

Exploring Radicalisation and Extremism Online – an Experimental Study

Dr Mark Littler

University of Huddersfield

Introduction:

The onset of the digital revolution has seen significant shifts in almost all areas of human interaction. Commerce (Slater, 2002), learning (Bonk, 2009) and the formation of social and romantic relationships (Gunter, 2013) have all been significantly and irreparably changed by the impact of new technologies (Littler, 2018), with a significant volume of scholarship over the last two decades exploring the nature of these changes. This is, perhaps unsurprising: alongside the return of mass-casualty terrorism (Littler and Lee, 2019) and the global financial crisis (Reinhart and Rogoff, 2013), the growth to dominance of digital communications has been the defining characteristic of early 21st century life.

In the context of terrorism and extremism the rapid pace of change has seen new forms of risk emerge, and pre-existing forms of risk evolve in unforeseen ways, ranging from the dissemination of terrorist training materials across national borders (Forest, 2008) and the rise of ‘cyberterrorism’ (Kenney, 2015) to the recruitment, organisation and financing of more traditional offline groups (Conway, 2006). While existing academic theory has often been adapted to help us understand and address these risks, empirical literature is slower to emerge, and there is consequently been a gap between what we hold to be true, and what we can prove to be true on the basis of the research evidence.

This problem is particularly acute in respect of online radicalisation, which has become perhaps the most ubiquitous topic of policy and academic discussion within the terrorism studies milieu (Whittaker, 2018). While a significant volume of political and media commentary has sought to link the consumption of extreme content online with the exhibition of extreme views and actions offline, there is no robust, contextually varied or experimental literature capable of sustaining the making of such assertions.

This paper represents an attempt to address this gap, using an experimental design to explore the impact of exposure to extreme political images on social and political attitudes regarding violence and democratic political participation in the UK. Based on the findings of these analyses it will argue that policy makers need to approach the question of content regulation in a sensitive manner, exploring alternative approaches to managing extremist risk that do not involve the blanket banning of online content.

Literature Review:

Despite the frequency of policy and media comment linking online extremism and offline violence, the role of digital content in shaping the behaviours of those who consume it remains under-researched and subject to significant debate (Littler and Feldman, 2015). While policy makers and media commentators regularly assert that online media content can - and does - induce behavioural change, academic scholarship suggests a more nuanced picture, rejecting simplistic attempts to link stimulus (online media exposure) and outcome (violence) in a purely linear relationship.

The lack of empirical research in this area complicates attempts to draw unambiguous conclusions as to the nature – or existence - of any relationship, and while studies by Pauwels and Schils (2016) and

Pauwels and Haydn (2018) have, to some extent, offered a basis for drawing correlatory links, no current literature can sustain the making of reliable causal claims.

Traditional scholarship on media effects offers a lesson in the difficulties of reliably isolating media effects, with research in this field often failing to show consistent links between content exposure and real-world behaviours (Cumberbatch, 2004). While a significant body of research does suggest a correlatory link between the consumption of anti-social media and the exhibition of anti-social behaviours (Johnson et al., 2002; Anderson and Carnagey, 2009; Greitemeyer and Mügge, 2014), other studies have failed to find such a link (Jerabeck and Ferguson, 2013; Ballard & Coates, 1995;). This point is lent credibility by conflicting review papers that both support (Anderson et al., 2010) and reject (Ferguson and Kilburn, 2009) a media consumption effect on the exhibition of aggressive traits.

Groebel (1999) suggests that the reasons for these disparities may lie in national context, research design, and the ubiquity of violence outside of the immediate research context, rendering the difficulty of isolating researcher induced effects insurmountable. However in a world in which violent media content has become “...more frequent, more intense, more easily accessible and more real” (Flannery, 2006) than in previous decades, the extent to which these problems can be addressed remains to be seen.

Disentangling the complex causal pathways that influence and shape media effects is therefore likely to prove increasingly difficult, and given the growth of “socialized communications” (Castells, 2007) that allow for simultaneous consumption and broadcast of content by all users – an area outside the ambit of much traditional media effects research (Valkenberg, Peter and Walther, 2016) – the usefulness of scholarship derived from observations based on traditional media sources, is when seeking to understand online radicalisation, unlikely to provide a comprehensive answer.

