

**The Prevailing Majority and the Silenced Minority: Effects of Yik Yak and Instagram's
Anonymity Affordances on Self-Censorship**

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On my honor I have neither given nor received unauthorized information regarding this work, I have followed and will continue to observe all regulations regarding it, and I am unaware of any violation of the Honor Code by others. Lily Radtke, Brillon Joseph, Alice Whisnant, Reina Sevintuna

Abstract

Past research on self-censorship emphasized the spiral of silence theory which suggests individuals self-censor when they fear their opinions deviate from the majority. However, research failed to match changes in the most widely used social media platforms and their affordances. This study investigated fear of social isolation (FSI) as a mediator between the anonymity affordances offered by a social media platform (IV) and political expression or withdrawal (DV). It also considered political incongruence as a moderator between FSI and self-censorship. Specifically, this study aimed to address the following: How does perceived political incongruence moderate the relationship between FSI and self-censoring in college students on Yik Yak (non-anonymous platform) versus Instagram (anonymous platform)? Twenty-three undergraduate students (8 males, 14 females, 1 questioning) participated. FSI did not influence an individual's level of self-censorship. However, on Yik Yak, participants were more inclined to engage in expressive behaviors, which suggested that a platform's anonymity influences political posting behaviors. Additionally, perceived political incongruence affected FSI's influence on withdrawal behaviors, but only when it was higher than average. Further studies should use a larger sample size to consider how social media spaces can foster productive political discourse and the traits associated with political activism.

Keywords: political self-censorship, social media, anonymity, fear of social isolation, expressive behaviors, withdrawal behaviors, college students, Yik Yak, Instagram

The Prevailing Majority and the Silenced Minority: Effects of Yik Yak and Instagram's Anonymity Affordances on Self-Censorship

“Ok. Time to grow up people. We are all adults. You aren’t traumatized, the nation didn’t become a police state overnight, they aren’t rounding anymore up. How do you expect to succeed in the real world if you can’t even handle your candidate losing?” read one post found on Yik Tak following the results of the 2024 U.S. Presidential Election (Anonymous, 2024b). Other Yaks echoed different perspectives, ranging from “we were so silly to think they’d pick a woman over a rapist” to “Maybe next time don’t pick the DEI hire as your candidate and don’t throw away the popular governor from PA as a running mate” (Anonymous, 2024c; Anonymous 2024a). Most posts ridiculed opposing perspectives and included vulgar language. Although other social media platforms like Instagram feature heavy polarization, political content on these platforms often appears more PG and includes far less obscenity (Suler, 2004).

The spiral of silence theory, which posits that people censor their opinions when they perceive their beliefs as out of line with those of the majority, is useful for explaining why some people opt against posting political content on their social media platform (Hayes et al., 2018). Researchers have explored the theory in detail, and much of the literature on political self-censorship on social media justified their research hypotheses with this theory. On Instagram specifically, users reported that they chose not to post their political opinions at all on social media sites like Instagram, specifying that they did this because the platform lacked anonymity given the public username (Gera et al., 2020). However, although this theory aligns with the behavior of Instagram users, it does not explain why people expressed their political opinions on Yik Yak, an anonymous platform widely used by college students. The app combines elements of X (formerly known as Twitter) and Reddit, as users post discussion threads under randomly

assigned usernames. People can leave comments on, upvote (similar to liking a post), or downvote (express disagreement) the discussion thread. The platform is geo-bound, meaning that users from specific communities, like a college campus, can only see posts from within a 5-mile radius. Drawing on this difference in the frequency of posts made and the nature of the content featured on Instagram versus Yik Yak, we centered our research on the following question: How does perceived political incongruence moderate the relationship between FSI and self-censoring in college students on Yik Yak versus Instagram?

Understanding political self-censorship on social media platforms proves especially useful to the field of social psychology in discerning patterns of group conformity on expression. Research suggested that in the 2016 and 2020 elections, X's content tended to be more liberal focused, meaning conservative viewpoints fell into the minority category (Fujiwara et al., 2024). Therefore, those aligned with more conservative viewpoints exhibited a greater susceptibility to self-censors and more moderate individuals were persuaded to act with their perceived majority and vote against Donald Trump (Fujiwara et al., 2024). Based on this, Instagram, which offers similar anonymity affordances to X, has the potential to sway college students' political beliefs depending on which political party falls within the minority and which in the majority. Anonymity affordance is a term used to characterize the extent to which an app's features allow the user to hide their identity. On the other hand, with Yik Yak offering high anonymity affordances, opinions from both parties are likely reflected in posts which could make college students more comfortable with voting for the candidate they truly support.

Most research on political expression and social media use has failed to keep up with the changing patterns of social media use, instead studying Facebook and X (Chan, 2018; Kushin et al., 2019; Kwon et al., 2015; Fujiwara et al., 2024). These platforms have both become obsolete

to most college students. Considering this, the following study examined how anonymity levels on social media (Yik Yak versus Instagram), fear of being excluded from social groups due to personal political beliefs, and perceived political incongruence influenced self-censorship behaviors. This enabled us to understand whether individuals were more likely to post political content on anonymous platforms compared to non-anonymous platforms where they might have perceived higher social risks. Additionally, this study analyzed both expressive and withdrawal behaviors by considering what factors influenced an individual to post or engage (like, comment, upvote) with political content as opposed to deleting or editing past posts or comments.

Spiral of Silence and Fear of Social Isolation

Past research focused on the spiral of silence (SOS) theory, indicating that political content is one of the most frequently self-censored topics (Gera et al., 2020). Developed by Noelle-Neuman, the SOS theory posits that individuals monitor the opinions of others on social media, only expressing their personal political beliefs when they align with the majority or the popular opinion. The SOS proposes that because people fear being isolated from their family, friends, or other social groups, they align their behavior and opinions with perceived norms (Hayes et al., 2018). This fear is referred to as fear of social isolation (FSI). Chan (2018) found that when individuals perceived an incongruence between their political beliefs and the beliefs of the majority, therefore placing them in the minority, they self-censored on social media. Consequently, because perceived minority beliefs are seldom shared, the SOS posits that they remain “silenced” while beliefs held by the perceived majority (popular beliefs) dominate social media platforms (Burnett et al., 2022). Beliefs from the vocal majority are then amplified, perpetuating the SOS.

Anonymity

Some research suggested that anonymity on a social media platform disrupted the spiral of silence as both minority and majority opinions were often shared on these platforms (Chan, 2018; Lane et al., 2018). Specifically, Chan (2018) found that when individuals had a stronger connection to their social network (i.e. they personally know their followers), they were incentivized to self-censor their political opinions. Based on this, it seems plausible that when there is no way for social networks to identify who posted what, people would feel less inclined to self-censor their beliefs. Literature indicated that this was the case on Yik Yak. Because Yik Yak is anonymous, many users reported feeling comfortable sharing authentic opinions without fearing the social consequences often felt when an account is attached to their name (Lane et al., 2018; Kang et al., 2013). Conversely, on apps with low privacy settings and no anonymity affordances such as Instagram, FSI and the desire to avoid conflict drove users to express fewer disagreeing political opinions (Chen, 2018; Powers et al., 2019).

Political Incongruence

Perceived political incongruence is best understood as a perceived difference between a person's political opinions and ones commonly seen on social media. Research found that perceived opinion congruence and fear of isolation can influence an individual's willingness to self censor their political beliefs (Kushin et al., 2019). Chen (2018) backed this conclusion, finding that FSI indirectly influenced social media users to self censor, but only when perceived political incongruence was high and privacy settings low (meaning they have no anonymity). This was especially true when elections were characterized by extremely polarized ideologies between the two primary presidential candidates and their supporters, which we commonly see in the United States (Matthes, 2018). Matthes noted that the more people perceived their opinions to align with others, the more willing they were to post their opinions.

However, this finding was not consistent across all literature. Some literature looked at both exposure to diverse political opinions and perceived political incongruence, finding that exposure to differing political opinions contributed to declined political posting whereas perceived political incongruence had no significant effect on posting. Exposure to diverse opinions means that people see both majority and minority political beliefs while perceived political congruence refers directly to how an individual feels. Exposure to diverse political opinions might lead an individual to feel politically incongruent, but only when they interpret the range of opinions they see to differ from their own (Kwon et al., 2015). Given this divide in research conclusions, we decided to also consider the effect of perceived political incongruence as a moderator between FSI and posting behaviors.

