



Designing for Meaning

Using Behavioral Science
to Mobilize the Latino Vote

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| About ideas42



We are a non-profit looking for deep insights into human behavior—why people do what they do—and using that knowledge in ways that help improve lives, build better systems, and drive social change. Working globally, we reinvent the practices of institutions, and create better products and policies that can be scaled for maximum impact.

We also teach others, ultimately striving to generate lasting social impact and create a future where the universal application of behavioral science powers a world with optimal health, equitable wealth, and environments and systems that are sustainable and just for all.

For more than a decade, we have been at the forefront of applying behavioral science in the real world. And as we've developed our expertise, we've helped to define an entire field. Our efforts have so far extended to 40 countries as we've partnered with governments, foundations, NGOs, private enterprises, and a wide array of public institutions—in short, anyone who wants to make a positive difference in people's lives.

Visit ideas42.org and follow [@ideas42](https://twitter.com/ideas42) on Twitter to learn more about our work. Contact Eva Matos at ematos@ideas42.org or Eva Frishberg at eva@ideas42.org with questions.

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Why the Latino Vote Matters

The Latino vote has been described as the ‘sleeping giant.’¹ Long overlooked, the 32 million Latinos eligible to vote are the nation’s largest ethnic minority voting bloc, with 13.3% of all eligible voters in the United States.² However, Latino voter participation continues to lag behind the national voting average (47.6% vs 60.1%). In the 2016 election, the majority of eligible Latinos did not vote—a trend that dates back to every presidential election since 1996.³

Chronically low voter turnout is a significant barrier to a functioning representative democracy. Low voter turnout disproportionately hurts communities of color by ceding ground to habitual voters who skew older, richer, more educated, and are predominantly white.⁴ Lawmakers shape policies to serve the interests of habitual voters, excluding the majority of Americans—especially people of color—from the policymaking process. Indeed, the lack of representation is deeply felt in the Latino community. Latinos suffer disproportionately high levels of poverty, ill-health, discrimination, arrest, and incarceration.⁵

At ideas42, we believe that for democracy to live up to its founding ideals of being ‘for the people, by the people,’ we must work to expand the electorate and make it more representative of the country as a whole. While we know that Latinos face structural barriers to voting like voter suppression, inflexible working hours, and harassment at the polls,⁶ our focus is on the problems that can be addressed using behavioral science. To that end, we set out to better understand the behavioral barriers keeping Latinos from engaging in the electoral process and recommend solutions for nonprofits, businesses, and government agencies who do Latino voter outreach to adopt.

The importance of understanding how Latinos value their vote

Drawing from the field of behavioral science—research from economics, psychology, and neuroscience that helps us understand *why* people behave the way they do—ideas42’s [Voter Innovation Lab](#) and others in the field have used behavioral design to boost voter turnout and uncover the way people ascribe value to their vote. Innovations like automatic voter registration,⁷ positive social pressure communications,⁸ and prompts to help people to make a plan to vote⁹ have shown promising results in increasing turnout across race and age groups. These solutions, and others aimed at making voting easier, are critical, can be further refined and scaled, and matter for Latinos as for all communities. But while these solutions are increasingly successful in closing the gap between people’s intention to vote and follow through, they do not address why people might feel disengaged from the democratic process. That’s why the ideas42 Voter Innovation Lab is particularly interested in contributing solutions that promote the value of voting. To this end, it has created new research and designs around [identity](#) and psychological distance, while helping incubate innovative relational tools like Vote Tripling. But we still have much more to uncover about

the key drivers of value. Here we describe new research investigating how this disengagement affects a specific community.

Unfortunately, for myriad social and historical reasons, this feeling of disengagement is strongly present in some communities of color. Indeed, research by EquisLab suggests that many Latinos question the value of their vote.^{10,11}

Latinos face several behavioral barriers that contribute to low voter turnout. There is evidence of voter suppression through bias in voter files¹² and rampant misinformation aimed at the Latino community¹³ exacerbating confusion around the voting process. In addition, many members of the Latino community face additional hassles like lack of familiarity with the voting process and lack of access to Spanish voting materials.¹⁴ But first we needed to know: What are Latinos' attitudes toward voting? What do they think about belonging and civic engagement? And how do they ascribe meaning to their vote?

Uncovering Latinos' perceptions of the value of their vote

To better understand how Latinos think about the value of their vote, we started with a literature review, analyzed turnout and registration rates across states, and connected with advocacy, voter education, and research organizations to learn about the barriers they've faced in their Latino voter outreach efforts. Next, we conducted original qualitative and quantitative research including:

- ▶ **Sentiment analysis on social media** to get a large scale understanding of what Latinos say and feel about voting. We scraped nearly 140,000 tweets from June 22nd, 2020 to August 31st, 2020 that contained words related to Latino voting (e.g., "vote latino," "election latino," "voto"). We examined how Latinos talked about voting overall, and by specific topic, mapping their emotional valence and clustering topics by frequency.
- ▶ **Content analysis from news sources like CNN, Fox News, Reuters, and Univision** to understand the context shaping Latinos' perceptions toward voting. We scraped news stories, analyzed 'sentiment' (i.e., determine whether news stories are positive or negative), and organized them by topic. In total we extracted 7,958 Latino vote-related one-line excerpts, most of which were from a Spanish language source: 363 from CNN, 358 from Fox News, 254 from Reuters, and 6,983 from Univision. This process allowed us to understand how TV and online news frame stories related to Latinos and voting, which contribute to the perceptions and narratives that Latinos have about their vote.
- ▶ **17 one-on-one in-depth interviews** with Latinos (11 voters and 6 nonvoters) to further explore potential behavioral barriers and develop hypotheses around the contextual features and psychologies that could be impacting how they ascribe value to their vote.

With so much at stake, what keeps Latinos from feeling like their vote matters?

While we recognize that the complexity of the Latino experience and its impact on civic engagement can't be captured in five barriers, we selected the most salient trends that emerged from our research that are ripe for behavioral interventions. Below are our top insights on the psychologies and contextual features that influence how Latinos think about the value of their vote.

