

# Comparison of Perception of 2020 Election Security Threats Between Young and Old Voters

Thomas Rafacz<sup>1</sup> & Jason Campbell<sup>1</sup>

<sup>1</sup> Schaumburg High School, Schaumburg IL

## SUMMARY

Elections constitute the bedrock of a democratically governed society. Due to the long time it has historically taken to ensure equal social participation, the integrity of elections needs to be particularly protected to make every vote count. The democratic process itself has been subject to manipulation through widespread illegal practices in many municipal areas like New York or Chicago that have earned in the past a notoriety for ballot stuffing or stealing votes through impersonation. In the current American social climate of the 2020 presidential election, the same concerns come up to the forefront, compounded by threats of cybersecurity. Our research gauged types and extent of concernment among two age groups of voters: college students and senior citizens. We explored the correlations using the baseline survey and re-examined them after applying information frames through a paired comparison. We found that opinions about voter ID laws and cybersecurity have a strong association to age. Our original hypothesis was that seniors will unchangeably perceive voter identification as essential to election safety while young people will emphasize cybersecurity but will be open-minded. Contrary to that hypothesis, seniors expressed an equal concern over voter ID and cybersecurity and seemed to be more susceptible to the influence of new information. Comparably, college students overwhelmingly confirmed their preoccupation with cybersecurity, marginalizing voter ID, but unexpectedly did not show inclination to easily change their views. The age of voters plays a role in how they perceive the concerns and how they react to information about them.

## INTRODUCTION

According to the 2019 report from the Electoral Integrity Project (EIP) conducted by the Department of Government and International Relations, in the years 2012 to 2018, the United States scored 61 points on a 100-point scale of electoral integrity in the assessments of the cumulative study of 337 presidential and parliamentary elections in 166 countries around the world (1). The scale measures 49 core items in expert political surveys, discerning a moderate range (50-59), high (60-69), and very high (70+). Among global complex electoral concerns were inconsistent voter registration processes and vulnerability to cybersecurity

attacks. While not fraudulent in essence, electoral laws and procedures, when manipulated, can lead to voter fraud, which is not a new phenomenon. Going back to 1982, a large-scale scheme was unveiled in the Chicago and Illinois general elections where 63 individuals were charged and convicted of tampering with registration, including forging signatures and impersonation (2). In the recent two decades, despite a low number of proven instances of voter fraud, only 1,088 cases nationwide since 2002 (3), the perception of fraud seemed to linger among American public, with a tendency to become subjectified. To illustrate, a study conducted in 2008 at Columbia Law School that involved a survey of a 36,500-person sample over a period of three years revealed that 41% of respondents held the belief of a high occurrence of fraud (4). In 2015, Sances and Stewart demonstrated the subjectivity of voter confidence through a strong pattern of voters reporting a high level of confidence (61%) in their own votes being counted as cast and a low level of trust (22%) in the accuracy of other voters' ballots (5). At the same time, this distrust seems to have recently fluctuated and diminished as reported by the Gallup Newspann from September of 2019 in which 70% of the public expressed a comfortable level of confidence in the upcoming 2020 election's accuracy (6).

Attempting to understand the changing trends and impacts on this conflicting perception is crucial in taking steps to further increase voter confidence. The sources of concern over election integrity stem from two kinds of threats: historically founded voter fraud, mostly through impersonation (7), and a recent phenomenon of threat to cybersecurity (8). There were attempts to address the first problem through the introduction of voter ID laws that have become a highly contentious subject, opening the stage for some studies on their effectiveness, especially following a momentous challenge of these laws in *Crawford v. Marion County Election Board* case in 2008 (9). After the 2013 Supreme Court decision to strike down Justice Department oversight of state election procedures, thirty-four states responded by introducing varying degrees of voter identification requirements (7). Public discourse demonstrates that opinion on voter ID laws is very divided: either they are a valuable tool for preventing voter fraud and assuring public confidence or they are a tool for disenfranchising voters. The existing research therefore has focused on examining the relationships between the laws and election turnout as well as public support for them based on rates of access to IDs by social groups. For example, a study conducted in Texas in

2011 found that 4.5% of their registered voters lacked proper identification (10). At the same time, the 2014 survey among New Mexico voters with a large Hispanic population who bear the brunt of the laws concluded that 51% of them do not see the laws as a barrier to voting and 70% accept them as a safeguard against fraud (11).

Along with the implementation of voter ID laws, American society has become increasingly dependent on technology such as electronic voting and automated voter registration systems. The breach of the electronic books in North Carolina, Florida, and Illinois by Russian government agents in 2016 (12) raised the possibility of votes being altered and thus compounded a threat to public confidence in the 2020 election results. In contrast to many known studies on the effects of voter ID laws, the existing literature on the subject of cybersecurity is scarce due to it being a relatively new domain. However, this seems to emphasize the inadequate communication of threats to public and state election officials. In a report prepared by the Cyber Law Program at the Hebrew University in Jerusalem, the findings point to secrecy in American cyber policies that tend to be limited to solely detecting and containing security breaches (13). Consequently, public knowledge of the attacks is limited to what is leaked to the press, which is enshrouded in sensationalism. For example, according to one account published in the *Washington Post* in June 2019, twenty-one states were targeted by the Russian agents in 2016 (12) while its July publication included the Senate panel's report alleging all fifty states becoming the subject of interference (14).

Most information about cybersecurity comes from government and corporate reports that assess states' preparedness for the 2020 election in an effort to substantiate federal funding for security upgrades. The most comprehensive report concerning levels of vulnerability in all fifty states was prepared by the Center for American Progress in cooperation with the U.S. Election Assistance Commission and top election officials. Based on their assessment of a given state's compliance with baseline security standards mandated by federal regulations, the authors found that five states are failing the expectations, twelve receive a "D" grade, and twenty-three states rate at a "C", which poses high risks for cyberattacks (15). Moreover, similar reports analyzing the threats to the voting process that have been prepared by the Brennan Center for Justice (BCJ) focus predominantly on electronic vulnerabilities such as outdated machines susceptible to hacking, states' use of electronic touch screen machines without a verifiable paper trail, or the scarcity of post-election paper audits (16).

These findings are crucial in leading to our research. In our study, we aimed to determine how many voters are aware of the vulnerability of electronic voting infrastructures to foreign interference compared with how many just express a basic concern about the identity of voters. The goal of our study was to examine which threat is more significant to the public, physical impersonation or compromised cybersecurity, and

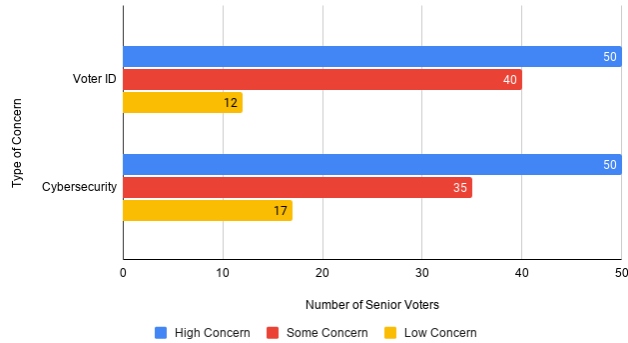
subsequently, if the perception concerning the type of threat tends to align with a respondent's age. We posed a hypothesis that senior voters will focus on voter ID while students will latch onto cybersecurity. Besides gauging the correlation between voters' ages and the perceived security threat, we were also interested in the impact of information on shaping that perception. In a 2014 New Mexico survey (11), depending on how the questions were framed, the respondents valued ensuring access more than prevention of fraud, a finding that was later corroborated by a 2016 study that demonstrated that information campaigns and their framing have a significant influence on public perception of the laws. It concluded that when the manipulated words in questions emphasized a possible harm to African-Americans or the elderly, public support for the laws decreased from 79 to 61% (17).

