

Unveiling the Influencers of Radical Content: A Multimodal Analysis of QAnon Videos

Online Radicalization, Multimodal Analysis, Video Perception, Emotion, Personality

Extended Abstract

Radicalization, the process of developing extremist ideologies and beliefs in others, has been increasingly seen on social media in recent years. Previous studies have proposed to identify online radicalization using lexical and social context analysis [4, 5, 6, 2]. However, much of the current radicalization is being attempted on video-sharing platforms, where multimodality features beyond text can be powerful in the promotion of extremist content. Moreover, generic social context analysis does not take into account comprehensive viewer traits and how those can affect viewers' perception of radicalizing content. To address these challenges, we focus on radicalization in YouTube and BitChute. We examine *QAnon*, a conspiracy-based radicalizing group originated in 2017 [1, 3]. In this study, we focus on three main research questions: **RQ1:** What viewer traits, such as personalities and media consumption, are associated with their video preferences? **RQ2:** What high-level video characteristics, such as quality, arousing emotions, and speaker traits, are correlated with viewers' perception? **RQ3:** Which modality features affect viewers' perception the most?

We have collected 5,924 YouTube and BitChute videos on *QAnon*. To study viewers' perception, we select a subset of videos from the full corpus, 3 pro- and 3 anti-*QAnon*, based on the videos' duration, diversity in styles, quality, and popularity. We then create a comprehensive questionnaire (see Figure 1) asking participants to explain aspects of their perception of the videos, and the actions they believe that they or others might take after watching the videos, which are usually the crucial first steps in the action pathways towards extremism and violence. Finally, to quantitatively assess viewers' perception of the videos, we utilize 3 metrics described in Figure 2 – **Enjoyment Score**, **Content Score**, and **Actions Score**.

A total of 46 viewers participate in the questionnaire. Participants' demographics information is collected (see Figure 3), and the distribution is shown in Figure 4. A set of introductory questions about participants' background and prior knowledge are also asked before the questionnaire (see Figure 5), and the statistics are summarized in Figures 6, 7, and 8.

To answer **RQ1**, we investigate how participants' self-reported personalities, initial impression of extremist groups, and their media consumption correlate with their preference for *QAnon* videos. We perform significance tests on the Spearman's correlation between these viewer traits and the 3 metric scores. As highlighted in Figure 9, viewers having a positive opinion of *The Proud Boys* or trusting *CNN news* enjoy watching *QAnon* videos in general. Particularly, viewers trusting *WSJ* tend to enjoy watching pro-*QAnon* videos, and those with a positive opinion towards *Antifa* enjoy watching anti-*QAnon* videos. Regarding the video content, viewers trusting *Fox News* generally agree with the content of pro-*QAnon* videos, whereas those trusting *NPR* and *AP* tend to disagree with them. Looking into the potential follow-up actions after watching these videos, viewers that tend to support pro-*QAnon* videos with the highest probabilities are those with positive opinions towards right-leaning groups and media sources such as *Oath Keepers*, *Fox News*, and *WSJ*.

To answer question **RQ2**, we examine how videos’ content and production quality, arousing emotions, and speaker characteristics affect viewers’ perception. Similarly, we perform significance tests on the Pearson’s correlation between these video traits and the 3 metric scores. As summarized in Figure 10, videos rated as more valid and persuasive are enjoyed more by viewers, whereas videos arousing disgust or rated as boring are more likely to be disagreed, as expected. Videos rated as more trustworthy, persuasive, and logical are more likely to win supportive actions from viewers. In addition, if the speakers in the videos are more enthusiastic, they are more likely to be supported by viewers.

To answer **RQ3**, we further analyze textual (LIWC and sentiment), acoustic (prosodic and emotion), and visual (facial expression and weapon detection) features on the inter-pausal unit level. We perform significance tests on the Pearson’s correlation between the multimodal features and the 3 metric scores. Some interesting findings are that lexicons related to friends and gender positively influence how viewers enjoy, agree, and support the videos, whereas lexicons related to violence put a negative impact. Speakers showing too much surprise or sad facial expression bring negative impact, whereas angry speakers surprisingly appeal to more viewers. In addition, the appearance of weapons has a negative impact on viewers’ perception. The full lists of significant multimodal features are listed in Figures 11, 12, and 13.