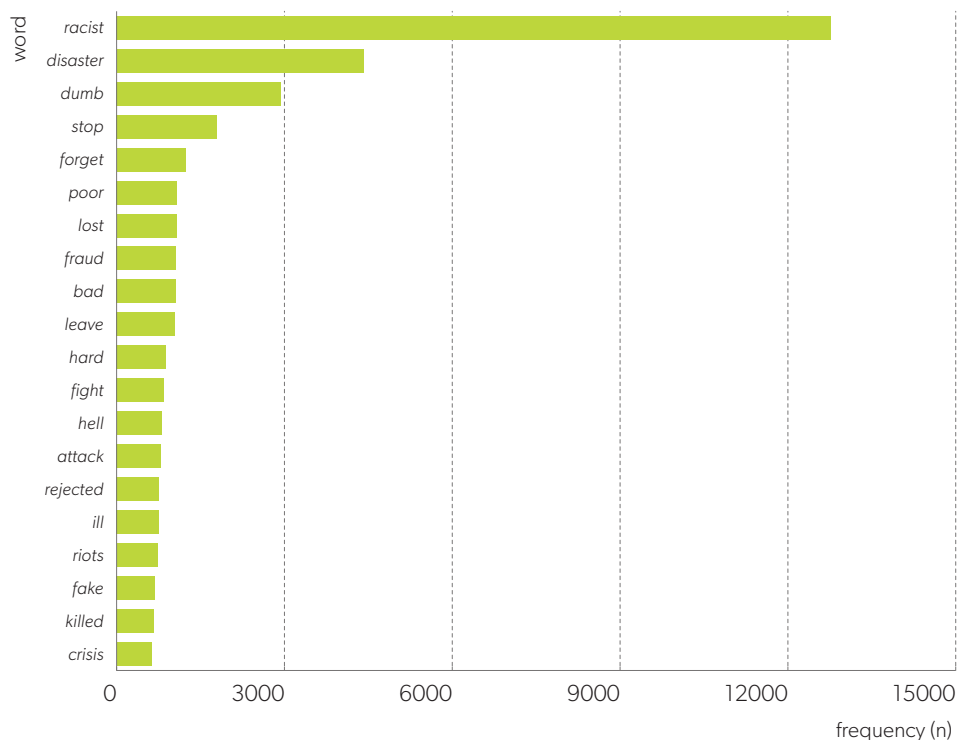


BARRIER #1

Latinos' interaction with the government is often plagued by experiences of discrimination, impacting how they ascribe meaning to their participation in the electoral process. Some are demobilized, while others are energized.

The way that Latinos identify and how they experience discrimination impacts their voting behavior. For Latinos who are assimilated and are more likely to identify as white or American, perceiving greater discrimination leads to a lack of trust and lower likelihood of voting.¹⁵ But individuals who have a strong sense of pan-Hispanic or Latino identity are less likely to be demobilized by experiences of discrimination and instead, use it as a motivating factor.¹⁶

Most commonly used negative words



Media and sentiment analysis highlight that many Latinos feel that racism and discrimination are both rampant and have become more explicit over time. They feel attacked by the government and stereotyped by the media. On social media, this feeling is widespread—among our sample of 138,916 tweets, the top negative word was racist, with over 12,000 hits. And negative feelings cross party lines. A Latino in Chicago retweeted this message:



Trump echoed support for white-power. Trump ES UN RACISTA. We all have a right to vote our conscience. If you're Black/Latino & vote for Trump, you're voting for a racist who puts you down. If you're white and vote for Trump, you're voting for a racist. What does that make us? 🤔🤔

Whereas a Latino from Wisconsin quoted some of Biden's comments tweeting out:



@JoeBiden "If you don't vote for me you ain't black" "Unlike the African American community, the Latino community is an incredibly diverse community with incredibly different attitudes about things" What if Joe Biden's actually racist and that's why he says racist stuff?

Notably, ***the nonvoters we spoke with were more likely to describe direct experiences of racism that made them disillusioned with the electoral process.*** One nonvoter who lived in a predominantly white neighborhood shared that he'd been subjected to racial profiling by the police several times and despite bringing it up to his local councilman, nothing changed:



I've had profiling issues when I first got here that I brought to the local politician and nothing changed. Then I brought the same issue to the Latino I voted for and nothing changed even though it was an issue he brought up [in his campaign]. This was 10 years ago, nothing changed. That's one reason why I feel the way I feel about politicians."

On the other hand, voters were more likely to cite exclusionary policies like the attempt to overturn Deferred Action for Childhood Arrivals (DACA), police brutality, voter suppression, and ICE raids as examples of the threats facing the Latino community. Whether directly or indirectly, our research revealed that Latinos are on the receiving end of government policies and media stories that have an 'othering' effect. Our media analysis suggests that the most prevalent concerns among Latinos are the Trump Administration's aggressive deportation practices, as well as its anti-immigrant rhetoric:



Poll shows immigrant rights ranking among the top issues for Hispanic voters, just behind the government's response to the coronavirus pandemic, healthcare and economic matters."

—Reuters

“ There are indications that anti-Latino, anti-immigrant rhetoric will have a mobilizing effect on Latino voters.”

–CNN

Research from behavioral science on *identity* helps explain why experiencing discrimination at the group-level has a demobilizing effect on nonvoters. Latinos frequently feel excluded by the government and society in many ways—whether it is immigration policy, racial profiling, voter suppression tactics or lack of access to Spanish materials—the underlying effect is feeling like they don’t belong to the ‘ingroup’ and are not invited to participate in the electoral process. Exacerbating ingroup/outgroup dynamics is **stereotype threat**¹⁷—the risk of an individual conforming to a negative characteristic about their social group. Our research revealed that Latinos are constantly exposed to harmful narratives in the media and are often targeted by the government, deepening their feelings of not belonging.



Stereotype threat

can raise doubt about one’s own abilities or sense of belonging and lead to lower participation.

Interestingly, stereotype threat manifests differently for voters. Voters who identify as pan-hispanic expressed that solidarity, or a shared identity as a Latino, was a powerful motivator to participate in the elections. A Latina from Philadelphia, PA tweeted about voter suppression and encouraged others to get educated about it:



Black voters, on average, wait 45 percent longer to vote than white voters; Latino voters wait 46 percent longer.* Anyway get educated on this. It’s a privilege to think voting is as easy as just showing up waiting 5-10 mins and leaving.

Voters who come from mixed status households felt a responsibility to vote on behalf of family members who could not use their voice. And despite having different countries of origin or ancestry, the voters we spoke with showed a shared sense of urgency and collective outrage at the treatment of Mexican Americans and immigrants from Central America. Several interviewees talked about how their vote represented the votes of those who are not legally allowed to vote, and participating to improve conditions for those loved ones.

“ One of the things that pushes me the most to vote is, without a doubt, immigration and the legalization of undocumented people. It’s what made me really want to go out and vote, to make a change, for all the people who came here years ago, because not all of us are criminals, many of us just want to come here and work, change the country, help, and being able to change that is very important.”

“ My vote is the voice of thousands that are not allowed to vote.”