Self-Censorship Behaviors

To encompass the range of behaviors and possibilities on social media, we considered two types of self-censorship behavior: expressive behavior and withdrawal behavior. Expressive behaviors include upvoting or commenting on a post, sharing something to a story, or making a politically-relevant post. Withdrawal behaviors include deleting comments or posts, asking to be untagged from a post that references politics, or unfollowing political accounts (Chen, 2018). High expressive behavior indicated low self-censorship levels while high withdrawal behaviors indicated high levels of self-censorship.

Gaps in Existing Literature

While several studies, including Kushin et al. (2019), looked at the impact of online anonymity on individuals' willingness to share political opinions, none of the reviewed literature simultaneously compared anonymous and non-anonymous platforms and the effect on political expression or withdrawal behaviors among college students specifically. Therefore, our specific

research moved beyond the prior focus on the general adult population and focused on college students to understand the mechanisms that potentially underlay the desire for political self-censorship on social media. To do this, we considered Yik Yak and Instagram, two platforms widely used by college students.

The Present Research

Drawing on past research that suggested fear of social isolation led people to self-censor their political opinions, that anonymity affordances increased comfort with posting political content, and that perceived political incongruence was associated with greater self-censorship (Chen, 2018; Lane et al., 2018; Hayes et al., 2018), we proposed five hypotheses:

H1: FSI is positively correlated with self-censorship behaviors.

H2: Students are more inclined to self-censor political content on Instagram than on Yik Yak. In other words, level of anonymity is negatively correlated with self-censorship behaviors.

H3: Perceived political incongruence moderates the relationship between FSI and self-censorship behaviors, such that as perceived political incongruence increases, the relationship between FSI and self-censorship strengthens.

H4: FSI mediates the relationship between platform and self-censorship behaviors and the relationship between FSI and self-censorship behaviors (both expressive and withdrawal behaviors) is moderated by perceived political incongruence. When perceived political incongruence is high, the effect of platform on self-censorship related behaviors, as mediated through FSI, is greater.

H5: Students who identify with the winning political party (as announced after the election) are less likely to self-censor following the election whereas students aligning with the losing political party are more likely to self-censor following the election. These tendencies

differ from their tendencies to self-censor prior to the election. This connects to the idea of perceived political incongruence, as we hypothesize that those identifying with the winning party report lower levels of perceived political incongruence compared to those who affiliated with the losing party.

The independent variable was level of anonymity and the dependent variable was self-censorship behaviors on social media. We manipulated the independent variable by randomly assigning participants to the Yik Yak condition (a social media platform with high levels of anonymity) or the Instagram condition (a social media platform with low levels of anonymity). We also measured FSI to analyze its influence as a mediator between anonymity conditions and expressive and withdrawal behaviors and measured perceived political incongruence to analyze its effects as a moderator of the relationship between FSI and expressive and withdrawal behaviors (see Figure 1). We collected demographic information at the completion of the study.

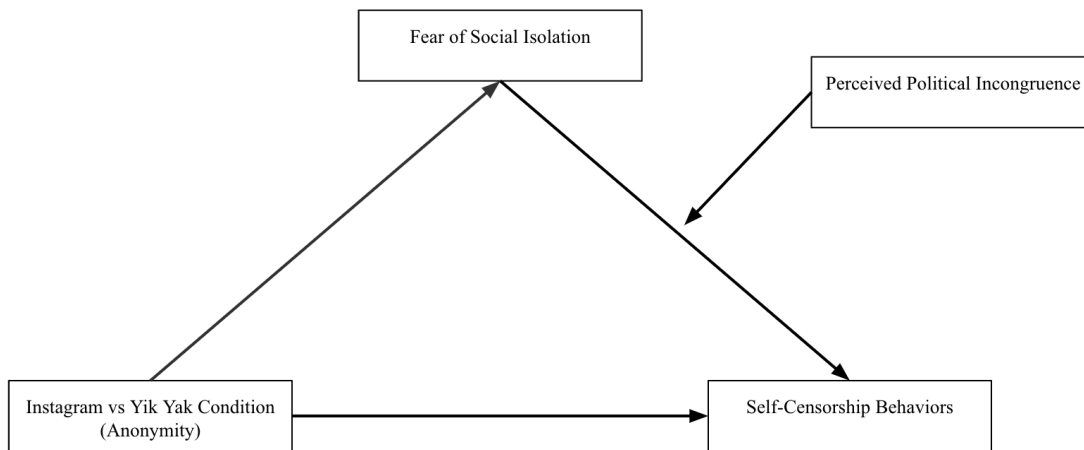
Data collection occurred in late October and early November during a presidential election year. Because we predicted the election would influence perceived political incongruence (those aligning with the winning party would report less perceived political incongruence), we kept track of whether the data was collected before or after election day. We included these findings in the results section.

By including FSI as a mediator and perceived political incongruence as a moderator within our model, we expanded on current research findings that emphasized the SOS theory and the role of perceived political incongruence on self-censorship. However, we also sought to expand existing knowledge. We used more relevant and widely used social media platforms as

the independent variables and also considered the influence of the presidential election results on withdrawal and expressive behaviors.

Figure 1

Proposed Mediation Moderator Model of the Relationship Between Anonymity, Fear of Social Isolation, Perceived Political Incongruence, and Self-Censorship Behaviors



Note. The final mediation moderator model breaks down self-censorship behaviors into expressive and withdrawal behaviors.

Method

Participants

Based on the small size of the Davidson College participant pool, we aimed to recruit 20 participants. 23 undergraduate students (8 male, 14 female, 1 questioning) between the ages of 18 and 21 ($M = 19.40$, $SD = 1.12$) participated in exchange for a research credit for their 100 or 200 level psychology course or to be entered into a raffle for a Davidson College Yeti Tumbler. We recruited all participants in our convenience sample via the participant pool or advertisement sent to their college email accounts. Student ethnicities and political affiliation are seen in Tables 1 and 2 respectively. Socioeconomic class identifications ranged from lower class to upper class (see Table 1 for demographic information). Eligibility criteria required that participants be undergraduate students and at least 18 years old. No participants were excluded from the final data analysis.

Table 1*Demographics*

Characteristic	<i>n</i>	%
Age		
18	5	21.7
19	10	43.5
20	2	8.7
21	6	26.1
Ethnicity		
African American	1	4.3
Hispanic	6	26.1
White	14	60.9
Asian	1	4.3
Asian/Caucasian	1	4.3
Socioeconomic Status		
Lower class	1	4.3
Lower middle class	5	21.7
Middle class	6	26.1
Upper middle class	6	26.1
Upper class	3	13
Prefer not to disclose	2	8.7
Sexual Orientation		
Bisexual	5	21.7
Lesbian	1	4.3
Pansexual	1	4.3
Queer	1	4.3
Questioning or unsure	1	4.3
Straight	13	56.5
Prefer not to disclose	1	4.3

Table 2*Ideologies and U.S. Voter Status*

Scale	<i>n</i>	%
Personal Ideology		
Very strong democrat/liberal perspectives	3	13.0
Democrat/liberal perspectives	10	43.5
More moderate but leaning liberal perspectives	4	17.4
More moderate but leaning conservative perspectives	4	17.4
Conservative/republican perspectives	1	4.3
Very strong conservative/republican perspectives	1	4.3
Eligible to Vote in United States		
Yes	21	91.3
No	2	8.7

Materials*Perceived Political Incongruence*

We modified Kwon et al.'s (2015) measure of perceived political (in)congruence with others' political views on Facebook to assess perceived political incongruence between a participant's political opinion and the majority views shared on social media platforms. The survey questions asked "what is your political orientation?" and "what is the political orientation of the majority of people you interact with on social media." Participants provided their responses on a scale of 1 (*very strong democrat/liberal perspectives*) to 6 (*very strong republican/conservative perspective*). To determine the degree of perceived political incongruence, we took the absolute value of the difference scores between each question. A score of zero indicated no perceived political incongruence while a score of 5 indicated the highest amount of perceived political incongruence. Perceived political incongruence was relatively low ($M = 0.78$, $SD = 0.80$).