The inconsistencies in research exploring the online space therefore need to be understood through both the prism of social media’s unique traits as well as through the influence of factors identified in the literature on mainstream media effects. A better understanding of the impact of online extremist content therefore requires an exploration of those factors that shape the user experience, including content format¹ (Littler, 2019), content source² (Littler and Feldman, 2015), and the social network proximity of the immediate content sharer as well as more traditional preoccupations such as content format, exposure duration, and content context.

The remainder of this paper is given over to an experimental exploration of two of these themes: content theme and the social network proximity.

Method:

To explore the relationship between social media consumption and support for violence, this paper will use an experimental design to test the following hypotheses:

- **H₁:** Content influencing political and social grievances will have a significant causal impact on support for violence.
- **H₂:** The impact of stimuli will be compounded by increasing social network proximity.

¹ For example, image, video, text or link.

² In this instance, the source sharing or highlighting the content in question – for example an extremist group, friend, or third party page/group.

In order to provide a confirmatory test of the relationship that accommodates the impact of desirability bias in respect of self-reported support for violence (see Saunders, 1991), and in line with literature highlighting the close concordance of political attitudes and support for violence (Littler, 2017; Pape, 2005; Wintrobe, 2009), a third hypothesis will be tested:

- **H₃**: Content influencing political and social grievances will have a significant causal impact on democratic valence³.

The corresponding null hypotheses are therefore:

- **H⁰₁**: Content influencing political and social grievances will have no significant causal impact on support for violence.
- **H⁰₂**: The impact of stimuli will not be compounded by increasing social network proximity.
- **H⁰₃**: Content influencing political and social grievances will have no significant causal impact on democratic valence.

Data Collection

The data are drawn from a 1,700-respondent poll conducted by YouGov on the evening of Tuesday 16th April 2019. In order to test the hypotheses, participants were randomly allocated to either a control group or one of six experimental conditions varying both stimulus theme and network proximity. A brief breakdown of the conditions and the corresponding number of participants allocated to each group can be found in Table 1, below. Prior to data collection approval was gained from both School and University level ethics panels at the University of Huddersfield.

[Table 1 about here]

Experimental Materials

Experimental stimulus materials were selected by the researcher from official online content published by the English Defence League, a major British street-based extremist movement. Following a review of their official posts over the last month, two key themes were chosen as an expression of the most salient issues in contemporary group discourse: migration and changing community demography, and political disenfranchisement and Brexit. The most engaging⁴ visual posts in each category were selected, alongside a neutral political control image chosen from the Google image repository⁵. As a review of group discourse also highlighted a number of appeals for direct action and civil disobedience, a third image was picked to represent this theme using the same process.

Preface instructions were provided before the display of each stimulus, inviting participants to consider its content and meaning before answering a battery of 9 outcome questions. These prefaces were designed by the researcher to position the stimulus images as either proximate to – or

³ Democratic valence is defined here as '[individual] perception of the attractiveness of democracy as a strategy for pursuing their political goals' (Littler, 2017)

⁴ Engagement determined on the basis of the aggregated number of likes, comments, and shares.

⁵ In this case, a 'lol katz' political meme also shared on Facebook

remote from – the individual’s personal social media network, allowing for contrasts supporting exploration of hypothesis 2.

Prior to data collection, these prefaces were piloted with colleagues and postgraduate students at the University of Huddersfield. Details of the final preface texts and stimulus images can be found in Appendix 1.

Measurement

The data included standard demographic controls (age, gender, social status, education level, social media engagement) alongside measures of democratic valence (trust in politicians, parliament and the police, political efficacy, political fairness, and democratic satisfaction) and scale measures of support for violence against property, government employees and civilians. Question texts were based on pre-validated measures from the Ethnic Minority British Election Study (EMBES).

Analysis

Following an initial descriptive exploration of the data, hypothesis testing for hypothesis 1 used linear regression with the 10-point scale measures of support for violence against civilians, government employees, or property as dependent variables in analysis comparing each thematic condition to the control group. As a result, a binary measure of control group membership was included alongside measures for age and gender in each model.

Three models were run for each experimental condition, rotating the dependent variables to produce a total of 18 iterations of the model. Supplementary analysis tested compound measures of support for political violence in each condition, with further confirmatory analysis using binary logistic regression against dichotomised support for violence measures.