Latinos' experience of discrimination is pervasive and can take many forms, from direct encounters with the system that leave Latinos feeling like they are less deserving of protection and justice to a political climate that uses racially-charged stereotypes and actively targets their community. We saw the effects in our interviews and in how Latinos express themselves in social media—some feel hopeless and undervalued, keeping them from participating meaningfully in elections. And others see it as a call to action, rallying in solidarity with the Latino community at large and mobilizing to vote.



BARRIER #2

Latinos can feel like voting is not for them because they do not see themselves or the issues they care about represented in candidates or by campaigns.

While the Latino electorate is not a monolith,¹⁸ the policy context and the issues at stake force Latinos to organize as a voting bloc or risk further invisibility. Latinos are racially diverse, come from very different cultures and ancestry, and have varied immigration experiences. But we also find commonality—Latinos have shared values and face similar challenges. Indeed, while most Latinos describe themselves using their country of origin or heritage first, 97% of foreign-born and 92% of second generation Americans also identify as Latino or Hispanic (pan-ethnic).¹⁹ Reflecting on the issues that brings Latinos together, one voter explained:

“ **One of the issues (that I care about) is the kids that are in cages... I was talking to my husband, that’s not constitutional, that’s harmful, it’s like maybe we can stand up together as a community and stand up for those kids. It’s time to say what you’re doing is not right... Hopefully our Latino community can stand up and talk about this issue.**”


For Latinos, lack of representation matters. Unsurprisingly, both voters and nonvoters in our interviews noted that the lack of Latino candidates (regardless of country of origin) on the ballots was problematic. They reported feeling like most politicians don’t understand the struggles the Latino community faces or are indifferent to them. We heard from one individual that the only time he voted was 10 years ago for a Latino candidate who was running for local office:

“ **He was Latino, he was speaking about things that I was interested in at the time, things I wanted to change in our local area. At that time, it was about how (in the area I live in) there’s not a lot of Latinos here, I was hoping he would bring some kind of a change... because they (White people) don’t care and I was hoping having someone Latino would change that.**”

When asked whether there are any politicians who share their values, individuals were likely to cite high profile Latino politicians. One interviewee said:

“ AOC [Alexandria Ocasio-Cortez] is one of them... she is someone who I trust.”

The overall disenfranchisement of Latino voters was also a key topic that came up on social media, as Latinos felt overlooked in the electorate. For example, a Latino from Inverness, FL tweeted:

 I am having a problem with the lack of Latino representatives. I have been talking to people in Tampa, Orlando, Kissimmee and they are all saying the same thing no one's talking to them let me remind you the people of Puerto Rico who are now spread throughout Florida can vote 🇺🇸.

In addition to reducing political power, the lack of representation in electoral politics reinforces Latinos' perception of being undervalued.

The composition of the Senate and the electoral college benefit white Americans at the expense of people of color. About 4 million American citizens who live in Puerto Rico and Washington, DC (and additional territories)—of which more than 90% are Black or Latino—have no congressional voting power.²⁰ This means the Senate gives the average Latino only 55% representation compared to white Americans who get 100% representation. Our research shows that Latinos are aware of the disparities underpinning the electoral system and that they make them feel disempowered:

“ I wish voting went more to a popular vote and I believe it would help people vote more. We saw (the same thing) in the election with Al Gore and George Bush and it just got in my head that my vote doesn't matter since one candidate won the popular vote and the electoral college went the other way. That's one issue I have with voting.”

We know from research on *identity conflict* that when one of a person's many social identities is at risk of being devalued, it impacts behavior in predictable ways.²¹ When Latinos engage with the electoral process they don't see people like them on the ballot or in the messages they receive. This reinforces the feeling that they don't belong, making Latinos question whether participating matters.



Identity conflict is when individuals have multiple social identities with divergent social norms, they may experience social identity conflict.

Beyond the lack of representation, Latinos rarely see the issues that matter to them at the center of campaign messaging or candidates' policy proposals. When they do, it is usually during the last mile of election season, casting doubt about candidates' commitment to change. For example, one Latino interviewee discussed how her community is

never acknowledged or visited by politicians. This lack of attention is particularly evident amid the COVID-19 crisis, which has disproportionately impacted Latino neighborhoods.²² The staggering numbers and inaction by elected officials sends a clear message about whose lives are valued. It can also perpetuate feelings of being devalued as a voter.

“ Not a lot of politicians come here. Big politicians go to big Texas cities, they never come here. Hillary came here, but it wasn’t that big. Pence came to see the border wall, he didn’t speak with people, he just came to see the wall. Melania came here but she wore the jacket that made everyone angry. Most people don’t come here or give us proposals to address our actual needs.”

There are several examples of what some label *‘hispandering’* by politicians—candidates who aren’t Latino trying to appeal to Latino voters using hollow gestures like switching to Spanish during debates or playing pop music by Latino artists at rallies.²³ In response to the [Goya CEO’s praise for Trump](#), a Latino from Los Angeles, CA tweeted:

 **He had the audacity to pander to the Hispanic/ Latino vote having put immigrant children in cages. 🤢🤮**

In this context of feeling overlooked, Latinos often feel like there’s a zero sum game—they can either vote for candidates that might not understand them or disengage from the electoral process altogether. But we also see that some Latinos recognize the urgent need to organize and mobilize their vote to affect meaningful change.



BARRIER #3

Latinos often question whether they should vote because they perceive a high standard for being a “prepared voter.”

Our research shows a consistent thread among Latino voters and nonvoters: both groups feel like they don’t know enough about politics to meaningfully participate in elections.

Tracking with our earlier research on low propensity and new voters, Latinos report being afraid of making the wrong decision because they’re uninformed about candidates’ platforms. None of our interviewees felt prepared enough to vote if the election were tomorrow. Voters and non-voter interviewees believe that in order to vote, they should be ‘political’ and have specialized knowledge about public policies and their impact on the Latino community. Evidence from Topos and EquisLab that Latinos avoid voting for fear of not wanting to “mess it up” support these conclusions.²⁴ A young woman from Florida shared:

“ I really am still trying to educate myself in politics and what I really want in someone. I don’t see myself as a Democrat or Republican; I’m still trying to figure out who I root more for. I have ideas I agree with on both sides, there’s things I agree with on both sides. I don’t want to make the wrong decision.”

We found that Latinos have a common *mental model* of who should vote and what qualifies as a prepared voter. All of us have mental models that organize prior knowledge into an understanding of how the world around us works.²⁵ They can often be useful to make sense of new information and can shape our decisions. In this case, however, what we saw from our interviews is that no one sees themselves as a prepared voter, even those who are informed and can cite what issues they care about and how they plan to vote. When asked if they were ready to vote, we heard things like:



Mental models are the frameworks that we use to explain how the world works. These frameworks are formed based on prior knowledge and experience, and they guide the way that we process new information.