In this study, we have collected a large corpus of *QAnon* videos, which we are willing to share with the research community for countering online radicalization. We have also conducted an experimental user study and performed comprehensive feature analysis to identify sources of influence that affect viewers’ impression and reaction to the videos. To the best of our knowledge, this is the first work that computationally analyzes viewers’ perception of radical content by examining not only the high-level characteristics and low-level multimodal features of the videos, but also the viewers’ background and prior knowledge of the domain. In future, we plan to generalize our work to a larger scale, and develop multimodal models for identifying radical techniques and potentially newly emerged radical groups.

References

- [1] A. Amarasingam and M.-A. Argentino. “The QAnon conspiracy theory: A security threat in the making”. In: *CTC Sentinel* 13.7 (2020), pp. 37–44.
- [2] O. Araque and C. A. Iglesias. “An approach for radicalization detection based on emotion signals and semantic similarity”. In: *IEEE Access* 8 (2020), pp. 17877–17891.
- [3] A. Garry et al. “QAnon conspiracy theory: examining its evolution and mechanisms of radicalization”. In: *Journal for Deradicalization* 26 (2021), pp. 152–216.
- [4] M. Hartung et al. “Ranking Right-Wing Extremist Social Media Profiles by Similarity to Democratic and Extremist Groups”. In: *Proceedings of the 8th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis*. Copenhagen, Denmark: Association for Computational Linguistics, Sept. 2017, pp. 24–33.
- [5] V. Hofmann et al. “Modeling Ideological Salience and Framing in Polarized Online Groups with Graph Neural Networks and Structured Sparsity”. In: *Findings of the Association for Computational Linguistics: NAACL 2022*. Seattle, United States: Association for Computational Linguistics, July 2022, pp. 536–550.
- [6] D. López-Sánchez et al. “Towards the automatic identification and monitoring of radicalization activities in twitter”. In: *International Conference on Knowledge Management in Organizations*. Springer. 2018, pp. 589–599.

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1. Did you understand the video?
 Yes
 No

2. Do you think the video was professionally produced with good quality?
 Yes
 No

3. Who do you think the video was trying to appeal to?: _____

4. Was there any violence displayed in the video?
 Yes
 No

5. Was there any music in video?
 Yes
 No

6. Did any of the following objects appear in the video? Choose all that apply.
 Guns
 Swords
 Other Weapons
 Flags
 Symbols of the Group
 None of the Above

7. How likely do you think it is that the people in the video will become involved in the following actions?
 Not at All Likely Not Much Likely Undecided Somewhat Likely Very Much Likely

Protests	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Violence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Illegal Acts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Would you associate the following traits with this video?

	Yes	Neutral	No
Boring (could you pay attention the whole time or not?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lively (was it energetic? Ex. was there music?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Persuasive (were you convinced by the content?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trustworthy (did you trust the content?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Logical (was there a structured argument or data presented?)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Is the video's stance positive, negative, or neutral towards the group?
 Positive
 Negative
 Neutral

10. Do you think this speaker demonstrated any of the following characteristics?

	Yes	Neutral	No
Charismatic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confident	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eloquent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enthusiastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Intelligent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Convincing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Charming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Did you enjoy watching the video?
 Not at All 1 2 3 4 5 Very Much

12. What emotions did you feel when you watched the video? Check all that apply.
 Happiness
 Sadness
 Surprise
 Fear
 Disgust
 Anger
 Confused

13. Which part of the video was most impactful? (Give the approximate timestamps.) Enter N/A if not applicable.: _____

14. Give a short description (a sentence) of the most impactful part of the video you listed above. Enter N/A if not applicable. : _____

15. Do you think any of the content in the video makes a valid point?
 Not at All 1 2 3 4 5 Very Much

16. Would you take any of the following actions after watching this video? Check all that apply.
 Like the video
 Dislike the video
 Post a supporting comment under the video
 Post a criticizing comment under the video
 Share the video with friends, families, or on social media platforms
 Search for similar videos
 Learn more about the group
 Consider joining the group
 Non of the Above

17. Do you think that others watching this video would consider taking any of the following actions? Check all that apply.
 Like the video
 Dislike the video
 Post a supporting comment under the video
 Post a criticizing comment under the video
 Share the video with friends, families, or on social media platforms
 Search for similar videos
 Learn more about the group
 Consider joining the group
 Non of the Above

18. Did the video change your mind about anything? If so, please elaborate.: _____

Figure 1: Video Specific Full Questionnaire

Metric	Description	Score Range
Enjoyment Score	Raters are asked to rate how much they enjoy watching each video on a 5-point Likert scale.	[-2, 2]
Content Score	Raters are asked to say whether they think a video is persuasive, trustworthy, logical, and professionally created. The Content Score of a video is the sum of these 4 traits' scores.	[-1, 1]
Action Score	Raters are asked whether they would take the following actions after watching a video, listed from the most active group opposing actions to the most active group supporting actions: a) posting a criticizing comment [score -2] b) disliking the video [score -1] c) liking the video [score 1] d) posting a supporting comment [score 2] e) considering joining the group [score 3]. The Actions Score of a video is the sum of these actions' scores.	[-3, 6]

Figure 2: Evaluation Metrics Description

1. What is your gender

- Male
- Female
- Nonbinary
- Prefer not to say

2. Which age group describes you?

- 18-29
- 30-39
- 40-49
- 50-59
- 60 or over

3. What is your ethnicity?

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Other

4. What is the highest level of education you've completed?

- Some high school or less
- High school diploma
- Associate's degree
- Bachelor's degree
- Master's degree
- Doctorate degree

5. Do you consider yourself to be conservative or liberal when thinking about politics?

- Conservative
- Liberal
- Moderate
- Other/Undecided

6. Here are a number of personality traits that may or may not apply to you. Please tick a number next to each statement to indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

	1-Disagree strongly	2-Disagree slightly	3-Neither agree nor disagree	4-Agree slightly	5-Agree strongly
Extraverted, enthusiastic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dependable, self-disciplined	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Anxious, easily upset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Open to new experiences, complex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reserved, quiet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sympathetic, warm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disorganized, careless	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Calm, emotionally stable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conventional, uncreative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 3: Demographics Information Questions

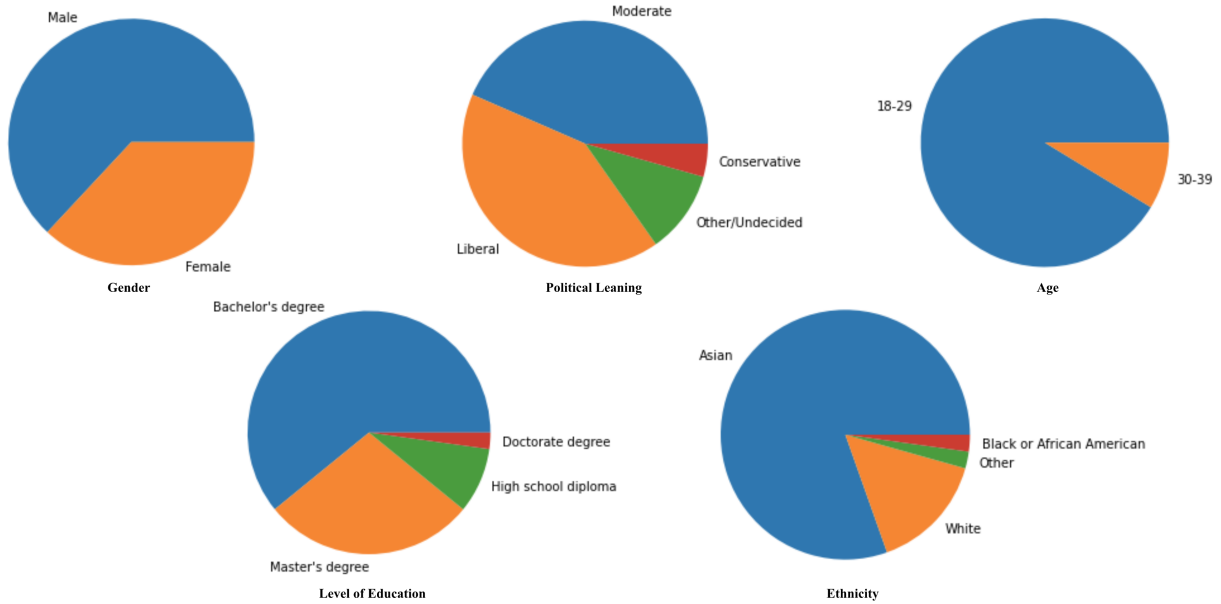


Figure 4: Participants' Demographics Distribution

<p>1. What is your opinion of the following groups?</p> <table border="0"> <thead> <tr> <th></th> <th>Positive</th> <th>Neutral</th> <th>Negative</th> <th>Never Heard of it</th> </tr> </thead> <tbody> <tr> <td>QAnon</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Antifa</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Proud Boys</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Oath Keepers</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>BLM</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table> <p>2. 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Is there anything else about your experience watching these videos that you would like to mention?:</p> <hr/> <p>3. Please rate your experience of this HIT</p> <p>Much worse than the average HIT <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 Much better than the average HIT</p> <p>4. 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Figure 5: Questionnaire Introductory and Final Questions

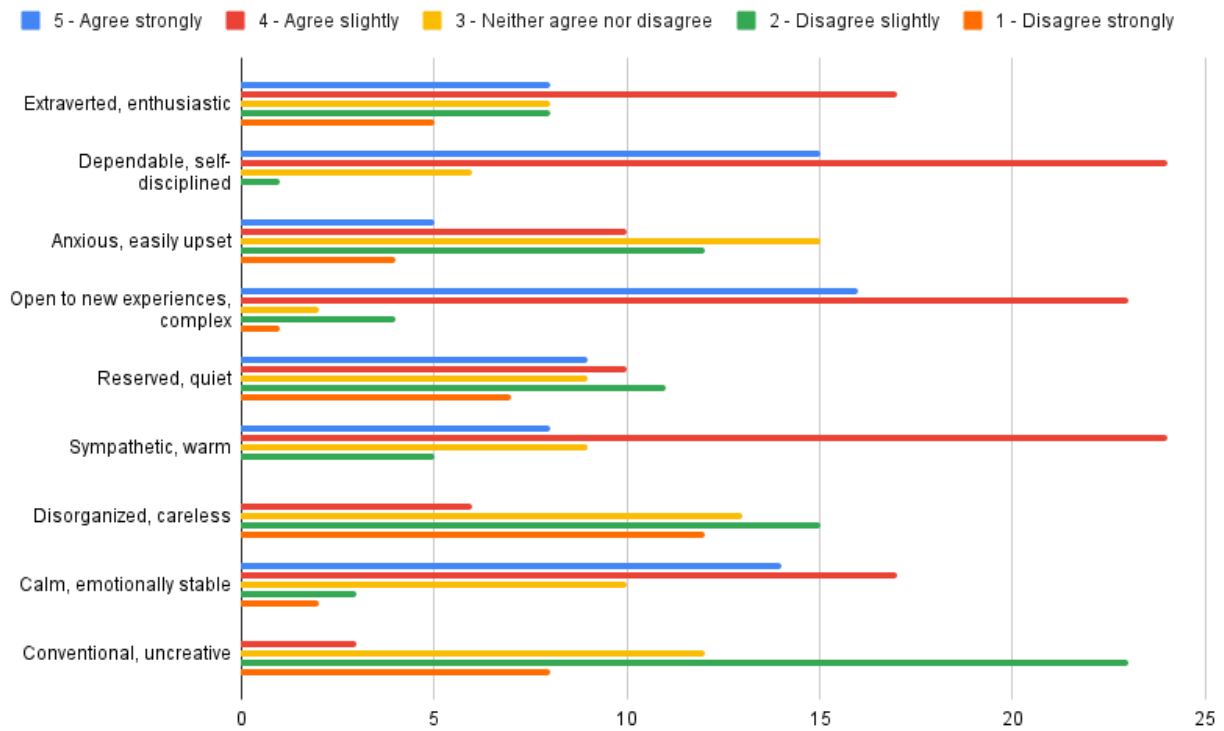


Figure 6: Participants' Self-Reported Personalities Distribution



Figure 7: Distribution of Participants' Opinion on Radical Groups

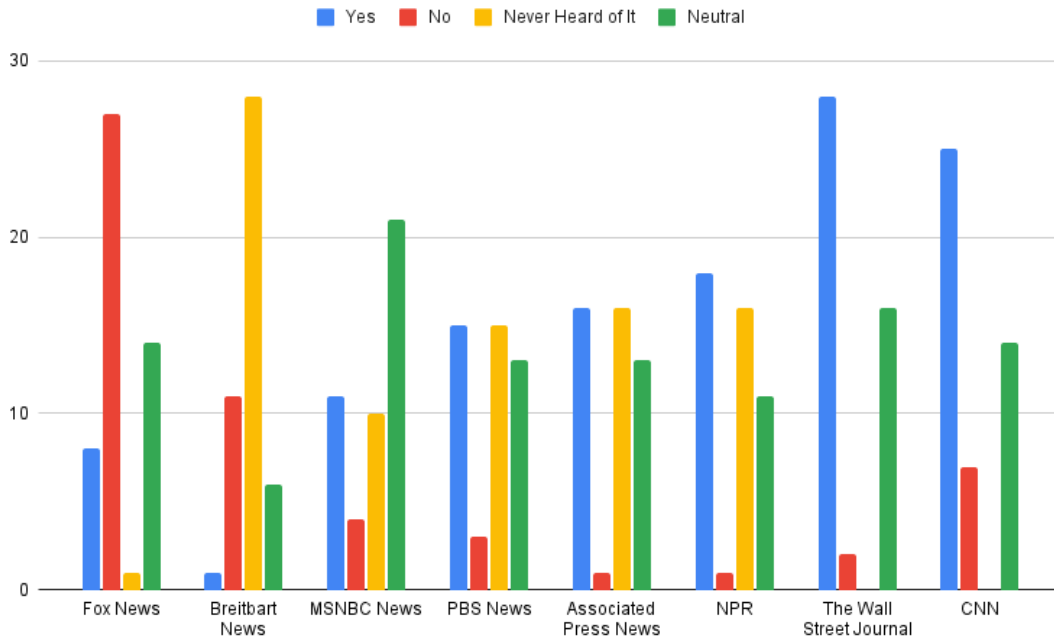


Figure 8: Distribution of Participants' Opinion on Media Sources

Enjoyment on All Videos				Actions after All Videos			
Feature	Corr	p-value		Feature	Corr	p-value	
Opinion_CNN	0.358	0.0146		Opinion_OathKeepers	0.387	0.00793	
Opinion_Antifa	0.345	0.0189		Opinion_Antifa	0.359	0.0143	
Opinion_ProudBoys	0.297	0.0452		Opinion_Fox	0.350	0.0172	
				Opinion_WSJ	0.322	0.0291	
Enjoyment on Pro-QAnon Videos				Actions after Pro-QAnon Videos			
Feature	Corr	p-value		Feature	Corr	p-value	
Opinion_CNN	0.329	0.0255		Opinion_OathKeepers	0.370	0.0114	
Opinion_WSJ	0.298	0.0440		Opinion_Fox	0.358	0.0145	
Enjoyment on Anti-QAnon Videos				Actions after Anti-QAnon Videos			
Feature	Corr	p-value		Feature	Corr	p-value	
Opinion_Antifa	0.368	0.0119		Disorganized	0.318	0.0312	
				Sympathetic	-0.317	0.0321	
Significant Viewer Traits and Ratings on Enjoyment Scores				Significant Viewer Traits and Ratings on Actions Scores			
Content of All Videos				Content of Pro-QAnon Videos			
Feature	Corr	p-value		Feature	Corr	p-value	
Opinion_Fox	0.430	0.00283		Opinion_Fox	0.487	0.000592	
				Opinion_NPR	-0.376	0.0100	
				Opinion_AP	-0.330	0.0253	
Content of Anti-QAnon Videos							
Feature	Corr	p-value					
Reserved	0.339	0.0213					

Figure 9: Significant Viewer Traits and Ratings (p-value < 0.05) on Enjoyment, Content, and Actions Scores

Enjoyment on Pro-QAnon Videos			Actions Likely after All Videos		
Feature	Corr	p-value	Feature	Corr	p-value
Validness	0.999	0.0234	Trustworthy	0.968	0.00150
Persuasive	0.997	0.0452	Validness	0.964	0.00191
Significant Video Traits and Ratings on Enjoyment Scores			Persuasive	0.905	0.0131
Content of Anti-QAnon Videos			Logical	0.875	0.0225
Feature	Corr	p-value	Actions after Anti Videos		
Disgust	-0.998	0.0440	Feature	Corr	p-value
Boring	-0.998	0.0440	Trustworthy	1.00	0.0114
Significant Video Traits and Ratings on Content Scores			Lively	-1.00	0.0167
			Significant Video Traits and Ratings on Actions Scores		

Figure 10: Significant High-Level Video Traits and Ratings (p-value < 0.05) on Enjoyment, Content, and Actions Scores

Enjoyment on All Videos			Content of All Videos			Actions after All Videos		
Feature	Corr	p-value	Feature	Corr	p-value	Feature	Corr	p-value
violence	-0.138	0.0247	god	-0.128	0.0376	time	-0.214	0.000479
deadline	-0.125	0.0429	time	-0.217	0.000393	friend	0.147	0.0173
i	0.165	0.00716	differ	0.139	0.0245	insight	-0.132	0.0321
they	-0.141	0.0220	friend	0.135	0.0285	negate	0.130	0.0353
male	0.122	0.0475	insight	-0.134	0.0303	female	0.130	0.0353
social	-0.122	0.0478	ingest	0.122	0.0475	ingest	0.126	0.0417
negate	0.122	0.0488	Content of Pro-QAnon Videos			Actions after Pro-QAnon Videos		
Enjoyment on Pro-QAnon Videos			Feature	Corr	p-value	Feature	Corr	p-value
sentiment	0.205	0.0337	sentiment	0.205	0.0337	sentiment	0.205	0.0337
weaponry	-0.387	0.0000384	weaponry	-0.387	0.0000384	weaponry	-0.387	0.0000384
violence	-0.324	0.000671	violence	-0.324	0.000671	violence	-0.324	0.000671
god	-0.266	0.00556	god	-0.266	0.00556	god	-0.266	0.00556
soldier	-0.211	0.0294	soldier	-0.211	0.0294	soldier	-0.211	0.0294
threat	-0.202	0.0370	threat	-0.202	0.0370	threat	-0.202	0.0370
focuspresent	0.377	0.0000630	focuspresent	0.377	0.0000630	focuspresent	0.377	0.0000630
they	-0.351	0.000215	they	-0.351	0.000215	they	-0.351	0.000215
power	-0.328	0.000554	power	-0.328	0.000554	power	-0.328	0.000554
ipron	0.323	0.000677	ipron	0.323	0.000677	ipron	0.323	0.000677
cogproc	0.301	0.00162	cogproc	0.301	0.00162	cogproc	0.301	0.00162
auxverb	0.291	0.00235	auxverb	0.291	0.00235	auxverb	0.291	0.00235
negate	0.280	0.00351	negate	0.280	0.00351	negate	0.280	0.00351
we	-0.277	0.00388	we	-0.277	0.00388	we	-0.277	0.00388
social	-0.273	0.00451	social	-0.273	0.00451	social	-0.273	0.00451
affiliation	-0.267	0.00543	affiliation	-0.267	0.00543	affiliation	-0.267	0.00543
i	0.261	0.00664	i	0.261	0.00664	i	0.261	0.00664
tentat	0.260	0.00675	tentat	0.260	0.00675	tentat	0.260	0.00675
negemo	-0.242	0.0120	negemo	-0.242	0.0120	negemo	-0.242	0.0120
drives	-0.241	0.0122	drives	-0.241	0.0122	drives	-0.241	0.0122
adverb	0.231	0.0167	adverb	0.231	0.0167	adverb	0.231	0.0167
ppron	-0.228	0.0182	ppron	-0.228	0.0182	ppron	-0.228	0.0182
anger	-0.222	0.0215	anger	-0.222	0.0215	anger	-0.222	0.0215
verb	0.219	0.0233	verb	0.219	0.0233	verb	0.219	0.0233
informal	0.219	0.0235	informal	0.219	0.0235	informal	0.219	0.0235
differ	0.212	0.0281	differ	0.212	0.0281	differ	0.212	0.0281
health	-0.210	0.0300	health	-0.210	0.0300	health	-0.210	0.0300
body	-0.209	0.0310	body	-0.209	0.0310	body	-0.209	0.0310
discrep	-0.208	0.0314	discrep	-0.208	0.0314	discrep	-0.208	0.0314
bio	-0.196	0.0428	bio	-0.196	0.0428	bio	-0.196	0.0428
quant	0.191	0.0484	quant	0.191	0.0484	quant	0.191	0.0484
Enjoyment on Anti-QAnon Videos			Content of Anti-QAnon Videos			Actions after Anti-QAnon Videos		
Feature	Corr	p-value	Feature	Corr	p-value	Feature	Corr	p-value
interrog	-0.165	0.0395	time	-0.285	0.000316	time	-0.266	0.000795
Significant Textual Features on Enjoyment Scores			friend	0.213	0.00765	friend	0.195	0.0146
			focuspast	-0.164	0.0409	insight	-0.161	0.0442
			female	0.163	0.0420	Significant Textual Features on Actions Scores		
			ingest	0.163	0.0424			
			conj	-0.157	0.0498			
			Significant Textual Features on Content Scores					

Figure 11: Significant Textual Features (p-value < 0.05) on Enjoyment, Content, and Actions Scores

Enjoyment on All Videos			Content of All Videos			Actions after All Videos		
Feature	Corr	p-value	Feature	Corr	p-value	Feature	Corr	p-value
Max Intensity	-0.660	3.14E-34	anger	-0.169	0.00602	Sd Intensity	-0.543	1.33E-21
Mean Intensity	-0.654	1.55E-33	Min Intensity	0.618	4.36E-29	Min Intensity	0.518	1.99E-19
Sd Intensity	-0.565	1.32E-23	Sd Intensity	-0.428	3.71E-13	Max Pitch	-0.173	0.00488
Sd Pitch	-0.361	1.68E-09	Mean Intensity	0.367	8.08E-10	Sd Pitch	-0.173	0.00494
Max Pitch	-0.354	3.68E-09	Max Intensity	0.353	4.06E-09	HNR	-0.164	0.00767
Jitter	0.303	5.66E-07	HNR	-0.234	0.000129	Actions after Pro-QAnon Videos		
Mean Pitch	0.230	0.000164	Min Pitch	0.192	0.00171	Feature	Corr	p-value
Shimmer	-0.134	0.0301	Content of Pro-QAnon Videos			HNR	0.870	5.76E-34
Enjoyment on Pro-QAnon Videos			Feature	Corr	p-value	Mean Pitch	0.738	1.26E-19
Feature	Corr	p-value	HNR	0.870	5.76E-34	Mean Intensity	-0.713	7.18E-18
HNR	0.870	5.76E-34	Mean Pitch	0.738	1.26E-19	Jitter	0.649	4.15E-14
Mean Pitch	0.738	1.26E-19	Mean Intensity	-0.713	7.18E-18	Shimmer	-0.640	1.17E-13
Mean Intensity	-0.713	7.18E-18	Jitter	0.649	4.15E-14	Min Pitch	0.562	2.97E-10
Jitter	0.649	4.15E-14	Shimmer	-0.640	1.17E-13	Max Intensity	-0.507	2.46E-08
Shimmer	-0.640	1.17E-13	Min Pitch	0.562	2.97E-10	Sd Pitch	-0.440	2.12E-06
Min Pitch	0.562	2.97E-10	Max Intensity	-0.507	2.46E-08	Max Pitch	-0.424	5.42E-06
Max Intensity	-0.507	2.46E-08	Sd Pitch	-0.440	2.12E-06	Min Intensity	-0.329	0.000548
Sd Pitch	-0.440	2.12E-06	Max Pitch	-0.424	5.42E-06	Sd Intensity	-0.230	0.0169
Max Pitch	-0.424	5.42E-06	Min Intensity	-0.329	0.000548	Actions after Anti-QAnon Videos		
Min Intensity	-0.329	0.000548	Sd Intensity	-0.230	0.0169	Feature	Corr	p-value
Sd Intensity	-0.230	0.0169	Content of Anti-QAnon Videos			Min Intensity	0.687	3.77E-23
Enjoyment on Anti-QAnon Videos			Feature	Corr	p-value	Sd Intensity	-0.569	8.67E-15
Feature	Corr	p-value	Min Intensity	0.676	3.58E-22	HNR	-0.372	1.74E-06
Max Intensity	-0.832	3.02E-41	Sd Intensity	-0.419	5.21E-08	Max Pitch	-0.164	0.0409
Mean Intensity	-0.829	9.96E-41	HNR	-0.311	0.0000767	Significant Acoustic Features on Actions Scores		
Sd Intensity	-0.678	2.25E-22	Mean Intensity	0.179	0.0256	Significant Acoustic Features on Content Scores		
Sd Pitch	-0.348	8.33E-06	Significant Acoustic Features on Content Scores			Significant Acoustic Features on Content Scores		
Max Pitch	-0.336	0.0000184	Significant Acoustic Features on Content Scores			Significant Acoustic Features on Content Scores		
HNR	-0.328	0.0000285	Significant Acoustic Features on Content Scores			Significant Acoustic Features on Content Scores		
Min Intensity	0.298	0.000161	Significant Acoustic Features on Content Scores			Significant Acoustic Features on Content Scores		
Jitter	0.172	0.0316	Significant Acoustic Features on Content Scores			Significant Acoustic Features on Content Scores		

Figure 12: Significant Acoustic Features (p-value < 0.05) on Enjoyment, Content, and Actions Scores

Enjoyment on All Videos			Content of All Videos			Actions after All Videos		
Feature	Corr	p-value	Feature	Corr	p-value	Feature	Corr	p-value
neutral	-0.270	1.23E-10	angry	0.311	9.41E-14	angry	0.312	8.15E-14
surprise	-0.143	7.95E-04	sad	-0.169	0.0000726	sad	-0.148	0.000514
happy	0.126	3.20E-03	surprise	-0.117	0.00628	surprise	-0.131	0.00215
sad	-0.117	6.23E-03	happy	0.107	0.0122	neutral	-0.0905	0.0342
has_weapon	-0.215	1.01E-06	neutral	-0.0995	0.0198	long-gun	-0.124	0.00526
long-gun	-0.210	1.74E-06	long-gun	-0.139	0.00163	Actions after Pro-QAnon Videos		
sword	-0.148	0.000799	has_weapon	-0.0923	0.0376	Feature	Corr	p-value
Enjoyment on Pro-QAnon Videos			sword	-0.0904	0.0418	happy	0.268	5.20E-06
Feature	Corr	p-value	Content of Pro-QAnon Videos			sad	-0.231	0.0000892
happy	0.259	0.0000105	Feature	Corr	p-value	neutral	-0.212	0.000343
neutral	-0.234	0.0000722	happy	0.259	0.0000109	angry	0.178	0.00270
sad	-0.226	0.000127	neutral	-0.235	0.0000673	surprise	-0.141	0.0182
angry	0.166	0.00532	sad	-0.226	0.000129	has_weapon	-0.251	0.0000816
surprise	-0.143	0.0160	angry	0.165	0.00548	long-gun	-0.215	0.000746
has_weapon	-0.243	0.000133	surprise	-0.143	0.0160	sword	-0.179	0.00531
long-gun	-0.220	0.000567	has_weapon	-0.243	0.000136	Actions after Anti-QAnon Videos		
sword	-0.184	0.00413	long-gun	-0.220	0.000561	Feature	Corr	p-value
Enjoyment on Anti-QAnon Videos			sword	-0.184	0.00409	angry	0.429	2.43E-13
Feature	Corr	p-value	Content of Anti-QAnon Videos			fear	-0.179	0.00335
fear	-0.230	0.000154	Feature	Corr	p-value	neutral	0.128	0.0374
surprise	-0.169	0.00579	angry	0.482	7.06E-17	surprise	-0.121	0.0495
disgust	-0.156	0.0108	neutral	0.167	0.00647	has_weapon	0.125	0.0424
Significant Visual Features on Enjoyment Scores			fear	-0.123	0.0451	Significant Visual Features on Actions Scores		
Significant Visual Features on Enjoyment Scores			has_weapon	0.141	0.0213	Significant Visual Features on Actions Scores		
Significant Visual Features on Enjoyment Scores			long-gun	0.143	0.0197	Significant Visual Features on Actions Scores		

Figure 13: Significant Visual Features (p-value < 0.05) on Enjoyment, Content, and Actions Scores