Experimental Stimulus

We manipulated the anonymity level offered by the social media platform as the independent variable. To do this, we randomly assigned participants to one of two conditions: Yik Yak or Instagram. Yik Yak is a completely anonymous social media platform whereas Instagram offers very little anonymity. In the Yik Yak condition, participants viewed six mock Yik Yak posts made under the Davidson community tag (all Yik Yak posts are made within a community and each one has a tag) to make them appear more real (sample: “Setting aside who you’re voting for, violence in any form should be unacceptable”). Two posts represented more politically conservative views, two represented more politically liberal views, and two represented more neutral political posts (see Appendix B).

Participants assigned to the Instagram condition viewed a series of six mock Instagram posts by the fake account @real_political_opinions (sample: “No matter who any of us are voting for, I think we could all agree that violence of any kind should be unacceptable in our country and that no one deserves to be a victim”). Two posts featured more neutral opinions, two more liberal opinions, and two more conservative opinions. These posts included photos given that this is one of the main features of the platform (see Appendix B).

To minimize the effect of content as a confound, posts in each condition were paired with a post in the other condition. Each pair featured the same content/issues. We phrased posts slightly differently to mirror the typical jargon used on each platform. To imitate the style of traditional Yik Yak and Instagram posts, we created the stimulus materials on their respective platforms and mirrored the layout of how a post would appear on a participant’s phone. Additionally, mock Yik Yak posts had the tag “Davidson” and mock Instagram posts had the like, share, and comment option.

Fear of Social Isolation

We measured FSI using the Fear of Social Isolation Scale developed by Hayes et al. (2011). The FSI scale showed strong reliability, discriminant validity, and unidimensionality (Hayes et al., 2011). We adapted this scale to specifically measure FSI related to political opinions and social media (Burnett et al., 2022). Our adapted version of the FSI scale included 5 items (sample item: “One of the worst things that could happen to me is that my friends might block me on social media because of my political opinions.”) rated on a response scale of 1 (*strongly disagree*) to 5 (*strongly agree*) (see Appendix C). We dropped FSI5 from the analysis as it was negatively correlated with items 1-4 on the FSI scale. With this item included, scale reliability was poor ($\alpha = .54$). In the present study, internal scale reliability was acceptable ($\alpha = .73$) and we computed mean scores using FSI items 1-4 ($M = 3.00$, $SD = 0.96$).

Expressive and Withdrawal Behaviors

We adapted Chen’s (2018) scale for measuring expressive and withdrawal behaviors to measure political posting and self-censoring behaviors in the future. To measure expressive behaviors, participants responded to four items regarding supportive and disagreeing expression (sample item: “Would you express your support or disagreement for posts like the ones previously seen?”) We measured these behaviors on a 1 (*likely never*) to 4 (*likely often*) scale and averaged results to create an “expressive behavior” index in our analysis (see Appendix D). Question 4, which asks, “Would you ever refrain from posting a post expressing political beliefs on this specific platform,” was reverse coded.

To measure withdrawal behaviors, participants responded to four items on a 1 (*likely never*) to 4 (*likely often*) scale that assessed whether they would delete or edit their own posts and comments related to politics. Responses to these questions averaged to create a “withdrawal behavior” index. According to Chen (2018), high self-reported levels of expressive behavior are

associated with decreased self-censorship while high levels of withdrawal behavior are correlated with increased self-censorship. Internal scale reliability for expressive behaviors was good ($\alpha = .83$), but was questionable for withdrawal behaviors ($\alpha = .66$). Given the poor internal scale reliability, we dropped item seven which asked, “would you ever edit your social media posts related to politics on this specific platform,” because users are unable to edit Yik Yak posts. Scale reliability on the withdrawal behavior scale was acceptable when we removed this item ($\alpha = .77$). We also computed the mean scores for expressive ($M = 2.09, SD = 0.88$) and withdrawal behaviors ($M = 2.15, SD = 0.63$).

Procedure

After signing up for a time slot on SONA, participants received instructions regarding the study location. All participants completed the study in-person in the same lab space. We presented materials on a desktop computer via a Qualtrics survey. Upon entering the lab, participants read and signed an informed consent form. If participants had any questions during the course of the study, we encouraged them to ask the researcher. Participants could not access study materials until they confirmed their eligibility and indicated that they consented to participate. Participants had the right to withdraw at any point without loss of their research credit.

After completing the consent form, participants officially began the study. The researcher told participants that the study measured political opinions across campus prior to and after the election. Participants were not told about the manipulation and that there were two separate conditions until the end of the study. We instructed participants that the results of the study were confidential and encouraged them to be honest in their self-report.

Participants began by completing the Perceived Political Incongruence measure. Qualtrics then randomly assigned participants to one of the two independent variable intervention conditions (Yik Yak or Instagram). Directions for those in the Yik Yak condition read, “You are about to view posts made on Yik Yak, an anonymous social media platform, by Davidson students. Please consider and remember how you would interact with these posts if they appeared in your personal feed.” Instructions for the Instagram condition read, “You are about to view posts made on Instagram, a non-anonymous social media platform. These posts were made on an account called @real_political_opinions_ and featured the political opinions sent in by Davidson College students. Please consider and remember how you would interact with these posts if they appeared in your personal feed.” To minimize looking time as a confound, participants could advance to the next slide only after 20 seconds and all images auto-advanced after 25 seconds. To minimize order effects, post presentation order was counterbalanced. Participants were not told that the posts were fake until the debriefing portion of the study.

After viewing the mock posts, participants completed the FSI scale and Expressive and Withdrawal Behaviors measure. Prior to completing the Expressive and Withdrawal Behaviors measure, directions on the computer screen prompted participants to think back about how they would interact with the posts they viewed. Finally, participants completed a brief demographic survey asking for their college year, age, gender identity, sexual orientation, ethnicity, socioeconomic status, and eligibility to vote (see Appendix E). To ensure that our measure of demographic information was inclusive to a range of identities, we followed Vanderbilt University’s Guidelines (2024) when creating the questionnaire. Responses to the demographic questionnaire were anonymous, which we reminded participants prior to completion.

After completing these steps, we provided participants with a paper sheet containing debriefing information about this study (see Appendix F). The debriefing form detailed our study's true purpose and participants were told that the posts were mock posts created for the sake of research. The debriefing page also provided participants with the contact information for the student researchers and faculty sponsor.

Results

To test the proposed hypotheses, we used the Gross Linear Model (GLM) mediation model function in JAMOVI. We created two models, one in which the outcome variable was expressive behaviors and the other in which the outcome was withdrawal behaviors. Employing this model allowed us to simultaneously measure mediation and moderation and ascertain both direct and indirect effects on the relationship between anonymity level and self-censorship behavior on social media (see Figure 2 and Figure 3).

Prior to building this model, we ran a correlation matrix to determine whether to consider withdrawal and expressive behaviors as two separate outcomes or to group them together under the larger category of "self-censorship behaviors." There was no correlation between withdrawal and expressive behaviors, $r(22) = -.08, p = .73$, so we computed two separate models. Given that the correlation coefficient was so low, this suggested that withdrawal behaviors and expressive behaviors were not related, meaning that a change in one did not influence a change in the other. One model looked at the mediation effect of FSI on anonymity's influence on expressive behaviors when moderated by perceived political incongruence and the other looked at the effect on withdrawal behaviors.

Hypothesis 1

Results of the component effect within the GLM model failed to support H1 that FSI (mediator) was positively correlated with self-censorship behaviors (DV). FSI did not predict expressive behaviors ($\beta = -.03, p = .90, 95\% \text{ CI } [-0.36, 0.33], SE = 0.18$) or withdrawal behaviors ($\beta = .24, p = .28, 95\% \text{ CI } [-0.15, 0.53], SE = 0.17$). This finding suggested that even as FSI increased, expressive behaviors did not decrease. Withdrawal behaviors were also uninfluenced by FSI, meaning that even as FSI increased, individuals' tendencies to redact political opinions from their social media platforms did not change.