“ No, as of today, no, not really... Would really need to put myself out there and see things and talk to more people and read up on more policies and get a better view of politics in general and how things work.”

And when prompted to describe what someone should know, interviewees suggested people should “do research” but didn’t offer specifics on what to look for, where to find information, or how much research is enough to be considered “prepared.”

Interestingly, Latino voters and nonvoters may respond differently to this ambiguity. Voters feel unprepared but still think it’s important to vote for a candidate that will represent them the best. Nonvoters report being ‘apolitical’ as a deliberate choice that frees them from the pressure of having to get informed in order to participate.

“ For me I think it’s really important to vote... I understand the importance of it and I try to be educated and stay on top of things, but things keep coming up and everything (info and news) changes all the time. ”

“ I’m not really political, especially now. I’m kind of indifferent in a way when it comes to that topic.”

What's more, doing the research can feel like a hassle, and hassles are well known for depressing follow through even when people feel very strongly about an action.²⁶

Navigating the registration and voting process can be difficult for everyone, but it is especially hard for voters who speak English as a second language and are unfamiliar with the process.²⁷ Latinos also often lack a support network that can guide them through the steps. We heard a similar thread in all our interviews:

“ The ballot is difficult to navigate so I can't figure out how to vote.”

“ I got my ballot three weeks ago. I opened it and... I just felt like it was a grad school paper. You've got to really put some work in here.”

Voters and nonvoters report that one challenge in preparing for elections is that they don't trust the news. Several individuals mentioned identifying contradictory information about the same story through different channels and feeling like disinformation is so rampant that they can't rely on mainstream media. While most Latinos reported watching a combination of Univision, Telemundo, Fox News, and CNN, they often put in effort to follow the same story on different outlets to get a better sense of what's 'real'.

“ I follow Telemundo for Denver and Puerto Rico, and follow the news on my social networks, so I see them on Facebook. If I'm interested in some news, I see (look at multiple sources) them from a different angle. In Puerto Rico they are very corrupt, so if I see the news comes from a big news outlet, I look for it in a different source from a different news outlet.”

But news coverage that emphasizes the disproportionately complicated and difficult process that Latinos and other minorities may face at the polls may actually have a backfire effect in exacerbating the concern Latinos have about being prepared or knowing enough to vote correctly.

“ Long lines to access the polls, insufficient voting machines and even a shortage of ballots were part of the chaos that authorities called “unacceptable” in Georgia's primary elections, specifically in areas where minorities live. Activists allege that these problems and evidence of racial discrimination have been constant for years”

–Univision

Taken together, the misperception of who a voter should be and the lack of access to reliable voter education makes Latinos less likely to feel like voting is meant for them and to embrace participating in the electoral process as their civic duty.



BARRIER #4

Latinos rarely see progress on the issues that matter to their community so it feels like voting does not affect change.

Latinos have been historically underserved by politicians who make promises on the campaign trail and don't deliver. For voters who believed in a candidate's platform and advocated for others to vote, being let down by a candidate once they're elected can demobilize and cause them not to vote in future elections. This betrayal can feel like *failed reciprocity*—a social norm of responding to an action with an equivalent action.²⁸ Latino voters expect to see candidates follow through on their commitments in exchange for their vote. When this doesn't happen, it makes Latinos question whether candidates care and in turn, whether voting makes a difference to their community. Importantly, while this may be true for many groups, it has an outsized effect on Latinos and communities of color who already experience lower levels of trust and engagement.



Failed reciprocity

is the failure of adhering to a social norm of responding to an action with an equivalent action.



I don't really trust Biden's fight, that he wants to do what's best for people and the community."



What's really hard is that because racism and oppression are so ingrained in our society it's hard not to be (racist as a politician). If you've made it all the way to the top, you've had to make a couple of excuses or cut a couple of corners to get there."

Even voters who haven't experienced these specific let downs may struggle to connect the consequences of voting to the policy issues they care about in their daily lives. In line with our broader research into nonvoters, we find that *psychological distance*²⁹ also plays a role in how Latinos feel about voting. How "close" the consequences of voting feel can determine, in part, the degree to which people picture them in a concrete and specific way. As a result, psychological distance can determine how strongly people react to or make decisions about voting. Even when Latinos know elections impact them, without a clear, concrete picture of how, they struggle to form strong connections or intentions.



Psychological distance

refers to the cognitive separation between self and things that are not present in our direct experience of reality.



We vote because we want this to change or that to change and the next four years happen and we are arguing about the same thing and promoting a candidate we think will change the things we were talking about 4 years ago. And I see people over and over again voting on an issue they care about and then 4 years later they are voting on the same things."



BARRIER #5

Many Latinos do not discuss voting or politics with anyone outside their family or close network, while nonvoters tend to steer clear of these conversations.

One of the most well-established behavioral phenomena in the context of voting is **social norms**—rules or standards shared by a group that guide or constrain behavior.³⁰ Research on the role of social norms in voting shows that hearing about high turnout rates and seeing people vote have a positive effect on individuals' voting behavior.³¹ Our interviews highlight that Latinos who vote are also likely to come from a family that votes and to talk about voting with friends:



Social norms are rules or standards shared by a group that guide or constrain behavior. Perceived social norms can be particularly powerful when people are uncertain what to do.

“**My family is very political, we do talk about voting. They definitely believe in your right to exercise your vote. They're voters. They are people who vote.**”

“**[On election day] I tell my friends I have to vote and we need to do it together to make a change. I went with a group of friends.**”

But our interviews suggest that **Latinos do not typically discuss or share their voting behavior outside of their families and friends, especially if it's unclear to them what is socially desirable.** Latinos perceive that politics leads to arguments and prefer to avoid the subject with strangers or casual acquaintances. **For nonvoters, discussing politics or voting with anyone can be perceived as high risk**—they feel like family and friends will criticize them for not wanting to vote or ‘nag’ them so they avoid politics and election talk altogether.

“**I try not to [talk about voting]. I don't want to get into it at times, especially presidential elections. Arguments on who you support and why you support, different stances from each party or each candidate. I have my certain beliefs and people have theirs and I don't want to get into it and it can be very vocal and combative and I just avoid it when I don't have to get into it.**”

Nonvoters' reluctance to speak about voting is also linked to feeling like they do not ‘deserve’ to complain because they haven't voted in the past, and that not voting also means they are not ‘allowed’ to talk about politics. This behavior perpetuates a cycle of disengagement:

“ I’m really strict on this ... I don’t like doing it [talking about voting] cuz I don’t vote. Right? I dont bring it up because I don’t vote. If you don’t vote, don’t complain.”