Hypothesis 2 was tested using linear regression with the 10-point scale measures of support for violence against civilians, government employees, or property as dependent variables. Unlike testing for hypothesis 1, contrasts explored only the differences between high and low source proximity groups, with a binary measure of high/low source proximity included in lieu of the control group membership measure. This was introduced to the model alongside control measures for age and gender. As above, supplementary analysis was undertaken using linear regression with a compound measures of support for political violence used as dependent variable in each condition. Further confirmatory analysis using binary logistic regression with dichotomised support for violence as dependent variable was also undertaken.

Hypothesis 3 was tested using linear regression with a compound factor approximating democratic valence as dependent variable. This factor was formed using quartimax rotated principal axis factoring with scale inputs for trust in politicians, parliament and the police included alongside measures of democratic satisfaction, political influence and political fairness. Outputs were saved as simple regression coefficients⁶ and were analysed alongside a binary variable for group membership.

Results:

Descriptive Analytics

⁶ This approach mirrors the one taken in earlier research by the author – for a fuller discussion, see Littler (2017).

The final data provided by YouGov comprised 1,756 cases aged between 18 and 199 with a mean age of 49.8 (SD = 12.962). The sample gender split was 43.8% Male (N = 770) to 56.2% Female (N = 986), however the random allocation of participants across experimental groups saw the gender balance vary between 38.8% Male to 61.2% Female and 47.1% Male to 52.9% Female across the experimental conditions. Further detail of this split is provided in Table 1, above.

Hypothesis 1

In order to test the first hypothesis, a series of linear regression models were specified to include the support for violence measures alongside covariates for age and gender and a measure of experimental group membership. Regression diagnostics were undertaken to ensure adequate model fit, with R^2 values ranging between .003 and .026 (though generally exceeding .010), indicating significant volatility and poor predictive fit in many cases. However, given the complexity of the phenomenon in question, and the nature of the analysis, such a result is neither surprising nor cause for concern.

A condensed table presenting the results of these analysis is presented below, in Table 2.

[Table 2 about here]

In no iteration of the analysis did membership of an experimental group significantly impact propensity to support violence, with group allocation found insignificant at the 5% threshold across all models exploring support for violence against property, government employees and civilians. Moreover, significant variation was found in the directionality of effects, with some stimulus materials apparently inducing a small reduction in support for violence. Confirmatory analysis exploring the impact of group allocation on both binary and compound measures of support for violence yielded similarly non-significant results, supporting the rejection of hypotheses 1 and the tentative acceptance of its corresponding null hypothesis.

Hypothesis 2

Despite the results of hypothesis 1, further analysis was undertaken to test hypothesis 2 while discounting the potential impact of control group anomalies. Data collected from participants exposed to each content theme was analysed with each of the three support for violence measure as dependent variable alongside a binary measure of source proximity and controls for age and gender. As a result, 9 models were run, with R^2 values ranging between .065 and .004, suggesting generally poor model fit (as above).

All three models produced non-significant results for source proximity, as detailed in Table 3, below. As above, confirmatory analysis using compound scale and binary measures of support for violence also failed to attain significance. As a result, hypothesis 2 may also be rejected, and the corresponding null hypothesis may be accepted.

[Table 3 about here]

Hypothesis 3

The results of final analysis exploring the impact of group allocation on democratic valence is presented in Table 4, below. Linear regression models were run contrasting each of the 6 experimental groups against the control group, with a factor measuring democratic valence used as dependent variable alongside a binary measure of experimental group membership and controls for age and gender. Again, R^2 values indicated poor predictive fit (ranging between .003 and .009), while the failure of group allocation to attain significance or to evidence consistent effect direction across the models

suggests that hypothesis 3 should also be rejected, and the corresponding null hypothesis should be accepted. The implications of this finding is discussed in further detail below.

[Table 4 about here]

Discussion

The principles behind *Occam's Razor*⁷ would suggest that the failure of these analyses to attain significance may be taken to indicate a failure of experimental design. An anomaly in the control group, impotent stimulus images, or insensitive instruments could potentially explain the comprehensive failure of these analyses to support the hypotheses under investigation. However, while this is possible, the absence of a strong body of contradictory literature, the source of the outcome measures, the design of the stimulus images, and the fundamental principles of experimental design – ensuring an even allocation of potentially confounding influences across all experimental groups - suggest that such an explanation is unlikely. As a consequence, a number of alternative – and potentially more credible - reasons must be considered.