Hypothesis 2

H2 proposed that students would be more inclined to self-censor political content on Instagram than on Yik Yak. Results of the mediation model showed a significant direct effect of condition on expressive behaviors ($\beta = -.52, p = .01, 95\% \text{ CI } [-1.58, -0.22], SE = 0.35$), indicating that as anonymity decreased, expressive political posting behaviors also decreased.

However, results supported H2 only when measuring expressive behaviors. For withdrawal behaviors, there was no direct effect of condition ($\beta = .09, p = .69, 95\% \text{ CI } [-0.52, 0.79], SE = 0.34$). This indicated that although individuals were more likely to post political content when a platform offered greater anonymity, the level of anonymity on Instagram compared to Yik Yak did not influence whether they deleted or edited past political posts and comments or removed likes from posts featuring political content.

Hypothesis 3

H3 proposed that perceived political incongruence would moderate the relationship between FSI and self-censorship behaviors, such that as perceived political incongruence increased, the relationship between FSI and self-censorship would strengthen. However, the role of perceived political incongruence failed to reach significance for expressive behaviors (see

Table 3). For withdrawal behaviors, perceived political incongruence did not moderate the relationship between FSI and withdrawal behaviors when it was lower than average levels. However, perceived political incongruence higher than average levels did moderate the relationship between FSI and withdrawal behaviors (see Table 4).

Table 3

Moderator Analysis: Role of Perceived Political Incongruence in Relationship Between Fear of Social Isolation and Expressive Behaviors

Moderation Levels	Estimate	SE	95% CI		p
			LL	UL	
Perceived Political Incongruence					
Mean-1·SD	.13	0.18	-0.21	0.48	.45
Mean	-.06	0.18	-0.41	0.28	.72
Mean+1·SD	-.26	0.18	-0.60	0.09	.14

Note. Number of responses = 23. CI = confidence interval; *LL* = lower limit; *UL* = upper limit; SD = standard deviation.

Table 4

Moderator Analysis: Role of Perceived Political Incongruence in Relationship Between Fear of Social Isolation and Withdrawal Behaviors

Moderation Levels	Estimate	SE	95% CI		p
			LL	UL	
Perceived Political Incongruence					
Mean-1·SD	.01	0.17	-0.31	0.34	.95
Mean	.26	0.17	-0.06	0.58	.12
Mean+1·SD	.51	0.17	0.19	0.83	.002

Note. Number of responses = 23. CI = confidence interval; *LL* = lower limit; *UL* = upper limit; SD = standard deviation.

These results indicated that perceived political incongruence only moderated the relationship between FSI and withdrawal behaviors. Specifically, as perceived political incongruence increased, FSI's influence on whether an individual withdrew from social media and deleted or edited politically related posts also increased. Perceived political incongruence did not affect the extent to which FSI influenced expressive behaviors.

Hypothesis 4

H4 had two elements: (a) FSI mediates the relationship between anonymity affordance via platform type and self-censorship behaviors and (b) the mediated relationship between anonymity and self-censorship behaviors (both expressive and withdrawal behaviors) is moderated by perceived political incongruence. When perceived political incongruence was high, the effect of platform on self-censorship related behaviors, as mediated through FSI, is greater.

In the model without perceived political incongruence, the indirect effect between condition, FSI, and expressive behaviors was insignificant ($\beta = -.01$, $p = .90$, 95% CI [-0.31, 0.27], $SE = 0.16$), suggesting that levels of FSI did not influence the role of anonymity level on expressive behavior. This was also the case for the role of FSI as a mediator between condition and withdrawal behavior ($\beta = .10$, $p = .33$, 95% CI [-0.16, 0.47], $SE = 0.16$). These findings regarding the indirect effect of FSI on expressive and withdrawal behaviors indicated that an individual's FSI did not shape the degree to which anonymity influenced their self-censorship behaviors.

The results of the GLM mediation analyses addressed the second element of H4. When participants reported levels of perceived incongruence 1 SD greater than mean levels, meaning they viewed their political beliefs as deviating from the majority, the role of FSI as a mediator

between anonymity level and expressive behavior remained insignificant (See Table 5). For the model looking at the role of FSI as a mediator between anonymity withdrawal behaviors, the indirect effect approached significance. However, the model ultimately indicated that for those who reported higher than average levels of perceived political incongruence, withdrawal behaviors did not change even as FSI decreased (See Table 6). Figures 2 and 3 outline this model for expressive and withdrawal behaviors respectively.

The insignificance of the indirect effect for all pathways suggested that the relationship between levels of anonymity and self-censorship behavior was not mediated by FSI. Specifically, those with high levels of FSI do not self-censor more than those with lower levels of FSI like we originally predicted. For individuals reporting greater levels of perceived political incongruence, the relationship between anonymity and self-censorship behavior as mediated by FSI did not differ from those who reported average perceived political incongruence levels or low levels of perceived political incongruence.

Table 5*Results of Mediation Moderator Model on Relationship Between Anonymity, Fear of Social**Isolation, Perceived Political Incongruence, and Expressive Behaviors*

Moderation Levels	Path	Effect	Estimate	SE	95% CI		p
					LL	UL	
Perceived Political Incongruence							
Mean-1·SD	Indirect	Condition1 ⇒ FSI ⇒ Expressive	.11	0.16	-0.16	0.42	.47
Mean-1·SD	Component	Condition1 ⇒ FSI	.85	0.36	0.14	1.57	.02
Mean-1·SD	Direct	Condition1 ⇒ Expressive	-.70	0.42	-1.53	0.13	.10
Mean-1·SD	Total	Condition1 ⇒ Expressive	-.93	0.32	-1.56	-0.30	.004
Mean	Indirect	Condition1 ⇒ FSI ⇒ Expressive	-.05	0.15	-0.35	0.24	.73
Mean	Component	Condition1 ⇒ FSI	.85	0.36	0.14	1.57	.02
Mean	Direct	Condition1 ⇒ Expressive	-.70	0.38	-1.44	0.03	.06
Mean	Total	Condition1 ⇒ Expressive	-.93	0.32	-1.56	-0.30	.004
Mean+1·SD	Indirect	Condition1 ⇒ FSI ⇒ Expressive	-.12	0.18	-0.57	0.13	.21
Mean+1·SD	Component	Condition1 ⇒ FSI	.85	0.36	0.14	1.57	.02
Mean+1·SD	Direct	Condition1 ⇒ Expressive	-.70	0.34	-1.37	-0.03	.04
Mean+1·SD	Total	Condition1 ⇒ Expressive	-.93	0.32	-1.56	-0.30	.004

Note. Condition1 refers to Instagram - Yik Yak.

Table 6*Results of Mediation Moderator Model on Relationship Between Anonymity, Fear of Social**Isolation, Perceived Political Incongruence, and Withdrawal Behaviors*

Moderation Levels	Path	Effect	Estimate	SE	95% CI		p
					LL	UL	
Perceived Political Incongruence							
Mean-1·SD	Indirect	Condition1 ⇒ FSI ⇒ Withdrawal	.01	0.14	-0.27	0.29	.95
Mean-1·SD	Component	Condition1 ⇒ FSI	.85	0.36	0.14	0.16	.02
Mean-1·SD	Direct	Condition1 ⇒ Withdrawal	-.18	0.40	-0.96	0.60	.66
Mean-1·SD	Total	Condition1 ⇒ Withdrawal	.27	0.32	-0.35	0.89	.40
Mean	Indirect	Condition1 ⇒ FSI ⇒ Withdrawal	.22	0.17	-0.11	0.56	.19
Mean	Component	Condition1 ⇒ FSI	.85	0.36	0.14	1.57	.02
Mean	Direct	Condition1 ⇒ Withdrawal	-.18	0.35	-0.87	0.51	.61
Mean	Total	Condition1 ⇒ Withdrawal	.27	0.32	-0.35	0.89	.40
Mean+1·SD	Indirect	Condition1 ⇒ FSI ⇒ Withdrawal	.24	0.23	-0.02	0.90	.06
Mean+1·SD	Component	Condition1 ⇒ FSI	.85	0.36	0.14	1.57	.02
Mean+1·SD	Direct	Condition1 ⇒ Withdrawal	-.18	0.32	-0.81	0.45	.57
Mean+1·SD	Total	Condition1 ⇒ Withdrawal	.27	0.32	-0.35	0.89	.40

Note. Condition1 refers to Instagram - Yik Yak.