For low propensity voters, unclear signals about social norms are especially impactful. Media stories of low Latino turnout can have an outsized influence on their behavior if they aren’t discussing voting with friends or family. Research shows that hearing about others performing a certain way, in this instance not voting, can lead to your acting in line with the norm.^{32,33} Media stories about low Latino turnout could make it seem like not voting is the group norm. Given the frequency of these stories, Latinos might also be more likely to remember low turnout figures even if they live in communities that vote regularly. That’s because we often use the *availability heuristic*—the tendency to rely on how easily examples of a behavior come to mind—when judging the probability of events.³⁴ The prominence of low voter turnout in the news is confirmed by our sentiment analysis. We uncovered several tweets reacting to reports of low turnout:



Availability heuristic

refers to the tendency to rely on how easily examples of a behavior come to mind when judging the probability of events.



If there are so many Latinos, why don’t Latinos vote in RECORD numbers!! I’m disgusted every election when I see the voting demographics - low Latino voter turnout- no esta chingando and VOTAR!!!



I am willing to bet the voter turnout out among the Latino / Hispanic community will be at an all time low. Neither Trump nor Biden has been good for them. Why do you think they overwhelmingly went for Bernie over Biden?

Our research suggests that while the intention of citing low turnout may be an effort to encourage Latinos to turn out and challenge the status quo, its effects can backfire and demobilize Latinos by using the wrong descriptive norm.


»» Designing to Promote Value in the Latino Vote

Our research revealed that Latinos face a unique confluence of barriers—they are targeted by policies that are designed to exclude them, they lack representation among candidates running for office, they are frequently underserved by elected officials and feel uncomfortable about being perceived as political. But despite the demobilizing effect of these barriers on nonvoters, we also saw an inspiring persistence and solidarity among voters. This proves that questioning the meaning of the vote is not a reflection of apathy or laziness—it is a byproduct of a threatening context that pushes Latinos to question their sense of belonging and in turn, the value of engaging in the democratic process. **We believe that using behavioral science to increase the salience of voting's value and Latinos' sense of deservedness and belonging can mobilize Latino voters and create a more representative democracy.**

Drawing from our research, we developed design principles that leverage behavioral science to mobilize the Latino vote. Keeping in mind the diversity of the Latino community, we recommend tailoring our designs to specific groups. Below, we describe the design principle that addresses one or several of the barriers outlined in our research, an illustrative example of what a design might look like in the field, and the recommended messenger and channel.



Design Principle #1

Shift Latinos' mental model of what 'preparedness' means by using simple heuristics to present information about what is needed to be a prepared voter

Barrier(s)	Design Concept	Channel(s)
 <p>Latinos question whether they should to vote because they perceive a high standard for being a "prepared voter."</p>	<p>Prepared Voter Snapshot: Use photos or videos of everyday Latino community members or influential Latinos paired with a checklist that defines what it means to be a prepared voter. The checklist would serve as a simple heuristic that summarizes what individuals need to do to be 'prepared' and reduces hassles by providing links and information for how to complete checklist items:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Register to vote (linked here) <input type="checkbox"/> Make a plan for when and where you will vote (template here) <input type="checkbox"/> Spend 2-3 minutes reviewing a sample ballot (linked here). 	<ul style="list-style-type: none"> » Postcard, flyers, mailers sent by government, trusted local CBOs, nonprofits » Social media posts (Tik Tok, Instagram, Facebook, Snapchat), traditional media by influential Latino celebrities » Digital ads, corporate communications



Design Principle #2

Reduce the psychological distance between the impact of voting and Latino community outcomes by making progress salient

Barrier(s)	Design Concept	Channel(s)
 <p>Latinos don't see progress on the issues that matter to their community so it feels like voting does not affect change.</p>  <p>Latinos feel like voting is not for them because they do not see themselves or the issues they care about represented in candidates or by campaigns.</p>	<p>Community Progress Visual:</p> <p>The community progress visual shows the disparate impact that voting can have on community issues. It would showcase how Latino turnout rates can directly affect community issues like level of policing, funding, and education through a map or social media graphic of adjacent districts by zip code. The graphic would include statistics around turnout rates, levels of funding for public services, and crime rates. The communication would also include a message motivating people to vote to drive better outcomes for their community with links to vote.org or other one-stop shops where they can register and prepare to vote.</p>	<ul style="list-style-type: none">» Shareable link to quiz to spread on social media (Instagram, Tik Tok, Snapchat, Facebook), with options to share results of your "match"» Digital ads (especially on community or voting-related websites), corporate communications, traditional media» Shareable link on trusted nonprofit or CBO websites that serve Latino community



Design Principle #3

Remove hassles to learning about candidate platforms by providing access to curated, trustworthy, and easy to understand information about candidate positions on issues that matter to Latino voters

Barrier(s)	Design Concept	Channel(s)
 <p>Latinos' interaction with the government is often plagued by experiences of discrimination, impacting how they ascribe meaning to their participation in the electoral process. Some are demobilized, while others are energized.</p>	<p>Interactive Ballot Scorecard: A clear and easy method of determining where politicians on your ballot stand on issues that Latinos care about. This design would take the form of a short online quiz, first prompting people to determine who is on their ballot with their address, and then asking questions about key issues like climate policy, criminal justice, abortion, etc. Next, it would display where each politician stands on each issue, using scorecards that have already been developed by nonprofits to make a 'match.' Finally, people can click on politicians they want to choose for each position on their ballot.</p>	<ul style="list-style-type: none"> » Shareable link to quiz to spread on social media (Instagram, Tik Tok, Snapchat, Facebook), with options to share results of your "match" » Digital ads (especially on community or voting-related websites), corporate communications, traditional media » Shareable link on trusted nonprofit or CBO websites that serve Latino community
 <p>Latinos feel like voting is not for them because they do not see themselves or the issues they care about represented in candidates or by campaigns.</p>	<p>Customizable Templates for Nonprofits and Community Spaces: Local community-based organizations (CBOs) are some of the most meaningful messengers since they help communicate social norms, but they sometimes lack the resources to create original materials. The goal is develop and equip local CBOs with pre-set customizable materials like one pagers, flyers, and postcards. Templates can include information on aspects of the voting process, key information and links on preparing, and messages to combat voter suppression. These templates can reduce the costs for CBOs, while allowing for tailoring for different audiences.</p>	<ul style="list-style-type: none"> » Shareable templates for 1-pagers, FAQs, flyers, mailers, postcards that can be customized for each CBO disseminated over email and on websites for download by GOTV orgs, governments, and nonprofits

Design Principle #4

Empower Latino identity by leveraging trusted and influential Latino messengers from different countries of origin to address the unique barriers they face as an electorate