However, before these are explored it is important to discount the simplest explanation fully. While the failure of the data to show significant differences in support for violence or democratic valence across and between experimental conditions may be taken to indicate that the experimental stimulus materials were ineffective, or that the image used in the control condition was itself inherently radicalizing, such an approach would lack prima facie credibility. The 'neutral' image used for the control condition (a 'lol katz' style meme of an aspiring politician cat, presented in Appendix 1) seems unlikely to have induced any strong political response amongst those in the control condition, and so its impact can reasonably be discounted when explaining these results.

The alternative suggestion, that the stimulus materials used in the experimental conditions were ineffective, also lacks credibility in the context of policy and media debate around extremism online. In choosing to employ content produced and shared by a well-known extremist group, this experiment has used precisely the type of material that policy and media commentators assert is behind online radicalization. It is therefore tautologous to suggest that this content is insufficiently extreme to fulfil its purpose while simultaneously claiming it as a public safety concern. Put simply: if it has failed to induce a shift in support for violence, it may well not be 'radicalising'.

The implications of such a finding cannot be overstated, not least in light of the assumptions underpinning the UK Government's recent *Online Harms White Paper* (Home Office, 2019). Implicit in the paper's view of the online space is the idea that "...online content...remains a feature of contemporary radicalisation" (Home Office, 2019:12) and therefore that a regulatory and legal response is required. In finding that the extreme content investigated in this paper had no impact on support for violence or political attitudes, this paper suggests either that the public may already be so supportive of violence and distrustful of politics and politicians that no meaningful change in their outlook can be induced, or that the materials produced by extremist groups fail completely to induce even minor shifts in recipient outlook. While it is impossible to definitively determine which of these explanations is correct, the close correspondence of mean levels of political trust, democratic satisfaction, political fairness and political influence scores in this data with those in the most recent (2015) British Election Study would seem to suggest the latter explanation is correct.

⁷ *Occam's Razor* is an abductive heuristic that suggests one should embrace the solution that makes the fewest assumptions.

In such an eventuality, it may seem sensible to assert that – as Hurst (2004) has argued in respect of mainstream media sources – the pervasive spread of soft extremist content and its forceful condemnation by users on social media has provided many people with an inoculation against the impact of extremist media. Regular exposure to both content and condemnation from other users may have deprived extremist images of their power to shock and outrage, and as a result, for most users they may now have no ability to impact social and political attitudes. To all intents and purposes, they may well be invisible to many who see them.

While this paper cannot (and does not) refute the assumption made in the white paper that online content may represent a particularly significant risk to vulnerable internet users (for example, the young), or the logic that asserts objectionable content should be removed, with content host compliance made subject to a legal duty and regulatory oversight, the results here argue the need for restraint and caution when formulating a response. While it is tempting to support blanket bans against objectionable content – and, indeed, sensible arguments may be made for doing so on other grounds (see Littler, 2018) - such an approach may well be disproportionate to the nature of the risk faced when justified in relation to online radicalisation. While further research is necessary to explore the interplay between individual markers of vulnerability and extremist content online, those sceptical of regulatory benefits could compellingly argue that, rather than restrict access to extreme content, effective policy responses would better focused on using the wealth of individual level data provided through social media to more effectively identify and target those at specific risk of harm. This would allow for a response which better balances individual rights to free speech with the need to respond effectively to the risk of extremism.

Alongside this, age restricting access to content – as has been implemented in respect of access to pornography – and greater investment in citizenship education in schools could also do much to address the risks of extremist vulnerability amongst young people. As Bjorgo (2004) identifies, pro-violent attitudes are produced by a complex range of social and political factors, including negative perceptions of the efficacy of engagement with democratic politics (Littler, 2017; Pape, 2005; Wintrobe, 2009). Given that research evidence has suggested that young people are likely to be distrustful of politicians (Bartlett and Miller, 2010) and are less likely to understand our political system (Henn, Weinstein, and Forrest, 2009), investment in improving understanding and confidence in democracy and its institutions is likely to significantly improve resilience to extremist messages.

In the context of analyses exploring hypothesis 2, the failure to find differences in support for violence on the basis of social network proximity may well be a product of the short exposure period and the difficulty, in an experimental setting, of representing social network proximity. While the prefaces used to accompany content were piloted prior to use, it is hard to identify how respondents reacted to instruction without further qualitative analysis. As a consequence, further research is clearly necessary to better understand the impact of the prefaces used in this study.