Hypothesis 5

We tested H5, an exploratory hypothesis, by running a between-subjects ANOVA. H5 proposed that students who identified with the winning political party (as announced after the election) are less likely to self-censor following the election whereas students aligned with the losing political party are more likely to self-censor following the election. Self-censorship behavior was the dependent variable and time (pre or post the election) and party (Democrat or Republican) were the factors. The ANOVA revealed no main effect of time $F(1, 19) = 0.00, p = 1.00, \eta p^2 = .00$, or political party affiliation, $F(1) = 0.00, p = .69, \eta p^2 = .01$. Additionally, the ANOVA indicated no significant interaction between time and party on expressive behaviors,

$F(1, 19) = 0.30, p = .60, \eta p^2 = .02$, on expressive behaviors. The ANOVA with withdrawal behaviors as the outcome variable also revealed no significant interaction between time and party, $F(1, 19) = 0.77, p = .39, \eta p^2 = .04$. Results indicated no main effect of time, $F(1, 19) = 0.05, p = .83, \eta p^2 = .00$, or political party affiliation, $F(1, 19) = 0.02, p = .90, \eta p^2 = .00$ on withdrawal behaviors. Ultimately, there was no difference in self-censorship behaviors between Democrats and Republicans before or after the election, suggesting that affiliation with the winning political party did not shape whether or not people post political content on social media.

Discussion

We posited five hypotheses: 1) there is a positive correlation between FSI and political self-censorship behaviors; 2) there is a negative correlation between the level of anonymity of the social media platform and self-censorship such that as anonymity increases, self-censorship decreases; 3) perceived political incongruence moderates the relationship between FSI and self-censorship; 4) (a) FSI mediates the relationship between anonymity affordance via platform type and self-censorship behaviors and (b) the mediated relationship between anonymity and self-censorship behaviors (both expressive and withdrawal behaviors) is moderated by perceived political incongruence; and 5) identification with the winning political party is correlated with lower self-censorship after the election.

Regarding the first hypothesis, we found no significant relationship between FSI and both expressive and withdrawal behaviors. The relationship between FSI and withdrawal behaviors was only moderately positively correlated, suggesting that, though not influential enough to determine a clear relationship and support H1, when FSI increased, so did withdrawal behaviors. The relationship between FSI and expressive behaviors was actually negatively correlated,

suggesting that when FSI increases expressive behaviors decrease. Again, however, this pattern did not reach the necessary level of significance to determine a causal relationship between the two variables. Therefore, we found no support for H1.

Some literature actually supports this finding, despite it going against our original hypothesis. Specifically, Chen (2018) concluded that FSI indirectly influences social media users to express less disagreeing political opinions. This outcome suggested that individuals with lower levels of fear of social exclusion and isolation exhibited heightened expressive behaviors, such as liking (Instagram), upvoting (Yik Yak), or commenting and creating new posts (both), but only when political disagreement with the majority opinion is also high. Considering that H1 looked at a direct effect rather than an indirect effect, based on Chen's findings, it makes sense that we found no support for this hypothesis. However, this result diverged from other literature that supported our original hypothesis, which found that a fear of social isolation correlated directly with political expression (Weeks et al., 2023).

For H2, we found a significant negative correlation between the direct effect of level of anonymity and expressive behaviors. This finding indicated that as the level of anonymity afforded by a platform increased, there was also an increase in the level of political expression on that respective platform, indicating less self-censorship. This finding is closely aligned with prior research (Lane et al., 2018), which highlighted that platforms with greater anonymity affordances are correlated with higher willingness or openness to sharing one's political views or beliefs on social media. Specifically, Lane et al. (2018) found that Yik Yak's affordances, one of which was its anonymity, generated a space where young adults could engage in political posting behaviors. While the literature extended to our finding about expressive behaviors, we found no significant relationship between anonymity affordance and withdrawal behaviors. We originally predicted

that when a social media platform offers less anonymity, withdrawal behaviors will increase (self-censorship behaviors increasing). However, this was not the case, meaning that H2 was only partially supported. The lack of support for this element of the hypothesis may be due to the idea that the mechanisms that underlie withdrawal behaviors operate independently of anonymity affordances on social media platforms. In other words, users of these social media platforms may have an increase in withdrawal behaviors in response to other factors that we may not have explored in our study, but to posit definitively is beyond the scope of our collective knowledge at this time

Regarding the third hypothesis, we found no significant moderating effect of perceived political incongruence on the relationship between FSI and expressive behaviors. This finding illustrated that perceived political incongruence did not influence the extent to which FSI shaped expressive behaviors. This deviated from what was expected based on the literature, in which the extent to which FSI shaped one's willingness to self-censor was influenced by perceived political incongruence (Kwon et al., 2015; Chen, 2018). However, this is likely because these studies were looking at one's willingness to self-censor rather than their actual self-censorship behaviors. We also found that FSI did not significantly mediate the relationship between anonymity and expressive behaviors (H4a), meaning that the extent to which level of anonymity influenced political expression on social media was not explained by FSI. Taken together, this suggests that anonymity either has a direct effect on expressive behaviors that could potentially be explained by other factors not explored in the current study or is completely independent of other factors.

Unlike the pattern found with expressive behaviors, we did find that when perceived political incongruence was higher than the average, there was a relationship between FSI and

withdrawal behaviors. This meant that when perceived political incongruence was high, as FSI increased, so did withdrawal behavior. This was more in line with Chen's (2018) findings that FSI would indirectly lead individuals to withdraw from social media at a greater level when political disagreement was high and supported part of H3. However, FSI did not influence the relationship between anonymity affordance and withdrawal behaviors, which mirrored the pattern we uncovered with expressive behaviors, therefore completely going against H4a.

Additionally, we found that FSI did not significantly mediate the relationship between level of anonymity and self-censorship behaviors when perceived political incongruence was higher than the average, which went against part B of H4. The degree of anonymity afforded by social media platforms and the expression of political opinions was not driven by an individual's level of fear of being socially isolated even when perceived political incongruence was higher than average. This was also the case for withdrawal behaviors, meaning that even when political incongruence was high, FSI did not influence the degree with which anonymity influenced people to delete or edit their existing posts. This suggested that FSI on its own was insufficient in explaining why people chose to censor their political beliefs on platforms with varying levels of anonymity.

Our findings diverged from Weeks et al.'s study (2024) which found that network diversity had a positive relationship with fear of social sanctions such that higher network diversity was related to higher fear of social sanctions. Furthermore, their findings revealed that participants' fear of social sanctions was negatively related to political expression, albeit on Facebook. In other words, a more diverse network was related to greater variation in political ideologies. In extending this finding, we predicted that perceived political incongruence, though slightly different from network diversity, might lead to heightened FSI levels and ultimately a

decrease in political expression. It could be that we did not find that perceived political incongruence moderated the relationship between FSI and self-censorship in the mediation model because we looked at Instagram and Yik Yak versus Facebook. Additionally, the highest level of perceived political incongruence in the sample was a two on a one (indicating no perceived political incongruence) to five (indicating high perceived political incongruence) scale. Given that the highest levels of perceived political incongruence within our sample were relatively low, this could explain why we found no significant effect here. However, although we did not observe an influence of perceived political incongruence within our study, we did find that the level of anonymity offered by each platform influenced FSI, such that those in the Yik Yak condition had less FSI. Therefore, while our results deviated slightly from most literature, our findings emphasized the affordance associated with anonymity that more recent literature also highlighted (Lane et al., 2018).

For our final hypothesis, we found no main effect of time or perceived political incongruence on self-censorship after the presidential election. In contradiction to our hypothesis, this finding highlighted that the outcome of the presidential election did not have any observable impact on the level of self-censorship that was observed among participants. However, while the lack of significant findings suggested that other factors such as anticipated backlash for beliefs might be more strongly correlated with a willingness to be politically expressive or to withhold from posting political beliefs, literature suggested otherwise. Specifically, research looking at engagement on X found that those affiliated with the winning party were more engaged with social media and retweeted political content at a faster rate than those affiliated with the losing political party following an election (Calvo et al., 2023). This indicated lower levels of self-censorship among those affiliated with the winning party. Although

it could be that this effect does not extend to either Instagram or Yik Yak, we likely did not observe this effect given most participants identified as more liberal and therefore exhibited similar behaviors to one another. This limited our power to compare posting behaviors across parties following the results of the election.