Barrier(s)	Design Concept	Channel(s)
 <p><i>Latinos' interaction with the government is often plagued by experiences of discrimination, impacting how they ascribe meaning to their participation in the electoral process. Some are demobilized, while others are energized.</i></p>  <p><i>Latinos feel like voting is not for them because they do not see themselves or the issues they care about represented in candidates or by campaigns.</i></p>	<p>Relational organizing by trusted members of the Latino community:</p> <p>The design would include trusted community leaders or well-known Latino public figures sharing resources about voting. Local residents can also be encouraged to share messages with 2-3 friends or family members. Both groups could share information by recording scripted voice messages on how to get registered and make a plan to vote, or it could also be a customizable e-mail or SMS template that is more easily shared with personal networks.</p>	<p>» Scripted cell voicemails, customizable e-mail or SMS from friends, family, trusted community leaders or influential Latinos</p>

»» Moving into a More Representative Electorate

The barriers outlined in this document, pulled from direct interviews with eligible Latino voters and supported by social media and news media sentiment analysis, help illustrate just how threatening a landscape the political world is for Latino voters in the U.S. These barriers, paired with the current structural challenges to voting like COVID-19, limited polling places, and a flood of misinformation and discriminatory messaging, create a challenging context for Latinos. All the while, mainstream actors continue to misrepresent Latinos as a uniform bloc of politically apathetic, ambivalent, undereducated nonvoters.

Reminding, or better yet showing, Latinos why and how their vote matters is necessary and urgent in order to disrupt the perpetuating cycle that keeps them out of key policy decisions that impact their livelihoods as Americans. By confronting these barriers through designs leveraging behavioral science to directly refute misperceptions, clarify processes, and strengthen the prepared voter identity, community organizations, advocacy groups, and more can help disrupt this cycle. We hope that this research can serve as a helpful tool to anyone aiming to mobilize among Latinos and look forward to building out and testing these designs in partnership with community-based organizations who do the important work of reaching and supporting Latino voters.

Endnotes

- ¹ Medina, J., & Fernandez, M. (2020, March 3). The Latino Vote: The ‘Sleeping Giant’ Awakens. Retrieved September 26, 2020, from <https://www.nytimes.com/2020/03/03/us/politics/latino-voters-california-texas-super-tuesday.html>
- ² Noe-Bustamante, L., Budiman, A., & Lopez, M. (2020, August 27). Where Latinos have the most eligible voters in the 2020 election. Retrieved September 27, 2020, from <https://www.pewresearch.org/fact-tank/2020/01/31/where-latinos-have-the-most-eligible-voters-in-the-2020-election/>
- ³ Krogstad, J., & Lopez, M. (2017, May 17). Black voter turnout fell in the 2016 US election. Retrieved September 27, 2020, from <https://www.pewresearch.org/fact-tank/2017/05/12/black-voter-turnout-fell-in-2016-even-as-a-record-number-of-americans-cast-ballots/>
- ⁴ McElwee, S. (2015, October 19). Why Increasing Voter Turnout Affects Policy. Retrieved September 27, 2020, from <https://www.theatlantic.com/politics/archive/2015/09/why-non-voters-matter/405250/>
- ⁵ Minority Rights Group International. (n.d.). Latinos. Retrieved September 27, 2020, from <https://minorityrights.org/minorities/latinos/>
- ⁶ Newkirk II, V. R. (2018, July 16). *Voter Suppression Is Warping Democracy*. Retrieved October 06, 2020, from <https://www.theatlantic.com/politics/archive/2018/07/poll-prri-voter-suppression/565355/>
- ⁷ McElwee, S., Schaffner, B., & Rhodes, J. (2017). Automatic Voter Registration in Oregon. Retrieved September 27, 2020, from <https://www.demos.org/policy-briefs/oregon-automatic-voter-registration>
- ⁸ ideas42 (2019, November). Boosting Turnout in Minnesota’s 2018 Midterm Election: Encouraging occasional voters to cast their ballots (Rep.). Retrieved October 1, 2020, from https://www.ideas42.org/wp-content/uploads/2019/12/142_Brief_MinnesotaVoting_1.pdf
- ⁹ Nickerson, D., & Rogers, T. (2010). Do You Have a Voting Plan? Implementation Intentions, Voter Turnout, and Organic Plan Making. *Psychological Science*, 21(2), 194-199. Retrieved September 27, 2020, from <http://www.jstor.org/stable/41062187>
- ¹⁰ Crabbe-Field, S. (2020, July 03). Latina Voters: Why Excitement Matters. Retrieved September 27, 2020, from <https://democracyjournal.org/magazine/57/latina-voters-why-excitement-matters/>
- ¹¹ Equis Labs. (2020, July 7). *Project Gigante* (Rep.). Retrieved September 28, 2020, from Equis Labs website: <https://www.equislabs.us/>
- ¹² Jackman, S., & Spahn, B. (2018). Politically Invisible in America. Working Paper.
- ¹³ Tobar, H., & Gessen, M. (2018, December 12). Trump’s Ongoing Disinformation Campaign Against Latino Immigrants. Retrieved October 06, 2020, from <https://www.newyorker.com/news/daily-comment/trumps-ongoing-disinformation-campaign-against-latino-immigrants>
- ¹⁴ Robert P. Jones, PhD, Daniel Cox, PhD, Rob Griffin, PhD, Molly Fisch-Friedman and Alex Vandermaas-Peeler. “American Democracy in Crisis: The Challenges of Voter Knowledge, Participation, and Polarization.” *PRRI*. 2018. <https://www.prri.org/research/American-democracy-in-crisis-voters-midterms-trump-election-2018>
- ¹⁵ Schildkraut, D. J. (2005). The rise and fall of political engagement among Latinos: The role of identity and perceptions of discrimination. *Political Behavior*, 27(3), 285-312.
- ¹⁶ See footnote 10.
- ¹⁷ Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, 69(5), 797-811.
- ¹⁸ Noe-Bustamante, L. (2020, May 31). Key facts about U.S. Hispanics and their diverse heritage. Retrieved October 01, 2020, from <https://www.pewresearch.org/fact-tank/2019/09/16/key-facts-about-u-s-hispanics/>
- ¹⁹ Lopez, M., Gonzalez-Barrera, A., & López, G. (2020, September 22). Latino Identity Declines Across Generations as Immigrant Ties Weaken. Retrieved September 28, 2020, from <https://www.pewresearch.org/hispanic/2017/12/20/hispanic-identity-fades-across-generations-as-immigrant-connections-fall-away/>
- ²⁰ Leonhardt, D. (2018, October 14). The Senate: Affirmative Action for White People. Retrieved September 29, 2020, from <https://www.nytimes.com/2018/10/14/opinion/dc-puerto-rico-statehood-senate.html>
- ²¹ Branscombe, N. R., Ellemers, N., Spears, R., & Doosje, B. (1999). The context and content of social identity threat. *Social identity: Context, commitment, content*, 35-58.
- ²² Jimenez, O. (2020, May 09). Latino communities in the US devastated by Covid-19. Retrieved September 28, 2020, from <https://www.cnn.com/2020/05/09/us/hispanic-population-coronavirus-impact/index.html>
- ²³ Meraji, S. (2019, June 27). Primary Season Is Here And ‘Hispandering’ Is Back. Retrieved September 28, 2020, from <https://www.npr.org/sections/codeswitch/2019/06/27/695299713/primary-season-is-here-and-hispandering-is-back>
- ²⁴ See footnote 10.
- ²⁵ Fiske, S. T., & Linville, P. W. (1980). What does the schema concept buy us?. *Personality and social psychology bulletin*, 6(4), 543-557.
- ²⁶ Bertrand, M., Mullainathan, S., & Shafir, E. (2006). Behavioral economics and marketing in aid of decision making among the poor. *Journal of Public Policy & Marketing*, 25(1), 8-23.
- ²⁷ See footnote 12.
- ²⁸ Fehr, E., & Gächter, S. (2000). Fairness and retaliation: The economics of reciprocity. *Journal of Economic Perspectives*, 14, 159-181.
- ²⁹ Liberman, N., Trope, Y., & Stephan, E. (2007). Psychological distance. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (p. 353–381). The Guilford Press.