The implication of this finding was significant in the formulation of our second hypothesis concerning "open-mindedness": We wanted to find out if increased public knowledge about types of threats leads to a changed perception of election security between young and old registered voters. In other words, extrapolating from our original hypothesis proposing that the older generation might be inclined to be concerned about ID laws while the younger generation growing up with a constant presence of technology might perceive existing vulnerabilities in cybersecurity, our research aimed to address if each generation is locked into a discernible way of thinking or open to acquiring new information and modifying the existing beliefs about them. Using a baseline survey to correlate age and a type of concern and then examining the impact of information frames through a paired comparison, our study confirmed that a strong positive association existed between age and concern about meeting proper identification standards at the polls and a strong negative association between age and cybersecurity concerns, even though seniors expressed an equally strong worry about electronic voting. We could not obtain validation for an influence of information on both age groups. We could only infer that the small margin of 10% out of 102 seniors seemed to be impacted by information framing.

## RESULTS

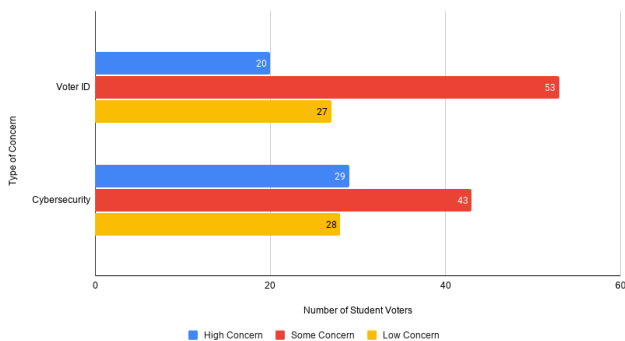
### Base Survey

Paper surveys were distributed to senior respondents (over the age of 70) and college students (ages 18 to 22) to determine generational differences in types of election security concerns and preferences. The questionnaire consisted of six questions. The first three questions collected demographic information such as voter registration status, gender, and political affiliation. The remaining three questions asked respectively how concerned a respondent was about voters meeting identification standards at the poll (People who vote are the people who they say they are), how concerned a respondent was about security of electronic machines when casting a vote (A vote will not be altered), and which is a greater threat to the 2020 election between identity fraud

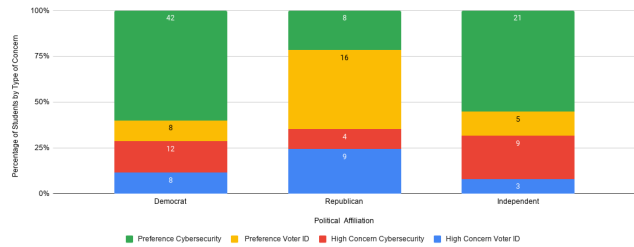


**Figure 1:** Comparison of Results for Election Concern Types in the Base Survey Among Senior Voters. Seniors (N = 102) expressed equally high concern over voter ID and cybersecurity.

(bloated registration lists or impersonation) and cyberattacks on the electronic systems. The former two questions included three options in responses: high, some, and low concern. The senior respondents included 71 females and 31 males. Among college students who participated in the study, 53 were females and 45 were males. Two students chose not to disclose their preference for gender. Data sets revealed a strong positive association between age and perception of high concern for the voter ID standards. In a chi-squared test, the relation between the variables of age and high and low concern for voter ID was significant,  $X^2(1, N=109) = 16.8819, p = 0.00004$ . Significant at  $p < 0.05$ . One in five young people (20%) expressed high concern while that number rose to 50% among older subjects. Likewise, a strong negative association was found between “low concern” for voter ID and age. Only 12% of older respondents thought that voter ID concern was insignificant whereas over double that number (27%) of young people dismissed the problem (Figures 1 & 2). There was no association found between the “some concern” answer for voter ID and age because a smaller difference existed between both age groups. Half of the young respondents (53%) expressed “some concern” compared with 40% of the seniors in the same category (Figures 1 & 2). The chi-squared relationship between age and “some” levels of concern was not significant,  $X^2(1, N= 132) = 1.7246, p = 0.189097$ . Not significant at  $p < 0.05$ . Of those seniors who thought that voter



**Figure 2:** Comparison of Results for Election Concern Types in the Base Survey Among College Students. Only about half as many students (N = 100) as seniors (N = 102) had high concerns, overall keeping low levels of concerns over both threats.

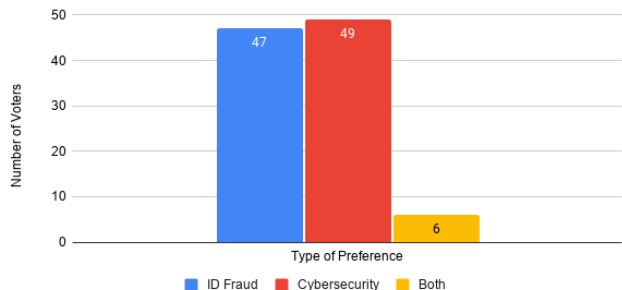


**Figure 3:** Comparison of Perception of Election Threats Among College Students Given Political Affiliations. 77.1% of college students who either expressed the preference for cybersecurity as a bigger threat or were highly concerned about it were Democrats.

ID was of “high concern”, 43% were Democrats and 53% were Republicans. In parallel, only 16% of young Democrats and twice as many Republicans (37%) viewed voter ID as a “high concern” (Figure 3).

Data sets with respect to “high concern” for cybersecurity pointed to a strong positive association between the responses and age: 29% of young respondents expressed high concern and the number rose to 50% in the older population (Figures 1 & 2). In a chi-squared test, the relation between the variables of age and concern for cybersecurity was significant,  $X^2(1, N=124) = 7.5136, p = 0.006124$ . Significant at  $p < 0.05$ . Our research revealed that older people expressed equally high concern for both voter ID and cybersecurity. There was a strong negative association between age and “low concern” for cybersecurity, with a decrease from 28% in young people to 17% in the older population (Figures 1 & 2). No association was found between age and “some concern” for cybersecurity: 43% of young students gave a neutral answer and this number decreased to 35% among seniors. The chi-squared relationship between age and “some” levels of concern was not significant,  $X^2(1, N= 132) = 0.5885, p = 0.443006$ . Not significant at  $p < 0.05$ . When comparing the values for the “some concern” category across voter ID and cybersecurity among old people, the difference of 5% was minimal (40% of “some concern” for voter ID and 35% of “some concern” for cybersecurity), indicating that about the same percentage did not care about both (Figure 1). When comparing “low concern” for voter ID and cybersecurity in young people, the numbers were almost equal: 27% for ID and 28% for cybersecurity (Figure 2). Similarly, the low percentage for “low concern” among old people was closely dispersed between 12% for voter ID and 17% for cybersecurity.

Young people typically did not express high concerns about cybersecurity: only three in ten (29%). The highest number (43%) was for those expressing “some concern” or the neutral position about cybersecurity. The same trend could be observed in the college students’ responses of “high” and “low concern” for voter ID, with 20% and 27% respectively, and the middle answer (“some concern”) taking up the highest percentage of 53% (Figure 2). This is, however, different for the old-age group which clearly displayed a disproportion between the “high concern” answer of 50% for voter ID and its “low concern” of 12%. Likewise, five in ten

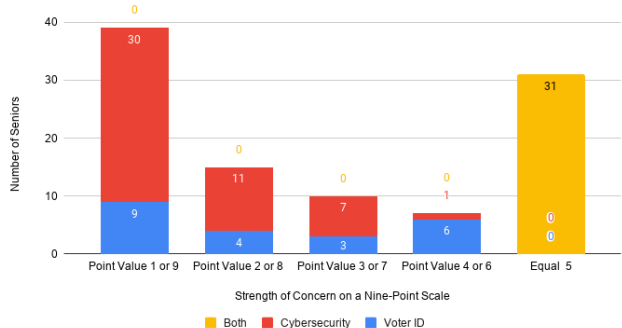


**Figure 4:** Comparison of Type of Election Security Preference in the Base Survey Among Senior Voters (N = 102). Almost 50% of the seniors kept their preference for the importance of cybersecurity.

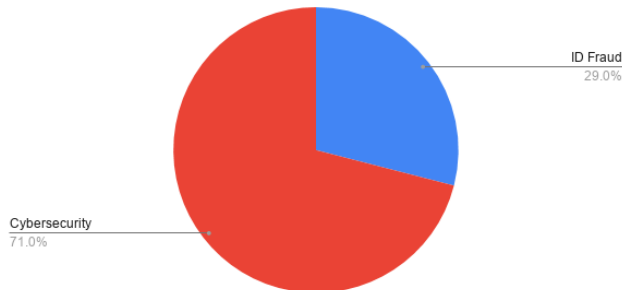
older respondents chose "high concern" for cybersecurity and only 17% selected "low concern" (Figure 1). In theory, higher concern about voter ID fraud should correlate with a perception that voter ID fraud is a greater threat than cybersecurity (as measured in the base survey); however, no such association was found. The chi-squared relation between these survey answers was not significant,  $\chi^2(1, N=146) = 1.5018, p = 0.220394$ . Not significant at  $p < 0.05$ . Older people were quite consistent, only slightly leaning towards cybersecurity (48%) and retaining their support for voter ID at 46% (Figure 4). In contrast, the majority of young people (71%) were leaning towards cybersecurity as opposed to 29% choosing earlier voter ID as a high concern (Figure 5). The correlation between age and choice for cybersecurity was significant,  $\chi^2(1, N=199) = 9.6018, p = 0.001934$ . Significant at  $p < 0.05$ .

### Paired Comparison Survey

The second phase of paper surveys was distributed to the same groups of respondents. It was meant to measure the impact of information framing on their perceptions of the same two election threats, voter identification and cybersecurity. Each respondent was asked to read a side-by-side short comparison of the alarming incidents, procedures, or regulations that had recently opened the ID laws and electronic voting to abuse. Then, the subjects were asked to rate on a scale of one to nine which of the two security vulnerabilities they would prefer to be addressed in the 2020



**Figure 6:** Results of Preference for Security Vulnerability Among Seniors (N = 102) in a Paired Comparison Survey. Given side-by-side information, almost 40% of seniors strongly felt that the election securities should be addressed.

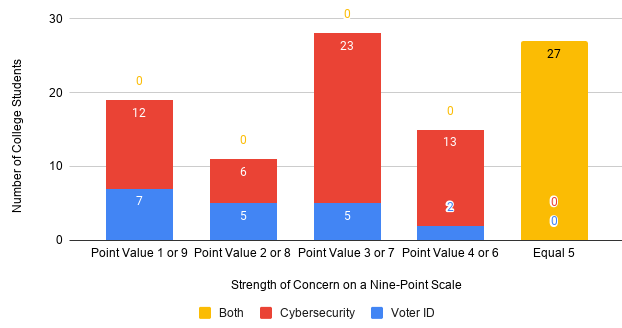


**Figure 5:** Comparison of Type of Election Security Preference in the Base Survey Among College Students. 71% of young voters chose cybersecurity as their primary election concern.

election. Three in ten seniors (30%) recorded strong (9 on the scale) concern for cybersecurity while 31% reported equal (5) concern for cybersecurity and voter ID standards (Figure 6). There were nine senior responses (1 on the scale) of strong concern about voter ID standards. Twenty-seven percent of young people chose a value of 5, indicating equal concern for both issues, while 7% still perceived voter ID as the strong concern (1), for a total of 34%—still a 5% increase from the original 29% (Figure 7). Young people's concern for cyberattacks seemed to be now more dispersed on the scale, with 12% perceiving it as strong (9), 6% choosing a value of 8, 23% opting for 7 on the scale, and 13% for a value of 6. We performed two-tailed tests for the differences in the ratings between seniors and students: one for voter ID and one for cybersecurity.  $H_0$ : Mean (u) = 0 (No difference)  $H_a$ : Mean (u) does not equal 0 (Two-tailed). For voter ID, there was no statistically significant evidence to support the claim that the seniors' answers were different from students',  $t = 1.1209, p = 0.3251$ . The same was true about the test for cybersecurity:  $t = -0.1589, p = 0.8839$  at  $p < 0.05$ .

### DISCUSSION

The aim of our research was to determine if there was an association between older age and concern about voter ID fraud as well as between younger age and cybersecurity. Additionally, we wanted to find out if there was a significant difference between both age groups and their reaction to new information about these threats.



**Figure 7:** Results of Preference for Security Vulnerability Among Students (N = 100) in a Paired Comparison Survey. The distribution of concerns was more evenly dispersed, with less than 20% of students expressing strong feelings.

### Phase One

Data sets on the base survey showed an overall lower rate of “high concern” for voter ID and cybersecurity in young people when compared with seniors. The older generation came out equally troubled by both concerns. Senior citizens tended to be more concerned and worrisome in general. Since Krosnick (18) suggests that the “some concern” answer reflects neutrality, the drop in percentage with age for that type of answer might indicate more crystallized fears and worries about the electoral process among older people. The findings for the young group were consistent with our original hypothesis: the young generation predominantly expressed concern about cybersecurity even though the “high concern” answer gauging the level of worry about security of electronic machines when casting a vote did not exactly match their preference of “cyberattacks on the electronic systems” when asked to choose a greater threat. However, the discrepancies between overall concerns and preferences are not entirely surprising. According to a study conducted by Ansolabehere *et al.*, what the public professes is not a reliable source of determination about the actual public concern. For example, in his study of the election turnout contingent upon beliefs about the frequency of voter fraud, he found that there was no significant difference in the number of validated votes in the 2006 general election between those who believed that fraud is a “very common” occurrence and those who reported fraud to be “infrequent” (4).

The lower numbers of Democrats in both age groups who expressed “high concern” about voter ID fraud were consistent with the partisan difference concerning the support for voter ID laws found in earlier studies which concluded that citizens support or oppose the ID laws based on their party loyalty, with Republicans increasing their support for the laws if there is even a “minuscule amount of in-person voter fraud” (19). We found that 16% of Republicans and 24% of Democrats chose the “high concern” option in response to the question about cybersecurity (**Figure 3**). We also noticed a similar frequency of partisan concern about cybersecurity among old voters: 56% of Democrats and only 32% of Republicans saw it as a “high concern”. While a political party was not a focus of our research, we decided to collect the data on party affiliation to observe if Democrats, regardless of age, are more concerned about cybersecurity than Republicans in our results.

### Phase Two

Another finding was that the information framing had no effect on either of the age groups. The choice of scaled paired comparison as an optimal design came from our intention to make response options exhaustive and yet mutually exclusive. Therefore, we chose a dichotomy to allow for the reporting of extreme attitudes and still be able to select a midpoint with a neutral attitude. Its simplicity and ease of administration in a short period of time were also our considerations. After reading information about voter identification and cybersecurity, the group of seniors seemed to be more

impacted by them than the young respondents. While 30% of concern for cybersecurity seems lower than the original 50%, a closer analysis might reveal a different conclusion. To clarify, even though the original design of the nine-point scale suggested the midpoint to be neutral, by observing the reactions of the participants and inferring from their clarifying questions, it is more plausible to consider a score of 5 (Equal) on the scale as the indicator of equally strong concern for both types of threats. Therefore, when combined, both responses for cyber concern were at 61% while merging strong concern for voter ID (9 responses that chose 1) with 31 responses with the middle value of 5 yielded 41% of high concern for voter ID among seniors. Overall, the information shifted the perception by about 10% on both sides, lowering the concern for voter ID by about 10% and increasing the concern for cybersecurity by 10%. When using a single sample t-test, this conclusion is significant for the population mean ( $\mu$ )=50,  $t(102) = -4.3203$ , at  $p < 0.05$ . Now, looking at the raw data of high concern responses about voter ID and cybersecurity, 9 and 30 respectively, there was no significant effect for age when performing two-tailed tests for the differences in the ratings.

When it comes to college students, information framing seemed to have an even less discernible impact. The information did not change their opinion about voter ID. Considering that originally 71% of young people chose the preference for cybersecurity, that 39% chose the strong preference in this phase (27% of responses consisted of 5 and 12% of 9) constituted a big drop. This might indicate that they were considering the received information and it decreased the strength of their perception, but a different explanation is also plausible. Since the frames did not shift their preference towards voter ID, it is also possible that the information had little impact in view of the fact that in the first survey, the participants only had a choice between voter ID and cybersecurity while the scale allowed for different degrees of concern, thus better reflecting subtleties in perception in the first place. Overall, the findings did not seem to support our second hypothesis that young people’s perceptions have higher susceptibility to the impact of information. There are a few explanations for such results. Firstly, a major confounder that has become more prevalent recently are misinformation campaigns and the rise of “alternative facts” or “fake news.” Even though we cited information from credible sources, it was difficult to earn enough trust from the respondents for them to be willing to accept new information. Secondly, the Stanford study from 2016 already established that the passage of strict voter ID laws made a marginal difference in the voters’ knowledge about their existence (5). When asked about their states’ legal voting requirements, 68% of the American public in nineteen states that lacked them in 2015 nevertheless reported either absence of knowledge or a misguided belief about the required documentation (5). This seemed to be particularly true for the younger generation.

### Limitations and Implications

The small sample of respondents posed the largest limitation. Additionally, in order to measure an actual significant change in the views of both age groups, a repeated longitudinal study is needed. Due to the convenience of administering the surveys at nursing homes that aggregate senior citizens, the respondents' age tended to be on average over 70 years. To increase reliability of the results, future surveys could use a more diverse and larger sample, ideally with some smaller gradation of age (a decade or two). To enhance the research and even potentially point it to a new direction of psychological study, additional questions could be added to the surveys. In her book *Political Persuasion and Attitude Change*, Diana Mutz, Professor at Stanford University, argues that "there is tremendous variability from one election to another, from one kind of issue to another, and from one social environment to another" (20). Thus, repeating the study for another election, identifying the influence of mass media, preferences for political elites, or even personality traits of the participants can play a role in determining the impact of information.

Still another limitation of the study was the unforeseen gender imbalance. Three times more females than males participated in the senior sample. Moreover, 79 college students who participated in the study were enrolled in a Political Science class, which could potentially create a bias since they already had some knowledge about the topic. Despite inherent limitations, polls and surveys seem to dominate our news and inform politicians about the public perceptions that later drive local and state decisions. For example, voter ID laws were first justified in 2000 by Republican-led majority elections in Georgia and Indiana by the widespread public concern about voter fraud (21). Moreover, states often cite public interest as sufficient to implement such laws (22). Similarly, with the widespread concern about cybersecurity among voters of all ages, a public-private partnership to administer elections or even ceding their control to an impartial judiciary rather than politicians (23) may merit more attention in the future.

### MATERIALS AND METHODS

The study design was conducted in two contiguous phases that received IRB approval from my school. In order to establish an association between age and perceived election security threat, quantitative data was first collected from a survey administered to two groups, one consisting of 102 senior citizens and the other of 100 college students. The first selected sample included a heterogeneous group of 79 students at a community college who were enrolled in five sections of Political Science 101 meeting face-to-face. A further sample was drawn from 21 randomly selected students on the same college campus. The survey was distributed during an in-person class and administered by the faculty with the permission of their Director for Institutional Research. Participation was voluntary and the students were invited to partake in a study about the upcoming election. The

completed surveys were anonymously placed in an envelope. The other sample of senior respondents was collected at three retirement homes in the north-west suburbs of Chicago with the help of the activities coordinators who advertised the event in the local bulletin and permitted us to set up the tables on site during specific times in late December 2019 and January 2020. The reason for choosing three different settings was related to the availability of the respondents as participation was anonymous and voluntary. The three venues included a wide representation of socio-economic status of the respondents, from affluent residents living on site to non-residents who come for social interaction and community outreach programs.

### Base Survey

The first survey measured perceptions of three issues related to potential 2020 election security threats: voter ID fraud, cybersecurity breaches, and which of these two should be addressed. The demographic variables that were collected included gender and political affiliation. The survey design used the scale of bipolar construct described by Krosnick (18) that consists of two opposing alternatives (slight and substantial) and a midpoint (moderate) with regard to concerns framed as two questions: "How concerned are you about voters meeting identification standards at the polls?" and "How concerned are you about the security of electronic machines when casting a vote?" Krosnick recommends using a bipolar construct for measurement of public attitudes arguing that a choice of a neutral midpoint tends to represent the status quo, the respondent's agreement with the existing state of affairs, thus yielding a collection of additional useful data. To improve data quality, the survey included verbal labeling of answer choices. The third question on the survey directly asked for the respondent's perception of a greater threat phrased as a choice between inaccurate identification or cyberattacks (**Figures 4 & 5**). Establishing this correlation was meant to test the proposed hypothesis that older voters might be more concerned about ID laws while younger respondents who are more accustomed to technology tend to be preoccupied with cybersecurity. The associations between age of the two groups (seniors and students) and levels of cybersecurity concerns as well as levels of voter identification concerns were assessed using a chi-squared test.

### Paired Comparison Survey

The second questionnaire in the design approach involved the quasi-experimental study aimed to examine the effectiveness of information in changing the perception of election security threat. It involved the same two samples of young and old voters. The second questionnaire used a design which was based on a paired comparison of two types of threats, voter ID and cybersecurity, modeled on the original experiment conducted by Magat who assessed values attached by consumers to risks associated with commercial chemical products (24). In our design, two informational

frames that pointed to current risks and vulnerabilities involved in the potential breach of the integrity of the 2020 election were posted side-by-side. Particular attention was given to a balanced length and wording between both concerns and strong wording such as “fraud” or “breach” was used. The following question was posed at the bottom of the survey, “Which security vulnerability would you prefer to be addressed in the 2020 election?” Respondents rated their preference on a nine-point scale where 1 is for “strongly concerned for voter ID”, 9 is “strongly concerned for cybersecurity”, and 5 represented indifference between them in order to test if the provided information had an influence on their perception of threats. A multi-point rating scale allows for a more precise detection of subtle differences in perception and attitudes (18). The scale of a paired comparison has been originally pioneered by Thurstone who argued that by removing verbal description in judgement, the subject can discriminate between given values with a reliability equal to discriminating between physical objects (25). Applying this design was meant to help investigate a concurrent hypothesis that older voters might be less susceptible to the influence of information and more set in their ways of thinking. The results of the second survey were then compared with the correlational data obtained through the first survey for both groups. Hypotheses about the impact were then statistically assessed through a two-tailed t-test for the differences in the ratings for voter ID and cybersecurity between seniors and students, using TI-84 Plus graphing calculator. The null hypothesis was that the Mean Difference = 0.

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