agents outside the household, including schools, peers, media, and campaigns (e.g., Campbell 1980; Campbell 2008; Cieciuch et al. 2024; Lee, Shah, and McLeod 2013; Sears and Valentino 1997).

[3] Interestingly, Greenstein (1967) did not even ask the children in his study about issues. He argues that "fourth, fifth, and sixth graders often were not sufficiently well informed to understand the sorts of statements which make up liberalism-conservatism scales" (67). As we will show in this paper, a large percentage of the children in our sample understand, and have opinions on, standard political issues that divide the left and right.

[4] A growing literature explores heterogeneity in parental socialization practices and its importance for children's political development (Anoll, Engelhardt, and Israel-Trummel 2022, 2025; Carlos 2018, 2021; Huft, Nieri, and Grindal 2024; Rico and Jennings 2016).

ingful influence on the politics of their parents (McDevitt and Chaffee 2002; Pedraza and Perry 2020).

This literature suggests that children are, in part, agents of their own political development. But we know less about the sources and mechanisms of such agency. One possibility is that children have pre-political orientations—at least partly independent of parents and the shared family environment—that guide political learning (Knutson 1974). In this view, children's basic traits and values shape the appeal of political ideas, and thus serve as a foundation for political development. Influential theories of *adult* political behavior emphasize the importance of stable individual differences (Bakker 2023; Federico and Malka 2023; Feldman and Weber 2023; Jost 2021), both in shaping people's choices about the content to which they are exposed, and in their evaluation, and ultimate acceptance or rejection, of the information they receive (e.g., Federico and Malka 2018; Jost, Federico, and Napier 2009; Zaller 1992). And recent research suggests that children hold differentiated personality structures, such as core values, at an early age (Bubeck and Bilsky 2004; Collins et al. 2017; Döring 2010; Döring et al. 2010; Measelle et al. 2005), and that measures of personality in early childhood predict political attitudes in adulthood (Block and Block 2006; Fraley et al. 2012; Wegemer and Vandell 2020).

At the same time, there are reasons to expect that such individual differences may *not* structure political attitudes at these early ages. Work in behavioral genetics, for example, finds an increase in the heritable component of political ideology, and a relative decrease in the shared environment component, around age twenty to twenty-five—a time when most young adults begin to distance themselves from their parental household (Eaves et al. 2011). It is plausible, then, that core individual differences, like values and traits, become influential only with the increasing independence of young adulthood, and that political attitudes among children are less strongly shaped by such predispositions.[5]

In this article, we examine the extent to which children aged ten to twelve map their core values to political attitudes. Using a paired survey of children and their parents, we find that the aggregate distribution of children's value priorities looks similar to that of parents and to a national sample of U.S. adults, though children are more "open" than adults, and show less variance in value priorities. At the individual level, children's value priorities strongly predict their own political preferences, even after adjusting for parental values and attitudes. Specifically, we find robust evidence that children who prioritize conservation values—such as conformity with rules, respect for tradition,

[5]Note, however, that twin studies estimate a substantial heritable component to young children's self-reported values (Uzefovsky, Döring, and Knafo-Noam 2016; see Twito and Knafo-Noam 2020 for a review).

and security—hold more conservative issue positions across a wide range of policy issues, and express more positive attitudes toward Donald Trump and the Republican Party relative to Kamala Harris and the Democratic Party.

Our paper speaks to important issues in the existing literature. First, generally speaking, we know relatively little about the politics of pre-adults, and of young children in particular. In a recent review, Reifen-Tagar and Cimpian (2022:78) note that only 1% of articles published over the previous 5 years in the journal *Political Psychology* concern children and politics, and that none of these study children younger than 13. They "argue that political psychology would benefit from the integration of evidence on young children's proto-political cognition".

Our project contributes a new set of data on this understudied population, with a focus on individual differences rarely included in the literature on political development. Our results are ultimately consistent with a more agentic view of children than what is found in much classic socialization research. It should stimulate additional work to unpack the processes by which values and other aspects of personality shape children's political beliefs and attitudes, and the extent to which these effects persist over time.

Our results also speak to recent critiques that question whether psychological dispositions *causally* shape political attitudes (Hatemi, Crabtree, and Smith 2019), with growing evidence for "bidirectional effects" among adults (see Arceneaux et al. 2025; Bakker, Lelkes, and Malka 2021). Studying how dispositions relate to political attitudes at younger ages can provide insight into this debate. The pre-adolescents in our sample are much less likely to identify with a political party or ideological label than adults, and often do not recognize these terms. Yet we find a strong association of their basic values with political attitudes toward both Presidential candidates and many political issues. This seems consistent with the idea that values operate as prepolitical orientations that, to some degree, shape—rather than merely reflect—broad political orientations like partisanship and ideology (Knutson 1974).

Our results come with important caveats. Our sample is relatively small, which reflects the difficulty and cost of obtaining data on young children. Moreover, as we discuss below, our sample is not representative of the population of U.S. households. Most importantly, the parents in our sampled households are more educated than a typical U.S. resident and a typical U.S. parent. This limits the scope of inferences that can be drawn from our data. And our cross-sectional research design cannot provide direct evidence for the causal direction of the relationship between values and political attitudes.

Nonetheless, we establish an important relationship of values to political attitudes for a subset of U.S. children. Our findings are thus consistent with models in which children's own sense of self is an important factor that shapes the development of political attitudes across the life-course. Along with other recent research (e.g., Carlos 2026; Dinas 2014; Gash and Tichenor 2022; Ojeda and Hatemi 2015), we suggest that greater attention to the agency of the individual child in studies of political development is warranted.

Values and Political Attitudes

Scholars have long argued that values are central to political judgment and decision making (e.g., Feldman 1988; Goren 2012; McClosky and Zaller 1984; Sniderman, Brody, and Tetlock 1991; for overviews, see Feldman 2013; Goren 2022). Conceptually, values are abstract and desirable goals, organized in terms of their relative importance, that serve as guides for individual behavior (Sagiv and Roccas 2017). Common examples include security, humility, equality, and achievement. Theoretically, values (and other abstract dimensions, such as ideology) allow people to make political decisions with less information (Goren 2022; Hinich and Munger 1994). For example, rather than identifying a candidate's stand on every issue—a difficult, often impossible, task—people can use value similarity as a heuristic for shared interests.

Values might also serve an expressive function (Katz 1960). In contrast to traits, values have a normative component: a person's values represent their ideal self (Roccas et al. 2014). Value-consistent choices reinforce, and signal to others, this core part of their self-concept (Goren 2022). Politics may be an especially appealing domain for the purpose of value expression. Much political debate involves value conflict, and since no single individual is decisive in determining the outcome, there is little cost in expressing one's values at the expense of potentially conflicting material interests (Brennan and Lomasky 1997).

Schwartz Value Theory

While scholars have explored a range of values in the context of political behavior (Feldman and Steenbergen 2001; Goren 2012; Jacoby 2014), contemporary research is often organized in terms of Schwartz value theory (SVT, Schwartz 1992; Schwartz et al. 2012). The most recent version of SVT proposes 19 universal value domains, listed in Table 1 along with their conceptual definitions.

Table 1: Schwartz Values (Adapted from Schwartz et al. 2012)

Value	Conceptual Definition	Label
Self-Direction–thought	Freedom to cultivate one's own ideas and abilities	selfd_t
Self-Direction–action	Freedom to determine one's own actions	selfd_a
Stimulation	Excitement, novelty, and change	stim
Hedonism	Pleasure and sensuous gratification	hedon
Achievement	Success according to social standards	achiev
Power–dominance	Power through exercising control over people	power_d
Power–resources	Power through control of material and social resources	power_r
Face	Security and power through maintaining one's public image and avoiding humiliation	face
Security–personal	Safety in one's immediate environment	secur_p
Security–societal	Safety and stability in the wider society	secur_s
Tradition	Maintaining and preserving cultural, family, or religious traditions	trad
Conformity–rules	Compliance with rules, laws, and formal obligations	conform_r
Conformity–interpersonal	Avoidance of upsetting or harming other people	conform_i
Humility	Recognizing one's insignificance in the larger scheme of things	humil
Benevolence–dependability	Being a reliable and trustworthy member of the ingroup	benev_d
Benevolence–caring	Devotion to the welfare of ingroup members	benev_c
Universalism–concern	Commitment to equality, justice, and protection for all people	univ_c
Universalism–nature	Preservation of the natural environment	univ_n
Universalism–tolerance	Acceptance and understanding of those who are different from oneself	univ_t

SVT posits patterns of compatibility and conflict among values: while some values can be pursued concurrently (e.g., "tradition" and "conformity"), others are largely in conflict (e.g., "conformity" and "self-direction"). These dynamics give rise to a two-dimensional structure for values, which is represented by a circumplex (Schwartz 1992; Schwartz et al. 2012), with each value occupying a particular "slice" of the overall circle. Figure 1 shows our operationalization of this circumplex. We divide the unit circle into 19 equal slices, and locate each value at the center of one arc, with the ordering of values determined by the theoretical ordering proposed in Schwartz et al. (2012).[6]

[6]The theoretical ordering in Schwartz et al. (2012) is actually somewhat ambiguous with respect to the positioning of benevolence–dependability. Their Table 2 (reproduced in our Table 1), shows benevolence–dependability located between benevolence–caring and humility, and thus closer to conformity and other conservation-related values. Later in the paper, however, they offer the conflicting interpretation that it should be located next to universalism-concern. We think there are clear theoretical reasons to expect dependability to be located closer to conformity than universalism, and for benevolence-caring to be located next to universalism-concern. Most clearly, the latter two values both represent concerns for the welfare of others, differing primarily in how far that concern extends. Dependability, by contrast, is about being a reliable and trustworthy member of the in-group, and is thus closely related to conformity to in-group norms and fulfillment of obligations.

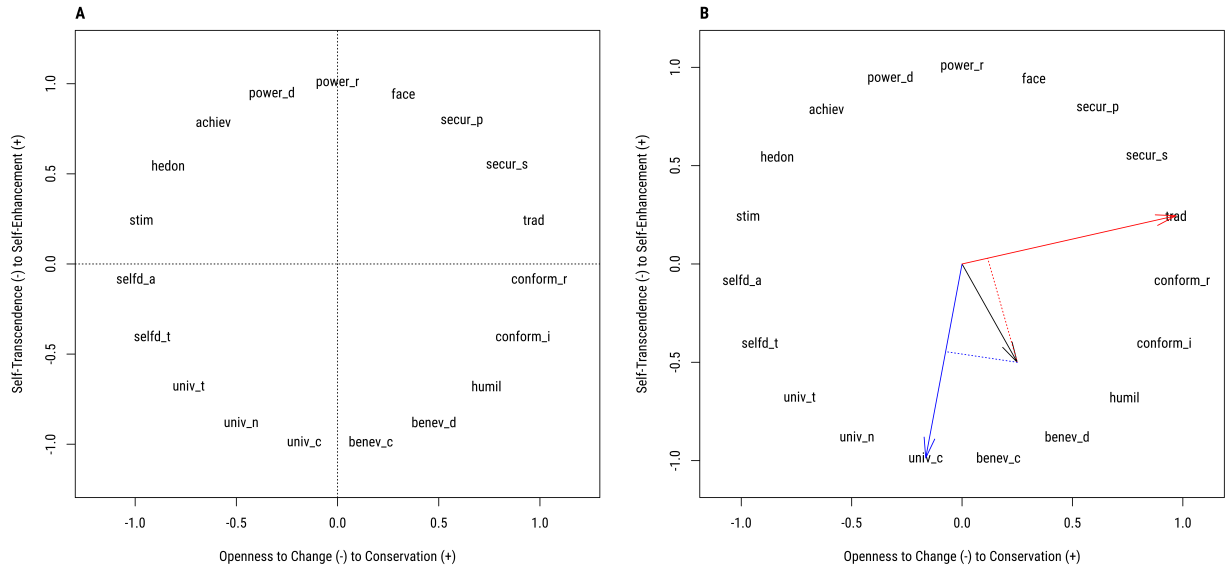

Figure 1: Schwartz Circumplex

Notes: Panel A presents the circular continuum of 19 values in Schwartz value space and canonical orthogonal bases. Value abbreviations correspond to the labels in Table 1. Panel B illustrates the choice model for a hypothetical respondent. The black arrow is the respondent's value vector; the red and blue arrows represent the value vectors for tradition and universalism-concern, respectively. Dashed lines show the projection of the respondent's vector onto each value vector.

While specific value terms (e.g., dominance, benevolence-caring, or universalism-nature) are used as conceptual anchors for making sense of directions within this space, it is theoretically a continuum, in the sense that every possible angle in the space represents a unique value or motivational orientation. Vectors in this space with small angular distances are theoretically compatible and positively correlated, those with large angular distances are incompatible and negatively correlated, and those at ninety-degree angles are theoretically orthogonal with minimal correlations. Hence, despite a theoretically infinite number of value concepts, SVT suggests we can simplify our characterization of value differences using only two continuous dimensions. While any two orthogonal axes could be chosen for this purpose, the canonical choice is to define the following two:

(1) *openness to change versus conservation*, which captures self-direction and stimulation on one side and security, tradition, and conformity on the other side; and
(2) *self-transcendence versus self-enhancement*, which captures benevolence and universalism on one side and power and achievement on the other side.

SVT has been applied successfully to model political judgment and decision making. In one stream of research, Schwartz and colleagues find that self-reported value priorities predict vote choice in the United States and Europe (Caprara et al. 2006; Piurko, Schwartz, and Davidov 2011; Schwartz, Caprara, and Vecchione 2010). In another research literature, Goren and colleagues have worked

to integrate SVT with existing research on *political* values, such as support for limited government (Goren 2012; Goren et al. 2016; Goren, Motta, and Smith 2020; Goren, Smith, and Motta 2022). In their model, basic values (as defined by SVT) shape preferences through the more domain-specific political values. SVT, then, provides a source of structure for ideologies and ideological conflict.