³⁰ Cialdini, R. B., Demaine, L. J., Sagarin, B. J., Barrett, D. W., Rhoads, K., & Winter, P. L. (2006). Managing social norms for persuasive impact. *Social Influence, 1*(1), 3–15. <https://doi.org/10.1080/15534510500181459>

³¹ Funk, Patricia, Theory and Evidence on the Role of Social Norms in Voting (March 2005). Available at SSRN: <https://ssrn.com/abstract=627347> or <http://dx.doi.org/10.2139/ssrn.627347>

³² Gerber, A. S., & Rogers, T. (2009). Descriptive social norms and motivation to vote: Everybody's voting and so should you. *The Journal of Politics, 71*(1), 178-191.

³³ Allcott, H. (2011). Social norms and energy conservation. *Journal of Public Economics, 95*(9), 1082–1095.

³⁴ Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive psychology, 5*(2), 207-23

Technical Appendix

Media scraping (CNN, Fox News, Univision, Reuters) and topic modeling

To better understand what Latinos see is being said in the media about them, we analyzed content from online news sources commonly viewed by Latino Americans ([previously identified by Harmony Labs and Equis Research](#)). Specifically, using Python, we scraped online news articles from CNN, Fox News, and Reuters, as well as headlines and summaries of Spanish-language TV news shows from Univision’s website, from the period June 2019 to August 2020 that appeared when searching for “Latino vote.” Next, from the title and body of the news posts, we extracted only those lines of text that included at least one of the following terms (and some variations of those terms): “Latino,” “Hispanic,” “Immigration,” “DACA,” “ICE,” “Deportations.” We then applied Natural Language Processing (NLP) techniques to process the text, analyze its ‘sentiment’ (i.e., determine whether they are positive or negative statements and their polarity level), and make an initial assessment of the topics that those excerpts included by using an unsupervised machine learning technique (topic modeling).

To do this, we used a Latent Dirichlet Allocation (LDA) algorithm, which essentially looks across all of the news excerpts, and creates ‘topics’ based on sets of words that appear to have some underlying commonality (e.g., based on how frequently the word is mentioned and in relation to other words in the excerpt). In reality, the algorithm does not tell you the precise topic, but rather it gives you a set of words that corresponds to each “topic” that the model identified, which we can then look at manually to decipher what topic that set of words was likely referring to.

After running our LDA analysis, we then manually defined topics for media excerpts that had the highest polarity levels (i.e., the “most positive” and “most negative” ones), which likely reflect an article that takes an opinionated stance versus merely factual reporting of the news. We also examined a random sample of news excerpts to better refine our definitions of each topic. We also performed this LDA analysis on the set of tweets we collected (see description of Twitter scraping in the next section).¹ Below are the topics that we found, as well as some examples of the media excerpts that represent those topics.

¹ To clean the tweet data for the LDA analysis, we did some [stemming and lemmatization](#), expanding contractions (e.g., can’t → can not), removing of special characters and html tags (for links included in tweets), removing of accented characters, converting to lowercase, and removing of stopwords.

Key findings

The output from the media scraping and analysis were the following topics and insights:

1 **Hassles faced by Latinos**

Not all Latinos who are eligible to vote speak English fluently or feel comfortable enough with the language. Therefore, English language ballots, instructions, and signage at polling places could potentially represent a barrier for Latinos to vote. It might also feel intimidating for this community to turnout to vote if there are no Spanish-language materials available.

“ ...a lawsuit was filed by several Latino and civil rights organizations, arguing that 32 counties were violating the Voting Rights Act because they had large Latino populations but didn’t offer Spanish-language ballots to its voters”

–Fox News

There is also a perception that minorities face worse conditions in their communities’ polling sites since the time that they need to wait in line for voting is disproportionately high compared to other sites.

“ Long lines to access the polls, insufficient voting machines and even a shortage of ballots were part of the chaos that authorities called “unacceptable” in Georgia’s primary elections, specifically in areas where minorities live. Activists allege that these problems and evidence of racial discrimination have been constant for years”

–Univision

2 **Discriminatory law enforcement**

Latinos’ motivation to join the Black Lives Matter movement was the police brutality that they suffer in their own communities, so they protested for a change on this matter for themselves.

“ Black Lives Matter Fight Benefits Hispanics, Says Vice President of Community Coalition”

–Univision

However, Trump’s attacks on protesters suggests the government’s lack of interest in seeking to address discriminatory law enforcement.

“ The president wants to turn the page on protests against police brutality and has branded protesters as domestic terrorists”

–Univision

Even though Democrats have claimed to be supportive of those policies that benefit Latinos, the fact that there were Democrats behind the implementation of past policies under which many Latinos' civil rights were violated, leaves them hopeless.

“ Bloomberg was dogged by criticism of his past support as mayor of “stop and frisk,” a policy that encouraged police to stop and search pedestrians and ensnared disproportionate numbers of blacks and Latinos”

–Reuters

3 **COVID-19 and voting by mail**

Latino neighborhoods have been more affected by both the spread and mortality of the disease and therefore these communities are afraid of visiting voting locations.

“ In Chicago, New York City and the state of California, Latinos are contracting coronavirus or dying from coronavirus at a higher rate than the rest of their population”

–CNN

One way to guarantee that this group can exercise their right to vote is prompting them to vote by mail, but historically Latinos have shown low participation rates in this voting modality. One reason could be that minorities tend to have less trust in government systems.