To conclude, we found that participants were more likely to express their political opinions on Yik Yak, indicating that anonymity did influence, to some extent, self-censorship among college students. We also found that when perceived political incongruence was higher than average levels, FSI had a more significant effect on withdrawal behaviors. This suggested that when perceived political incongruence was high, as FSI increased, so did the extent to which college students reported withdrawing their political opinions from social media.

Limitations and Future Directions

While our findings were informative, there are several limitations to the current study. First, not only did we use a convenience sample, but given the small sample size ($n = 23$), statistical power may not have been reached. The current sample was obtained solely at Davidson College and was largely composed of students with some interest in psychology. Therefore, we strongly advise that future research replicate the study at other universities in an effort to increase statistical power. While exact replication is not possible given the historical effect of the election, future research could study the relationship between anonymity affordance, FSI, perceived political incongruence, and self-censorship behaviors during future presidential election cycles.

Furthermore, the sample was not as diverse as we would have liked with 73.9% of the total sample (17 out of 23) identifying with liberal values or ideologies. This likely occurred due to our convenience sampling methods and the fact that all participants attended a liberal arts

undergraduate institution. Although the generalizability of studies conducted on college campuses is usually a concern, this is not the case for the current research due our explicit focus on college students. They are the targeted demographic, and therefore the main concern is ensuring that the sample is representative of and can be generalized to wider, more diverse college populations that might be less liberal-leaning.

This limitation connects to the idea of a social media echo chamber. Given that posts on Yik Yak specifically come from within a 5-mile radius and represent a singular community, content is likely homogenous with the user's political beliefs (Powers et al., 2019). This means that participants' perceived political incongruence is likely lower than it would be if looking at a social media platform that is not geo-bound, and they therefore might be less likely to withdraw from social media. Conducting this study on a larger college campus where there are more people with more diverse opinions in the 5-mile radius could help to address this limitation.

Another limitation of the current study has to do with the reliability of the FSI scale that we used. We found that the fifth item on our scale had poor reliability in relation to the other scale items, resulting in that item being dropped from our reported reliability analyses. A revision of the FSI scale might be beneficial in future studies so as to reduce the possibility of poor inter-item reliability and to ensure that all items in the scale are measuring the same conceptual variable. We also found that scale reliability was low when question 7 of the of the Expressive and Withdrawal Behaviors Scale was included, which we posit was due to the fact that Yik Yak posts cannot be edited. Because we dropped this question from our final analyses, we also suggest that future research reconsiders the scales used.

Likewise, for our scale measuring perceived political incongruence, responses to the question asking about personal political orientation could be a result of social desirability bias.

Our sample was taken from a liberal college population, meaning that those who identified with more conservative beliefs might have been less likely to indicate these beliefs in their response. This limitation connects to our suggestion that future research should use a larger, more diverse sample.

Implications

Despite the limitations, the findings of this study are important for several reasons. First, our study suggests that factors such as being aligned with the winning party do not necessarily increase political expression, meaning that some people might just be more vocal about their political beliefs on social media compared to others. We posit that this occurs because such a drive to be politically active might be a stable characteristic of a certain group of people. Literature backs this, noting that political attitudes are often more stable than the personality traits people assume predict political beliefs (Hatemi & Verhulst, 2015). Understanding the factors that shape political activism expands social psychological understandings of why people behave the way they do.

Furthermore, our findings point to the deeper nuances of the SOS phenomenon as different types of behaviors appear to be impacted differently by certain factors. Given that we found that differential impacts of factors like anonymity have a direct effect on expressive behaviors, our results challenge existing notions of the spiral of silence theory that group withdrawal and expressive behaviors together under the larger category of self-censorship behaviors. This suggests that the mechanisms underlying expressive and withdrawal types of behaviors vary. Again, understanding the theoretical underpinnings behind these behaviors contributes directly to social psychology's understanding of people's behaviors.

Expanding on this finding, the influence of anonymity on political expression on social media reveals that, in a country where freedom of expression is stressed as an inalienable right of all individuals, many individuals may not necessarily feel that they can truly express their political opinions exactly how they want to. The fact that expression increases with anonymity on social media platforms implies that there is some systemic fault that causes individuals to be fearful of political discourse or expression despite it being their right. This has further implications on the perpetuation of prejudice. Being included in political discussion by members of other political groups reduces prejudice towards one another, especially towards the out-group, or, in the case of the SOS, the minority group (Voelkel et al., 2021). Drawing on this, if people believe they cannot express their true political opinions, prejudice is likely to prevail. This implication is evident in our finding that anonymity affordance directly influences expression when perceived political incongruence is at the mean level or higher which extends beyond the realm of college students.

Additionally, fear of social isolation or exclusion due to one expressing their political beliefs is indicative of a polarized country that prioritizes individuality over respectful political discourse. Polarization likely results in heightened levels of perceived political incongruence, which we found results in increased withdrawal behaviors. This suggests that platforms with greater levels of anonymity may, either intentionally or not, promote greater political discourse or expression, ultimately suggesting the public's need for safe spaces in their everyday lives to express their beliefs without fear of judgment, exclusion, and/or isolation. This need to create safe spaces extends to the familial network. Specifically, people report the greatest family strain when they perceive that their family members are not willing to have conversations about disagreeing political opinions (Warner et al., 2021). Developing more platforms where people

could share their opinions might help to reduce this inter-familial strain that results from the perceived inability to share political beliefs without experiencing constant disagreement.

In conclusion, our research overwhelmingly suggested that psychological processes underlie people's political posting behaviors, especially their expressive behaviors. While our other results yielded no significant findings, our research does contribute to current literature on group conformity, FSI, and self-censorship among college students. Specifically, the fact that participants indicated greater political expression on Yik Yak suggested that undergraduate students feel less pressure to conform to the perceived majority opinion when their name is not attached, although this may be due to other factors beyond FSI. This finding points to the need for greater research on the patterns of self-censorship on anonymous versus non-anonymous social media platforms with larger, more diverse samples. Furthermore, future research should explore our proposed model in future election cycles.

Positionality Statement

We acknowledge that our personal identities impact the conceptualization and design of our research project. Two authors identify as straight, White women affiliated with the Democratic party. They understand that their party affiliation likely manifested in the stimulus materials they created, with stimulus materials aligning with stereotypical perspectives about what each party believes. However, these perspectives also offered insight into the kinds of content college students are actually exposed to. Additionally, two authors identify as international students. While this meant that they were slightly less familiar with the broader political context, their lived experiences helped ensure that the language, coherence, and accessibility of the manuscript were important considerations throughout the writing and editing

process. Throughout this process, we constantly sought feedback from one another in order to minimize the effects of our personal biases.

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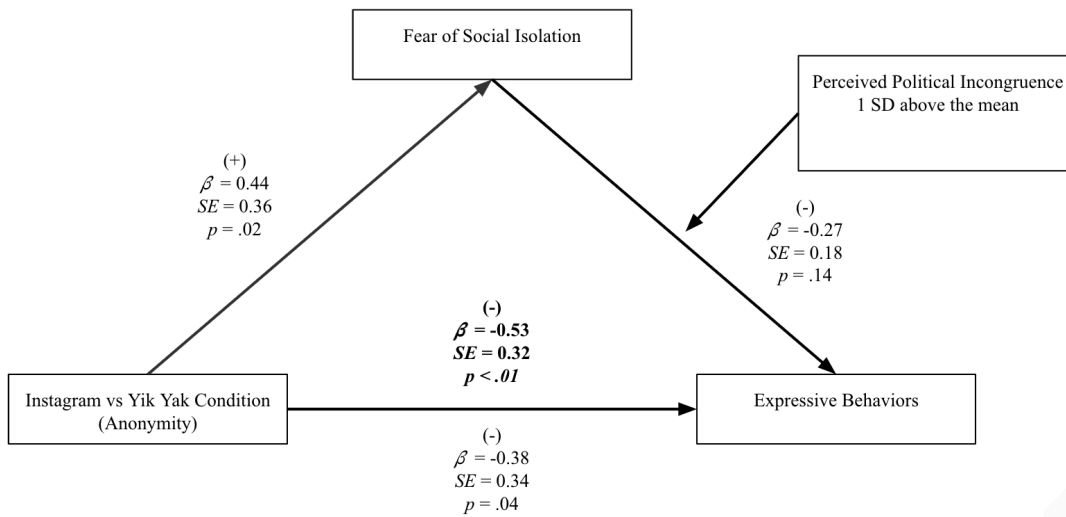
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Figure 2

