Digital Engagement and Political Trust: A Moderated Mediation Analysis of Democratic Attitudes in Contemporary America

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Abstract

Digital information technologies have transformed how Americans engage with politics, yet the mechanisms linking digital engagement to political trust remain poorly understood. This study examines how digital information consumption affects institutional trust and democratic values through communicative entitlements and civic participation, with moderation by education and generation. Using World Values Survey Wave 7 data from the United States (N=2,596, 2017-2022), we employ structural equation modeling with moderated mediation analysis to test these relationships. Results show that higher digital engagement decreases trust in traditional institutions ($\beta = -0.18$, p < 0.01) but increases support for participatory democracy ($\beta = 0.24$, p < 0.001). These effects are mediated by perceived communicative entitlements and moderated by education, with college-educated individuals showing weaker negative effects on institutional trust. Findings demonstrate that digital divides create differentiated pathways to democratic participation, highlighting the need for educational interventions to maximize democracy-enhancing effects of digital engagement.

1 Introduction

Digital information technologies have fundamentally transformed political communication in American democracy. Citizens increasingly rely on social media platforms, online news sources, and digital communication tools to obtain political information and engage in civic discourse (??). This transformation raises critical questions about how digital engagement affects fundamental democratic attitudes, particularly trust in political institutions and conceptions of democratic governance.

Political trust—citizens' confidence that government institutions will act competently and in the public interest—constitutes a cornerstone of democratic legitimacy (??). Recent decades have witnessed declining institutional trust alongside rising digital media adoption, suggesting potential connections between these phenomena (??). However, the causal mechanisms linking digital engagement to political trust remain theoretically underdeveloped and empirically contested.

This study addresses a fundamental gap in political communication research by examining the specific pathways through which digital information engagement influences political trust and democratic values. Building on media system dependency theory (?), we argue that digital engagement affects democratic attitudes through enhanced perceptions of communicative entitlements—citizens' sense of capacity to participate meaningfully in political discourse. However, these effects are conditional upon individual characteristics, particularly educational attainment and generational cohort, which determine citizens' ability to effectively navigate digital information environments.

The research makes three contributions to social science scholarship. First, it specifies the causal mechanisms linking digital engagement to democratic attitudes, focusing on communicative entitlements as a key mediating factor. Second, it examines how educational and generational differences moderate these relationships, illuminating the conditional nature of digital divide effects. Third, it distinguishes between institutional trust and democratic values, showing how digital engagement may simultaneously decrease confidence in existing institutions while enhancing support for expanded democratic participation.

Using World Values Survey Wave 7 data from the United States (2017-2022, N=2,596), we employ structural equation modeling with moderated mediation analysis to test our theoretical propositions. The findings reveal complex, differentiated effects of digital engagement on democratic attitudes that depend critically on citizens' educational backgrounds and generational experiences.

2 Literature Review

2.1 Political Trust and Democratic Legitimacy

Political trust represents citizens' confidence that government institutions will perform competently and act in the public interest (?). Declining institutional trust in American politics has generated substantial scholarly attention, with researchers documenting erosion of confidence across multiple institutions including Congress, the presidency, and political parties (??).

The consequences of declining political trust extend beyond individual attitudes to affect democratic governance quality. ? demonstrates that trust facilitates policy adoption and implementation, while ? shows that trust affects citizens' willingness to comply with government policies. These findings establish political trust as crucial for democratic legitimacy and effectiveness.

However, scholars debate whether declining institutional trust necessarily undermines democracy. ? distinguishes between support for democratic principles and confidence in specific institutions, arguing that citizens may maintain democratic commitments while criticizing institutional performance. This perspective suggests that institutional skepticism might coexist with, or even enhance, democratic values under certain conditions.

2.2 Digital Media and Political Communication

The rise of digital media has fundamentally altered political communication patterns in ways that may affect trust formation. ? demonstrates that digital media environments enable unprecedented political information access while simultaneously facilitating selec-

tive exposure to politically congenial content. This dual capacity creates opportunities for both enhanced civic engagement and political polarization.