Values and Politics Among Pre-Adults

While the importance of values in structuring political preferences is well-documented, there is little research on the role of values in politics among pre-adults. In part, this is due to the dearth of research on politics among pre-adults in general (Reifen-Tagar and Cimpian 2022). But it is also a result of the influence of parental transmission—and of socializing agents more generally—as a paradigm for thinking about political development. This is reflected in the lack of data measuring both personal values and political preferences among children and adolescents.

Importantly, it is *not* the case that children lack meaningful values and political preferences. A long line of research has explored the development of values among children, such as equality, conformity, respect for authority, or reciprocity (e.g., Fehr, Bernhard, and Rockenbach 2008; Piaget 1997; see Reifen-Tagar and Cimpian 2022 for a recent review). A growing body of research suggests that children as young as five display individual differences in value priorities that are structured similarly to what is expected from SVT (Bubeck and Bilsky 2004; Collins et al. 2017; Döring 2010; Döring et al. 2010). With respect to politics, research finds that pre-teens show substantial interest in political issues such as war and poverty (Haug 2017), preschoolers show behavioral responses (e.g., punishment of fairness violations) indicative of their parents' ideological orientations (e.g., social dominance, right-wing authoritarianism) (Reifen Tagar et al. 2014, 2017), and young children show strong affective reactions to political parties and party leaders (Lay et al. 2023; Oxley et al. 2020; Tyler and Iyengar 2023).

In sum, values are central to psychological accounts of political behavior in adults, but we know little about the relationship of values to political attitudes in pre-adults, especially in pre-adolescents. This represents a significant gap in our understanding of political development. At the same time, a growing body of research suggests that children have differentiated value structures, even in early childhood, and possess substantial levels of political interest and meaningful political views.

We extend this research to explore the connection between values and political attitudes in a sample of children in the U.S. In doing so, we answer three basic questions. First, how similar are children's value priorities to those of their parents and to adults? Second, do these values organize children's

own political evaluations and issue positions? Third, do these value effects persist once we adjust for parental values, parental political orientations, and basic sociodemographic differences?

Analytic Strategy

Data Sources

We use three original surveys for our analyses. Data for children and their parents were collected by the authors and their colleagues as part of a larger project on political development, which also featured in-depth qualitative interviews. Data for the U.S. adult sample was collected through Cint (formerly Lucid). We believe that this effort provides a novel contribution to scarce survey studies on children. All our survey instruments as well as the data collection procedures received approval from Duke University's Institutional Review Board (protocol no. *#2024-0534* and *#2026-0075*).

Our primary dataset contains original surveys of children and one of their parents, collected from the Research Triangle region of North Carolina, United States, between October 3, 2024, and August 5, 2025. We recruited 228 children and 173 parents using a combination of probability-based and non-probability sampling. Most children (74%) were recruited through probability-based mailers sent to 12,500 unique addresses sampled from a Wake County voter file, which was obtained from the commercial company L2.[7] We supplemented this mailer-based sample with an additional 60 children recruited through non-probability methods, including advertisements in parent Facebook groups and recruitment emails to local community groups in both Wake and Durham counties.

We implemented several procedures to ensure data quality. Parents first completed an intake survey, provided informed consent, and scheduled an interview date and time for their child or children. On the scheduled date, children provided active assent, and then completed their surveys in a synchronous video conference session with a trained team member who provided instructions, monitored attention, and ensured independent responding. Most sessions (75%) were one-on-one, and the remaining sessions included small groups with breakout rooms to maintain independence of observations. During these sessions, our team members regularly monitored the participants.

Prior to beginning the survey, team members provided all respondents with instructions for using the Qualtrics survey, as well as example questions across several different formats (e.g., pairwise

[7] Our response rate is just under 2%. That said, our mailer list could only differentiate households likely to have children ages 6 to 15, rather than our target of 10 to 12. In turn, we contacted a substantial number of households that were ineligible for the study.

choice, multiple choice, grid-style items). During the survey, team members turned off their audio and video, but were available to help on technical issues. Children had the option of either reading each survey question themselves, or having the question read aloud from pre-recorded audio files. The latter option was available via a visible button on each question page. The parent survey was administered online and subsequent to the child's session, and was given to the parent participating in the intake survey (77% of whom were women). We achieved an 86% response rate for parents, which also includes several parents who had two children participating in our survey.

Relative to Wake County, and the U.S. more generally, our parent sample has higher average income, higher education, and a higher percent of white and Democratic respondents (see Supplementary Material A for comparisons). Nonetheless, there is substantial variation in partisanship, with 43% of parents identifying as Democrats and 23% as Republicans (see Tables 2 and 3 for descriptive statistics across samples).[8] These sample characteristics notwithstanding, we believe this study represents a rare window into political development, given the difficulties of reaching pre-teens and the near absence of existing data on children of this age range.

To provide a national adult benchmark, we also fielded the same questionnaire to a non-probability sample of U.S. adults through Cint (formerly Lucid)—a platform that connects researchers with online participants from different panel providers. Research shows that Cint samples closely match the U.S. population both demographically and politically, and replicate experimental findings from other providers (Coppock and McClellan 2019; Hohenberg et al. 2024; Stagnaro et al. 2024). The survey ran from September 30 to October 2, 2025, and produced 937 complete responses. We used quota sampling on age, gender, race, and region to align the sample with basic Census benchmarks. Respondents were excluded if they failed a two-image CAPTCHA, either of two attention checks, or a hidden prompt to detect AI-generated responses. We then conducted a post-hoc quality screen that flagged remaining inattentive or fraudulent responses using completion-time thresholds, non-sequitur open-ended answers, an obscure Supreme Court knowledge item, and the Qualtrics bot-detection score, with respondents flagged on two or more indicators being removed.[9] Although not a probability sample, this dataset provides a large and diverse adult comparison sample, with several quality filters, using the same survey items as children and parents. Details on recruitment, sampling, and additional elements are provided in Supplementary Material A, along with comparisons of sample demographic composition to U.S. population benchmarks in Tables A1 and A2.

[8] Including independent leaners, these figures increase to 59% for Democrats and 34% for Republicans.

[9] In Supplementary Material H, we replicate the main findings using only respondents with no flags on any indicator, and observe no substantive differences.

Table 2: Descriptive Statistics for Children

Characteristic	**N = 228**
Age	
9	2.2%
10	37.3%
11	29.4%
12	29.8%
13	1.3%
Gender	
Boy	55.7%
Girl	39.9%
Something Else	4.4%
Race	
White	68.9%
Black	7.5%
Hispanic	7.9%
Asian	7.9%
Other	3.5%
Don't Know	4.4%
Political Identity	
Democrat	29.8%
Independent	14.5%
Republican	17.1%
Something Else	2.2%
Don't Know	36.4%

Table 3: Descriptive Statistics for Parents and U.S. Adults

	Parents	**U.S. Adults**
Characteristic	**N = 173**	**N = 937**
Age	44.4	48.1
Gender		
Man	21.4%	48.9%
Woman	77.5%	50.6%
Something Else	1.2%	0.5%
Race		
White	82.7%	60.7%
Black	7.5%	10.7%
Hispanic	2.9%	17.0%
Asian	6.9%	7.0%
Other	0.0%	4.6%
Education		
No College	5.2%	62.9%
Bachelor's	50.9%	23.4%

(*continued*)

Characteristic	Parents N = 173	U.S. Adults N = 937
Post-Grad	43.9%	13.8%
Income		
Less than $10,000	0.0%	10.5%
$10,000 to $24,999	1.2%	12.8%
$25,000 to $49,999	2.9%	22.6%
$50,000 to $74,999	5.2%	18.5%
$75,000 to $99,999	11.0%	11.5%
$100,000 to $149,999	26.0%	13.3%
$150,000 to $199,999	15.0%	6.3%
$200,000 to $299,999	20.8%	2.9%
$300,000 to $399,999	11.0%	0.7%
$400,000 to $499,999	4.0%	0.3%
$500,000 or more	2.9%	0.5%
Political Identity		
Democrat	43.4%	33.5%
Independent	27.2%	30.0%
Republican	23.1%	33.8%
Something Else	5.2%	2.7%
No Response	1.2%	

Measurement of Personal Values

We define a person's value priorities as a point in the Schwartz space. It is the endpoint of a vector, starting at the origin, that points in the direction of the person's most important values. The length of this vector represents the strength of that preference. We show an example in Panel B of Figure 1. Our goal is to estimate this point (this vector) for each person in our surveys as their *values*.

To do so, we build on work that elicits value priorities through pairwise choices (Bilsky et al. 2015).[10] In previous research using this approach, respondents choose which of two values is more important to them, and all possible pairs of Schwartz values are considered, one pair at a time (see also Lee, Soutar, and Louviere 2008; Oishi et al. 2005). With 19 values, this would require a very large number of choices. We thus use a recent extension of this strategy, which reduces the number of pairwise choices by leveraging the theoretical structure of values as additional information (see Johnston and Opertti 2025).

[10]The pairwise choice approach was developed to overcome limitations associated with the commonly-used "Portrait Values Questionnaire" (Schwartz et al. 2012), or PVQ. The PVQ does not force respondents to make tradeoffs among values in terms of importance (Bilsky et al. 2015), even though such *relative* judgments are central to SVT.

We first define several indicators for each value, which are inspired by the descriptions in Schwartz et al. (2012). For example, we use "trying new and different things" and "having an exciting life" to represent the value of *stimulation*, while "being obedient, following the rules" and "showing respect for parents and elders" are used to capture *conformity to rules* (see Supplementary Materials B for the complete list). In our surveys, respondents are presented with 15 randomly selected pairs of indicators to choose between. For each, they choose which is most important to them.

To translate these 15 choices into a position in Schwartz value space, we need to specify a statistical model linking them. We make two assumptions to achieve this. First, we assume that each value indicator is a unit vector in Schwartz space located at the same angle as its corresponding value category. For example, the indicator "keeping up traditions and customs" is located at the position for *tradition*, shown with a red vector in Figure 1, and "treating everyone equally" is located at the position for *universalism-concern*, shown with an alternative blue vector instead.

Second, we assume that respondents choose between values by comparing *their own vector* in value space to the vector for each value, and they choose the value indicator most similar to their own. We define "similarity" as the dot product of the respondent's vector with the vector of a given value indicator. This means that similarity is high when the two vectors point in the same direction and the respondent's vector is long, and similarity is low when they point in opposite directions and the respondent's vector is long. Respondents with short vectors have only weak value preferences, suggesting that the values in the space are of roughly equal importance to them.

Formally, each choice is modeled as a Bernoulli trial, with the probability of choosing value A over value B a function of the difference in dot products of the actor's vector with each value's vector:[11]

$$p_{ij} = \Pr(\text{choose A})_{ij} = F\left(x_i \cdot a_{ij} - x_i \cdot b_{ij}\right) \tag{1}$$

In Equation 1, p_{ij} is the probability that respondent i chooses value indicator A over indicator B on choice task j; F is a cumulative distribution function; x_i is a two-vector for respondent i; and a_{ij} and b_{ij} are two-vectors for the randomly drawn pair of value indicators the respondent sees on trial j.

We can expand Equation 1 as

$$p_{ij} = F\left(x_{1i}(a_{1ij} - b_{1ij}) + x_{2i}(a_{2ij} - b_{2ij})\right) \tag{2}$$

Now subscripts "1" and "2" reference the entries of the vectors in Equation 1, which represent the

[11] This is equivalent to the directional model of voting outlined in Rabinowitz and Macdonald (1989).

locations on the two canonical Schwartz dimensions (conservation and self-enhancement, respectively). Since a_{ij} and b_{ij} are known by assumption, Equation 2 takes the form of a generalized linear model, with x_{1i} and x_{2i} as the coefficients to be estimated. The *effect* of the difference between value A and value B on each dimension thus gives us the position of the respondent on each dimension. If we choose the cumulative normal distribution for F, we get a hierarchical probit regression, where respondent-choices on the pairwise Schwartz task are nested within each respondent.

The model estimates a separate set of coefficients for each respondent by treating their positions x_i as independent and identically distributed random variables. The respondent positions are given a multivariate normal distribution, allowing the correlations between the positions on the two dimensions to be freely estimated (see Supplementary Material B for statistics on estimated positions for each sample). We implement a Bayesian approach for estimation[12], and use the mean of each respondent's posterior distribution on each dimension as their estimated position on that dimension, and the standard deviation of that distribution as the uncertainty around their value position.[13]

Conceptual Replication with Big Five Personality Traits

While our focus is on personal values, our survey also includes a battery of items measuring the Big Five personality traits (McCrae and Costa 2003), based on the extra-short form of the Big Five Inventory-2 (Soto and John 2017). There are three statements for each of the five traits, and respondents indicate their agreement on a five-point scale. For example, the item "I am original, I come up with new ideas" is conceptualized as an indicator of "openness to experience."

In Supplementary Materials G, we report estimates for the Big Five traits on political preferences, though we briefly discuss the findings in the results section below. In particular, openness to experience is closely related, both conceptually and empirically, to the Schwartz value dimension of conservation versus openness to change, with higher openness to experience associated with lower importance of conservation values (Roccas et al. 2002; Vecchione 2023). Indeed, recent work treats both Schwartz openness-to-change values and Big Five openness to experience as indicators of a common latent dimension of dispositional openness (Ollerenshaw and Johnston 2022; Opertti and Johnston 2026). The results for openness to experience thus serve as a conceptual replication of the results for conservation.

[12] We use the package `brms` in `R` to estimate the model for each sample. We use the default priors associated with the function `brm` (Bürkner 2017).

[13] In Supplementary Materials E, we report three different approaches to assessing measurement precision and reliability for the estimated value positions. Given the small number of choices we were able to include on the survey, precision and reliability are relatively low, though comparable to short-form versions of the PVQ. We deal with this issue by propagating measurement error into our regression estimates, as described below.

Measurement of Preferences and Evaluations

We use the same questions to assess issue preferences and evaluations of figures and parties across all surveys. We adapted the questions from well-established adult surveys, such as the American National Election Studies (ANES) and the General Social Survey (GSS). We intentionally avoided simplifying the language or structure of the items, as one of our primary goals was to understand whether children at this age could adequately comprehend political questions and articulate their own opinions. Hence, this approach ensures direct comparability across samples.