“ Already, data about Georgia’s vote-by-mail applications showed that more white voters requested absentee ballots than black, Asian and Latino voters, suggesting that voters of color were more likely to choose to vote in person, according to a Brennan Center analysis of mail in voting application data”

–CNN

Moreover, rules about who is eligible to vote by mail may not be clear because of new guidelines or ongoing litigation. Additionally, Trump and his supporters have spread rumors that voting by mail can lead to massive voter fraud.

“ The president claims, without proof, that the vote by mail “opens the doors” to fraud and the director of the postal agency denies that the delays were caused intentionally. Democrats denounce that dozens of mailboxes have been removed in various states and that several of their machines are out of service”

–Univision

4 **Immigration and racism**

One constant concern among Latinos are Trump's aggressive deportation practices, as well as his anti-immigrant rhetoric, which they perceive to be the cause of hate crimes such as the El Paso massacre. So even when exercising their right to vote as a means to make their voice heard to defend immigrants' rights, Latinos might also feel intimidated and not worthy of exercising that right.

“ A month after the massacre at a Walmart in El Paso, almost 70% of registered Hispanic voters think that the presidential language had a lot or at least a good amount to do with the tragedy”

–Univision

“ There are indications that anti-Latino, anti-immigrant rhetoric will have a mobilizing effect on Latino voters”

–CNN

5 **Economic prosperity under Trump's administration**

Latinos seemed to be tolerant of Trump's racist comments and discriminatory policies against immigrants before the pandemic given the lower unemployment rates and higher incomes that they had achieved.

“ The president, who was accompanied by Jovita Carranza, the administrator of the Office of Small Business and the only Hispanic in his cabinet, spoke of the low unemployment among Latinos and the economic achievements of Hispanic entrepreneurs. A recent Univision poll revealed that approval of the president increased from 22% to 27% among Latinos in the last six months”

–Univision

“ As he has at many rallies, Trump touted Hispanic American employment and poverty numbers”

–CNN

However, the pandemic has hit Latinos harder than other groups both economically and in terms of health. Therefore, this crisis has uncovered a more structural problem which is the lack of access to healthcare and overall safety net services among immigrants.

“ Latino unemployment reached 18.9% nationwide this month, higher than other ethnicities, and data from Florida shows they have been disproportionately hit by the virus, making up at least a third of COVID-19 cases in the state”

–Reuters

“ The Latino community has been disproportionately affected by the coronavirus in the US from a health standpoint and a financial one”

–CNN

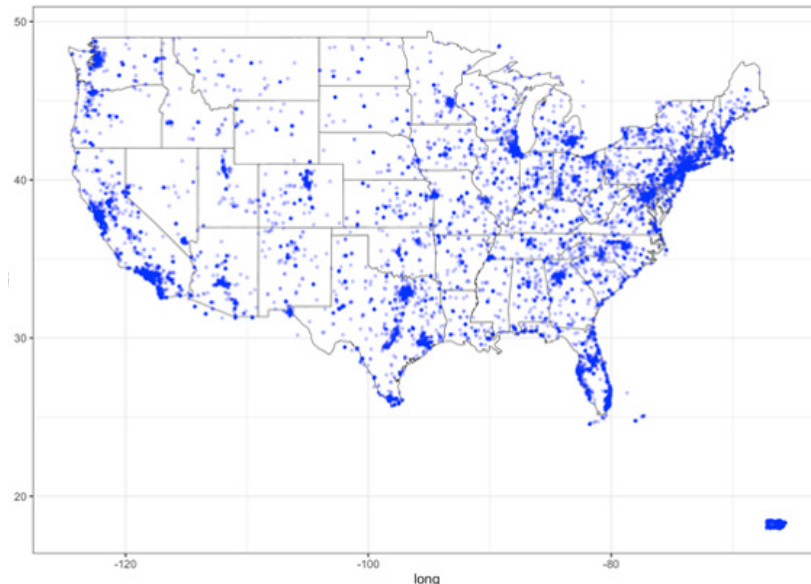
Sentiment analysis on social media (Twitter)

To better understand what Latinos were saying about voting, or at the very least, what people were saying about Latino voting on social media, we turned to Twitter. Using R and the *rtweet* package, we scraped nearly 2 million tweets (1,977,666) from the U.S. over the summer (June 22nd, 2020 to August 31st, 2020) that contained words related to latino voting (e.g., “vote latino,” “election latino,” “voto”).

We filtered our data by including (1) tweets where the user had written a U.S. or Puerto Rican location in their bio,ⁱⁱ or (2) tweets that were in English (which was a good proxy for it being from the U.S.). Thus Spanish tweets that did not have a U.S. or Puerto Rican location written in the user’s bio were removed. This left us with 201,417 tweets. We also filtered Spanish tweets and selected ones where the tweet mentioned keywords related to U.S. politicians (e.g., “Trump,” “Biden”), U.S. politics (“Republican,” “Democrat,” “November,” etc.), or a U.S. location (i.e., a sizable U.S. city, U.S. state name, or U.S. state abbreviation). See the [list of terms for this filtering step here](#). This final filter trimmed our dataset down to 138,916 tweets coming from 58,200 people. The map on the next page shows where these Twitter users were coming from, with many coming from the Northeast, or major cities such as Seattle, San Francisco, Los Angeles, Dallas, Austin, Houston, Chicago, Detroit, Atlanta, Orlando, Tampa, or Miami.

ⁱⁱ We used a script to automatically assign coordinates based on the location written in the user’s bio (about 63% of users wrote something for location in their bio). When the script was unable to identify the location written in the bio, but the location nevertheless contained the name of a sizable U.S. city (pop. > 100k), U.S. state, or U.S. state name abbreviation, we manually reviewed the location to decipher its true location and gave it the appropriate coordinates. We then filtered to tweets where the user’s location coordinates in their bio fell within the U.S. or Puerto Rico.

Map of U.S. and Puerto Rico residents tweeting about Latino voting (58,200 people)



We then used a predefined dictionary, the [afinn dictionary](#), to give words a sentiment score (i.e., positive or negative valence). This allowed us to examine things like the most commonly used negative (or positive) sentiment words, as well as examine how sentiment fluctuated over time at the tweet level (i.e., we averaged the sentiment scores from all words within a tweet to arrive at an overall sentiment score for that tweet). We zoomed in on particular peaks and valleys (e.g., Aug 5-9) to better understand what was driving the change in sentiment (e.g., [racist/insensitive comments made by Joe Biden](#)).

Sentiment score (positive or negative valence)