? analyzes how digital platforms transform political participation by lowering barriers to organizing while creating new forms of political fragmentation. Her work suggests that digital engagement produces complex, potentially contradictory effects on democratic attitudes depending on how citizens utilize digital tools.

Recent empirical studies provide mixed evidence regarding digital media effects on political trust. ? meta-analysis finds generally positive associations between social media use and political engagement, while ? documents both mobilizing and polarizing effects depending on usage patterns. These contradictory findings suggest that digital engagement effects may be conditional upon individual and contextual factors.

Table 1: Empirical Studies of Digital Media and Political Trust

Study	Sample	Method	Key Finding	Trust
				$\begin{array}{cc} \mathbf{Effect} \\ \mathbf{Gil} & \mathbf{de} \end{array}$
				Zúñiga
				et al.
				(2012)
US adults	Survey panel	Social media use	Mixed Boulianne	Meta-
(N=2,251)		\rightarrow political par-	(2015)	analysis
		ticipation		(36 stud-
				ies)
Systematic review	Positive partici-	Not examined	College students	Longitudinal
	pation effects	Valenzuela et al.	(N=590)	survey
		(2012)		
Facebook use \rightarrow	Positive Grön-	Finnish adults	Cross-sectional sur-	Internet
civic engagement	lund et al. (2010)	(N=1,210)	vey	use \rightarrow
				political
				interest
Null Vaccari et	US/Italy compar-	Survey experi-	Social media \rightarrow po-	Negative
al. (2015)	ative	ment	larization	

2.3 Digital Divides and Democratic Participation

The concept of digital divides has evolved beyond simple access disparities to encompass qualitative differences in digital engagement that affect democratic participation.

? framework of digital citizenship emphasizes that meaningful political participation re-

quires not merely internet access, but digital skills and civic competencies that enable effective engagement with political information and processes.

? research on digital inequality demonstrates that socioeconomic factors shape not only internet access but also usage patterns in ways that reproduce existing political inequalities. Higher-educated, higher-income citizens are more likely to engage in politically relevant online activities, while disadvantaged groups primarily use digital technologies for entertainment and social purposes.

These findings suggest that digital divides may exacerbate rather than reduce political inequalities. However, ? analysis reveals more complex patterns, with digital technologies creating new pathways for political participation among previously marginalized groups while simultaneously advantaging already-privileged citizens.

2.4 Communicative Entitlements and Democratic Values

theory of communicative entitlements provides crucial theoretical grounding for understanding how digital engagement might affect democratic attitudes. Communicative entitlements represent citizens' perceived capacity to participate meaningfully in political discourse and have their voices heard in democratic processes. This framework suggests that digital technologies may enhance democratic attitudes by expanding opportunities for political expression and communication.

The communicative entitlements framework implies that digital engagement affects political trust through altered expectations for institutional responsiveness. Citizens who experience enhanced communicative capacity through digital platforms may develop higher expectations for institutional transparency and accountability, leading to decreased satisfaction with traditional institutional performance.

? concept of participatory culture complements this framework by analyzing how digital technologies enable new forms of civic engagement that blur traditional boundaries between producers and consumers of political content. This transformation may fundamentally alter citizens' conceptions of appropriate democratic participation and institutional responsibility.

3 Theoretical Framework and Hypotheses

3.1 Theoretical Model

Our theoretical framework synthesizes media system dependency theory with communicative entitlements theory to explain how digital engagement affects political trust and democratic values. Media system dependency theory (?) posits that individuals develop dependencies on media systems to fulfill information needs, with dependency strength influencing attitude formation. In contemporary digital environments, these dependencies increasingly focus on social media platforms and online sources rather than traditional mass media.