We captured political preferences on a wide range of policy issues. First, we assessed opinions on cultural issues, including the legality of abortion, immigration, gun regulation, the social impact of new lifestyles, racial advantages for whites, and the government's role in promoting racial equality. Second, we assessed opinions on economic issues, including the government's role in employment, health care, and reducing inequality, as well as the trade-off between environmental protection and economic growth and attitudes toward military intervention abroad. We coded the responses such that higher values indicate conservative political positions across all our samples.

Second, we collected people's evaluations of candidates and political parties. In doing so, we asked participants to evaluate 2024 national election candidates (Donald Trump and Kamala Harris) and parties (Democratic Party and Republican Party) on a Likert scale ranging from strongly dislike to strongly like. We coded these responses such that higher values indicate warmer attitudes toward Trump and Republicans and colder attitudes toward Harris and Democrats (the latter two are thus "reverse-coded"). Descriptive statistics for outcomes are reported in Supplementary Material C.

Modeling Strategy

In the survey, children selected the "don't know" option more than 20% of the time. If the children who choose to answer differ systematically from those who do not (for example, if more politically engaged children also hold more polarized views), then analyzing only observed responses could lead to biased estimates of the value–attitude relationship. To address this issue, we model political preferences with a two-equation multilevel selection framework, grounded in Heckman (1979): the *selection* equation models whether a child responds to a given item; the *outcome* equation models the direction of their response, conditional on having an answer. The two equations share a latent correlation parameter, ρ, which captures the dependence between the unobserved determinants of response propensity and the unobserved determinants of the outcome variable. When $\rho \neq 0$, the model adjusts for the fact that the observed outcomes are drawn from a non-random subset of

children.[14]

Let s_{ij} be an indicator for whether child i responds to item j, which is nested in a "domain," specified either as "issues" or "evaluations," and y_{ij} denote the observed outcome when $s_{ij} = 1$. We write:

$$\begin{aligned} s^*_{ij} &= (\alpha^s_{d[j]} + u^s_i + v^s_j) + (\beta^s_{d[j]} + b^s_j)^\top \theta_i + \gamma^{s\top} \mathbf{X}^s_{ij} + e^s_{ij} \\ y^*_{ij} &= (\alpha^y_{d[j]} + u^y_i + v^y_j) + (\beta^y_{d[j]} + b^y_j)^\top \theta_i + \gamma^{y\top} \mathbf{X}^y_{ij} + e^y_{ij} \end{aligned} \tag{3}$$

where $\alpha_{d[j]}$ are domain (issue or evaluation) fixed effects; u_i and v_j are individual and item random effects; θ_i contains the respondent's latent position in Schwartz value space (conservation and self-enhancement); $\beta_{d[j]}$ are domain-level slopes for values and b_j are item-level deviations from those slopes; $\mathbf{X}^y_{ij}$ contains demographic covariates (age, sex, and race), and $\mathbf{X}^s_{ij}$ contains the same demographic covariates as well as a political engagement score, which we discuss below. The equation with subscripts s is the selection equation and the one with subscripts y is the outcome equation. To correct for selection bias, the error terms e^s and e^y are jointly distributed as:

$$\begin{pmatrix} e^s \\ e^y \end{pmatrix} \sim \mathcal{N}\left(\mathbf{0}, \begin{bmatrix} 1 & \rho \\ \rho & \sigma^2_y \end{bmatrix} \right) \tag{4}$$

To help identify the selection process separately from the outcome process, we model the likelihood of responding using a political engagement score: an index we generated using (1) correct answers to five political knowledge questions, (2) self-reported political interest, and (3) self-reported news following. We include this item in the selection equation only, which ensures that the model can separate the factors that affect whether a child responds from the factors that affect their responses. We allow the effect of political engagement to vary across issues. Empirically, political engagement is indeed associated with fewer DK responses.

As noted before, our value measurement strategy produces value estimates with uncertainty: each respondent's position in Schwartz value space is a posterior distribution, not a point. If we simply plugged in the posterior means as fixed covariates, we would treat imprecisely estimated values as though they were known, understating the uncertainty in our regression coefficients. To avoid this issue, we incorporate a measurement component directly into our model, where we explicitly

[14] While non-response is substantial among children, it is minimal among adults. Among parents, DK rates are 1.3% for issues and 2.8% for evaluations; in the U.S. adult sample, these figures are 3.2% and 2.4%, respectively.

model each respondent's latent value position as a draw from their posterior:

$$\begin{aligned} \theta_i^{\text{self}} &\sim N\left(\hat{\theta}_i^{\text{self}}, \hat{\sigma}_i^{\text{self}}\right) \\ \theta_i^{\text{cons}} &\sim N\left(\hat{\theta}_i^{\text{cons}}, \hat{\sigma}_i^{\text{cons}}\right) \end{aligned} \tag{5}$$

where the $\hat{\theta}_i$ and $\hat{\sigma}_i$ are posterior means and standard deviations from the measurement model for each dimension of Schwartz value space (i.e., self-enhancement and conservation). This propagates the uncertainty in our estimates of values into the Heckman model, and respondents with less precise value estimates contribute less information to the estimated coefficients.[15]

In Supplementary Materials F, we also present results from a simplified modeling approach, which uses only non-missing observations (no selection model), average value positions (no uncertainty propagation), and estimates the multilevel model using maximum likelihood. The conclusions are similar, suggesting that our findings are not driven by the estimation framework. In Supplementary Materials I, we drop the Bayesian value estimation entirely. Instead of latent values, we construct simple scales directly from children's pairwise choices: for each of the 15 trials, we take the difference between the Schwartz-space coordinates of the chosen and not-chosen indicators, and average these differences across all choices. Using these scales provides substantively similar conclusions, suggesting that our results do not depend on the latent measurement model.

The Extended Child Model. A natural question with our baseline model specifications is that children's value-attitude associations might simply reflect parental influence: children may hold similar values and similar political views to their parents, without independently mapping one to the other. To address this, we extend the child model in three ways. First, we adjust for parental values and parents' item-specific political positions in both the selection and outcome equations, which allows us to estimate whether children's own values predict their political preferences beyond what can be attributed to their environment.[16] Second, we implement a Bayesian imputation for missing responses in parental issue positions, which account for approximately 2% of the responses. Third, we adjust for household income to account for the shared socioeconomic circumstances.[17]

Issue-Level Linear Models for Adults. While our models for children properly account for selection

[15] On each round of the MCMC chain, we treat each respondent's true value position as a random draw from its posterior. Therefore, each round uses a different value position, with the variation from one round to another determined by the uncertainty encoded in $\hat{\sigma}_i$, thus propagating measurement uncertainty into model estimation.

[16] When a parent has more than one child in the sample, parental predictors (values and issue positions) are indexed at the parent level. Siblings thus share the same parental covariates, and the model treats the parent as a single source of information regardless of how many children they have in the actual surveys.

[17] While doing this analysis, we lose about 14% of our child participants due to parental non-response to our survey invitation.

into response, this is less of a concern when we analyze our adult sample, as missingness is 3.2% for issues and 2.4% for evaluations. Similarly, the sample includes 937 respondents, which is large enough to estimate issue-level slopes efficiently without partial pooling. That said, uncertainty in our value measures remains a concern. To address this problem, we estimate issue-specific linear regression models for the U.S. adult sample, adjusting for age, gender, and race. Instead of treating conservation and self-enhancement as fixed covariates, we take 4,000 independent samples from the posterior distributions of values at the individual level and estimate 4,000 separate regressions. The distribution of these coefficients reflects uncertainty in value measurement. We then pool these coefficients and their standard errors using Rubin's rules. This procedure allows us to propagate the uncertainty into regression coefficients.

We estimate the baseline child model and the extended child model in a Bayesian framework using Stan. We use weakly informative priors: we assign normal priors for regression coefficients (with standard deviations of 1 for intercepts and covariates, and 0.5 for value coefficients), half-normal priors for variance parameters with scale 1, and LKJ Cholesky priors for correlation matrices. We model the latent value positions using normal priors centered at respondents' posterior means from the measurement model, with standard deviations equal to their posterior uncertainty. We base our estimation on four chains with 1,000 warm-up iterations and 3,000 post-warm-up draws.

Results

We start with Figure 2, which presents the distribution of value estimates across three groups (children, their parents, and U.S. adults) in the Schwartz value circumplex. Substantively, value priorities cluster in the lower quadrants, suggesting a general tendency to prioritize self-transcendence values over self-enhancement values. The mean estimates of the self-enhancement dimension are -0.29, -0.38 and -0.33 for children, parents and U.S. adults, respectively. In addition, the average positions of the two adult samples are shifted toward the lower *right* quadrant (with means of 0.17 for parents and 0.18 for U.S. adults), relative to the children (mean $= -0.02$), suggesting a greater priority placed on conservation values over openness to change values. These patterns are broadly consistent with past research using different estimation strategies (e.g., Bubeck and Bilsky 2004; Döring et al. 2010; Schwartz et al. 2012).

We also observe more variation in the value positions of adult samples than the value positions in the children sample. The standard deviation of value estimates for the conservation dimension is 0.25 and 0.23 for parents and U.S. adults, respectively, while it is 0.16 among children. Similarly,

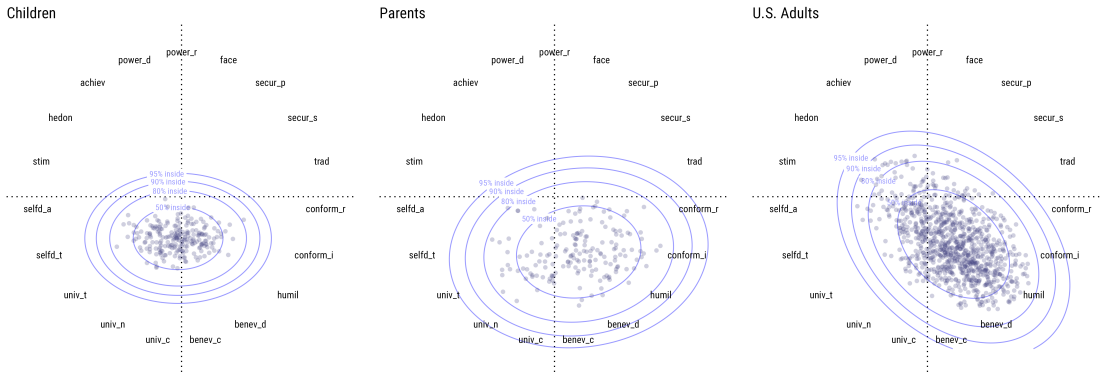

Figure 2: Estimated Value Positions Across Groups

Notes: The figure presents estimated value positions in Schwartz value space among children, parents, and U.S. adults. Value labels at the perimeters of the circles represent the fixed theoretical locations of the Schwartz values. Each point represents a particular respondent's posterior mean value position in the circumplex. Each contour represents a particular percentile of the estimated distribution of respondent value positions. Value abbreviations correspond to the labels in Table 1. Table B1 in Supplementary Materials B provides the list of corresponding survey items.

while the standard deviation of self-enhancement values is 0.16 and 0.21 among parents and U.S. adults, this value is 0.09 among children. This suggests that children's value representations are more restricted in range compared to parents and the U.S. adults, though we treat these results as tentative due to the small child sample.

Overall, however, Figure 2 suggests a high degree of similarity in the value distributions of children and adults. Importantly, this does *not* imply that children's values are simply reducible to those of their parents. Indeed, at the individual level, the correlations between the values of parents and their own children are modest ($r = 0.13$ for self-enhancement and $r = 0.23$ for conservation), and even with correction for error variance in value estimates, they are consistent with only moderate alignment (about $r \approx 0.50$—though these corrected correlations are associated with substantial uncertainty). While children are more similar to their parents than a randomly selected adult, variation in parents' values explains only a modest proportion of the variation in children's values.[18]

The Relationship of Values to Political Attitudes

Figure 3 presents the relationship of values to political attitudes. The left panel reports the average relationship across political evaluations, with higher scores corresponding to *more* pro-Republican and *less* pro-Democratic evaluations. The right panel reports the average relationship across issues,

[18] We present the congruence between parent and child value positions, as well as the correlations between parent and child political attitudes across items, in Supplementary Materials D.

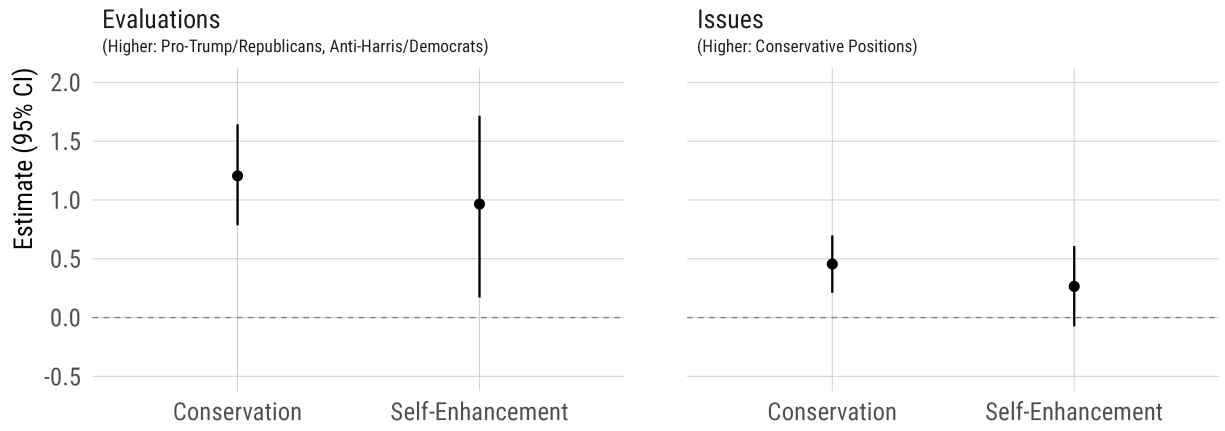

Figure 3: The Coefficient Estimates of Values on Political Orientations

Notes: The figure demonstrates posterior means and 95% credible intervals for the average effects of conservation and self-enhancement on standardized political evaluations (the left panel) and issue positions (the right panel). We present the effects of a 0.5-increase in value priorities, which corresponds to a quarter of the diameter in the Schwartz circumplex. Outcome measures are standardized within question across respondents, so coefficients can be interpreted as SD changes in each outcome. Models adjust for age, gender, and race. The complete sample for children (N = 228).

with higher scores indicating more conservative responses. In each panel, we show the change in the dependent variable associated with a 0.5 change in value priorities, which is one-fourth of the diameter of the Schwartz circumplex, and is roughly the range of variation in value positions observed in our sample of children.

