Subversive Online Activity Predicts Susceptibility to Persuasion by Far-Right Extremist Propaganda

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Abstract

Despite the widespread assumption that online misbehavior can affect outcomes related to political extremism, no extant research has provided empirical evidence to this effect. To redress this gap in the literature, we performed two studies in which we explore the relationship between subversive online activities and proclivity for persuasion by far-right extremist propaganda. Study 1 ($N = 404$) demonstrates that when individuals are exposed to far-right 'scientific racism' propaganda, subversive online activity is significantly associated with feelings of gratification, attribution of credibility to and intention to support the propaganda's source, as well as decreased resistance to the propaganda itself. To verify these findings across thematic domains, Study 2 ($N = 396$) focused on far-right propaganda consistent with 'male supremacy.' Results in Study 2 replicated those from Study 1. These findings have implications for understanding subversive online activity, *vis-à-vis* its association with one's susceptibility to persuasion by far-right extremist propaganda.

Keywords: Subversive online activity (SOA), right-wing extremism, propaganda, scientific racism, male supremacy, source credibility, reactance.

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As long as online communication channels have been subject to empirical investigation, researchers have discussed the supposed link between online activity and negative offline outcomes. For their part, terrorism experts have sought to identify online indicators that foretell one's likelihood of adopting viewpoints that support ideological violence. As retrospective analyses of terrorists' motivations show radicalization processes to be occurring increasingly online, this pursuit has become central to the study of political violence. Despite the importance of understanding how online activity affects support for violence, few studies have provided systematic evidence linking them. At best, evidence in support of the association has been anecdotal, leaving a gap in our understanding of the factors that contribute to online radicalization processes.

The current study seeks to redress this gap through an investigation of problematic online behaviors and how they affect outcomes related to persuasion by far-right extremist propaganda. This study demonstrates that engagement in behaviors that have been anecdotally linked to support for far-right extremism are empirically connected to outcomes that render one a greater risk for supporting or engaging in far-right violence.

Given the range of online behaviors that have been theorized to correlate with risk for radicalization, we first describe what we refer to as *subversive online activities* (SOAs), as well as the far-right ideological motifs to which these activities have been linked. We then describe two studies that evaluate the relationship between SOA and one's vulnerability to persuasion by propaganda consistent with these motifs. Finally, we discuss the implications of the evidence connecting SOA with susceptibility to persuasion by far-right extremist propaganda.

Subversive Online Activities

For the purposes of the current study, SOAs can be classified into one of two categories: behaviors that are meant to abuse and harass others and the use of certain niche subcultural platforms on which problematic activity occurs.

For the first category, subversiveness is defined by the behavior's intent and outcome. One such behavior is known as *doxing*. Most definitions describe doxing as the intentional public release of another individual's personal information by a third party. This release is typically done to humiliate, embarrass, threaten, intimidate, silence, or punish the target of the doxing attack (Douglas, 2016). Although some have argued that doxing may seem justified under certain circumstances, doxing practices can nonetheless reinforce categorical forms of discrimination (Trottier, 2020).

As with doxing, definitions of *trolling* vary widely across the scholarly literature (see Komaç & Çağıltay, 2019; Ortiz, 2020 for examples). For the purposes of the current study, we adopt a definition consistent with Craker and March (2016, 74), who conceptualize trolling as 'a form of online bullying and harassment…[that] includes starting aggressive arguments and posting inflammatory malicious messages…to deliberately provoke, disrupt, and upset others.'

Whereas doxing and trolling are considered subversive based on their intended outcomes, the second category of online behaviors can be considered subversive because of the very nature of the online platforms and applications on which they occur. These platforms and applications feature affordances that are either intentionally or incidentally tailored toward an extremist user base. This so-called *alt-tech* is a collection of platforms that mimic popular social media applications to provide an online social space in which racism, misogyny, and violent ideation are tolerated, and sometimes encouraged (Conway, 2020; Hughes, 2019). These sites are

characterized by their users' engagement in extreme antisocial behavior, up to and including the planning of violence against perceived enemies (Ebner, 2019).

There is some overlap between the use of alt-tech and the broader ecosystem of *encrypted communication applications* and/or *anonymized applications* that can be used to facilitate deviant behavior (Feldstein & Gordon, 2021; Hughes & Miller-Idriss, 2021). End-to-end encryption scrambles messages such that they can be deciphered only by the sender and the intended recipient, avoiding decryption by even law enforcement or the platform itself (Perlroth, 2019). These platforms also facilitate the maintenance of anonymity, which can be extremely difficult to disrupt (Gehl, 2018).

Of course, the use of applications that allow for data encryption or anonymization is not a *de facto* indication of extremist intent. But, applications that facilitate encrypted communication and/or anonymity allow users to circumvent incrimination in the event that their messages are attributed to them, making them popular among those that seek to espouse extremist rhetoric or plan violence (e.g., Walther & McCoy, 2021).

Given the long-standing anecdotal link between these five activities – doxing, trolling, use of alt-tech, and use of applications that encrypt communications or anonymize users – and one's proclivity for far-right radicalization, this study seeks to empirically explore their collective association with persuasion by such propaganda. The following sections offer a brief explanation of far-right extremist propaganda and two contemporary motifs that pervade it.

Far-Right Extremist Propaganda

For the purposes of the current paper, we characterize the extreme right on the basis of its adherence to 'antidemocratic practices and ideals, exclusionary beliefs, existential threats and conspiracies, and apocalyptic fantasies' (Miller-Idriss, 2020, 4), as well as its 'strategies of

violence and terrorism...intense nationalism, and/or support for criminal action' (Blee and Creasap, 2010, 270), enforced through 'emphasis on hierarchical authority' (Mudde, 2007, 21). These core values are reflected in the two narrower discourses examined in our study: scientific racism and male supremacy.

Scientific Racism

Scientific racism refers to a pseudoscience characterized by the hierarchical categorization of races based on assumed inherent differences. The origins of race science are based in taxonomies produced by Enlightenment-era scholars that sought to reconceptualize theories of human difference to better suit white populations in the age of colonization and scientific revolution (Sussman, 2014). This idea persisted throughout the 18th, 19th, and 20th centuries to justify the brutalization and conquest of non-white populations and differentially categorize those who had been historically victimized with violence and genocide (Jenkins & Leroy, 2021).

Contemporary scientific racism continues to leverage questionable practices to rationalize the use of damaging stereotypes, hierarchies, and taxonomies. One of the latest forms of scientific racism has moved beyond biological or genetic perspectives, instead using evolutionary psychology to explain racial differences (Jackson, 2017).

The online spaces where these messages circulate are populated with individuals who engage in the SOAs described above. To operationalize the degree to which individuals that engage in SOAs are persuadable by far-right propaganda consistent with scientific racism propaganda they would encounter in these spaces, we seek to measure the degree to which SOA is associated with gratification, attribution of credibility to the source of the propaganda, psychological reactance (a measure of resistance to a persuasive message), and intent to support

the source of the propaganda. In general, we predict that SOA would be positively related to the degree to which one is persuadable by race science propaganda.

H1: SOA is positively related to feelings of gratification in response to propaganda promoting scientific racism.