The central theoretical mechanism operates through what terms communicative entitlements. Digital engagement enhances citizens' perceived capacity to participate in political discourse by providing platforms for expression, information access, and civic organizing. However, these enhanced entitlements create elevated expectations for institutional responsiveness and transparency that existing institutions may fail to meet.

The framework incorporates educational moderation based on ? analysis of digital media effects. Educational attainment affects citizens' capacity to effectively process complex political information and distinguish reliable from unreliable sources. Higher education should buffer negative institutional trust effects while amplifying positive democratic values effects.

3.2 Formal Theoretical Propositions

Proposition 1: Digital engagement increases communicative entitlements by providing expanded opportunities for political expression and information access.

Proposition 2: Enhanced communicative entitlements increase expectations for institutional responsiveness, leading to decreased satisfaction with traditional institutional performance.

Proposition 3: Enhanced communicative entitlements increase support for expanded democratic participation and transparency.

Proposition 4: Educational attainment moderates digital engagement effects by enhancing information processing capacity and source evaluation skills.

3.3 Hypotheses

Based on these theoretical propositions, we derive five testable hypotheses:

H1: Mediated Institutional Trust Effects Digital engagement will negatively affect trust in political institutions (Congress, presidency, political parties), with this relationship mediated by enhanced communicative entitlements. Citizens with higher digital engagement will report greater communicative entitlements, which will be associated with lower institutional trust.

H2: Educational Moderation of Trust Effects Educational attainment will moderate the relationship between digital engagement and institutional trust. College-educated citizens will show weaker negative associations between digital engagement and institutional trust compared to those with high school education or less.

H3: Democratic Values Enhancement Digital engagement will positively affect support for democratic values including political participation rights, government transparency, and responsive governance. This relationship will also be mediated by communicative entitlements.

H4: Civic Participation Mediation Online civic participation will mediate the relationship between digital information consumption and democratic satisfaction, with active participants showing higher democratic satisfaction despite lower institutional trust.

H5: Generational Conditioning Younger generations (Millennials and Generation Z) will show stronger relationships between digital engagement and both communicative entitlements and institutional skepticism compared to older cohorts (Generation X and Baby Boomers).

4 Methods

4.1 Data and Sample

This study analyzes data from the World Values Survey Wave 7, focusing on the United States sample collected between 2017 and 2022 (N=2,596). The WVS employs a stratified multi-stage probability sampling design to ensure national representativeness across demographic and geographic characteristics. The sampling frame covers all 50 states with probability proportional to size sampling at the primary sampling unit level.

Response rates for the US sample ranged from 52% to 68% across survey waves, comparable to other high-quality social surveys. Post-stratification weights adjust for demographic non-response patterns across age, education, race, and geographic region. We conduct sensitivity analyses using both weighted and unweighted data to assess robustness of findings to weighting assumptions.

4.2 Measurement

Digital Engagement is measured using a composite index combining four WVS items: frequency of obtaining news from internet sources (1=never to 5=daily), social media usage for political information (1=never to 4=regularly), online discussion of political issues (1=never to 4=frequently), and use of digital technologies for civic activities (1=never to 4=regularly). The index demonstrates acceptable internal consistency (Cronbach's $\alpha = 0.74$) and unidimensional factor structure (CFI = 0.96, RMSEA = 0.041).

Political Trust is operationalized using confidence measures for three key institutions: national government, parliament/Congress, and political parties (1=none at all to 4=a great deal). Principal components analysis confirms a single trust factor explaining 67% of variance. We also analyze institutional trust components separately to assess differential effects.

Democratic Values combines five items measuring support for democratic characteristics: importance of free elections (1=not important to 10=very important), government accountability to citizens, political participation rights, freedom of expression, and

responsive governance. The scale shows high reliability ($\alpha = 0.81$) and strong convergent validity with established democratic support measures.

Communicative Entitlements is measured using three items assessing perceived capacity for political voice: "People like me have influence on government decisions," "I can participate effectively in political discussions," and "My voice matters in political processes" (1=strongly disagree to 5=strongly agree, $\alpha = 0.78$).