We find a strong relationship between conservation values and political preferences. A 0.5-increase in conservation corresponds to an increase of 1.21 standard deviations in evaluations. Similarly, an increase of 0.5 in conservation is associated with a 0.45 SD increase in conservative issue positions. These findings replicate established patterns linking conservation to political attitudes among adults (Goren et al. 2016), and suggest that this relationship emerges early in life for at least some subsets of the population.

In contrast, the relationship is smaller and somewhat more uncertain when it comes to self-enhancement values. The estimated coefficient for self-enhancement values and evaluations is 0.94 SD, while it is 0.26 SD for issues, with only the former being statistically significantly different from zero. To some degree, the weaker result for self-enhancement is expected, because there is less variation along this dimension in terms of value positions. Overall, there is some evidence that children connect this value dimension to politics in a similar way to adult samples, but additional research with a larger sample, and a larger number of value choices, is needed for a more conclusive finding.

To give these estimates additional context, the associations of children's age, gender, and race with political preferences are, respectively, 0.02, -0.07, and -0.05 for evaluations and 0.06, -0.14, and -0.09 for issues. Compared to these differences, the estimates associated with value priorities are indeed substantial. We also find that the estimated selection-outcome correlation from the Heckman model is $\hat{\rho} = 0.01$ (95% CI: $[-0.14, 0.17]$), indicating no dependence between unobserved determinants of children's propensity to respond and the direction of their responses. This is consistent with the similar results obtained from a simplified model without selection correction (Supplementary Material F).

To examine whether these aggregate patterns hold consistently across different political outcomes and provide a comparison to the U.S. adult benchmark, Figure 4 presents item-specific estimates for issue positions, separately for children and U.S. adults. Once again, these estimates are associated with an increase of 0.5 in each value dimension. Importantly, however, while this change exhausts the full empirical distribution of value positions among children, it represents less than half of the empirical distribution among U.S. adults. Put another way, the *standardized* coefficient estimates are closer in magnitude than those presented here. This is not to say that the standardized estimates are more valid, but only that the changes illustrated in the figure do not represent changes in outcomes as a result of changes in personal values across the observed range among adults.[19]

We find that the association of conservation with preferences is directionally comparable across items, though there is much more uncertainty and variability in these estimates for children than for adults. Overall, these estimates reinforce the conclusion of Figure 3: even at a young age, many children connect values related to conservation versus openness to their political attitudes, with endorsement of conservation values corresponding to more conservative issue opinions and support for right-wing candidates and the Republican Party. Also consistent with Figure 3, the item-level estimates for self-enhancement are generally smaller, but again are quite imprecise, making it difficult to draw conclusions about the association of self-enhancement with any particular preference.

As a conceptual replication, we estimated the same Heckman specification using Big Five personality traits in place of Schwartz values (presented in Supplementary Materials G). Consistent with prior work linking openness to experience to the conservation dimension (Roccas et al. 2002; Vecchione 2023), we find that higher levels of openness in children are associated with less conserva-

[19] Indeed, it is quite intriguing that children have both a smaller range of value estimates, and larger effects for the same absolute change in values. One possibility is that the estimates for children are the estimates of values *conditional* on having an opinion at all. Among adults, almost everyone is willing to express an opinion, but children with opinions may be an especially politically interested subset of that population.

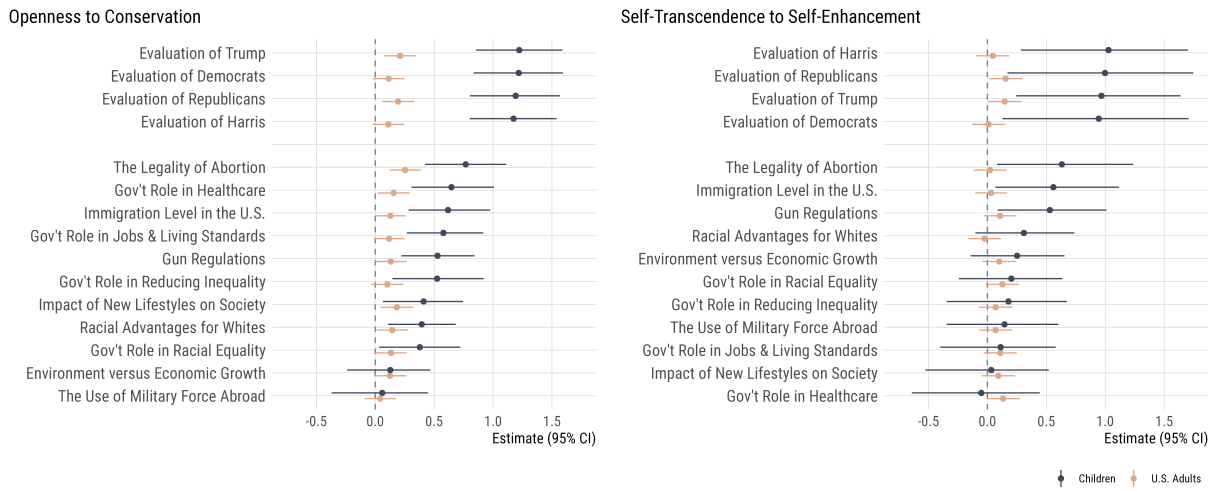

Figure 4: The Coefficient Estimates of Values on Political Outcomes

Notes: The figure demonstrates posterior means and 95% credible intervals for the item-specific effects of conservation (the left panel) and self-enhancement (the right panel) across evaluations and issue positions. We present the effects of a 0.5-increase in value priorities, which corresponds to a quarter of the diameter in the Schwartz circumplex. Outcome measures are standardized within question across respondents, so coefficients can be interpreted as SD changes in each outcome. Coefficient estimates for children are drawn from the multilevel Heckman selection model. Coefficient estimates for U.S. adults are drawn from linear regression models with uncertainty propagation. Both models adjust for age, gender, and race. The complete sample for children (N = 228) and U.S. adults (N = 937).

tive (more liberal) political preferences.

Examining Parent-Adjusted Estimates

Does the relationship of children's values to their politics persist after accounting for parental positions? Figure 5 examines this question by comparing estimates from the baseline model to those from the parent-adjusted specification, which includes parental values and attitudes as controls. To achieve comparability, we re-estimated the baseline child model using respondents whose parents participated in the surveys, reducing our analysis sample size from $N = 228$ to $N = 196$.

The results show that the association of conservation with political preferences remain substantial and credibly different from zero after adjusting for parental characteristics. The conservation effect declines from 1.35 to 0.54 SD (a reduction of 60%) for evaluations and from 0.51 to 0.35 SD (a reduction of 31%) for issues; however, in both cases the coefficients remain sizable and significantly different from zero. To put these estimates in context, the adjusted conservation coefficient for children on evaluations is comparable in magnitude to the coefficient for parents' own political attitudes, and at least as large as the coefficient for parents' conservation values. In contrast, parental

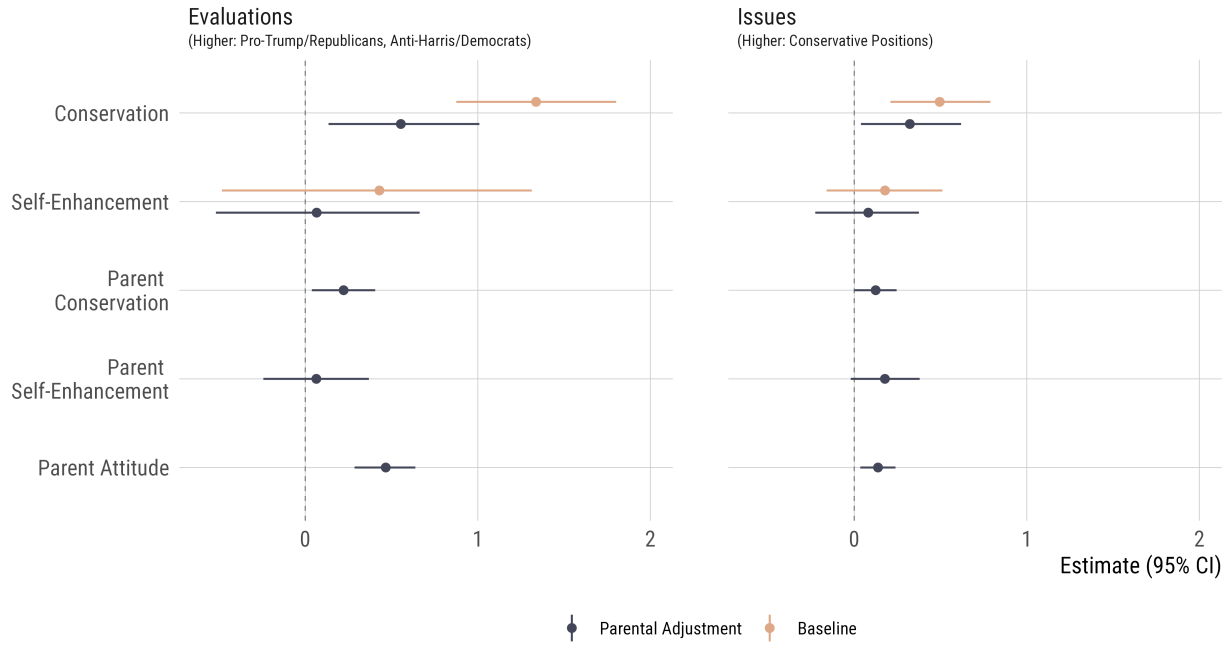

Figure 5: The Coefficient Estimates of Values on Political Orientations

Notes: The figure demonstrates posterior means and 95% credible intervals for the average effects of conservation and self-enhancement on standardized political evaluations (the left panel) and issue positions (the right panel). We present the effects of a 0.5-increase in value priorities, which corresponds to a quarter of the diameter in the Schwartz circumplex. Outcome measures are standardized within question across respondents, so coefficients can be interpreted as SD changes in each outcome. The baseline model adjusts for age, gender, and race. The parental adjustment specification additionally adjusts for parents' conservation and self-enhancement values, parents' corresponding political positions, and household income, so estimates represent the direct association between children's values and their political orientations. The sample for children with parental surveys (N = 196), a 14% reduction from the baseline sample.

characteristics largely account for the relationship of self-enhancement to preferences. The coefficients decline from 0.44 to 0.10 SD (a reduction of 77%) for evaluations and from 0.17 to 0.12 SD (a reduction of 33%) for issues, with estimates no longer credibly different from zero.

These findings indicate that although an important part of value relationships among children reflect shared family environments or intergenerational transmission, a substantial portion of the relationship between conservation values and preferences remains even after we adjust for parental values and preferences. This persistence suggests that value-based political differentiation from parents may emerge even among (at least some) pre-teens, as they begin to integrate values into their political attitudes and identities.

To examine the differences between the baseline and parental adjustment models across items, Figure 6 provides random-effects estimates, separately for conservation and self-enhancement. We observe that conservation continues to be associated with more conservative positions on several

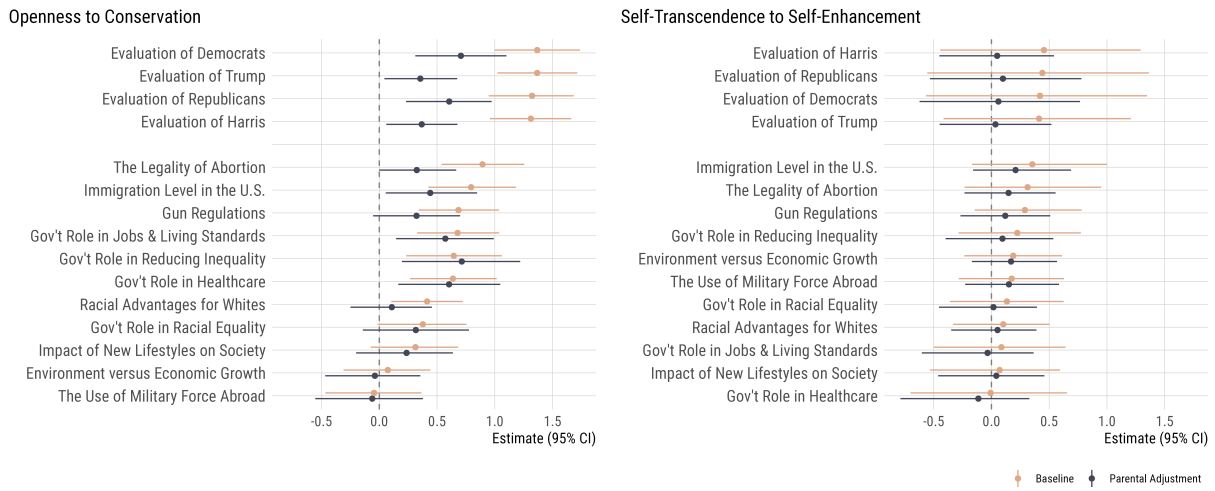

Figure 6: The Coefficient Estimates of Values on Political Outcomes

Notes: The figure demonstrates posterior means and 95% credible intervals for the item-specific effects of conservation (the left panel) and self-enhancement (the right panel) across evaluations and issue positions. We present the effects of a 0.5-increase in value priorities, which corresponds to a quarter of the diameter in the Schwartz circumplex. Outcome measures are standardized within question across respondents, so coefficients can be interpreted as SD changes in each outcome. The baseline model adjusts for age, gender, and race. The parental adjustment specification additionally adjusts for parents' conservation and self-enhancement values, parents' corresponding political positions, and household income, so estimates represent the direct association between children's values and their political orientations. The sample for children with parental surveys (N = 196), a 14% reduction from the baseline sample.

issues—such as abortion, immigration and gun regulations—and stronger support for conservative candidates and parties. Once again, the imprecise estimates for self-enhancement, particularly for evaluations, are almost entirely eliminated after we adjust for parental values and outcomes, with nearly all item-specific estimates on issues and evaluations moving toward a value of zero after adjustment.