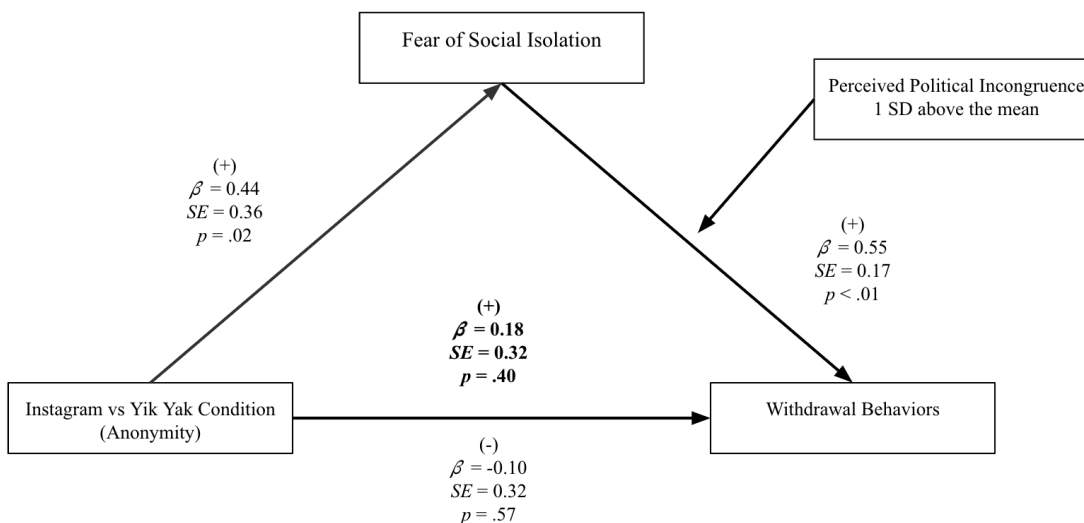
Mediation Moderator Model of the Relationship Between Anonymity, Fear of Social Isolation, Elevated Perceived Political Incongruence, and Expressive Behaviors



Note. The total effect is bolded.

Figure 3

Mediation Moderator Model of the Relationship Between Anonymity, Fear of Social Isolation, Elevated Perceived Political Incongruence, and Withdrawal Behaviors



Note. The total effect is bolded.

Appendix A*Perceived Political Incongruence Scale*

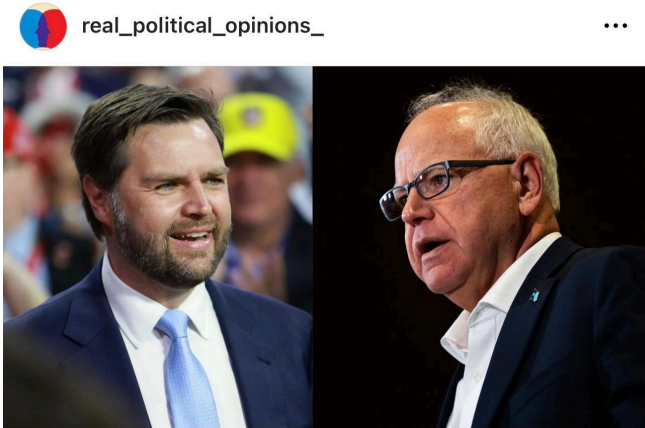
1. What is your political orientation?
 - a. 1 = very strong democrat/liberal perspectives
 - b. 2 = democrat/liberal perspectives
 - c. 3 = more moderate but leaning liberal perspectives
 - d. 4 = more moderate but leaning conservative perspectives
 - e. 5 = conservative/republican perspectives
 - f. 6 = very strong conservative/republican perspectives

2. What is the political orientation of the majority of people you interact with on social media?
 - a. 1 = very strong democrat/liberal perspectives
 - b. 2 = democrat/liberal perspectives
 - c. 3 = more moderate but leaning liberal perspectives
 - d. 4 = more moderate but leaning conservative perspectives
 - e. 5 = conservative/republican perspectives
 - f. 6 = very strong conservative/republican perspectives

Appendix B

Stimulus Materials

Anonymous Yik Yak Condition and NonAnonymous Instagram Condition Stimuli #1 (Neutral)



D Davidson Just now
 Need to emphasize again that the VPs did a better job having a polite and respectful debate over their presidential nominees



real_political_opinions_ It warmed my heart to see Vance sympathize with Waltz after he had expressed that his son witnessed gun violence first hand. And it was so refreshing to hear the candidates openly agreeing with points made by the other. All politics aside, this is how two people with opposing views should treat each other: with respect, empathy, and compassion.

Anonymous Yik Yak Condition and NonAnonymous Instagram Condition Stimuli #2 (Neutral)

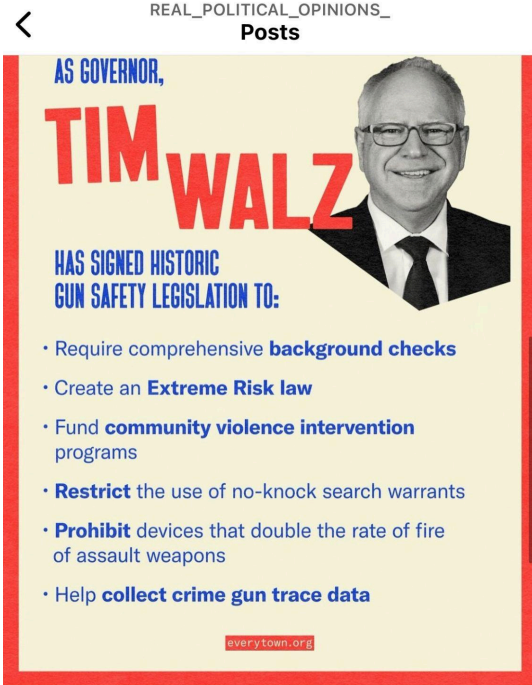


D Davidson Just now
 setting aside who you're voting for, violence in any form should be unacceptable



real_political_opinions_ No matter who any of us are voting for, I think we could all agree that violence of any kind should be unacceptable in our country. And that no one deserves to be a victim.

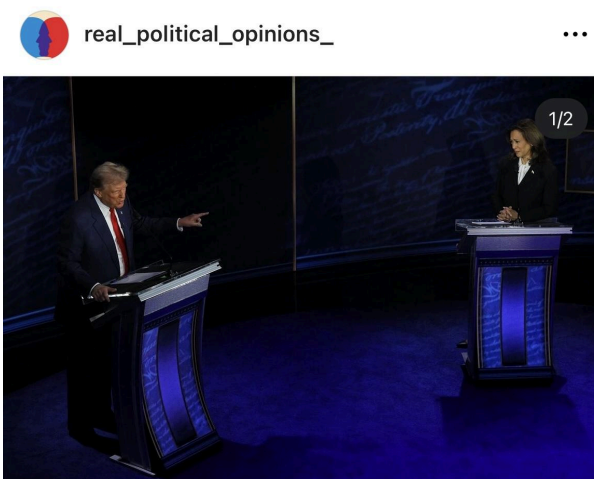
Anonymous Yik Yak Condition and NonAnonymous Instagram Condition Stimuli #3 (Liberal)



real_political_opinions_ It baffles me that anyone could be opposed to the democratic candidates. Mass shootings are becoming so common that we hardly bat an eye unless the victims remind us of what and who we could lose. I fear for my life and my siblings' lives everyday. No one should have to live in a country where their lives are at risk when trying to receive an education. There is an obvious choice here. And just one of the two names is only five letters.
#HarrisWalz2024

D Davidson Just now ...
anyone else scared about school shootings happening to them or their siblings? this is why we need Harris and Walz. just look at what he's done in Minnesota

Anonymous Yik Yak Condition and NonAnonymous Instagram Condition Stimuli #4 (Liberal)



real_political_opinions_ She gives him respect and looks at him when he speaks. He hasn't looked at her once. His misogyny is so blatant; it's repulsive. God...