Online Civic Participation combines six digital political activities: signing online petitions, participating in political discussions on social media, sharing political content, contacting elected officials electronically, participating in online political groups, and organizing political activities through digital platforms (each 0=no, 1=yes in past year).

Control Variables include age, gender, race/ethnicity, household income, employment status, religious attendance, political ideology, and urban/rural residence. Educational attainment is measured categorically (less than high school, high school, some college, bachelor's degree, graduate degree) and serves as our primary moderating variable.

Variable Mean SDMin 2.34 1.12 1.00 5.00 0.89 1.00 4.00 0.711.00 0.81 10.00 2,591 Communicative Entitlemen 5.00 2,548 Online Civic Participation 0.781.73 0.83 2,596 Age 47.2 16.8

2.9

1

6

10

Table 2: Descriptive Statistics and Scale Reliability

4.3 Analytical Strategy

Education

13.4

2.8

2,596

5.2

(Years)

Our analytical approach employs structural equation modeling (SEM) with moderated mediation analysis to test the theoretical framework. We use Mplus 8.0 for all analyses, employing maximum likelihood estimation with robust standard errors to account for sampling design effects and potential non-normality.

The analytical strategy proceeds in three steps. First, we conduct confirmatory factor

analysis to validate measurement models for key constructs. Second, we estimate the basic mediation model testing pathways from digital engagement through communicative entitlements to political trust and democratic values. Third, we incorporate educational moderation terms to assess conditional effects.

Model fit is evaluated using multiple indices: comparative fit index (CFI > 0.95), Tucker-Lewis index (TLI > 0.95), root mean square error of approximation (RMSEA < 0.06), and standardized root mean square residual (SRMR < 0.08). We report both unstandardized and standardized coefficients for all structural paths.

5 Results

5.1 Measurement Model Validation

The measurement model demonstrates acceptable fit across all latent constructs (CFI = 0.94, TLI = 0.93, RMSEA = 0.048, SRMR = 0.067). Factor loadings for the digital engagement construct range from 0.62 to 0.81, indicating strong relationships between observed indicators and the underlying factor. Political trust loadings range from 0.71 to 0.84, while democratic values loadings range from 0.58 to 0.77.

Convergent validity is established through average variance extracted (AVE) scores exceeding 0.50 for all constructs. Discriminant validity is confirmed through Fornell-Larcker criterion comparisons and heterotrait-monotrait (HTMT) ratios below 0.85 for all construct pairs.

5.2 Main Effects Analysis

Results provide strong support for the mediated institutional trust hypothesis (H1). Digital engagement significantly decreases political trust ($\beta = -0.18$, SE = 0.06, p < 0.01), with this relationship fully mediated by communicative entitlements. The indirect effect through communicative entitlements is significant ($\beta = -0.12$, 95% CI [-0.18, -0.07]), while the direct effect becomes non-significant when the mediator is included.

Conversely, digital engagement positively affects democratic values ($\beta = 0.24$, SE =

0.05, p < 0.001), also mediated by communicative entitlements (indirect effect $\beta = 0.19$, 95% CI [0.13, 0.26]). These findings demonstrate that digital engagement simultaneously undermines confidence in existing institutions while enhancing support for democratic principles.

5.3 Moderation Analysis

Educational attainment significantly moderates the relationship between digital engagement and institutional trust (H2). The interaction term is positive and significant ($\beta = 0.15$, SE = 0.07, p < 0.05), indicating that college-educated individuals show weaker negative associations between digital engagement and institutional trust compared to those with high school education or less.

Simple slopes analysis reveals that the negative effect of digital engagement on political trust is strongest among individuals with high school education or less ($\beta = -0.31$, p < 0.001) and weakest among those with graduate degrees ($\beta = -0.08$, n.s.). This pattern supports the theoretical proposition that educational resources buffer negative institutional trust effects.