Discussion

In this article, we find evidence that value priorities among children ages 10 to 12 are associated with their political preferences in ways that match the associations seen in previous research on adults. The relationship of conservation values to preferences holds even after adjusting for the values and preferences of one of their parents. Children who prioritize conservation values—such as conformity with rules, respect for tradition, and security—over openness values—such as self-direction and stimulation—hold more conservative positions, and express stronger support for the Republican Party and its candidate.

One might be concerned that these results are limited to our particular measure of individual differences. In the Supplementary Materials G, we replicate our findings using a standard measure of the Big Five trait of openness to experience, which is closely (and negatively) related to the Schwartz dimension of conservation versus openness to change. Consistent with the results for values, we find that children with lower levels of openness to experience have higher ratings of Trump and Republicans, lower ratings of Harris and Democrats, and are more conservative in their issue positions, on average. This is also consistent with prior research on the Big Five and politics among adults, which finds a consistent relationship between openness to experience and left-wing attitudes (e.g., Carney et al. 2008; Gerber et al. 2010).

Our findings speak to broader issues in political development concerning child agency (e.g., Gash and Tichenor 2022; Ojeda and Hatemi 2015). In contrast to the classic literature, which often sees children as passive recipients of the attitudes of various socializing agents, our findings support a dynamic in which children's own value priorities have a meaningful influence early in their political development. Of course, we do not dispute that the family household matters. In fact, the reduction in effect sizes once we adjust for parental values and attitudes suggests a significant role for parental transmission and shared household environment. At the same time, the persistence of substantial relationships, after these adjustments, highlights the importance of children's own values as well.[20]

To be clear, these values are likely due, in part, to socialization; children are not born with a set of stable values, fully formed. The correlations of parent and child values in our sample are modest, but there are other important sources of value socialization, such as schools and media, and parents may even encourage values they themselves do not prioritize.[21] Our key point is that children *do have* a set of values that matter for their political attitudes, and thus actively participate in their own political development, rather than merely imitating the attitudes of others.

This article also extends contemporary work on Schwartz value theory and political behavior. We show that the mapping between basic values and political orientations identified in past work (e.g., Schwartz et al. 2010) is already evident among pre-teens and that this pattern is similar to that observed among U.S. adults. Across diverse issues, we show a stronger role of the conservation versus openness dimension compared to the self-enhancement versus self-transcendence dimension. It is plausible that conservation, which captures preferences for order, security, and tradition, is more

[20] One caveat is that we were only able to include one parent from the household in our data collection. This limits what we can infer about family dynamics and the possibility that the non-responding parent is a more salient influence in cultivating political development.

[21] For example, a parent might wish to inculcate the prevailing values of the broader society. We thank Allison Anoll for suggesting this point.

tightly bound to the left-right political dimension in the United States. It is also possible, however, that the tendency of people to prioritize self-transcendence over self-enhancement values limits the ability of this dimension to explain variation in political preferences. Future work should examine the mechanisms connecting particular values to politics to explain such empirical findings.

There are several other design-related limitations that qualify our findings. First, our sample is not representative of the U.S. population: the parents are more educated, white, and politically liberal than the typical U.S. resident. As a result, our findings should be interpreted as evidence that values matter for children in at least some subsets of the population. At the same time, because education is strongly linked to political participation, this subset of the population may be especially likely to engage with politics as adults, which makes them a theoretically interesting subpopulation in their own right. Relatedly, our study is situated entirely within the U.S., where the mapping between values and political conflict may be shaped by a context-specific set of cultural and policy cleavages. Whether children in other national contexts would show similar patterns remains an open question.

Second, our analyses rely on a cross-sectional design and the possibility of causal inference is thus limited. This is important, because recent evidence suggests that political attitudes may also cause personality orientations and related constructs (see Arceneaux et al. 2025).[22] It is reasonable to think that this reverse pathway is less likely for children, given their weaker exposure to and knowledge of U.S. politics, and their relatively undeveloped political identities. In fact, 36% of children in our sample reported that they have not thought about their partisanship, and 70% did not or could not report whether they were liberals or conservatives. These non-response rates are higher than those for political issues, and much higher than those for candidates, for which the vast majority of children reported an attitude. Nonetheless, our design cannot conclusively show the causal effects of values on outcome variables. More research is thus needed to unpack the causal sequence relating values to political attitudes and identity.

A related concern is that a generalized receptivity to political messaging could produce the observed association between values and political preferences without values playing a substantively independent role. For example, children exposed to conservative messaging in their households or communities might simultaneously adopt both conservation values and conservative policy positions, not because their values organize their politics, but because both reflect exposure to a common ideological environment. We cannot fully rule out this possibility with our cross-sectional

[22] Empirical studies also suggest that values and value-expressive behavior have reciprocal influences on one another during childhood (Scholz-Kuhn et al. 2025; Vecchione et al. 2016).

design. That said, the persistence of the conservation effect after adjusting for parental values and parental political positions suggests that simple exposure to a shared ideological environment may not fully account for the relationship.

Finally, our design also does not allow us to establish whether shared environments or direct family transmission is more responsible for the variance in political attitudes attributable to the values and attitudes of children's parents. That is, we do not know whether children are obtaining their political attitudes (to some degree) directly from their parents, or whether children and their parents are subject to the same environmental conditions or forces, which foster similar political preferences.

Despite these limitations, our findings suggest that greater attention is warranted to children's agency in their own political development, and to the basic dispositions that shape their response to political conflict. Such "proto-political" orientations (Knutson 1974; Reifen-Tagar and Cimpian 2022) likely have a disproportionate effect on adult political attitudes, because they shape the initial sorting process into a party or ideology, which remains relatively stable across life (e.g., Sears and Funk 1999), and drives exposure to and processing of political information (e.g., Bolsen, Druckman, and Cook 2014; Zaller 1992). Exploring these questions fully requires longitudinal designs that follow children across childhood and adolescence, and into adulthood. We need more diverse samples, drawn from different regions, racial and ethnic groups, and socioeconomic backgrounds, to assess the role of individual differences, such as values, and their influence on political outcomes. We believe our study makes a significant contribution to this project.

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Supplementary Materials for

Values and Political Preferences in Childhood

Christopher D. Johnston Martín Opertti Turgut Keskintürk

Table of Contents

Supplementary Materials A: Data Sources

We draw on three original data sources. The children and parent data were collected by the authors and colleagues as part of a larger project on political socialization that also includes in-depth qualitative interviews, while the U.S. adult sample was collected through Cint (formerly Lucid). This effort provides a novel contribution to the scarce political survey data on children as young as 10 to 12 years old. All our survey instruments, as well as the data collection procedures, received approval from Duke University's Institutional Review Board (protocols #*2024-0534* and #*2026-0075*).

A1. Surveys for Children and Parents

Overview

We collected data on children aged 10 to 12, and their parents, in the state of North Carolina in the United States between October 3, 2024, and August 5, 2025. We surveyed 228 children and 173 parents, where 23 parents had two participating children. We recruited most children (74%) using a probability sampling method, through mailers sent to addresses sampled from the Wake County voter file. Given the difficulty and high costs of reaching this specific population, we supplemented the sample with non-probability recruitment techniques, including recruiting participants through Facebook groups or community organizations, which yielded an additional 60 participants.

The recruitment procedure began with either a mailed letter or an online advertisement (depending on the recruitment method) inviting adults with kids aged 10 to 12 to participate in the study. If agreed, one parent (self-selected within the household) completed an intake survey. In this initial survey, parents confirmed that they had a child in the target age range, indicated their willingness for both themselves and their child to participate, and entered the names of the participating parent, any other caregiver, and the child. These names were later used in the surveys to allow children to answer questions about their parents by name. Parents also provided and signed informed consent which included information about the study details and the compensation process.

After providing consent, parents were redirected to a virtual calendar to schedule a session for their child to connect with one of the authors or research assistants via the video conferencing platform Zoom. During the scheduled session, an author or research assistant met synchronously with the child, provided instructions for completing the survey in the online survey platform Qualtrics, and remained available on Zoom to assist as needed. After the child completed the survey, a link to the complete parent survey was sent to the parent who had completed the intake survey.

Instrument Design

All three surveys covered a wide range of topics and, in general, used the exact same questions. For measuring values, as described in the main article, we used a technique that estimates respondents' positions in the Schwartz circumplex using pair-choice tasks based on short descriptions associated with each of the 19 Schwartz values. These short descriptions were crafted to accurately represent each value while also remaining intelligible to children, avoiding too complex or abstract words. The exact same value-measurement technique was used for all three survey samples.

Regarding policy issues and other political evaluations, the goal was *not* to adapt the language of political questions typically used in adult surveys so that 10-12-year-olds could understand them. Rather, we intentionally kept the questions as they are usually asked in adult surveys, as we were interested in whether children can understand them at their particular age. We avoided including questions that would be unreasonable for children in terms of attention span and overall political knowledge. Using this approach, we constructed items comparable to those in the American National Election Study (ANES) and the General Social Survey (GSS). For instance, as described in more detail in Section C1, to ask about the government's role in creating jobs and improving living standards, we adapted the following GSS item:

> *We would like to talk with you about issues some people tell us are important. Some people think that the government in Washington should do everything possible to improve the standard of living of all poor Americans; they are at Point 1 on the scale below. Other people think it is not the government's responsibility, and that each person should take care of himself; they are at Point 5*, with responses *1 = I strongly agree the government should improve living standards, 2, 3, 4, 5 = I strongly agree that people should take care of themselves, Don't know*.

to the following question:

> *People at point 1 feel the government in Washington should do everything possible that every person has a job and a good standard of living. People at point 7 think that this is not the government's responsibility, and that each person should take care of themselves. And others fall somewhere in-between. Where would you place yourself on this scale, or haven't you thought much about this?*, with responses *1 = Government should see to jobs and standard of living, 2, 3, 4, 5, 6, 7 = Each person should take care of themselves, Haven't thought much about this*.

Cognitive Interviews

Before recruiting participants, we conducted cognitive interviews to ensure that children could understand the survey questions and survey structure, as well as to assess whether they could maintain the necessary attention throughout the 30–45 minute questionnaire. We conducted 20 cognitive interviews, recruiting children in the target age range through snowball sampling and Duke's Interdisciplinary Behavioral Research Center (IBRC) community participant center.

The results of the cognitive interviews suggested that our survey instrument did not have any major shortcomings. Children were able to understand most questions and indicate when they did not know an answer or did not fully understand the question. The cognitive interviews also allowed us to confirm that children's attention spans were sufficient to complete the survey. Based on these interviews, we made minor changes to question wording and the selection of policy issues.

Sampling

Mailing Sampling

We first describe the sampling of the mailers. To construct a sampling frame, we purchased Wake County (NC) voter records from commercial company L2. This list includes household addresses and personal information at the individual level, ranging from parental status to information about voter status and party registration. Our target population was households with a 10-12-year-old child. Yet the information in the file was not detailed enough to identify this exact group, so we filtered for households with children estimated to be between 6 and 14 years old, as well as households where adults' inferred ages ranged from 25 to 50. This improved the efficiency of the sample, given that only children aged 10 to 12 were eligible to participate in the study. Households with more than one eligible child in the target age range were allowed to participate with all children.

We conducted three waves of mailers, each using a separate list of addresses randomly sampled from our sampling frame. For the first wave, we used random sampling proportional to size from the L2 file and obtained 52 children responses. As the participants from this wave skewed toward Democrats, the second wave targeted households with registered Republicans. In the third wave, we oversampled Republicans (50%) while also including Democrats and households without party information in L2. With these second and third mailers, we recruited an additional 116 children.

Additional Sampling

To supplement the probability-based sample, we recruited children using non-probability methods. Specifically, we invited parents with children in the target age range to participate in the study via advertisements posted in parent/mom Facebook groups, and through community groups and emails sent by Parent-Teacher Associations (PTAs) throughout the broader Research Triangle area. Of the 60 children recruited through these methods, most (92%) came from Facebook group advertisements, with the remaining 8% recruited via the PTA emails or community groups.

Recruitment

Mailing Recruitment

As mentioned above, we conducted three waves of recruitment through mailers. In the first wave, we sent 5,000 mailers to addresses in the Wake County, 2,500 in the second wave, and an additional 5,000 in the third wave. Each household received a letter inviting them to participate in the study under the message *be a voice for the community*, along with details about how and why to participate. The letter included the signature of one of the co-authors, a QR code, and a personal access code to complete the intake survey. All letters contained a one-dollar bill visible through the envelope, which were free for participants to keep. The letter we used is as follows:

> *Dear Wake County household,*
>
> *Be A Voice for Your Community!*
>
> *Do you have a child who is 10 to 12 years old? If so, we invite you and your child to participate in a research study about what it's like to grow up in America. Your household is among a select few chosen to represent the opinions and experiences of people in your area. If you have more than one child in this age range, we invite them to participate too.*
>
> ***What is the research for?*** *We want to understand both your and your child's opinions about American society today. The research is being conducted by Duke University.*
>
> ***Why participate?*** *Your insights are important. We want to make sure all perspectives are represented in our survey. Participating is easy and takes about* ***45 minutes****. Participating will make the study more accurate, so we all know more about the views of your community. You and your child will* ***each*** *receive a* ***$10 Amazon gift card*** *for completing the survey. When the study is complete, we can share the results with you.*

How to participate? Your child's survey will be conducted using Zoom, a video conferencing service. As the parent, you don't need a Zoom appointment. You may fill out your survey on your own, at your convenience. To schedule your child's survey appointment and access the link to your survey, please visit the website or scan the QR code printed below, and then enter your personal access code.

Who can I contact with questions? *If you have difficulty scheduling the appointment or have other questions, please email us at youngvoices@duke.edu. We are happy to help.*

Thank you for considering being part of this research study. In appreciation of your time, we included $1 with this invitation. This dollar is yours to keep. You and your child will each be emailed $10 Amazon gift cards after you complete the survey. You can schedule the survey now —claim your spot today!

For the first mailing recruitment and the Facebook recruiting, each child and parent received a $10 Amazon Gift Card as a reward for their participation. In order to increase the response rate, with IRB approval, for the second and third waves of mailers we offered $20 Amazon Gift Cards.

Additional Recruiting

We posted advertisements in parent Facebook groups for non-probability recruitment.

We first contacted group administrators to request permission to share a post, and after receiving approval, we created a post with the following text:

Young Voices: Growing Up in America project at Duke University is looking for participants!

If you are interested in joining in our study and be a voice for your community, claim your spot and visit [*LINK*]. *If you have difficulty scheduling the appointment or have other questions, please email us at youngvoices@duke.edu. We are happy to help.*

And we attached the e-flyer with more details, represented in Figure A1.

Child Survey Protocol

All children's surveys were self-administered, but completed while the child was in a live Zoom session with a member of the research team present. We recruited undergraduate students from Duke University through the *Bass Connections* program (*Young Voices: How Children Develop Political*

Figure A1: E-Flyer Used for Recruitment in Facebook Groups

Identities) to help on-board and monitor children as they completed their surveys.

After recruiting participants through the parent intake survey, we scheduled appointments with the children. When a child entered the session, a team member welcomed them and gave a short tutorial on how to answer a survey in Qualtrics. Team members shared their screens to demonstrate how to respond to different types of questions. Children also had the option to click a button on each page to hear the question and response options read aloud in their devices.

We reminded children to pay careful attention to the answer choices and reassured that it was completely fine to be "unsure" about a question. They were told that many questions included a "don't know" option, but that they should not ask for help from others. Team members monitored the sessions and paused any survey in which there were strong indications that parents were interacting with or assisting the child. In cases where one or more parents joined in the Zoom session at the start, we instructed parents to allow their child to answer these questions alone.

After receiving instructions, children provided verbal assent indicating that they understood the study and agreed to participate independently by responding to the following text:

> *Thank you very much for joining our project. We are very happy to have you here. We will now start our survey. There are no right or wrong answers to these questions. Just give us your most honest opinions. Even though your parent said it was OK, you get to decide whether or not you want to do this. If you try it and decide that you want to stop, that's OK. Just tell us that you would like to quit. Is it alright if we start the survey now?*

Sessions included between 1 and 6 children, though most sessions (75%) had only one child. In sessions with multiple children, general instructions were given to the group, after which final instructions, verbal assent, and survey completion occurred in breakout rooms to prevent children from interacting with each other. In these cases, we instructed each child on how to ask for help, and team members checked in regularly to ensure everything was working properly. The survey automatically loaded information about the parent who completed the intake survey, allowing certain questions to be tailored to each child. Surveys typically lasted between 30 and 45 minutes.

Parents Survey Administration

After the children completed their survey, parents were sent a link to complete their own questionnaire. This was a self-administered online survey with no monitoring. We sent several reminders, resulting in a final response rate of 86%.

Descriptive Statistics

We compared our parent sample to estimates we obtained from the *American Community Survey*'s (ACS) 2023 data. We filtered for households in Wake County with PUMA = 01203, 01204, 01205, 01206, 01207, and 01208, with children aged 10 to 12. We then constructed some basic weighted estimates on income, race, college education and age for comparison, presented in Table A1.

Table A1: Comparisons of Parent Sample with American Community Survey

Characteristic	Parent Sample	ACS Estimates for 2023
Median HH Income	175,000	144,857
Percent with College Degree	95	64
Mean Age	44	44
Percent White	83	55

A2. General Population Survey

To obtain general population data, we conducted a non-probability convenience survey of respondents recruited through Cint (formerly Lucid). Cint is a platform that connects researchers with online research participants drawn from a network of panel providers. Prior research shows that samples collected through Cint approximate the demographic and political composition of the U.S. population. They also successfully replicate experimental findings and include respondents who are less "professionalized" and less politically sophisticated than those found in other nonprobability samples (Coppock and McClellan 2019; Hohenberg et al. 2024; Stagnaro et al. 2024).

The survey was fielded from September 30 to October 2, 2025. A total of 977 U.S. adults consented, correctly identified two images containing a stop sign (from a set of six), successfully passed two attention checks and a hidden prompt to detect AI-generated responses, and completed the survey. The attention checks we used were:

1. Which color is produced by combining blue and yellow? This is an attention check question and the correct answer is green. [Orange, **Green**, Blue, Yellow, Purple].
2. People are very busy these days and many do not have time to follow what goes on in the government. This is an attention check. To show that you have read this much, answer both "extremely interested" and "very interested." [**Extremely interested**, **Very interested**, Moderately interested, Slightly interested, Not interested at all].

Following Panizza, Kyrychenko, and Roozenbeek (2026), we also embedded a hidden open-ended item that was invisible to human respondents using JavaScript. This question asked for a detailed explanation of an obscure sailing term. Because only AI tools would detect and answer the hidden prompt, any respondent who answered this item ($N = 1$) was excluded from the study.

After data collection, we screened responses for signs of inattention or fraud. Respondents were

flagged as problematic or fraudulent if they met any of the following criteria:

1. completed the survey in less than half the median completion time;
2. gave a non-sequitur or item non-response to the open-ended question "What do you think is the most important problem facing the country today?";
3. correctly answered an open-ended question about an obscure Supreme Court case (Graham 2024): "In what year did the U.S. Supreme Court decide United States v. Segui? Please type a number";
4. received a low reCAPTCHA score according to Qualtrics' automated bot-detection threshold.

We removed 40 respondents (4%) who failed two or more of these checks, resulting in a sample size of 937. Among the 937 respondents in the final sample, 163 were flagged for correctly answering the obscure Supreme Court question, 72 for speeding, 21 for failing Qualtrics' reCAPTCHA check, and 6 for invalid open-ended responses. We present analyses that drop these respondents in Supplementary Materials H, which shows that our main conclusions are practically the same.

While recruiting participants, we employed quota sampling on age, gender, race, and region using U.S. Census benchmarks. Table A2 provides the descriptive statistics for the final U.S. adult sample, as well as adult population estimates from the American Community Survey's 2023 data.

Table A2: Descriptive Statistics for the U.S. Adult Sample

		U.S. Adult Sample	U.S. Adult Benchmarks
Gender	Female	51	51
	Male	49	49
Age	18-29	19	21
	30-49	34	33
	50-64	25	28
	65+	23	18
Education	No College	50	35
	Bachelor's	13	34
	Some College	23	19
	Post-Grad	14	11
Income	$49,999 or less	46	32
	$50,000 to $99,999	30	28

		U.S. Adult Sample	U.S. Adult Benchmarks
	$100,000 to $149,999	13	17
	$150,000 or more	11	22
Race	White	61	63
	Black	11	12
	Hispanic	17	19

Supplementary Materials B: Descriptive Statistics for Schwartz Value Estimates

B1. Wording of Survey Items

Table B1 shows the items corresponding to each of the 19 Schwartz values.

Table B1: Wording of Schwartz Value Items

Value	Items
Self-direction thought	Thinking up new ideas, being creative
	Doing things in my own, original way
	Learning new things for myself
Self-direction action	Making my own decisions about what I do
	Being independent, free
Power-resources	Having money and nice things
	Being strong, powerful
Power-dominance	Being in charge, a leader
	Influencing other people
Stimulation	Trying new and different things
	Having an exciting life
	Having adventures, taking risks
Hedonism	Feeling pleasure, spoiling myself
	Having fun, good times
Achievement	Showing my skills and abilities
	Impressing others, being admired
	Getting ahead in life, being successful
Face	Being respected by others
	Having a good reputation
Security-personal	Living in a safe and secure place
	Avoiding sickness, being healthy
	Keeping things clean and organized
Security-societal	Protecting my country, national defense

Value	Items
	Living in a stable, orderly society
Tradition	Doing what my faith or religion requires
	Keeping up traditions and customs
Conformity-rules	Being obedient, following the rules
	Showing respect for parents and elders
Conformity-interpersonal	Being polite, good manners
	Making people feel comfortable, at ease
Humility	Being humble, modest
	Being satisfied, grateful for what I have
Benevolence-dependability	Being loyal to friends and family
	Being trustworthy, dependable
Benevolence-caring	Caring for others close to me
	Being forgiving, not holding grudges
Universalism-concern	Treating everyone equally
	Protecting the weak in society
Universalism-nature	Caring for nature and the environment
	Fitting in with the natural world
Universalism-tolerance	Trying to understand people who are different from me
	Promoting peace, harmony

The instructions and question wording for the choice tasks are as follows:

> *In this section of the survey, we are interested in the kinds of things that are important to you. On each question, you will see a pair of things that might be important to you. Please choose the one that is most important to you personally. While you may think all of these things are important, we are interested in which ones are most important to you. If you are unsure, that is OK. Just give your best response, if you had to choose.*
>
> *Choose the one that is most important to you.*
>
> [*Value A*] [*Value B*]

B2. Descriptive Statistics

Table B2 provides parameter estimates for the value measurement model.

Table B2: Parameter Estimates and 95% Credible Intervals by Sample

Parameter	Children	Parents	U.S. Adults
Conservation	-0.02	0.17	0.18
	[-0.08, 0.03]	[0.09, 0.24]	[0.15, 0.21]
Self-Enhancement	-0.29	-0.38	-0.33
	[-0.34, -0.24]	[-0.45, -0.31]	[-0.36, -0.30]
SD for Conservation	0.26	0.37	0.33
	[0.19, 0.34]	[0.28, 0.46]	[0.29, 0.37]
SD for Self-Enhancement	0.18	0.27	0.32
	[0.07, 0.27]	[0.18, 0.36]	[0.28, 0.36]
Correlation	0	0.08	-0.37
	[-0.55, 0.51]	[-0.31, 0.46]	[-0.51, -0.22]

Supplementary Materials C: Descriptive Statistics for Political Preferences

C1. Wording of Survey Items

The exact question wording of outcome variables in all three studies is:

- **Introduction:** Great! For the next set of questions, we will ask you about your opinions on different issues using a 7-point scale. Some people feel strongly about one side of the issue, and place themselves at point 1. Others feel strongly about the other side of the issue, and place themselves at point 7. And, of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5, or 6. For example, some people think that children should go to school all year round, others think that children should get the entire summer off from school, and others fall somewhere in between, as in the scale below. Each of the following questions will be like this. If you haven't thought much about one of the issues, it is fine! Please tell us by clicking the choice *Haven't thought much about this.

  [*1 = children should go to school all year round, 2, 3, 4, 5, 6, 7 = children should get the entire summer off from school, Haven't thought much about this*]

- **Government Role in Healthcare:** People at point 1 think that it is the responsibility of the government in Washington to help people in paying for doctors and hospital bills.People at point 7 think that these matters are not the responsibility of the federal government and that people should take care of these things themselves. And others fall somewhere in-between. Where would you place yourself on this scale, or haven't you thought much about this?

  [*1 = Government should help people in paying for doctors and hospital bills, 2, 3, 4, 5, 6, 7 = People should take care of these things themselves, Haven't thought much about this*]

- **The Legality of Abortion:** To what extent do you agree or disagree with the following statement? A pregnant woman should be able to obtain a legal abortion if she wants it, for any reason.

  [*1 = Strongly Disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree*]

- **Immigration Level in the U.S.:** Should the number of immigrants from foreign countries who are permitted to come to the United States to live be:

  [*1 = Increased a lot, 2 = Increased a little, 3 = Left the same as it is now, 4 = Decreased a little, 5 =*

Decreased a lot]

- **Government Role in Jobs & Living Standards:** People at point 1 feel the government in Washington should do everything possible that every person has a job and a good standard of living. People at point 7 think that this is not the government's responsibility, and that each person should take care of themselves. And others fall somewhere in-between. Where would you place yourself on this scale, or haven't you thought much about this?

  [*1 = Government should see to jobs and standard of living, 2, 3, 4, 5, 6, 7 = Each person should take care of themselves, Haven't thought much about this*]

- **Gun Regulations:** People at point 1 think the federal government should make it much more difficult for people to buy a gun than it is now. People at point 7 think the federal government should make it much easier for people to buy a gun than it is now. And others fall somewhere in-between. Where would you place yourself on this scale, or haven't you thought much about this?

  [*1 = Make it much more difficult to buy guns, 2, 3, 4, 5, 6, 7 = Make it much easier to buy guns, Haven't thought much about this*]

- **Government Role in Reducing Inequality:** Now let's turn to some other kinds of questions. Do you favor, oppose, or neither favor nor oppose the government trying to reduce the difference in incomes between the richest and poorest households?

  [*Favor, Oppose, Neither favor nor oppose*]

  Do you [Favor/Oppose] that a great deal, a moderate amount, or a little?

  [*A great deal, A moderate amount, A little*]

- **Impact of New Lifestyles on Society:** And to what extent do you agree or disagree with this statement? The newer lifestyles are contributing to the breakdown of our society.

  [*1 = Strongly disagree, 2 = Disagree, 3 = Slightly disagree, 4 = Neither agree nor disagree, 5 = Slightly agree, 6 = Agree, 7 = Strongly agree, Don't know*]

- **Racial Advantages for Whites:** To what extent do you agree or disagree with this statement? White people in the United States have certain advantages because of the color of their skin.

  [*1 = Strongly disagree, 2 = Disagree, 3 = Slightly disagree, 4 = Neither agree nor disagree, 5 = Slightly agree, 6 = Agree, 7 = Strongly agree, Don't know*]

- **Government Role in Racial Equality:** People at point 1 feel that the government in Washington should not make any special effort to help black people because they should help themselves. People at point 7 feel that the government should make every effort to improve the social and economic position of black people. And others fall somewhere in-between. Where would you place yourself on this scale, or haven't you thought much about this?