D Davidson Just now ...
I hope everyone who watched the debate agrees that trump is so full of misogyny it's repulsive

Anonymous Yik Yak Condition and NonAnonymous Instagram Condition Stimuli #5
(Conservative)



real_political_opinions_ The obvious winner of the VP debate a few nights ago. The Democrats had no chance. It's almost like they replaced their previous old, stumbling candidate with another one but just a few years younger. #Vance #Vance2024 #Trump2024

D Davidson Just now ...
Vance obviously won the debate. Tampon Tim had no chance. It's like they replaced Biden with someone a little younger who stumbles just as much

Anonymous Yik Yak Condition and NonAnonymous Instagram Condition Stimuli #6
(Conservative)



real_political_opinions_ Say what you want about Trump and Vance, but being pro-life is not simply a political issue. It's a moral, ethical, and religious matter and one that I believe America should get on board with. Criminalize abortion. It's simple.

D Davidson Just now ...
Anyone else agree that we should criminalize abortion? It's a moral, religious, and ethical issue.

Appendix C

Fear of Social Isolation Scale

FSI1: “It is scary to think about not being connected with my friends on social media because of political differences.”

- 1 = Strongly disagree
- 2 = Somewhat disagree
- 3 = Neither agree nor disagree
- 4 = Somewhat agree
- 5 = Strongly agree

FSI2: “One of the worst things that could happen to me is that my friends might block me on social media because of my political opinions.”

- 1 = Strongly disagree
- 2 = Somewhat disagree
- 3 = Neither agree nor disagree
- 4 = Somewhat agree
- 5 = Strongly agree

FSI3: “It would bother me if no one liked or commented on my social media posts.”

- 1 = Strongly disagree
- 2 = Somewhat disagree
- 3 = Neither agree nor disagree
- 4 = Somewhat agree
- 5 = Strongly agree

FSI4: “I dislike feeling left out of social functions, parties, or other social gatherings because people don’t like the political posts I share on social media.”

- 1 = Strongly disagree
- 2 = Somewhat disagree
- 3 = Neither agree nor disagree
- 4 = Somewhat agree
- 5 = Strongly agree

FSI5: “It is important that my political opinions match what others post on social media.”

- 1 = Strongly disagree
- 2 = Somewhat disagree
- 3 = Neither agree nor disagree
- 4 = Somewhat agree
- 5 = Strongly agree

Appendix D*Expressive and Withdrawal Behaviors Scale*

1. Would you express your support or disagreement for posts like the ones previously seen by commenting on it?
 - a. 1 = Likely never
 - b. 2 = Likely rarely
 - c. 3 = Likely sometimes
 - d. 4 = Likely often

2. Would you react to a post like the ones previously seen? This might take the form of liking or upvoting or downvoting.
 - a. 1 = Likely never
 - b. 2 = Likely rarely
 - c. 3 = Likely sometimes
 - d. 4 = Likely often

3. Would you ever share or repost a post like the ones previously seen on this specific platform?
 - a. 1 = Likely never
 - b. 2 = Likely rarely
 - c. 3 = Likely sometimes
 - d. 4 = Likely often

4. Would you ever refrain from posting a post expressing political beliefs on this specific platform? (RC)
 - a. 1 = Likely never
 - b. 2 = Likely rarely
 - c. 3 = Likely sometimes
 - d. 4 = Likely often

5. Would you ever delete your social media posts related to politics on this specific platform?
 - a. 1 = Likely never
 - b. 2 = Likely rarely
 - c. 3 = Likely sometimes
 - d. 4 = Likely often

6. Would you ever delete your comments on posts related to politics on this specific platform?
 - a. 1 = Likely never
 - b. 2 = Likely rarely
 - c. 3 = Likely sometimes
 - d. 4 = Likely often

7. Would you ever edit your social media posts related to politics on this specific platform?
 - a. 1 = Likely never
 - b. 2 = Likely rarely
 - c. 3 = Likely sometimes
 - d. 4 = Likely often

8. Would you ever edit your comments on posts related to politics on this specific platform?
 - a. 1 = Likely never
 - b. 2 = Likely rarely
 - c. 3 = Likely sometimes
 - d. 4 = Likely often

Appendix E*Demographic Information Questionnaire*

1. What is your class year?
 - a. Freshman
 - b. Sophomore
 - c. Junior
 - d. Senior

2. What is your age?
 - a. 18
 - b. 19
 - c. 20
 - d. 21
 - e. 22
 - f. 23

3. What is your gender identity?
 - a. Male
 - b. Female
 - c. Non-Binary
 - d. Agender
 - e. Genderfluid or Genderqueer
 - f. Questioning or unsure
 - g. Prefer not to disclose
 - h. Additional gender identity not listed (please specify)

4. Do you identify as transgender?
 - a. Yes
 - b. No
 - c. Prefer not to disclose

5. What is your sexual orientation/identity?
 - a. Aromantic
 - b. Asexual
 - c. Bisexual
 - d. Fluid
 - e. Gay
 - f. Lesbian
 - g. Pansexual
 - h. Queer
 - i. Questioning or unsure
 - j. Straight (heterosexual)
 - k. Prefer not to disclose
 - l. Sexual orientation not listed (please specify)

6. What is your ethnicity?
 - a. White/Caucasian
 - b. Asian
 - c. Hispanic or Latino
 - d. African-American
 - e. Native Hawaiian or Pacific Islander
 - f. Native American
 - g. MENA (Middle Eastern North African)
 - h. Prefer not to disclose
 - i. Two or more (please specify)
 - j. Ethnicity not listed (please specify)

7. What socioeconomic class do you identify with?
 - a. Lower Class
 - b. Lower Middle Class
 - c. Middle Class
 - d. Upper Middle Class
 - e. Upper Class
 - f. Prefer not to disclose

8. Are you eligible to vote in the United States?
 - a. Yes
 - b. No
 - c. Prefer not to disclose

Appendix F*Oral Debriefing***ORAL DEBRIEFING FORM
DAVIDSON COLLEGE**

Now that you are finished, I'd like to tell you a little bit more about the study. You were told that the purpose of this study was to investigate political expression on social media posts made by actual Davidson College students. In actuality, although we were interested in investigating the extent of students' political self-censorship behaviors, the posts were not created by Davidson Students. As a reminder of the study procedure, you and other participants first completed a measure of perceived political incongruence and then were assigned to one of two experimental conditions. Some participants were assigned to read fictional posts from Instagram and some read fictional posts from Yik Yak. One of these platforms is anonymous and one is not. Following this, participants were asked to answer survey questions to measure their level of political self-censorship while also measuring their fear of being excluded from their friends or social groups due to their political opinions. We hypothesized that students assigned to the Yik Yak experimental condition would engage in less political self-censorship behaviors than those in the Instagram condition due to Yik Yak's greater anonymity in comparison to Instagram.

I apologize for not telling you the full purpose of the study at the beginning. To protect the integrity of this research, I could not fully divulge our hypotheses at the start of the experiment. I hope you can see that if participants knew exactly what we were interested in studying, they might change their answers a little bit, which would negatively affect the quality of our research conclusions.

As you know, your participation in this study is voluntary. If you so wish, you may withdraw at this point, at which time all records of your participation will be destroyed. You will not be penalized if you choose to withdraw and you'll still receive your research credit or your raffle entry. Are you comfortable with me using your data? Do you have any questions? If you have questions later, you can also e-mail me using the contact information provided on the consent form. If you have questions about your rights as a participant, you can e-mail the IRB using the contact info also provided on the consent form.

Finally, I ask that you don't talk about any details of the study with other students until the end of the semester. If participants know the true purpose of the study ahead of time, it will skew our results, so please do not share any information about the study.

Thank you very much for your participation today. I hope you found it enjoyable. If you would like to have a copy of the results e-mailed to you, please let me know and I will take your email address. I will send you a copy of the aggregated results when they become available by the end of the semester.

Have a great day!