H2: SOA is positively related to attribution of credibility to the source of propaganda promoting scientific racism.

H3: SOA is negatively related to psychological reactance in response to propaganda promoting scientific racism.

H3(a): SOA is negatively related to anger in response to propaganda promoting scientific racism.

H3(b): SOA is negatively related to counter-arguing against propaganda promoting scientific racism.

H4: SOA is positively related to the intention to support the source of propaganda promoting scientific racism.

Male Supremacy

Gender refers to the social, cultural, and historical attributes assigned to individuals, traditionally on the basis of the biological sex they express and/or embody. Historically, the concepts of masculinity and femininity have been conflated with biological sex and sexual orientation. Since the mid-1900s, however, researchers of gender, identity, queer studies, and feminism have sought to uncouple these concepts (Barker, 2016). As a result of these efforts, many experts have come to understand gender as a culturally-bound social and psychological construct that can be (but is not necessarily) linked with an individual's biological sex (Smiler, 2004).

Deriving from the concept of gender is the concept of masculinity, which has been defined as the drive to develop or express traits that are stereotypically characteristic of biological males (Pleck, 1987), a performance through which individuals demonstrate goal-oriented and purposeful action (Connell, 1993), and the psychological and behavioral tendencies that drive the individual to demonstrate ambition, resist showing emotion, and be willing to use violence (Brannon, 1976). Pervasive assumptions about masculinity have been thrown into doubt since the advent of second-wave feminism in the 1960s-1970s, which contended that neither women nor men benefit from traditional gender roles (Messner, 2016)

In opposition to some second-wave feminists, emergent 'Men's Rights Activists' (MRAs) contended that both men and women were oppressed by sex roles, but also that men did not benefit from these roles at the expense of women (Farrell, 1974). As feminist ideas have grown more mainstream in the late 20th and early 21st centuries, MRAs have shifted their concerns to issues related to dating, sex, relationships, and the growing normative acceptance of homosexuality (Mountford, 2018).

The online spaces in which these values and viewpoints circulate today are informally referred to as the 'manosphere.' The manosphere is populated by digital citizens of communities stylized as Pick-Up Artists (men who seek short-term sexual relationships with multiple women), involuntary celibates (individuals who lament their inability to attract sexual partners), Men Going Their Own Way (men who seek to break from a feminist-led society), and those who have taken the 'Red Pill' (individuals who have 'awoken' to the fact that women dictate how the world works). These ideas often serve to devalue and foster anger toward women, and promote belligerent and violent behavior to maintain masculine dominance (Hoffman et al., 2020).

For this study, male supremacy refers to an ideology that combines the pursuit of the historical masculine archetype with traditional gender hierarchies, exclusionary beliefs, and the threat of violence against women. In this formulation, men are deemed entitled to women's sexual or domestic labor, caregiving, attention, or submission (Ging, 2019).

Given extant data demonstrating the link between SOAs and proclivity for encouraging violence against women, we predict that these activities will be positively related to persuadability by far-right, male supremacy propaganda.

H5: SOA is positively related to feelings of gratification in response to propaganda promoting male supremacy.

H6: SOA is positively related to attribution of source credibility to the source of propaganda promoting male supremacy.

H7: SOA is negatively related to psychological reactance in response to propaganda promoting male supremacy.

H7(a): SOA is negatively related to anger in response to propaganda promoting male supremacy.

H7(b): SOA is negatively related to counter-arguing in response to propaganda promoting male supremacy.

H8: SOA is positively related to the intention to support the source of propaganda promoting male supremacy.

Evaluating the System of Variables with Structural Equation Modeling

Although H1-H8 predict relationships between SOA and multiple outcomes, they provide no predictions on how those outcomes interrelate. Without analyzing the overall *system* of variables, we cannot know whether significant relationships are the function of direct effects,

indirect effects, or both. We therefore pose a research question to better understand the interrelated system of variables concerning SOA and persuasive outcomes resulting from exposure to far-right propaganda.

RQ1: What is the structural nature of the relationships between SOA and persuasion associated with exposure to race science/male supremacy propaganda?

Study 1: Race Science

Methods

Participants

Data were collected from a paid, opt-in online survey panel of American adults in December of 2020. Respondents below the age of 18 or unable to understand English were disqualified from participation. We removed all response sets that were disproportionately incomplete, 'straight-lined,' or completed in less than 25% of the median completion time. Application of these exclusion criteria yielded a sample of 404 respondents. This sample size was large enough to achieve sufficient statistical power for detecting small-to-medium sized effects ($f = 0.175$) for all analyses in this study, assuming p-value of 0.05 and a minimum statistical power ($1 - \beta$) of 0.80 (Cohen, 1992).

To recruit a sample similar to populations targeted by right-wing extremist propaganda, we used quotas that determined the extent to which certain demographic variables were represented (90.1% male, 74.3% white, 73.5% aged 18-35). For the purposes of statistical comparisons, however, we ensured that there were enough respondents characterized by other demographic features. The sample's overall makeup is summarized in Table 1, available at the Open Science Framework (https://tinyurl.com/Table1SOA).

Materials

Scientific Racism Propaganda. The focus of the original study from which this study derived investigated the moderating effect of propaganda subtlety and format on the persuasive efficacy of the propaganda. As such, each participant was exposed to one of four kinds of scientific racism propaganda: an unsubtle video, a subtle video, an unsubtle meme, or a subtle meme.

The unsubtle video features an anti-Semitic discussion in which Jews' inherent intellect and slyness allow them take advantage of non-Jews. The subtle video condition features a prominent racist vlogger who argues that IQ and race are correlated and acts saddened by this fact, as if he is revealing an unfortunate truth. The unsubtle meme juxtaposed an image of Koko the Gorilla with an African child, with a caption that suggests that the former is as smart or smarter than the latter. The subtle meme was presented as a four-panel comic in which opponents of scientific racism are inherently averse to 'facts' that demonstrate different IQs for different races.

Given that (a) persuasive differences in the four kinds of propaganda are not the focus of the current study, (b) all four kinds of propaganda are pervasive in the online spaces under consideration, and (c) regular users of online spaces associated with SOA are likely to encounter *all* these kinds of propaganda, we collapsed all participants into a single exposure condition.

Measures

Subversive Online Activities. To measure participants' SOA, they were asked to indicate how often they *troll* other users, *dox* other users, use applications that *anonymize* their communication, use applications that *encrypt* their communication, and use *alt-tech*. These items were measured using a series of Likert scales ranging from 1 (never) to 4 (often), and were

randomly embedded in a larger scale measuring multiple online behaviors. Overall score for SOA was calculated as the mean of these items ($\alpha = 0.91$).

Gratification. Gratification was measured with two items that were randomly embedded in a larger index gauging emotional response. These items asked participants to indicate how much they felt *satisfied* and *reassured* by the propaganda on Likert-scales ranging from 1 (*none at all*) to 7 (*a great deal*). Cronbach's alpha is an insufficient metric for describing the reliability of the two-item gratification scale as it would underestimate the scale's true internal consistency. To remedy this, Eisinga et al. (2012) recommend applying a Spearman-Brown correction ($\rho = 2r / [1 + r]$) on the bivariate correlation between the two items. Using this correction, we calculated the reliability estimate of the two-item gratification index ($r = .71$, $\rho = .83$).

Perceptions of Source Credibility. To indicate how credible participants found the source of the propaganda, they responded to six seven-point semantic differentials. These items were adapted from a measure originally developed by McCroskey (1966), and were anchored by the following pairs of descriptors: *trustworthy-not trustworthy*, *sincere-insincere*, *honest-dishonest*, *dependable-not dependable*, *credible-not credible*, and *reliable-unreliable*. The mean of these six items served as the score for perceived source credibility ($\alpha = .95$).

Psychological Reactance. Past work on reactance – an aversive motivation to resist persuasive attempts – has demonstrated the construct to be the intertwined combination of anger and counter-arguing (Dillard and Shen, 2005). We therefore utilized two scales to measure these two constituent outcomes.

Anger. To indicate the degree to which participants were angry after being exposed to the propaganda, they were presented with three items randomly embedded in a larger emotional response index. These items asked participants to indicate the extent to which they felt *anger*,

irritation, and *frustration* in response to the propaganda on a scale ranging from 1 (*none at all*) to 7 (*a great deal*). The mean of these three items served as the overall score for anger (α = .83).

Counter-arguing. Counter-argument against the propaganda was measured using a single Likert-type scale ranging from 1 (*I accepted all the points made in the message*) to 7 (*I argued against all the points made in the message*). Psychometric research on psychological reactance has shown the use of this single item to be strongly correlated with validated, open-ended counter-arguing measures (Parker et al., 2016).

Support Intention. Participants were presented with four seven-point Likert scales asking whether they would support the group *ideologically* (e.g., post support on social media), *financially* (e.g., donate money to the group), *logistically* (e.g., store weapons for the group), or *violently* (e.g., fight for the group). The mean of the four items served as the overall score for support intention (α = .96).

Control Variables and Moderators.

Demographics. Given that (a) far-right propaganda disproportionately targets young, white males and (b) material related to race science is likely to induce automatic aversion among non-white participants, we created dummy variables to represent participants' age, gender, and race categories. We then included the dummy-coded variables in our analyses. This allowed us to control for the automatic aversion that non-white participants may have felt and estimate the respective effects of characteristics common to targets of race science propaganda.

Right-Wing Authoritarianism and Social Dominance Orientation. Given the politically charged nature of not only race science propaganda, but all far-right propaganda, it was necessary to account for political predisposition for right-wing political positions at large. To this end, we included measures for right-wing authoritarianism (RWA) and social dominance

orientation (SDO) in our analyses. Past research in political psychology has linked both RWA and SDO to far-right and extreme conservative beliefs and attitudes (Pratto et al., 1994). By including RWA and SDO in our regression models, we were able to control for variation in these personality characteristics.

RWA was originally conceptualized to measure the degree to which a person prefers social dynamics that prioritize uniformity and submission and limit diversity (Altemeyer, 1988). Right-wing authoritarians often seek restrictions on immigration and favor laws that dictate what they perceive as moral behavior. Where RWA is related to submissiveness to authority and adherence to social norms, SDO is more closely associated with support of social hierarchies and in-group superiority bias. Both RWA and SDO concern prejudice, but whereas the former concerns prejudice against 'threatening' groups, the latter concerns prejudice against minority or disadvantaged groups.

RWA was measured by presenting participants with 14 nine-point Likert scales on which they indicated the degree to which they agreed with various statements (e.g., 'What our country really needs is a strong, determined leader who will crush evil and take us back to our true path'). SDO was measured using 16 Likert scales on which participants indicated the degree to which they agreed with other kinds of statements (e.g., 'Some groups are simply inferior to other groups'). Overall scores for both RWA ($\alpha = .76$) and SDO ($\alpha = .87$) were calculated as the means for their respective question sets.

Inoculation Condition. The data used for the current study were part of a larger project evaluating the effects of attitudinal inoculation on the persuasiveness of various kinds of right-wing propaganda (see Braddock, 2020). Given that inoculation treatments have counter-

persuasive effects by design, we included a dummy-coded variable for inoculation condition in our models to control for inoculation's inverse effect on propaganda persuasiveness.

Analyses

Three sets of analyses were performed in SPSS (v. 27) to evaluate the respective relationships between SOA and all outcomes. First, we calculated the bivariate correlations between SOA and all outcome variables.

Second, we divided participants low-, medium-, and high-SOA tertiles with which we could perform analyses of covariance (ANCOVAs) evaluating whether differential levels of SOA significantly deviated from one another in how they are related to salient outcomes. All ANCOVA models included SOA (high, medium, low) as the predictor variable and RWA, SDO, the demographic variables, and inoculation condition as covariates.

Third, we performed a series of multiple regressions to estimate the effects of the predictors on all persuasive outcomes. To identify optimal regression models containing only significant predictors, all models initially regressed the dependent variables on SOA (as a continuous variable), RWA, SDO, gender, race, age, and inoculation condition. If any predictors in the model were not significant, they were removed one-by-one based on highest *p*-value until only significant predictors remained (i.e., the backward-entry method).

To provide a comprehensive view of how SOA and the DVs are structurally related, we also evaluated the system of variables with structural equation modeling techniques in AMOS Graphics (Version 27).

Results

SOA and Gratification in Response to Race Science Propaganda

H1 predicted a positive relationship between SOA and gratification in response to race science propaganda. The bivariate correlation between these variables was positive and significant ($r = 0.48$, $p < 0.001$) and a significant ANCOVA ($F(2, 351) = 11.00$, $p < .001$) revealed that all levels of SOA were significantly different from one another (at least $p < 0.05$) in terms of their feelings of gratification in response to the propaganda ($M_{high} = 3.34$, $SD_{high} = 0.32$; $M_{med} = 2.49$, $SD_{med} = 0.24$; $M_{low} = 1.42$, $SD_{low} = 0.27$).

Regression analyses further supported the positive relationship between SOA and gratification in response to propaganda advocating scientific racism. The optimal regression model ($F(4, 395) = 48.91$, $p < 0.001$) included four significant predictors of which SOA was the most potent (see Table 2).

Table 2

Regression Weights for the Relation of Optimal Predictors with Gratification in Response to Race Science Propaganda

Predictor	B	95% CI	β	t
Constant	-0.35	[-1.06, 0.37]		-0.95
SOA	0.75	[0.56, 0.94]	0.36	7.88***
SDO	0.46	[0.33, 0.58]	0.32	7.10***
Race	0.34	[-0.03, 0.71]	0.08	1.83†
Inoculation	-0.77	[-1.28, -0.25]	-0.12	-2.94**
Adjusted R^2	0.32			

Note. $N = 399$. Race (1 = white, 0 = all other); inoculation (1 = inoculated, 0 = not inoculated).

***$p < 0.001$, **$p < 0.01$, $^{\dagger}p < 0.10$.

These results support H1.

SOA and Attribution of Credibility to the Source of Race Science Propaganda

H2 asserted a positive relationship between SOA and attribution of credibility to the source of race science propaganda. The correlation between these two variables was positive and significant ($r = 0.47$, $p < 0.001$) and the ANCOVA demonstrated that the three SOA tertiles were significantly different (at least $p < 0.05$) from one another ($M_{high} = 3.82$, $SD_{high} = 0.33$; $M_{med} = 2.99$, $SD_{med} = 0.24$; $M_{low} = 2.31$, $SD_{low} = 0.27$; $F(2, 351) = 6.42$, $p < 0.01$).

Regression analyses offered further support, identifying SOA as one of two significant, positive predictors of source credibility attribution ($F(3, 396) = 63.86$, $p < 0.001$). Table 3 summarizes the optimal regression model.

Table 3

Regression Weights for the Relation of Optimal Predictors with Attribution of Credibility to the Source of Race Science Propaganda

Predictor	B	95% CI	β	t
Constant	0.45	[-0.22, 1.13]		1.33
SOA	0.71	[0.52, 0.90]	0.34	7.44***
SDO	0.48	[0.35, 0.61]	0.34	7.43***
Inoculation	-0.77	[-1.31, -0.28]	-0.13	-3.03**
Adjusted R^2	0.32			

Note. $N = 399$. Inoculation (1 = inoculated, 0 = not inoculated).

***$p < 0.001$, **$p < 0.01$.

Taken together, these results support H2.

SOA and Psychological Reactance in Response to Race Science Propaganda

H3 posited an inverse relationship between SOA and reactance in response to race science propaganda. Because reactance consists of anger and counter-arguing, we evaluated SOA's respective relationships on these outcomes with the analyses described above and measured SOA's influence on the overall reactance construct using structural equation modeling.

SOA and Anger in Response to Race Science Propaganda. H3(a) predicted a negative relationship between SOA and anger in response to race science propaganda. The correlation between SOA and anger was not significantly different from zero ($r = 0.03$, $p = 0.57$). Moreover, an ANCOVA failed to identify significant differences between any of the SOA tertiles regarding their reported anger ($F(2, 351) = 2.04$, $p > 0.10$).

The regression analyses were successful in identifying the optimal model for predicting anger ($F(3, 396) = 7.52$, $p < 0.001$), but SOA was only a marginal *positive* predictor (Table 4).

Table 4

Regression Weights for the Relation of Optimal Predictors with Anger in Response to Race Science Propaganda

Predictor	B	95% CI	β	t
Constant	4.26	[3.46, 5.07]		10.39
SOA	0.21	[-0.01, 0.43]	0.10	1.91†
RWA	-0.26	[-0.44, -0.07]	-0.16	-2.72**

SDO	-0.16	[-0.33, 0.01]	-0.12	-1.88†
Adjusted R^2	0.05			

Note. $N = 399$.

$^{**}p < 0.01$, $^{\dagger}p < 0.10$.

These findings do not support H3(a).

SOA and Counter-arguing against Race Science Propaganda. H3(b) predicted an inverse relationship between SOA and counter-arguing against propaganda that advocates race science. The correlation between these variables was negative and significant ($r = -0.45$, $p < 0.001$), and the ANCOVA indicated that participants characterized by low SOA ($M_{low} = 3.90$, $SD_{low} = 0.29$) reported counter-arguing to a significantly greater degree those who reported engaging in moderate or high SOA ($M_{med} = 3.27$, $SD_{med} = 0.26$; $M_{high} = 2.93$, $SD_{high} = 0.35$).

Additionally, the optimal regression model for predicting counter-arguing included SOA as a significant negative predictor (($F(3, 396) = 66.68$, $p < 0.001$); see Table 5).

Table 5

Regression Weights for the Relation of Optimal Predictors with Counter-arguing against Race Science Propaganda

Predictor	B	95% CI	β	t
Constant	7.22	[6.59, 7.85]		22.39
SOA	-0.64	[-0.84, -0.44]	-0.28	-6.24***
SDO	-0.62	[-0.76, -0.49]	-0.40	-8.96***

Race	-0.36	[-0.76, 0.04]	-0.07	-1.79†
Adjusted R^2	0.33			

Note. $N = 399$. Race (1 = White, 0 = all other races).

***$p < 0.001$, †$p < 0.10$.

These findings support H3(b).

SOA and Reactance as the Combination of Anger and Counter-Arguing (Race Science).

To better understand the relationship between SOA and reactance, we constructed a series of path models in which reactance was modeled as a latent construct comprising anger and counter-arguing. To identify the model that best fit the data, we altered path models based on output modification indices and the removal of non-significant paths (see the section titled Structural Relationships between SOA and Persuasion by Race Science Propaganda for details). Every iteration of the model revealed a significant, inverse relationship between SOA and reactance, including the optimal model ($\beta = -0.42$, $p < .001$).

Contradictory findings concerning SOA's relationship with anger and counter-arguing confuse the nature of the association between SOA and reactance. However, a significant negative path coefficient linking SOA to the reactance construct across several path models offers some clarification. The sum of the evidence mostly supports H3.

SOA and Intention to Support the Source of Race Science Propaganda

H4 predicted a positive relationship between SOA and intention to support the source of race science propaganda. The correlation between SOA and support intention was positive and significant ($r = 0.53$, $p < 0.001$), and the three tertiles were significantly different (at least $p <$

0.05) from one another (M_{high} = 4.18, SD_{high} = 0.32; M_{med} = 4.05, SD_{med} = 0.24; M_{low} = 3.19, SD_{low} = 0.27; $F(2, 351) = 3.81$, $p < 0.05$).

Moreover, the optimal regression model included SOA as its most potent positive predictor ($F(5, 394) = 48.41$, $p < 0.001$; see Table 6).

Table 6

Regression Weights for the Relation of Optimal Predictors with Intention to Support the Source of Race Science Propaganda

Predictor	B	95% CI	β	t
Constant	0.62	[-0.16, 1.39]		1.55
SOA	0.86	[0.67, 1.05]	0.39	8.80***
SDO	0.49	[0.36, 0.62]	0.33	7.47***
Race	0.38	[0.00, 0.76]	0.08	1.98*
Age	0.34	[-0.04, 0.72]	0.07	1.77†
Inoculation	-0.57	[-1.09, -0.05]	-0.09	-2.16*
Adjusted R^2	0.37			

Note. N = 399. Race (1 = white, 0 = all other races); age (1 = 18-35 years old, 0 = all other ages); inoculation (1 = inoculated, 0 = not inoculated).

***$p < 0.001$, *$p < 0.05$, †$p < 0.10$.

These results support H4.

Structural Relationships between SOA and Persuasion by Race Science Propaganda

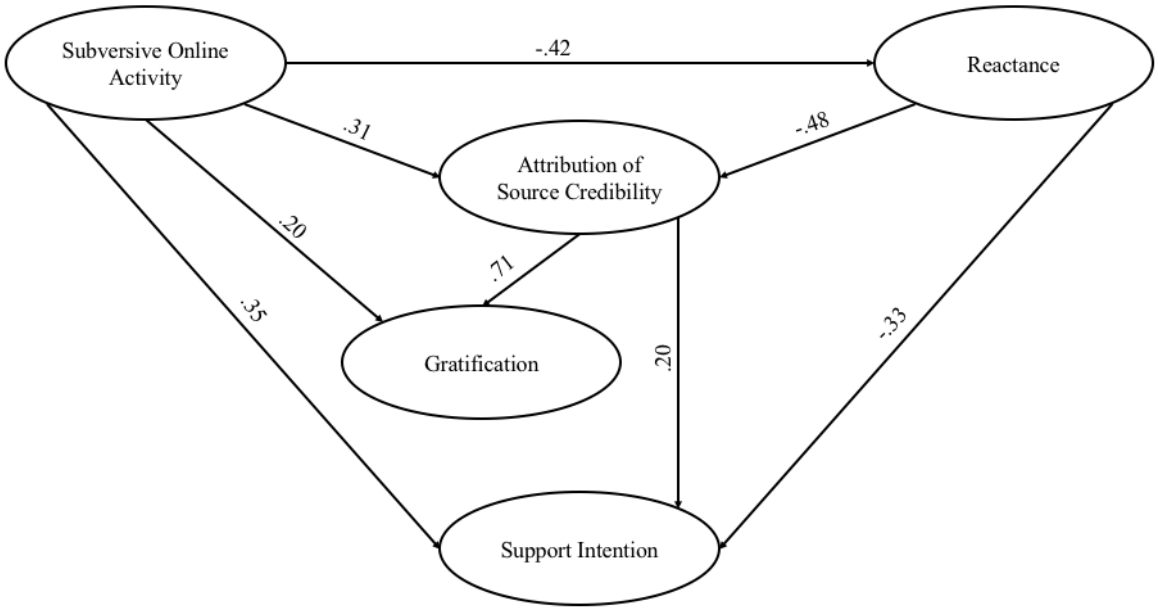
To answer RQ1, we used AMOS Graphics (v. 27) to construct a series of path models to identify a structural model that best matched the data. We began with a simple model (Model 1) reflecting H1-H4, whereby SOA directly predicted all outcomes of interest with no other paths. According to various model fit standards (Hu & Bentler, 1999), this initial model was a poor fit to the data (CFI = 0.89, RMSEA = 0.11, SRMR = 0.14, χ^2 (df) = 906.19 (149)).

Modification indices recommended the addition of multiple paths to improve model fit (Model 2). Retaining all original paths, Model 2 also included paths from reactance to attribution of source credibility and support intention, as well as a path from attribution of source credibility to gratification. This model represented a good fit to the data (CFI = 0.96, RMSEA = 0.07, SRMR = 0.06, χ^2 (df) = 419.74 (146)).

Though Model 2 fit the data well, past work on the persuasiveness of extremist propaganda has shown attribution of source credibility to exert a positive effect on support intention (Braddock, 2020). We therefore added this path to bring the model into closer alignment with past evidence. This further improved model fit. Given Model 3's fit to the data and correspondence with past work on persuasive outcomes in the context of extremist propaganda, it was selected as the optimal representation (see Figure 1; CFI = 0.96, RMSEA = 0.07, SRMR = 0.05, χ^2 (df) = 399.86 (144)).

Figure 1

Structural Relationships between SOA and Persuasive Outcomes (Study 1)



Note. All paths significant at least $p < 0.05$. All path coefficients standardized.

These path coefficients allow for the calculation of the total (i.e., direct + indirect) standardized effects of each predictor on all outcomes. These sums of effects are summarized in Table 7.

Table 7

Total Standardized Effects Exerted by Predictors on Outcomes (Study 1)

	Predictor		
Outcome	SOA	Reactance	SC
Reactance	-0.42		
SC	0.50	-0.48	
Gratification	0.57	-0.34	0.71

Support Intention	0.59	-0.43	0.20

By calculating the total effects of all exogenous variables on all endogenous variables in the model, we see that SOA exerts a positive total effect on gratification, attribution of credibility, and support intention; SOA also exerts a sum negative effect on reactance. These sums of total effects provide further support for H1-H4.

Study 1 Summary

The goal of Study 1 was to determine whether engagement in SOA predicts persuadability by far-right race science propaganda. The data indicate that it can. All four hypotheses received support and path models showed that the relationships between SOA and various salient outcomes are the dual function of direct *and* indirect effects.

Compelling as these findings may be, they describe only how SOA relates to one form of far-right messaging. To provide a robust account of how SOA may relate to persuasion by far-right propaganda, it is necessary to replicate these analyses in another thematic domain. Study 2 offers such a replication.

Study 2: Male Supremacy

Methods

Participants

The sample (N = 396) was recruited and subjected to the same quotas and inclusion and exclusion criteria as in Study 1. Power analyses again indicated a sufficiently large sample size, assuming a statistical power of 0.80 and an alpha level of 0.05 for each analysis. Participants were again primarily male (90.2%), white (70.7%), and 18-35 years old (78.3%).

See Table 8 at the Open Science Framework (https://tinyurl.com/Table8SOA) for a synopsis of all participant demographics.

Materials

Male Supremacy Propaganda. Participants were exposed to an unsubtle video, a subtle video, an unsubtle meme or a subtle meme. The unsubtle video stimulus involved a men's rights activist discussing dominant 'alpha' males' domination of feminized 'beta' males and women. The subtle video stimulus depicts a man repeating that, 'men are tired,' followed by complaints that purport to show sexism against men. The unsubtle meme stimulus juxtaposed an image of extreme bondage pornography with text overlay stating that women may 'threaten to make [their] holes unavailable' as a way to argue with men. The subtle meme stimulus shows a young, sexually active female who is implied to become a disease-ridden spinster. As in Study 1, the goals of the current study led us to collapse these into a single exposure condition.

Measures

All measures used in Study 2 were the same as those used in Study 1. Reliability estimates for all scales were sufficient ($\alpha_{SOA} = 0.89$; $\rho_{gratification} = 0.80$; $\alpha_{sourcecred} = 0.96$; $\alpha_{anger} = 0.88$; $\alpha_{intention} = 0.96$; $\alpha_{RWA} = 0.77$; $\alpha_{SDO} = 0.87$).

Analyses

All analyses in Study 2 were replications from Study 1.

Results

SOA and Gratification in Response to Male Supremacy Propaganda

H5 predicted a positive link between SOA and gratification in response to the male supremacy propaganda. The correlation was positive and significant ($r = 0.53$, $p < 0.001$) and a significant ANCOVA ($F(2, 342) = 11.20$, $p < .001$) showed that moderate ($M_{med} = 2.83$, $SD_{med} =$

0.32) and high (M_{high} = 2.38, SD_{high} = 0.29) levels of SOA experienced significantly greater gratification than those who reported engaging in low levels of SOA (M_{low} = 0.95, SD_{low} = 0.28; $p < 0.001$).

The regression analysis also showed SOA to be a robust predictor of gratification. The optimal regression model ($F(2, 385) = 91.39$, $p < 0.001$) included two significant predictors of which SOA was the strongest (see Table 9).

Table 9

Regression Weights for the Relation of Optimal Predictors with Gratification in Response to Male Supremacy Propaganda

Predictor	B	95% CI	β	t
Constant	-0.39	[-0.91, 0.14]		-1.45
SOA	0.92	[0.73, 1.11]	0.44	9.58***
SDO	0.31	[0.17, 0.44]	0.21	4.55***
Adjusted R^2	0.32			

Note. N = 396.

***$p < 0.001$.

These results offer support for H5.

SOA and Attribution of Credibility to the Source of Male Supremacy Propaganda

H6 predicted a positive relationship between SOA and attribution of credibility to the source of male supremacy propaganda. The correlation between these two variables was positive and significant ($r = 0.51$, $p < 0.001$). An ANCOVA ($F(2, 342) = 18.41$, $p < 0.01$) similarly

demonstrated significant differences between all SOA tertiles in their attribution of source credibility (M_{high} = 2.98, SD_{high} = 0.30; M_{med} = 2.79, SD_{med} = 0.34; M_{low} = 1.57, SD_{low} = 0.29; all $p < 0.01$).

Furthermore, the optimal regression model included SOA as the strongest predictor of perceived source credibility ($F(3, 384) = 55.14$, $p < 0.001$; see Table 10).

Table 10

Regression Weights for the Relation of Optimal Predictors with Attribution of Credibility to Sources of Male Supremacy Propaganda

Predictor	B	95% CI	β	t
Constant	-0.31	[-1.06, 0.44]		-0.81
SOA	0.85	[0.66, 1.04]	0.42	8.83***
SDO	0.25	[0.11, 0.40]	0.18	3.40***
RWA	0.14	[-0.02, 0.30	0.08	1.68†
Adjusted R^2	0.30			

Note. $N = 387$.

***$p < 0.001$, †$p < 0.10$.

The results of these analyses support H6.

SOA and Psychological Reactance in Response to Male Supremacy Propaganda

H7 predicted an inverse relationship between SOA and psychological reactance in response to male supremacy propaganda. Analyses involving reactance's constituent elements

(anger and counter-arguing) and reactance as a singular latent construct were replicated from Study 1.

SOA and Anger in Response to Male Supremacy Propaganda. H7(a) predicted an inverse relationship between SOA and anger in response to male supremacy propaganda. The correlation between these variables was negligible ($r = 0.01$, $p = 0.79$). Neither the ANCOVA ($F(2, 342) = 0.65$, $p = 0.52$), nor the regression analysis($F(3, 384) = 5.48$, $p < 0.001$) revealed any significant effects of SOA on anger. See Table 11 for the optimal regression model for predicting anger.

Table 11

Regression Weights for the Relation of Optimal Predictors with Anger in Response to Male Supremacy Propaganda

Predictor	B	95% CI	β	t
Constant	3.89	[2.77, 5.00]		6.85
Inoculation	0.57	[-0.05, 1.18]	0.09	1.82†
Race	0.35	[-0.04, 0.73]	0.09	1.77†
Gender	-0.26	[-1.30, -0.12]	-0.12	-2.35*
RWA	-0.71	[-0.42, -0.11]	-0.17	-3.30**
Adjusted R^2	0.04			

Note. $N = 388$. Inoculation (1 = inoculated, 0 = not inoculated); race (1 = white, 0 = all other); gender (1 = male, 0 = all other).

$^{**}p < 0.01$, $^{*}p < 0.05$, $^{\dagger}p < 0.10$.

These results do not support H7(a).

SOA and Counter-Arguing against Race Science Propaganda. H7(b) predicted an inverse relationship between SOA and counter-arguing against male supremacy propaganda. The correlation between these variables was significant and negative ($r = -0.46$, $p < 0.001$). And an ANCOVA ($F(2, 342) = 4.84$, $p < 0.01$) showed that those characterized by low SOA ($M_{low} = 4.71$, $SD_{low} = 0.34$) counter-argued against the propaganda significantly more (all $p < 0.01$) than those characterized by moderate SOA ($M_{med} = 3.60$, $SD_{med} = 0.40$) or high SOA ($M_{high} = 3.23$, $SD_{high} = 0.35$)

Furthermore, the optimal regression model included SOA as the strongest inverse predictor of reported counter-arguing ($F(4, 384) = 35.80$, $p < 0.001$; see Table 12).

Table 12

Regression Weights for the Relation of Optimal Predictors with Counter-Arguing against Male Supremacy Propaganda

Predictor	B	95% CI	β	t
Constant	6.77	[5.81, 7.72]		13.875
SOA	-0.85	[-1.08, -0.62]	-0.36	-7.38***
SDO	-0.33	[-0.50, -0.16]	-0.20	-3.71***
RWA	-0.17	[-0.37, 0.02]	-0.09	-1.73†
Race	0.43	[0.01, 0.86]	0.09	1.99*

Adjusted R^2	0.27

Note. $N = 388$. Race (1 = White, 0 = all other).

$^{***}p < 0.001$, $^{*}p < 0.05$, $^{\dagger}p < 0.10$.

These results collectively support H7(b).

Reactance as the Intertwined Combination of Anger and Counter-Arguing (Male Supremacy). As in Study 1, we constructed a series of path models in which reactance was modeled as a latent construct that predicted anger and counter-arguing. The section titled Structural Relationships between SOA and Persuasion by Male Supremacy Propaganda provides comprehensive descriptions of each iteration of the model. Once again, the model that best fit the data included a path signifying a significant, inverse relationship between SOA and reactance ($\beta = -0.42$, $p < .001$).

In a complete replication with Study 1, the respective analyses of the relationship between SOA and reactance's constituent elements produced conflicting results, but a significant negative path coefficient linking SOA to reactance provides clarifying support.

The sum of this evidence provides support for H7.

SOA and Intention to Support the Source of Male Supremacy Propaganda

H8 predicted a positive relationship between SOA and intent to support the source of the male supremacy propaganda. The correlation between SOA and intention was positive and significant ($r = 0.52$, $p < 0.001$). An ANCOVA further demonstrated that SOA was positively related with support intention ($F(2, 342) = 3.84$, $p < 0.05$). Individuals who engaged in high or moderate levels of SOA ($M_{high} = 3.93$, $SD_{high} = 0.31$; $M_{med} = 4.01$, $SD_{med} = 0.35$) reported significantly greater intention to support the source of the male supremacy propaganda than individuals engaged in low SOA ($M_{low} = 2.91$, $SD_{low} = 0.30$).

Additionally, the regression model that best fit the data included SOA was the strongest predictor ($F(3, 384) = 64.18$, $p < 0.001$; see Table 13).

Table 13

Regression Weights for the Relation of Optimal Predictors with Intention to Support the Source of Male Supremacy Propaganda

Predictor	B	95% CI	β	t
Constant	0.02	[-0.77, 0.81]		0.04
SOA	0.90	[0.70, 1.10]	0.41	8.83***
SDO	0.30	[0.14, 0.45]	0.19	3.79***
RWA	0.25	[0.08, 0.43]	0.14	2.90**
Adjusted R^2	0.33			

Note. $N = 388$.

***$p < 0.001$, **$p < 0.01$.

The results of these analyses support H8.

Structural Relationships between SOA and Persuasion by Male Supremacy Propaganda

We again used AMOS Graphics (v. 27) to construct a series of path models to identify the optimal variable structural orientation. Beginning with a simple model (Model 4) reflecting H5-H8, SOA directly predicted all outcomes of interest with no other paths. This model did not fit the data well (CFI = 0.90, RMSEA = 0.11, SRMR = 0.12, χ^2 (df) = 805.01 (148)).

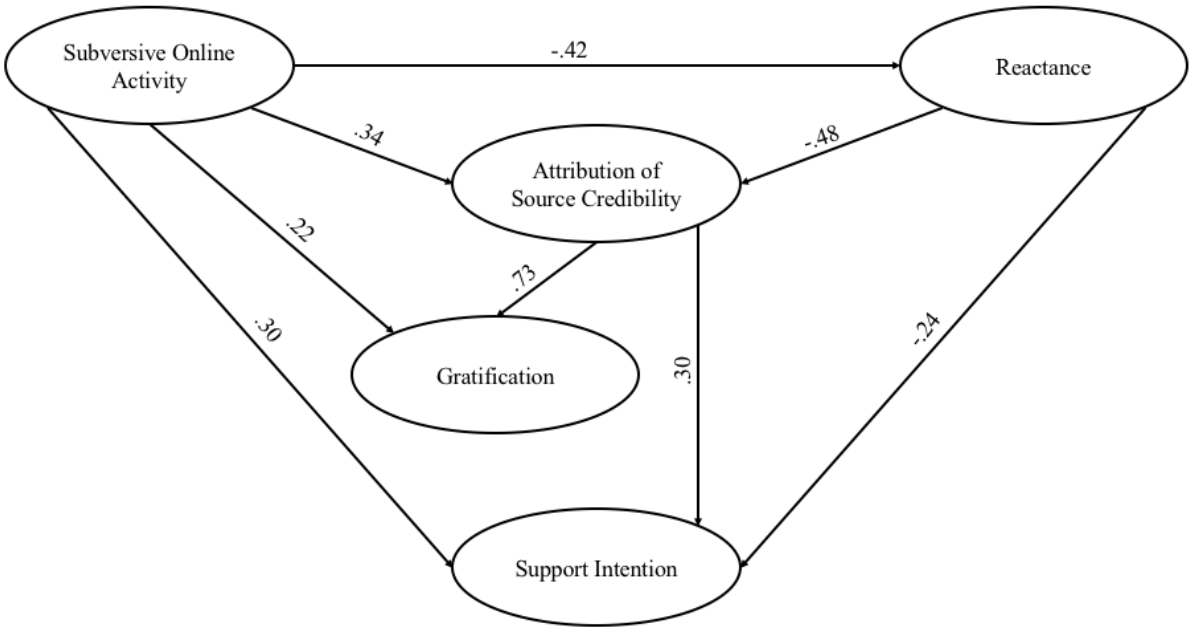
Modification indices recommended the addition of the same paths used to construct Model 2 in Study 1. All paths from Model 4 remained significant and were retained. This model

(Model 5) represented a good fit to the data (CFI = 0.97, RMSEA = 0.06, SRMR = 0.05, χ^2 (df) = 382.01 (145)).

We again amended the model to reflect past work on the persuasiveness of extremist propaganda and created a path from attribution of source credibility to support intention (Model 6). This further improved model fit and was chosen as the optimal model (CFI = 0.97, RMSEA = 0.06, SRMR = 0.04, χ^2 (df) = 372.841 (144)). Figure 2 depicts Model 6.

Figure 2

Structural Relationships between SOA and Persuasive Outcomes (Study 2)



Note. All paths significant at least $p < 0.001$.

Table 14 summarizes the total effects of all predictors on all outcomes.

Table 14

Total Standardized Effects Exerted by Predictors on Salient Outcomes (Study 2)

Predictor

Outcome	SOA	Reactance	SC
Reactance	-0.42		
SC	0.54	-0.49	
Gratification	0.61	-0.35	0.73
Support Intention	0.57	-0.38	0.30

Note. SC = attribution of source credibility.

These total effects replicate those calculated in Study 1 in terms of sign and magnitude, further supporting H5-H8.

Study 2 Summary

The purpose of Study 2 was to determine whether the relationships identified in Study 1 are robust to other far-right propaganda domains. The data indicate that they are. The effects of SOA on persuasive outcomes related to exposure to male supremacy propaganda are similar in sign and magnitude as those observed in relation to race science propaganda. Moreover, the system of variables relating all variables in Study 2 perfectly replicate the system of variables from Study 1. The respective relationships between SOA and salient persuasive outcomes seem to be robust across far-right propaganda themes.

Given these results, it is clear that SOA can play a central role in how one responds to far-right propaganda of all kinds. This finding has implications for understanding how far-right propaganda persuades intended audiences, and just as importantly, how we might intervene in radicalization processes catalyzed by exposure to such propaganda.

Overall Discussion

The SOAs outlined above effectively predicted the degree to which participants would resist the propaganda, felt gratified by far-right extremist propaganda, perceive credibility on the part of the source of that propaganda, or report intention to support the group that produced the propaganda. These findings were replicated across two separate studies with near-identical results.

The question remains, however, as to how we can use this knowledge to increase our understanding of online radicalization processes and intervene in them, thereby reducing the likelihood of far-right extremist violence.

Interrupting Radicalization Processes

This study's findings offer four key takeaways about the risks of SOA and its role in the assimilation of far-right extremist ideologies (and support for violence).

First, an individual's participation in SOA increases their risk of being persuaded by far-right extremist propaganda. Prevention efforts focused on helping stakeholders (e.g., parents, teachers) identify those at risk for receptivity to far-right extremist propaganda would benefit from recognizing some of the SOAs outlined above. Moreover, intervention targets might be better differentiated in terms of their participation in SOA, as it may help optimize the use of finite resources intended to prevent persuasion by extremist propaganda.

Second, far-right extremist propaganda disseminated on alt-tech or in other online spaces that promote SOA are likely to be perceived as credible and enjoyable by heavy users of those platforms. This ought to raise a red flag about the potential additive harms of SOA for mass disinformation campaigns like the 'Stop the Steal' mobilization that led to the January 6, 2021 attack on the U.S. Capitol.

Third, these studies suggest that SOAs should be incorporated into broader models of individual vulnerability to radicalization. Social dislocation and the search for social meaning are commonly—and rightly—understood as risk factors for radicalization to violent extremism (Miller-Idriss, 2020). However, our findings point to another modality of online radicalization risk. Individuals with established social roles in online spaces marked by SOA are more likely to express support for far-right attitudes and behaviors. It follows that social isolation is not the only online factor that relates to increased risk of radicalization; social embeddedness in online communities that advocate SOA can increase this risk as well. This indicates a need to shift focus from the 'quantity' of social embeddedness in online media (i.e., isolated or not) toward the 'quality' of embeddedness—that is, what social milieus (and activities performed therein) contribute to one's vulnerability to online radicalization.

Finally, these findings highlight how SOAs have important implications for the rest of the online ecosystem. Core architectural features of the Internet, like hyperlinks and transferable content, ensure that what happens in subversive online spaces can reappear on a mainstream social media platform, and vice versa. Research has shown how hyperlinks in particular can act as portals that transport users across online spaces and content moderation regimes (Velasquez et al., 2020). Given the ease with which users can travel between platforms characterized by SOA and moderated mainstream platforms, users of the latter can be exposed to content and activities occurring in more subversive spaces. As such, efforts to prevent online radicalization on mainstream platforms may benefit from developing programs intended to reduce engagement in SOA, rather than focus exclusively on extremist behavior (Saltman et al., 2021).

Study Limitations and Future Research

As in any empirical exercise, the results of this study are qualified by certain limitations. First, both studies relied on a sample gleaned from an opt-in survey platform. This limits our ability to project findings about how these treatments would perform in live online settings. Relatedly, and consistent with ethical best practices, participants were aware that their participation was part of research study, increasing the risk of collecting responses biased by social desirability effects. Second, although Model 3 and Model 6 provided better fits to the data relative to when the paths were reversed, these findings are not definitive on causality. SOA is clearly *related* to persuadability by far-right extremist propaganda; but, we cannot definitively claim that SOA *causes* this persuasive vulnerability. Empirical investigations that evaluate these variables in a longitudinal fashion may provide some evidence int his regard.

Third, these studies were limited to two far-right thematic domains. More research is needed to extend these findings to other kinds of extremist propaganda (e.g., anti-government). Finally, we note that there are limitations to including use of encrypted and anonymizing apps as in the index variable for SOA, given that such platforms may be used for benign purposes. As evidenced by the high internal consistency of the SOA scale, it is clear that use of anonymizing and encrypting apps were at least related to more obvious subversive behaviors (e.g., doxing). That said, an SOA scale that is more unidimensional may provide more insight into the SOA-persuasion relationship.

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References

Altemeyer B (1988) *Enemies of Freedom: Understanding Right-Wing Authoritarianism*. San Francisco: Jossey-Bass.

Barker M-J (2016) *Queer: A Graphic History*. London: Icon Books Ltd.

Blee K and Creasap KA (2010) Conservative and right-wing movements. *Annual Review of Sociology* 36: 269-286.

Braddock K (2020) Vaccinating against hate: using attitudinal inoculation to confer resistance to persuasion by extremist propaganda. *Terrorism and Political Violence*.

Brannon R (1976) The male sex role: our culture's blueprint of manhood, and what it's done for us lately. In David DS and Brannon R (eds) *The Forty-Nine Percent Majority*. Reading, MA: Addison-Wesley.

Cohen J (1992) A power primer. *Quantitative Methods in Psychology* 112: 155-159.

Connell RW (1993) *Masculinities*. Berkeley, CA: University of California Press.

Conway M (2020) Routing the extreme right: challenges for social media platforms. *The RUSI Journal* 165(1): 108-113.

Craker N and March E (2016). The dark side of Facebook: the Dark Tetrad, negative social potency, and trolling behaviors. *Personality and Individual Differences* 102: 79-84.

Dillard JP and Shen L (2005) On the nature of reactance and its role in persuasive health communication. *Communication Monographs* 72(2): 144-168.

Douglas DM (2016) Doxing: a conceptual analysis. *Ethics and Information Technology* 18: 199-210.

Ebner J (2019) Replatforming unreality. *Journal of Design and Science* (6).

Eisinga R, te Grotenhuis M and Pelzer B (2012) The reliability of a two-item scale: Pearson, Cronbach, or Spearman-Brown? *International Journal of Public Health* 58: 637-642.

Farrell W (1974) *The Liberated Man: Beyond Masculinity – Freeing Men and Their Relationships with Women*. New York: Random House.

Feldstein S and Gordon S (2021) Are telegram and signal havens for right-wing extremists? *Foreign Policy*, 13 March. Available at https://foreignpolicy.com/2021/03/13/telegram-signal-apps-right-wing-extremism-islamic-state-terrorism-violence-europol-encrypted/.

Gehl RW (2018) *Weaving the Dark Web: Legitimacy on Freenet, Tor, and I2P.* Cambridge, MA: MIT Press.

Ging D (2019) Alphas, betas, and incels: theorizing the masculinities of the manosphere. *Men and Masculinities* 22(4): 638-657.

Hoffman B, Ware J and Shapiro E (2020) Assessing the threat of incel violence. *Studies in Conflict & Terrorism* 43(7): 565-587.

Hu L and Bentler PM (1999) Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal* 6(1): 1-55.

Hughes B (2019) Thriving from exile: toward a materialist analysis of the alt-right. Available at https://www.boundary2.org/2019/09/brian-hughes-thriving-from-exile-toward-a-materialist-analysis-of-the-alt-right/.

Hughes B and Miller-Idriss C (2021). Uniting for total collapse: The January 6 boost to accelerationism. *CTC Sentinel* 14(4): 12-17.

Jenkins D and Leroy J (2021) *Histories of Racial Capitalism*. New York: Columbia University Press.

Komaç G and Çagiltay K (2019) An overview of trolling behavior in online space and gaming context. In: Proceedings of the 1st International Informatics and Software Engineering Conference, Ankara, Turkey, 6-7 November 2019, pp: 1-4.

McCroskey JC (1966) Scales for the measurement of ethos. *Speech Monographs* 33: 65-72.

Messner MA (2016) Bad men, good men, bystanders: who is the rapist? *Gender and Society* 30(1): 57-66.

Miller-Idriss C (2020) *Hate in the Homeland: The New Global Far Right*. Princeton, NJ: Princeton University Press.

Mudde C (2007) *Populist Radical Right Parties in Europe*. Cambridge, UK: Cambridge University Press.

Ortiz SM (2020) Trolling as a collective form of harassment: an inductive study of how online users understand trolling. *Social Media + Society* 6(2): 1-9.

Parker KA, Rains SA and Ivanov B (2016) Examining the 'blanket of protection' conferred by inoculation: the effects of inoculation messages on the cross-protection of related attitudes. *Communication Monographs* 83: 49-68.

Perlroth N (2019) What is end-to-end encryption? Another bull's-eye on big tech. *New York Times*, 19 November. Available at https://www.nytimes.com/2019/11/19/technology/end-to-end-encryption.html.

Pleck JH (1987) The theory of male sex-role identity: its rise and fall, 1936 to the present. In: Brod H (ed) *The New Men's Studies*. Winchester, MA: Allen & Unwin, pp. 21-38.

Pratto F, Sidanius J, Stallworth LM et al. (1994) Social dominance orientation: a personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology* 67(4): 741-763.

Smiler AP (2004) Thirty years after the discovery of gender: psychological concepts and measures of masculinity. *Sex Roles* 50: 15-26.

Sussman RW (2014) *The Myth of Race*. Cambridge, MA: Harvard University Press.

Trottier D (2020) Denunciation and doxing: towards a conceptual model of digital vigilantism. *Global Crime* 21(3-4): 196-212.

Velasquez N, Leahy R, Restrepo NJ, et al. (2020) Hate multiverse spreads malicious COVID-19 content beyond individual platform control. *arXiv Preprint*. https://arxiv.org/abs/2004.00673.

Walther S and McCoy A (2021) US extremism on Telegram: fueling disinformation, conspiracy theories, and accelerationism. *Perspectives on Terrorism* 15(2): 100-124.