  [*1 = Black people should help themselves, 2, 3, 4, 5, 6, 7 = Government should help black people, Haven't thought much about this*]

- **Environment versus Economic Growth:** People at point 1 think that economic growth and creating jobs should be the top priority, even if the environment suffers to some extent. People at point 7 think that protecting the environment should be the top priority, even if it causes slower economic growth and some loss of jobs. And others fall somewhere in-between. Where would you place yourself on this scale, or haven't you thought much about this?

  [*1 = Economic growth and creating jobs should be the top priority, 2, 3, 4, 5, 6, 7 = Environment should be the top priority, Haven't thought much about this*]

- **The Use of Military Force Abroad:** How willing should the United States be to use military force to solve international problems?

  [*1 = Extremely willing, Very willing, Moderately willing, A little willing, Not at all willing*]

- **Trump/Harris Evaluations:** Now let's turn to a different topic. How much do you dislike or like each of these people?

  [*Donald Trump/Kamala Harris*]

  [*1 = Strongly dislike, 2 = Dislike, 3 = Slightly dislike, 4 = Neither dislike nor like, 5 = Slightly like, 6 = like, 7 = Strongly like, Don't know*]

- **Republicans/Democrats Evaluations:** And how much do you dislike or like each of these groups?

  [*The Democratic Party/The Republican Party*]

  [*1 = Strongly dislike, 2 = Dislike, 3 = Slightly dislike, 4 = Neither dislike nor like, 5 = Slightly like, 6 = like, 7 = Strongly like, Don't know*]

C2. Descriptive Statistics

Table C1 shows the descriptive statistics of the outcome variables used in the main analyses.

Table C1: Descriptive Statistics for Outcomes by Sample

Question	Response Option	Children	Parents	US Adults
Feelings towards The Democratic Party	Don't know	21.1	1.7	2.5
	Item non-response	3.5	2.3	0.4
	1 - Strongly dislike	7.5	8.7	18.0
	2 - Dislike	3.5	14.5	11.3
	3 - Slightly dislike	3.5	11.6	7.3
	4 - Neither dislike nor like	25.0	13.9	19.5
	5 - Slightly like	5.7	14.5	10.6
	6 - Like	16.2	23.7	15.2
	7 - Strongly like	14.0	9.2	15.3
Environment versus Economic Growth	Don't know	14.9		3.5
	Item non-response	0.4		
	1 - Economic growth and creating jobs should be the top priority	4.4	10.4	31.1
	2	2.6	4.6	9.7
	3	8.3	16.2	12.4
	4	22.8	25.4	16.4
	5	22.8	21.4	12.1
	6	6.6	15.0	5.4
	7 - Environment should be the top priority	17.1	6.9	9.4
Gov't Role in Healthcare	Don't know	23.2		4.4
	1 - Government should help people in paying for doctors and hospital bills	23.7	32.9	32.3
	2	12.3	12.1	10.6

Question	Response Option	Children	Parents	US Adults
	3	20.2	17.3	12.7
	4	11.8	16.2	16.0
	5	5.7	11.6	10.1
	6	1.8	4.6	6.1
	7 - People should take care of these things themselves	1.3	5.2	7.8
Gov't Role in Jobs & Living Standards	Don't know	17.5		4.1
	Item non-response	0.9		
	1 - Government should see to jobs and standard of living	20.6	18.5	24.3
	2	11.0	11.0	9.1
	3	14.5	15.6	12.1
	4	20.6	19.1	17.1
	5	9.2	16.8	13.6
	6	3.9	9.8	8.5
	7 - Each person should take care of themselves	1.8	9.2	11.3
Gov't Role in Racial Equality	Don't know	25.0	2.9	9.9
	Item non-response	0.9		
	1 - Black people should help themselves	2.6	9.2	17.0
	2	0.4	11.0	7.5
	3	1.3	11.0	7.5
	4	11.4	23.7	19.2
	5	12.7	16.2	12.8
	6	9.2	12.1	7.7
	7 - Government should help black people	36.4	13.9	18.5
Gov't Role in Reducing Inequality	Don't know	46.5		
	Item non-response	1.3	0.6	1.1

Question	Response Option	Children	Parents	US Adults
	1 - Favor a great deal	10.5	27.2	25.5
	2 - Favor a moderate amount	12.3	19.7	20.9
	3 - Favor a little	2.2	3.5	2.1
	4 - Neither favor nor oppose	17.1	26.0	29.7
	5 - Oppose a little	2.6	2.3	1.6
	6 - Oppose a moderate amount	5.7	9.8	9.2
	7 - Oppose a great deal	1.8	11.0	9.9
Gun Regulations	Don't know	13.6		4.9
	Item non-response	0.4		
	1 - Make it much more difficult to buy guns	41.7	59.0	39.3
	2	11.4	11.0	9.0
	3	17.1	11.0	9.9
	4	8.8	12.1	17.0
	5	0.9	5.2	8.5
	6	0.4	1.7	5.8
	7 - Make it much easier to buy guns	5.7		5.7
Feelings towards Kamala Harris	Don't know	6.6	1.7	1.7
	Item non-response	1.8	0.6	0.5
	1 - Strongly dislike	11.0	11.6	22.9
	2 - Dislike	6.6	12.7	8.8
	3 - Slightly dislike	3.5	9.8	6.1
	4 - Neither dislike nor like	14.0	12.1	16.8
	5 - Slightly like	10.5	11.0	12.4
	6 - Like	21.1	25.4	15.3
	7 - Strongly like	25.0	15.0	15.6
Immigration Level in the U.S.	Don't know	37.7		
	Item non-response	0.4	1.2	
	1 - Increased a lot	12.3	5.2	10.8
	2 - Increased a little	19.3	20.2	17.5

Question	Response Option	Children	Parents	US Adults
	3 - Left the same as it is now	18.0	46.2	38.1
	4 - Decreased a little	7.5	16.8	15.8
	5 - Decreased a lot	4.8	10.4	17.8
Impact of New Lifestyles on Society	Don't know	42.5	6.4	4.6
	Item non-response	0.9	0.6	0.5
	1 - Strongly disagree	2.2	22.5	6.8
	2 - Disagree	6.6	13.3	5.1
	3 - Slightly disagree	6.1	4.0	4.2
	4 - Neither agree nor disagree	14.5	16.8	22.7
	5 - Slightly agree	15.4	13.9	17.7
	6 - Agree	9.2	14.5	22.1
	7 - Strongly agree	2.6	8.1	16.2
Racial Advantages for Whites	Don't know	9.2	0.6	1.6
	Item non-response	0.4	0.6	
	1 - Strongly disagree	2.2	31.8	21.5
	2 - Disagree	5.7	26.6	20.2
	3 - Slightly disagree	23.7	18.5	15.4
	4 - Neither agree nor disagree	9.2	6.9	15.9
	5 - Slightly agree	2.6	2.9	4.8
	6 - Agree	9.6	6.9	7.9
	7 - Strongly agree	37.3	5.2	12.8
Feelings towards The Republican Party	Don't know	20.6	1.7	2.6
	Item non-response	3.5	0.6	0.7
	1 - Strongly dislike	14.0	30.6	23.8
	2 - Dislike	11.4	23.7	8.9
	3 - Slightly dislike	10.1	13.9	7.5
	4 - Neither dislike nor like	25.9	10.4	16.1
	5 - Slightly like	2.6	7.5	9.6

Question	Response Option	Children	Parents	US Adults
	6 - Like	5.7	8.7	15.7
	7 - Strongly like	6.1	2.9	15.2
The Legality of Abortion	Don't know	31.1		
	Item non-response	0.9		0.2
	1 - Strongly disagree	20.6	47.4	25.5
	2 - Disagree	14.0	17.3	25.1
	3 - Neither agree nor disagree	13.2	6.4	20.2
	4 - Agree	8.8	11.0	13.7
	5 - Strongly agree	11.4	17.9	15.4
The Use of Military Force Abroad	Don't know	27.6		
	Item non-response	1.3	1.7	0.9
	1 - Extremely willing	4.8	1.2	10.6
	2 - Very willing	7.9	5.8	15.6
	3 - Moderately willing	32.9	39.3	36.5
	4 - A little willing	21.1	43.9	25.7
	5 - Not at all willing	4.4	8.1	10.8
Feelings towards Donald Trump	Don't know	5.7	1.7	1.1
	Item non-response	2.2	0.6	0.2
	1 - Strongly dislike	42.5	62.4	35.6
	2 - Dislike	13.2	9.8	6.3
	3 - Slightly dislike	5.7	3.5	4.9
	4 - Neither dislike nor like	11.4	6.4	8.3
	5 - Slightly like	3.5	5.8	7.8
	6 - Like	7.9	5.2	15.0
	7 - Strongly like	7.9	4.6	20.7

Supplementary Materials D: Parent-Child Congruence in Values and Issue Positions

In Figure D1, we present the estimated value positions of parents and their children, while Figure D2 shows the issue-level correlations between parents and their children.

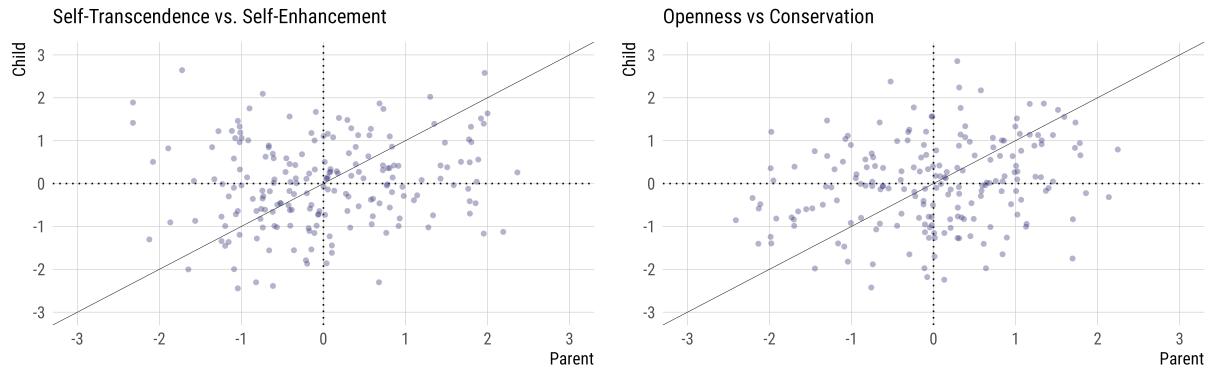

Figure D1: Estimated Value Positions for Parents and Children

Notes: The figure presents estimated value positions in Schwartz value space for parents and their children. Each point represents a particular respondent's posterior mean value position in the relevant axis.

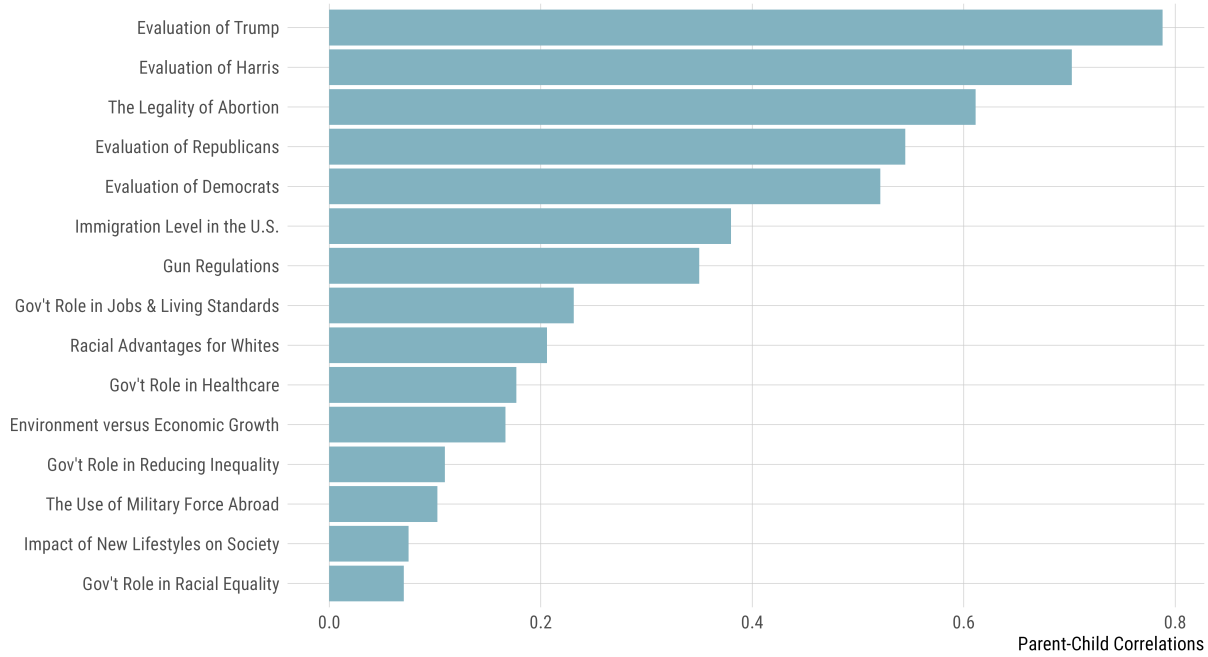

Figure D2: Correlation of Attitudes Between Parents and Children

Notes: The figure presents Spearman correlation coefficients between issue positions among parents and issue positions among children. For each question, we use the complete non-DK responses within each group.

Supplementary Materials E: Precision and Reliability of Value Positions

There are several ways to think about measurement quality with respect to values, assuming the underlying choice model. We consider three for the children's value estimates:

(1) We can ask about what the *average uncertainty* in value positions across respondents is. The average standard deviation of the posterior distribution is 0.20 and 0.14, for the conservation and self-enhancement dimensions, respectively. Note that each dimension ranges, roughly, from -1 to 1, and the empirical ranges are $(-0.45, 0.43)$ for conservation and $(-0.49, -0.02)$ for self-enhancement among children. This suggests that about 50% of the theoretical range is observed for conservation, while this is about 25% when it comes to self-enhancement.

(2) We can ask about the average area of the ellipse that contains 95% of a respondent's posterior distribution in Schwartz space. For the children's model, this average area is 0.49. The area of the unit circumplex is π, so the ratio of the areas is $0.49/\pi = 0.16$. In other words, we can locate each respondent, with 95% confidence, in an ellipse that is about 16% of the area of the overall circumplex.

(3) We can ask about the correlation between estimated and true value positions, which is the definition of measurement reliability in classic true-score theory. We obtain estimates of reliability through simulation. Specifically, we used children's estimated population mean and covariance matrix of value positions to simulate the value positions of samples of 228 children. We then had each simulated participant complete our 15-item choice task (with randomly selected value indicators, as in the true survey). On each trial, the simulated participant chooses according to the model presented in the main text of our paper. We then used our Bayesian approach to estimate the value positions of each simulated participant and calculated the correlation between estimated and true positions. This correlation is 0.60 for conservation and 0.40 for self-enhancement. The smaller correlation for self-enhancement is due to the substantially smaller variation in positions along that axis. Obviously, these reliabilities are lower than would be desirable. That being said, they are comparable to what is obtained using short-forms of the PVQ. For example, Malka, Lelkes, and Soto (2019) report a Cronbach's α of 0.51 for the conservation dimension using the short-form on the World Values Survey. Similarly, we calculate alphas of 0.66 and 0.64 for the short-form versions of conservation and self-enhancement scales using the 2012 General Social Survey.

Given that there is substantial uncertainty in measurement, we employed a modeling strategy that propagates this uncertainty into our regression analyses, as described in the main manuscript.

Supplementary Materials F: Sensitivity Analysis Using a Multilevel Specification

In this section, we present results from a simpler multilevel specification as a robustness check for our main estimation strategy. We estimate a conventional linear mixed-effects model on the subset of non-missing outcomes, treating children's mean value scores as observed covariates. In doing so, we included covariate adjustments (age, gender, race, and political engagement), with individual and item random effects, and item-level random slopes for values. We used a parametric bootstrap with 1,000 draws and summarized the resulting bootstrap distribution. Coefficients are reported on the same substantive scale as the main results (corresponding to a 0.5-unit shift in value space). Figure F1 presents the results from this specification, showing substantively similar patterns.

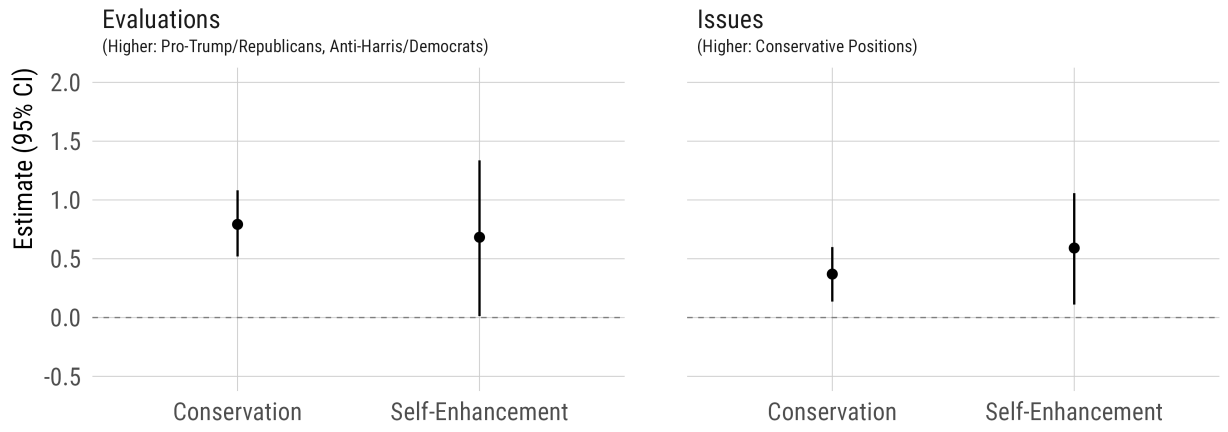

Figure F1: The Coefficient Estimates of Values on Political Orientations

Notes: The figure demonstrates the average effects of conservation and self-enhancement on standardized political evaluations (the left panel) and issue positions (the right panel). We present the effects of a 0.5-increase in value priorities, which corresponds to a quarter of the diameter in the Schwartz circumplex. Outcome measures are standardized within question across respondents, so coefficients can be interpreted as SD changes in each outcome. Models adjust for age, gender, race, and political engagement. The complete sample for children (N = 228).

Supplementary Materials G: Conceptual Replication with Big Five Personality Traits

In this section, we use Big-5 personality traits rather than Schwartz values to explore the relationship between personality (specifically, openness to experience) and political preferences.

As noted in the main manuscript, openness to experience is closely related, both conceptually and empirically, to the Schwartz value dimension of conservation, with higher openness to experience associated with lower importance of the conservation values (Roccas et al. 2002; Vecchione 2023). We thus interpret the main results for openness to experience presented in Figure G1, which shows a substantively similar association with political preferences, as a conceptual replication.

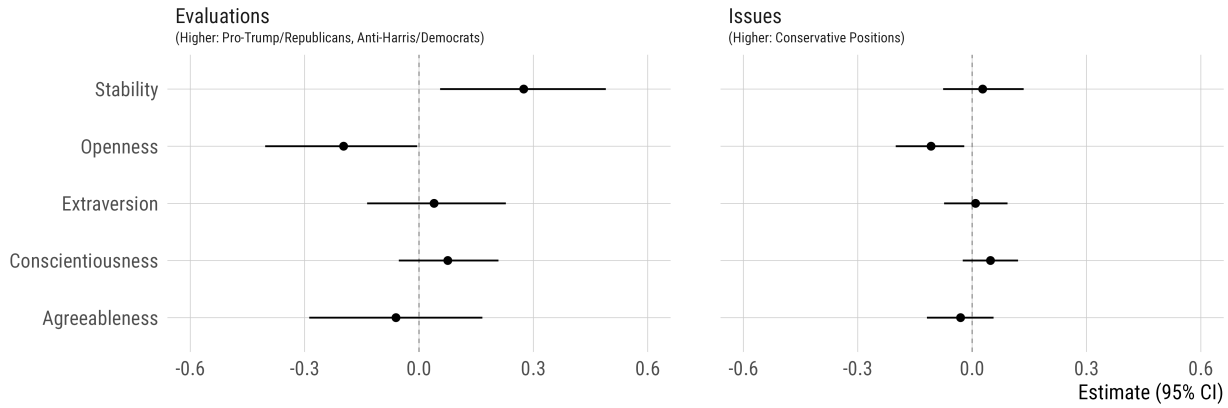

Figure G1: The Coefficient Estimates of Big-5 Traits on Political Orientations

Notes: The figure demonstrates posterior means and 95% credible intervals for the average effects of Big-5 personality traits on standardized political evaluations (the left panel) and issue positions (the right panel). We present the effects of a 1 SD increase in each trait. Outcome measures are standardized within question across respondents, so coefficients can be interpreted as SD changes in each outcome. Models adjust for age, gender, and race, using the same Heckman specification estimated in Figure 3 of the main text. The complete sample for children (N = 228).

Supplementary Materials H: Two Approaches to Quality Flags for U.S. Adult Sample

In this section, we compare the results for our general population survey (which excludes respondents with two or more quality flags) with a more restrictive sample that excludes respondents with any flag (N = 676). Figure H1 shows no meaningful differences between the two approaches, suggesting that results are not sensitive to our data quality thresholds.

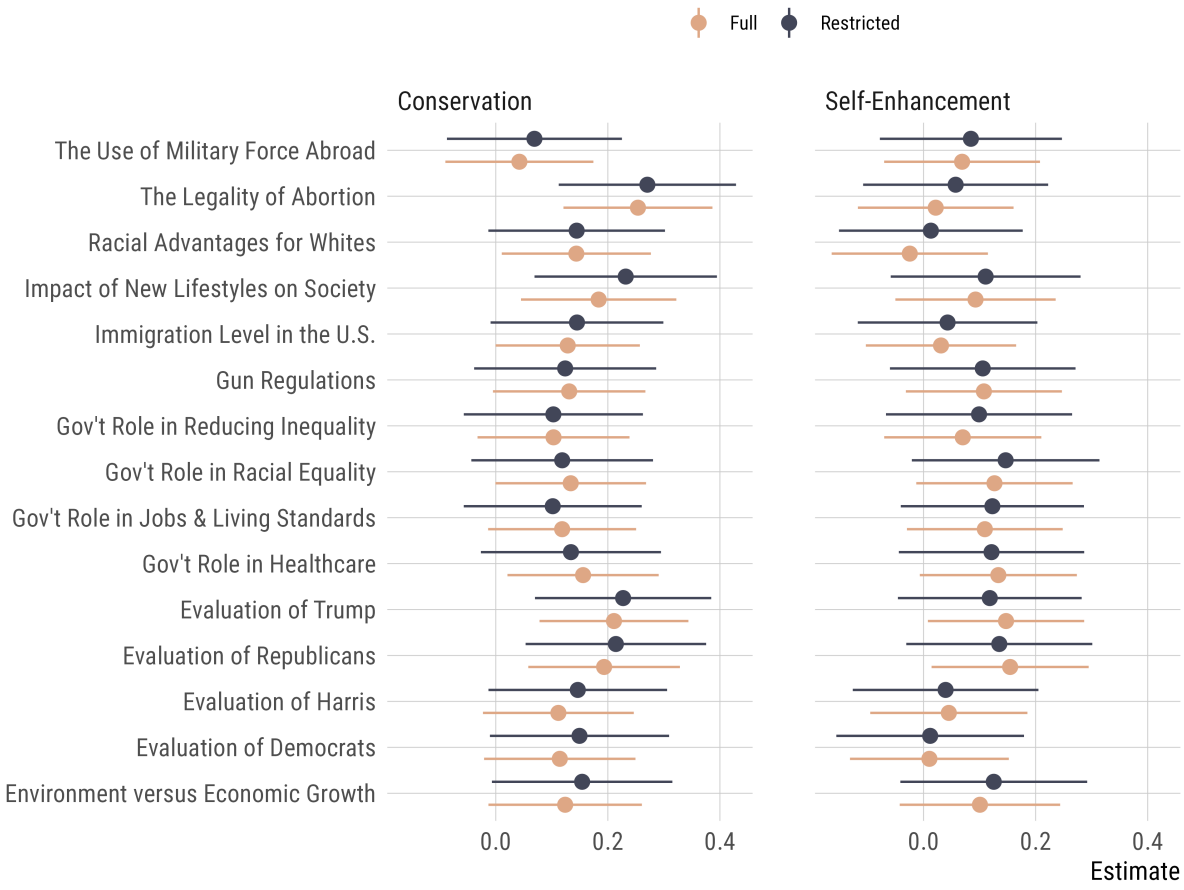

Figure H1: Main Results by Data Quality

Notes: Models use the same specification as those for the complete U.S. adult sample in Figure 4 of the main text, estimated on both the final sample and the subset of respondents not flagged on any data quality indicator.

Supplementary Materials I: Sensitivity Analysis Using Value Choices Directly

In the main analyses, we used a Bayesian model to estimate value positions among children. Here, we present the results from an alternative—and simpler—strategy. Instead of this model, we used children's choices between the two indicators directly. For each respondent, we subtracted the value positions of their non-chosen indicators from the value positions of their chosen indicators, and averaged these differences across all 15 choices. This gives us, at the child level, an average score for conservation and self-enhancement. For example, if a child repeatedly chooses values with higher conservation positions on the Schwartz circumplex, they will have a higher conservation score, and vice-versa. The same is true for the self-enhancement dimension. Thus, positive scores indicate average preference for conservation and self-enhancement values, and negative scores indicate average preference for openness to change and self-transcendence values. We then fit linear regression models with each political preference as the outcome and both of the value measures as the predictors. Figure I1 displays the results from this exercise, and shows substantively similar estimates.

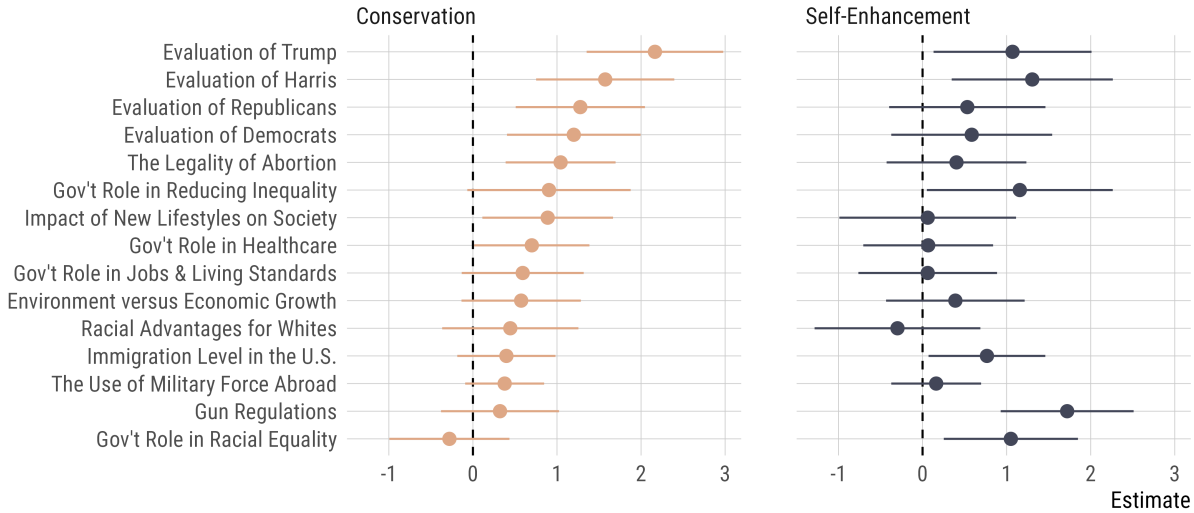

Figure I1: Regression Estimates for Conservation and Self-Enhancement

Notes: Linear regression models predicting political preferences using conservation and self-enhancement scores, both constructed taking the average of 15 choices with chosen value minus nonchosen value.

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