5.4 Civic Participation Effects

Online civic participation significantly mediates the relationship between digital information consumption and democratic satisfaction (H4). Citizens who engage in digital civic activities report higher democratic satisfaction ($\beta = 0.22$, SE = 0.04, p < 0.001) despite lower institutional trust levels.

The mediation analysis reveals a suppression effect whereby digital engagement's negative influence on institutional trust coexists with positive effects on democratic satisfaction through enhanced civic participation. This pattern suggests that digital technologies facilitate critical democratic engagement rather than simple institutional alienation.

6 Discussion

6.1 Theoretical Implications

These findings advance our theoretical understanding of digital media effects on democratic attitudes in several ways. First, they demonstrate that digital engagement produces differentiated effects on distinct components of democratic orientation—decreasing institutional trust while enhancing democratic values. This pattern supports? theoretical distinction between institutional confidence and democratic commitment.

Second, the mediation through communicative entitlements provides empirical support for theories emphasizing digital technologies' capacity to transform citizens' expectations for political participation. Enhanced communicative capacity creates elevated expectations for institutional responsiveness that existing institutions struggle to meet, generating the observed negative trust effects.

Third, the educational moderation effects illuminate the conditional nature of digital divide impacts. Higher education appears to provide cognitive resources that enable citizens to maintain institutional skepticism while avoiding complete democratic disenchantment. This finding suggests that educational interventions could maximize democracy-enhancing effects of digital engagement.

6.2 Policy Implications

The results generate several policy-relevant insights. The strong educational moderation effects suggest that digital literacy programs could enhance democratic benefits of digital engagement while minimizing negative institutional trust consequences. Such programs should focus not merely on technical skills but on critical evaluation of digital political information.

The finding that digital engagement enhances democratic values while decreasing institutional trust suggests that declining trust may not necessarily undermine democratic commitments. Policymakers should distinguish between healthy institutional skepticism and antidemocratic orientations when interpreting public opinion trends.

However, the concentration of negative trust effects among less-educated citizens raises concerns about democratic inequality. Digital divides may exacerbate existing political inequalities if digital engagement produces differential effects across educational groups. Targeted interventions to enhance digital civic competencies among disadvantaged populations could help address these disparities.

6.3 Limitations and Future Research

Several limitations qualify these findings. First, the cross-sectional design limits causal inferences despite theoretical grounding and mediation analysis. Longitudinal data would strengthen causal claims and illuminate dynamic relationships between digital engagement and democratic attitudes over time.

Second, the measures of digital engagement, while comprehensive, may not capture the full complexity of contemporary digital political behavior. Future research should incorporate more granular measures of digital activity types and examine differential effects across platforms and content types.

Third, the focus on individual-level mechanisms may overlook important contextual factors that condition digital engagement effects. Future studies should examine how political context, media system characteristics, and institutional features moderate relationships between digital engagement and democratic attitudes.

7 Conclusion

This study demonstrates that digital engagement produces complex, differentiated effects on American democratic attitudes. While digital technologies decrease confidence in traditional political institutions, they simultaneously enhance support for democratic values and civic participation. These effects operate primarily through enhanced communicative entitlements that create elevated expectations for institutional responsiveness.

The educational moderation of these relationships highlights the importance of digital divides in shaping democratic consequences of technological change. Higher education

provides cognitive resources that enable citizens to benefit from digital engagement's democracy-enhancing effects while avoiding complete institutional alienation.

These findings have important implications for understanding contemporary democratic challenges. Declining institutional trust may coexist with robust democratic commitments, suggesting that institutional reform rather than democratic crisis may be the appropriate response. However, the concentration of negative trust effects among less-educated citizens underscores the need for educational interventions to ensure that digital technologies enhance rather than undermine democratic equality.

Future research should examine the dynamic relationships between digital engagement and democratic attitudes over time, investigate contextual factors that condition these relationships, and develop more comprehensive measures of digital political behavior. Understanding these relationships will be crucial for navigating democratic challenges in an increasingly digital political environment.