Despite this, if these results are accepted, then the possibility that social network proximity has no impact on attitudes to content cannot be discounted. This would challenge the argument made by Littler and Feldman (2015) which suggests that extremist social networks play an important role in sharing content and shaping offline action in a manner akin to the two-step-flow model of media influence (see Katz, 1957). While it remains the case that this may be an accurate representation of content dissemination within extremist groups, the findings of this paper suggest that mainstream social media users are unlikely to be more swayed by content that appears on their newsfeed via a friend than by content that appears via sponsored advertising. This may be seen to question the well-established principles of peer influence (see Warr and Stafford, 1991) though – as work by Cole et al. (2010) suggests - this may simply be a function of the exclusion from this paper of data from

those aged under 18, whose susceptibility to peer influence is well documented and who – according to existing research – are at the highest risk of radicalisation.

In all cases further research is clearly necessary to build our understanding of the links between online extremist content and offline values and behaviours, both to address the deficiencies of this study and to better ascertain whether the results here are an accurate representation of the online-offline relationship. Future studies in non-UK contexts, focussing on different extremist groups and different extremist themes, are particularly welcome, as are replications of this work in the context of younger internet users. Longitudinal and ethnographic research, exploring the impact of duration of exposure and mapping the role of exposure in adolescence on later life behaviours would do much to address the issues flagged in respect of the current Home Office white paper. Moreover, research focussing on the role of format (for example, the role of video) and content curation in facilitating online radicalisation would be particularly beneficial to scholarly understandings of extremist internet use given recent findings highlighting the centrality of both to the process of content dissemination (Littler, 2019; Lee, 2015).

Conclusions

This paper has sought to explore the relationship between exposure to online extremist content and social and political attitudes including support for violence. Following exhaustive analysis no relationship between these phenomena has been found. Moreover, analysis exploring the role of network proximity in shaping support for violence also suggests that the source of extremist content has little impact on its ability to shift social and political attitudes.

The implications of these findings for both existing policy and academic research in this area have been discussed, alongside the limitations of this paper and the directions for future research. In particular, the need for research in different contexts, research using a broader range of stimuli, and research exploring the impact of individual level vulnerability have all been highlighted.

References:

- Anderson, C. A., & Carnagey, N. L. (2009). Causal effects of violent sports video games on aggression: Is it competitiveness or violent content?. *Journal of Experimental Social Psychology*, 45(4), 731-739.
- Anderson, C. A., Shibuya, A., Ihori, N., Swing, E. L., Bushman, B. J., Sakamoto, A., ... & Saleem, M. (2010). Violent video game effects on aggression, empathy, and prosocial behavior in Eastern and Western countries: A meta-analytic review. *Psychological bulletin*, 136(2), 151.
- Ballard, M. E., & Coates, S. (1995). The immediate effects of homicidal, suicidal, and nonviolent heavy metal and rap songs on the moods of college students. *Youth & Society*, 27(2), 148-168.
- Bartlett, J., and Miller, C. (2010) *The Power of Unreason*, London: Demos
- Bjørger, T. (Ed.). (2004). *Root causes of terrorism: Myths, reality and ways forward*. Routledge.
- Bonk, C. J. (2009). *The world is open: How web technology is revolutionizing education* (pp. 3371-3380). Association for the Advancement of Computing in Education (AACE).
- Castells, M. (2007). Communication, power and counter-power in the network society. *International journal of communication*, 1(1), 29.
- Cole, J., Alison, E., Cole, B., & Alison, L. (2010). Guidance for identifying people vulnerable to recruitment into violent extremism. *Liverpool, UK: University of Liverpool, School of Psychology*.
- Conway, M. (2006). Terrorism and the Internet: New media—New threat?. *Parliamentary Affairs*, 59(2), 283-298.
- Cumberbatch, G. (2004). *Video Violence. Villain or victim*. London: Video Standards Council
- Ferguson, C. J., & Kilburn, J. (2009). The public health risks of media violence: A meta-analytic review. *The Journal of pediatrics*, 154(5), 759-763.
- Flannery, D. (2006). *Violence and mental health in everyday life*. USA: AltaMira Press
- Forest, J. J. (2008). 21 Knowledge Transfer and Shared Learning among Armed Groups in Norwitz, J. H. (Eds.). *Armed groups: Studies in national security, counterterrorism, and counterinsurgency*. Government Printing Office.
- Greitemeyer, T., & Mügge, D. O. (2014). Video games do affect social outcomes: A meta-analytic review of the effects of violent and prosocial video game play. *Personality and social psychology bulletin*, 40(5), 578-589.
- Groebel, J. (1999). UNESCO Global Study on Media Violence, The Major Project of Education. *Bulletin*, 49.
- Gunter, B. (2013). The study of online relationships and dating. In *The Oxford handbook of internet studies*.
- Henn, M., Weinstein, M., & Forrest, S. (2005) Uninterested youth? Young people's attitudes towards party politics in Britain, *Political studies*, Vol. 53, No. 3
- Home Office (2019) *Online Harms White Paper* London: Home Office
- Hurst, M. D. (2004). Researchers target impact of television violence. *Education Week*, 24(12).
- Jerabeck, J. M., & Ferguson, C. J. (2013). The influence of solitary and cooperative violent video game play on aggressive and prosocial behavior. *Computers in Human Behavior*, 29(6), 2573-2578.
- Johnson, J. G., Cohen, P., Smailes, E. M., Kasen, S., & Brook, J. S. (2002). Television viewing and aggressive behavior during adolescence and adulthood. *Science*, 295(5564), 2468-2471.
- Katz, E. (1957). The two-step flow of communication: An up-to-date report on an hypothesis. *Public opinion quarterly*, 21(1), 61-78.
- Kenney, M. (2015). Cyber-terrorism in a post-stuxnet world. *Orbis*, 59(1), 111-128.
- Lee, B. (2015). A day in the "Swamp": Understanding discourse in the online counter-Jihad nebula. *Democracy and Security*, 11(3), 248-274.
- Littler, M. (2017). Rethinking democracy and terrorism: a quantitative analysis of attitudes to democratic politics and support for terrorism in the UK. *Behavioral sciences of terrorism and political aggression*, 9(1), 52-61.

- Littler, M. (2018) Online Radicalization, Risk and Terrorism in the Digital Space, in Kallis, A., Zeiger, S., and Osturk, B., *Violent Radicalization and Far-Right Extremism in Europe*, Ankara, TR: SETA Publications
- Littler, M., (2019) *God, Guns and the Internet(?): Exploring British anti-Abortion Extremism* in Littler, M., and Lee, B. (Eds.) *The New Extremism: Readings in Violence, Radicalisation and Extremism in the Digital Space*, London: Palgrave [In Press]
- Littler, M., and Feldman, M. (2015) *Tell MAMA Reporting 2014/2015: Annual Monitoring, Cumulative Extremism, and Policy Implications*, Teesside: Teesside University Press
- Littler, M., and Lee, B. (2019) *Introduction* in Littler, M., and Lee, B. (Eds.) *The New Extremism: Readings in Violence, Radicalisation and Extremism in the Digital Space*, London: Palgrave [In Press]
- Pape, R. A. (2006). *Dying to win: The strategic logic of suicide terrorism*. Random House Incorporated.
- Pauwels, L. J., & Hardyns, W. (2018). Endorsement for extremism, exposure to extremism via social media and self-reported political/religious aggression. *International journal of developmental science*, (Preprint), 1-19.
- Pauwels, L., & Schils, N. (2016). Differential online exposure to extremist content and political violence: Testing the relative strength of social learning and competing perspectives. *Terrorism and Political Violence*, 28(1), 1-29.
- Reinhart, C. M., & Rogoff, K. S. (2008). Is the 2007 US sub-prime financial crisis so different? An international historical comparison. *American Economic Review*, 98(2), 339-44.
- Saunders, D. G. (1991). Procedures for adjusting self-reports of violence for social desirability bias. *Journal of Interpersonal violence*, 6(3), 336-344.
- Slater III, W. F. (2002). Internet history and growth. In *Chicago Chapter of the Internet Society* (Vol. 2003).
- Valkenburg, P. M., Peter, J., & Walther, J. B. (2016). Media effects: Theory and research. *Annual review of psychology*, 67, 315-338.
- Warr, M., & Stafford, M. (1991). The influence of delinquent peers: What they think or what they do?. *Criminology*, 29(4), 851-866.
- Whitaker, J. (2018) Online Radicalisation, The West, and the "Web 2.0": A Case Study Analysis in Minchev, Z., and Bogdanowski, M., (Eds.) *Countering Terrorist Activities in Cyberspace*. Amsterdam: IOS Press
- Wintrobe, R. (2006). *Rational extremism: the political economy of radicalism*. Cambridge University Press.

Table 1 – Allocation of Participants to Control and Experimental Conditions

Condition	Total N	Male N	Female N	Mean Age
<i>Control</i>	250	97	153	51.24
<i>Democracy (Close)</i>	237	105	132	48.42
<i>Democracy (Neutral)</i>	271	126	145	51.12
<i>Migration (Close)</i>	260	113	147	50.37
<i>Migration (Neutral)</i>	242	114	128	49.12
<i>Civil Unrest (Close)</i>	242	96	146	47.37
<i>Civil Unrest (Neutral)</i>	254	119	135	50.65

Table 2 – Impact of Group Allocation on Support for Violence (Compared to Control Group)

		Democracy (Close)	Democracy (Neutral)	Migration (Close)	Migration (Neutral)	Civil Unrest (Close)	Civil Unrest (Neutral)
Support for Violence Against Property							
	<i>B</i>	-.004	-.079	.027	.122	-.196	-.133
	<i>S.E.</i>	.985	.202	.212	.217	.204	.203
	<i>P</i>	.216	.694	.898	.573	.337	.513
Support for Violence Against Government Employees							
	<i>B</i>	-.094	.064	-.070	.260	-.228	-.032
	<i>S.E.</i>	.191	.193	.183	.216	.187	.191
	<i>P</i>	.624	.738	.705	.230	.223	.869
Support for Violence Against Civilians							
	<i>B</i>	-.011	.148	.070	.123	-.165	-.059
	<i>S.E.</i>	.176	.178	.175	.180	.169	.164
	<i>P</i>	.951	.404	.689	.495	.330	.718

Table 3 – Impact of Group Allocation on Support for Violence (Compared to Close Proximity Group)

		Democracy	Migration	Civil Unrest
Support for Violence Against Property				
	<i>B</i>	.075	-.110	-.098
	<i>S.E.</i>	.204	.216	.193
	<i>P</i>	.712	.610	.611
Support for Violence Against Government Employees				
	<i>B</i>	-.187	-.334	-.208
	<i>S.E.</i>	.181	.198	.175
	<i>P</i>	.303	.083	.234
Support for Violence Against Civilians				
	<i>B</i>	-.186	-.068	-.115
	<i>S.E.</i>	.174	.177	.153
	<i>P</i>	.287	.700	.451

Table 4 – Impact of Group Allocation on Democratic Valence (Compared to Control Group)

		Democracy (Close)	Democracy (Neutral)	Migration (Close)	Migration (Neutral)	Civil Unrest (Close)	Civil Unrest (Neutral)
Democratic Valence							
	<i>B</i>	-.182	.083	-.155	.079	.010	.038
	<i>S.E.</i>	.197	.198	.192	.200	.199	.199
	<i>P</i>	.356	.675	.421	.694	.962	.850

Appendix 1: Stimulus Images and Preface Texts

Control Group

Facebook has increasingly been used to share viral political images, such as the one below. Please consider this image, and then answer the following questions:



Split 1

Facebook has increasingly been used to share viral political images, such as the one below. Imagining that a close personal friend has share this image, please consider it and then answer the following questions:



Split 2

Facebook has increasingly been used to share viral political images, such as the one below. Please consider this image, and then answer the following questions:



Split 3

Facebook has increasingly been used to share viral political images, such as the one below. Imagining that a close personal friend has share this image, please consider it and then answer the following questions:



Birmingham in 1940. Englishmen ready to die to prevent a foreign invasion.



Birmingham in 2017.

Split 4

Facebook has increasingly been used to share viral political images, such as the one below. Please consider this image, and then answer the following questions:



Birmingham in 1940. Englishmen ready to die to prevent a foreign invasion.



Birmingham in 2017.

Split 5

Facebook has increasingly been used to share viral political images, such as the one below. Imagining that a close personal friend has share this image, please consider it and then answer the following questions:



Split 6

Facebook has increasingly been used to share viral political images, such as the one below. Please consider this image, and then answer the following questions:

