QAnon's Psychological Influence: Investigating Q’s Digital Messaging

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It is difficult to imagine any commonalities between California yogis and German right-wingers—or between new-age hippies, senior military leaders, US elected politicians, and French influencers. Yet people from these seemingly disparate groups have connected over what started on the fringes of the internet: QAnon. A 4 June 2021 Federal Bureau of Investigation (FBI) bulletin that was circulated among members of Congress describes QAnon as a constantly evolving conspiracy theory. Acknowledging that QAnon does not behave like other groups, the FBI bulletin concludes that QAnon is a decentralized online community that propagates a multitude of false narratives and conspiratorial beliefs. Chief among these narratives and theories is the belief in a “deep state” of corrupt, Satan-worshipping elites who run a sex-trafficking ring and control the media and politics. The QAnon movement originated with “Q,” an anonymous digital user who began posting messages on the 4chan message board in 2017, and later moved to the website 8kun. These messages are commonly referred to as “drops” that, according to QAnon followers, contain secret intel about the deep state’s criminal activities. Q quickly became the authoritative source for the QAnon community, arguably until the final drop in 2020, after which Q took an 18-month hiatus from posting messages. Although Q is certainly not the sole source of information for QAnon followers, a 2021 report by the Center for Strategic and International Studies suggests that Q is the source from which adherents ultimately take their directions.

QAnon significantly increased its support base in a relatively short period of time, and understanding the reasons behind its widespread influence remains a critical national security task. As others have noted, it is difficult to know the exact number of QAnon supporters, but several indicators clearly point to rapid growth. In their recent work *Pastels and Pedophiles*, Mia Bloom and Sophia Moskalenko write that from 2019 to 2021, the number of QAnon supporters in the US nearly doubled every year—surging from 5 percent of the US population in 2019 to roughly 17 percent in just twenty-four months. Moreover, the Institute for Strategic Dialogue estimated that from March 2020 to June 2020, the number of QAnon posts on social media increased by 175 percent on Facebook, 63.7 percent on Twitter, and 77.1 percent on Instagram. The spread of QAnon beyond the shores of the United States has been equally impressive. QAnon researcher Marc-André Argentino identified QAnon adherents in at least 71 countries. Estimates in August 2020 found the largest increases in Australia, Canada, France, Germany, Italy, New Zealand, and the United Kingdom.

Previous research on the emergence and spread of QAnon has focused primarily on individual-level factors (e.g., fear, anxiety, a sense of lost control, and uncertainty about the future: factors that motivate people to seek explanations in an attempt to resolve these feelings), societal considerations that exacerbate these pre-existing individual tendencies, and the role of disinformation in social and mass media. The tensions surrounding the 2020 presidential election and the global pandemic, with its associated consequences for heath, economic stability, and social freedom, are two obvious triggers. For example, QAnon conspiracies about the Covid-19 pandemic and vaccines—such as the false idea that the pandemic was created by world elites, or that vaccines would be used to track people—play on people’s fear and anxiety. Those who start to follow QAnon content risk becoming isolated from alternative sources of information and people who do not share their beliefs, as the algorithms of social media platforms systematically reinforce human tendencies to seek out information consistent with one’s pre-existing beliefs.

However, it remains unclear how Q’s digital messaging capitalizes on some of these factors in ways that research suggests influence how people think and ultimately behave. This is a gap that merits exploration. To investigate, this study uses a quantitative natural-language processing tool, the Linguistic Inquiry Word Count (LIWC), to evaluate

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“The community takes its directions from Q, whose position in the movement is as much that of a deity as an extremist leader: their wisdom is absolute and their word gospel.”

— James Suber and Jacob Wäre, “Examining Extremism: QAnon”
the content of all Q drops over time, focusing on language themes associated with three core principles of psychological influence: cognitive, emotional, and social processes. Before detailing this study, we situate it within the broader contexts of national security and the social psychology of influence literature.

QAnon’s Threat to National Security

Many scholars and practitioners have labeled QAnon a national security threat. Its success in spreading dangerous falsehoods about vaccines, the pandemic, election security, political leadership, and many other issues, underscores a broader set of security challenges that the United States and other democratic societies face with disinformation and misinformation in the modern information environment.

QAnon’s false narratives have also harmed social connections. False narratives that denigrate social groups or public figures, claim moral superiority, and foster “us versus them” distinctions fuel social and political discord. This should not go unnoticed given the increasing problems the United States faces with societal division and political polarization. For example, according to a 2017 poll, 86 percent of Americans reported feeling that the country was more politically divided than ever, and 2020 polling data find this trend has worsened over time. Political division has consequences, as evidence suggests that liberals and conservatives not only dislike each other, but also demonstrate prejudice and discrimination against each other. There is ample reason to conclude that QAnon cultivates significant discord. Consider that “QAnon Casualties,” an online support group for friends and family members of QAnon adherents, has 167,000 members at the time of this writing. Media reports have indicated that QAnon is in fact tearing families apart, a trend that directly interfaces with national security vulnerabilities. Former national security adviser and ambassador to the United Nations Susan Rice has stated that she has “long viewed domestic division as our greatest national security vulnerability. Political polarization is a ‘force multiplier’ that worsens other threats and cripples our ability to combat them.”

Combating the activities of QAnon adherents extends beyond the digital domain, since some have taken violent action against the so-called deep state, including kidnappings, murder, assassination plots, and participating in the US Capitol riot on 6 January 2021. Due to concerns that it could stoke extremist violence, the FBI designated QAnon a domestic terror threat. Although QAnon has not imposed the same societal costs in terms of violence and destruction that other modern extremist threats have (e.g., white supremacist groups, the Weather Underground), it nevertheless represents the larger problem of domestic extremism within the United States. But this threat extends outside the United States, too. For example, violent far-right demonstrators rushed the German Reichstag on 29 August 2020. Conspiracy theories promoted by QAnon communities in Germany played a role in stoking the violence carried out by agitators in the crowds.

Taken together, the national security implications are clear. In just three years (2017-2020), QAnon went from internet message boards to a designated domestic terror threat. How did Q’s messages achieve this level of influence? Research on the social psychology of influence offers important insights.

Q’s Digital Messaging and Principles of Social-Psychological Influence

Central findings in social psychology reveal that persuasive messaging uses, among other things, repetition, emotion, extremity, and scarcity/urgency. Of course, the conditions under which an attempt to influence others is most
likely to succeed or fail involve many other considerations. Among these are the individual and social factors previously mentioned, as well as the state of the audience, the personal relevance of the topic, socio-political motivations, and group identification (and de-identification with outgroups), to highlight a few. Detailing this vast scholarship on psychological influence is beyond the scope of this article. Since the precise focus of this research is to examine Q’s messages within three core categories of influence that can also be measured with the LIWC’s natural language processing software—cognitive, emotional, and social processes—we constrain our discussion of the literature to the foundational aspects of influence within each of these areas.

Cognitive Processes and QAnon’s Influence

Research suggests that explicit, direct attempts to influence individuals’ thinking are less effective than indirect attempts. For example, on average, arguments that are overheard rather than targeted are more persuasive. This is in part accounted for by psychological reactance theory, which states that when people’s freedom is taken away (e.g., if they think they are being forced or pressured to agree), they feel a desire to resist the pressure or undergo an attitude change in order to reestablish their freedom. As such, inducements toward autonomous thinking give a sense of control back to the individual.

The prevalent QAnon narrative, “do your own research,” capitalizes on this longstanding influence principle. Q does not deliver arguments stating the reasons people should believe Q’s claims, but rather asks people to think for themselves and actively participate in interpreting “puzzles and hints.” Of note, what Q calls “research” involves “connect the dots” online activity that keeps followers engaged with QAnon content. Repeated exposure to QAnon messaging itself can change how people think and feel. According to the Mere Exposure Effect, the more we see something, the more we agree with and like it. This can be manipulated simply by spreading information as quickly and widely as possible—a relatively easy task in today’s digital age. When people repeatedly see the same false narrative across many different sites, shared by numerous people and groups, they are more likely to believe that the narrative has merit. This is especially true for emotionally charged messages.

“QAnon’s writings are crafted to be oracular, that is [sic] in the form of puzzles and hints, that the audience is challenged to interpret.”

Emotional Processes and QAnon’s Influence

“No matter how logical we consider ourselves, and no matter how certain we are that our views are grounded in facts and reason, emotions and cognitive biases still play a significant role in how we perceive the world and make decisions.”

– Sean Lonnquist, “QAnon Doesn’t Make Sense, but its Popularity Does”

As evidenced by a long history of research, emotional appeals are persuasive. According to the Elaboration Likelihood Model, positive and negative emotions alike can enhance persuasion, depending on the context. For example, research suggests that anger and fear reinforce attitude and behavior change, a tendency that can be seen in the digital domain, where negative messages that play on fear, anxiety, anger, and moral outrage are particularly engaging. People are not only more likely to share such content, but consistent with emotional contagion (a form of social contagion involving the spread of shared emotion), they also become more negative in their own online behavior. What is more, the human brain rewards this behavior. Indeed, Yale researcher Molly Crockett found that moral outrage makes us feel good, and this can be seen via increased activation of reward pathways in the brain. Fear and uncertainty have also been shown to fuel beliefs in conspiracy theories.

It is perhaps unsurprising, then, that QAnon relies heavily on emotionally laden narratives. QAnon adherents share a sense of deep distrust in the government, political leadership, corporations, and the “fake-news” media; as such, QAnon content tends to perpetuate fear and anxiety by emphasizing (baseless) reasons for this distrust.
As journalist Julia Wong notes, “on Facebook, anxiety over children due to the coronavirus pandemic, a resurgent anti-vaxx movement, and QAnon-fueled scaremongering about child trafficking have all combined to inspire a modern-day moral panic, somewhat akin to the ‘Satanic Panic’ of the 1980s.” This emotional content is not without consequence. Consider, for example, that after QAnon hijacked the phrase “save the children” from the humanitarian organization by that same name, QAnon groups that operated under the guise of “anti-trafficking” causes increased their membership by 3,000 percent.

Whether intending harm or simply expressing opinion, part of this online behavior is driven and reinforced by a new sense of community felt among groups within social networking platforms. This has worked to QAnon’s advantage. Although users may perceive QAnon forums as communal interactions that bring together those with shared feelings, the lack of direct and interpersonal social consequences may in fact prove more isolating.

Social Processes and QAnon’s Influence

The key QAnon tagline, “where we go one, we go all,” signals group cohesion and belongingness. This is a compelling message, as psychological research underscores the importance of belonging as a fundamental human motivation, and conspiratorial people are often seeking group affiliation. Social identity theory—deriving a sense of self from group membership—addresses how belonging to a group influences people’s attitudes and behavior toward both their ingroup and outgroups. Within the digital domain, identities hide behind assumed usernames, profile descriptions, and photos. These disguised “personas” can then freely interact, post, comment, and become influential communicators within their individually created spheres of influence because online interaction diminishes social consequences. QAnon is no less susceptible to these processes than other online and offline communities.

While there are many positive psychological benefits to feeling part of a group, the group lens also changes the way we think about and behave toward “others” in ways that can sometimes be harmful. The tendency to attribute positive characteristics to our own groups and to those who share similar ideas coincides with a tendency to cast dissimilar outgroups in fundamentally negative ways. These “us versus them” distinctions become more salient under threat, whether real or perceived. A long history of social psychological research suggests that when we feel that our group or group ideals are threatened, one consequence is more extremism in defense of those ideals. Given this, it is perhaps easy to understand QAnon’s trend toward more extremist thinking and behavior. Identifying what it perceives as threats from the “deep state” is a key activity of the QAnon community.

Method: Overview and Expectations

The aim of this project was to quantitatively examine Q’s messaging over time with respect to three broad categories of influence: cognitive, emotional, and social processes. Based on previous social psychological research and theory, and on media reporting about QAnon, we expected linguistic analyses of Q drops to show (1) an increasing reliance on cognitive-focused messages over time; (2) more emotional language over time, particularly with respect to negatively valanced emotional messages; and (3) less social language over time. This expectation was driven in part by previous research on conspiracy groups indicating that followers become increasingly detached from society, and in part by media reports on QAnon specifically that describe the tendency of QAnon adherents to become isolated from society, family, and friends.
Procedure: Data Set and Variables

To assess the linguistic properties of Q drops over time, we used the LIWC software, a text analysis program that quantifies words with corresponding psychological categories. Q drops were first published on 4chan before moving to 8chan, which later became 8kun. The initial dataset included all 4,952 messages, commonly referred to as “Q drops,” starting with the first on 28 October 2017 and ending on 13 November 2020. Q posted once more on 8 December 2020; however, the post was solely a website link to a YouTube video and thus was excluded from the dataset because there was no message to analyze. Q did not post again until 24 June 2022, at which point our analysis was already complete. Therefore the five most recent drops (24-29 June 2022) are not included. We removed drops that were blank, as well as those containing only numbers, brackets, symbols, or website links without any corresponding text. This resulted in a final dataset of 4,087 Q drops.

The LIWC offers many language-processing capabilities, but this analysis focused specifically on linguistic categories directly related to expectations about influential messaging: cognitive processes, emotional processes (termed “affective processes” in the LIWC system), and social processes. The LIWC uses a dictionary of words to categorize cognitive processes into specific thinking-oriented themes: insight (e.g., think, know); causation (e.g., because, effect); discrepancy (e.g., should, would); tentative (e.g., maybe, perhaps); certainty (e.g., always, never); and differentiation (e.g., hasn’t, but, else). Emotional processes are categorized into specific emotions: positive emotions (e.g., love, nice, sweet); negative emotions (e.g., hurt, ugly, nasty); anxiety (e.g., worried, fearful); anger (e.g., hate, kill, annoyed); and sadness (e.g., crying, grief, sad). Finally, the social processes category includes words like “talk,” “us,” “they,” and “mate,” and further separates social-oriented language into the following subcategories: family (e.g., daughter, dad, aunt); friend (e.g., buddy, neighbor); female references (e.g., girl, her, mom); and male references (e.g., boy, his, dad).

To measure time, we opted to number the 4,087 Q drops used in this study based on their chronological order, with 1 the first drop and 4,087 the last, rather than assess drops by days, months, or years. There were times when Q did not post for several days or even weeks, so looking at the Q drop number as the metric for time bypasses the missing data issue that comes with using “days” or “months.” Moreover, an analysis using “years” would be inadequate given that this dataset spans just three years. Using the Q drop number not only allows for the most precise test of Q’s language use over time, but it also maximizes statistical power.

Results and Discussion

We followed the same analytic approach to examine Q message characteristics over time. Analyses include a series of multivariate linear regression tests using the Q drop number as a predictor for each summary category (cognitive, emotional, social) and its subcategories. In the sections that follow, we first report the results for the summary category before highlighting effects that emerged for the subcategories. Discussion and interpretation of findings follow. (See table 1 for a summary of all findings.)

Cognitive Processes: Q’s Thinking-Focused Messaging Over Time

To assess Q’s thinking-focused messaging over time, we performed a multivariate linear regression test using the Q drop number as a predictor for cognitive processes. Results were consistent with expectations. The summary variable for cognitive processes revealed a significant increase over time ($r = .04^{**}, p = .005$), which was primarily driven by the specific category for insight ($r = .60^{***}, p < .001$) and, to a lesser extent, tentative language ($r = .04^{***}, p = .008$). These two linguistic properties emphasize different aspects of cognition. Q’s messages increasingly contained content like “think,” “know,” and “consider” (insight), while also promoting a tentative mindset as reflected through verbiage like “maybe,” “perhaps,” and “guess.” Further substantiating the idea that Q’s messages promote tentativeness, there was no effect of certainty ($r = .01; p = .463$) or discrepant language ($r = .01, p = .503$), both of which signal more rigid communication (certainty words, e.g.: “never,” “always”; discrepancy words, e.g.: “should,” “would”).
Taken together, these findings suggest that Q’s messages exemplify more cognitively focused language with indications toward more flexible, open-ended thinking (e.g., insight and tentativeness over certainty). This type of cognitive openness may seem counterintuitive given the connections between conspiracy beliefs, political extremism, and cognitive rigidity. However, QAnon followers are active participants who attempt to disentangle the cryptic Q drops, often doing so together online. QAnon also evolves by accommodating new claims, reframing narratives when specific predictions do not come to fruition, and incorporating a multitude of conspiracy theories that appeal to a broad audience. Indeed, QAnon draws followers from strikingly diverse social, cultural, and ideological backgrounds. According to a June 2021 New York Times article, “the earliest adherents were mainly far-right Trump supporters, but in 2020, the movement expanded its reach to include health-conscious yoga moms, anti-lockdown libertarians and evangelical Christians. . . There are Harvard graduates and Wall Street executives who believe in it, as well as people with less elite pedigrees.”

Given these characteristics, it makes sense that Q messages use thinking-oriented language that signals tentative, open thinking. To achieve influence across such a broad range of people requires cognitive flexibility.

Emotional Processes: Q’s Affective-Focused Messaging Over Time

Using the same analytic approach that we used to test Q’s thinking-focused messaging over time, we performed a multivariate linear regression test using the Q drop number as a predictor for emotional processes. Findings are largely consistent with expectations. Although there was no effect of positive or negative emotion over time, Q’s messages increasingly reflected more anxiety ($r = .03^*; p = .052$) and anger ($r = .08^{**}; p < .001$) while simultaneously conveying less sadness ($r = -.07^{***}; p < .001$). The opposing effects of anger and sadness are particularly noteworthy considering previous research that shows anger can mobilize individuals and motivate action, whereas sadness often has the opposite effect. Research also suggests that anger provides individuals with a sense of control.

One explanation for these findings is that Q capitalized on the contentious socio-political climate by strategically using angrier, more anxiety-laden messaging to both embolden followers and influence new individuals toward QAnon content. However, these data only shed light on some of the content themes from Q’s messaging over time; they do not indicate the effects the messages did or did not have on the audience. Thus, it is also worth considering alternative interpretations. For example, it is possible that Q’s messaging reflected this pattern of emotionality because the socio-political climate influenced Q, and thus Q’s shifts in language represent an unintentional consequence of the environment rather than an intentional communication strategy. Additional research is needed to disentangle these and other interpretations. But regardless of the underlying reasons, this clear trend in emotion-focused messaging is a noteworthy observation and an initial step to understanding the QAnon movement from an influence and communication perspective.

Social Processes: Q’s Social-Focused Messaging Over Time

Consistent with expectations, the multivariate linear regression test using the Q drop number as a predictor for social processes revealed a decline in social language over time ($r = -.03^*; p = .040$). This finding lends some empirical support to qualitative reports that indicate that many Q followers become isolated from their social connections as they align more with the QAnon movement. While the same descriptive pattern emerged for communication about family and friends, these effects were not statistically significant and therefore merit some caution in interpretation. Further, whereas male references became less prevalent over time ($r = -.05^{**}; p = .005$), this effect did not emerge for female references. Despite these inconsistencies,
the overall picture offers some support for the idea that Q messages increasingly de-emphasized sociality.

**Conclusion**

Taken together, these findings empirically demonstrate that Q’s messages blend insightful, tentative thinking with emotion (namely anger and anxiety) and isolation. Although none of these linguistic elements is a direct measurement that explains how Q attracts and influences followers, Q’s incorporation of language that corresponds to aspects of psychological influence principles, and an increasing use of this language over the same period of time when QAnon followership dramatically increased, may at least partially shed light on the effect of Q’s messages. It cannot be known from these data whether these language patterns reflect an intentional messaging strategy or are incidental. Moreover, we remain cautious about overinterpreting these findings given the relatively small effect sizes. Detecting small effects is common in psycholinguistic research, so this was not unexpected, but we would be remiss if we did not acknowledge this statistical point, especially given the large sample.

There are also interpretational ambiguities with respect to the linguistic properties of Q drops over time. The LIWC system only indicates the presence of words associated with language categories, but does not indicate the context in which these words were used. Consider, for example, the cognitive processes categories that measure words like “think,” “know,” and “consider.” It is possible that more cognitive-focused messaging emerged over time because Q messages contained statements like “don’t think” or “you know I am right” and thus discouraged rather than

<table>
<thead>
<tr>
<th>Language Marker</th>
<th>Sample Words</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cognitive Processes</strong></td>
<td>cause, know, ought</td>
<td>.04**</td>
<td>.005</td>
</tr>
<tr>
<td><strong>Insight</strong></td>
<td>think, know, consider</td>
<td>.60***</td>
<td>&lt; .001</td>
</tr>
<tr>
<td><strong>Tentative</strong></td>
<td>maybe, perhaps, guess</td>
<td>.04***</td>
<td>.008</td>
</tr>
<tr>
<td><strong>Discrepancy</strong></td>
<td>should, would</td>
<td>-.01</td>
<td>.503</td>
</tr>
<tr>
<td><strong>Certainty</strong></td>
<td>never, always</td>
<td>.01</td>
<td>.463</td>
</tr>
<tr>
<td><strong>Causation</strong></td>
<td>because, effect</td>
<td>-.01</td>
<td>.366</td>
</tr>
<tr>
<td><strong>Differentiation</strong></td>
<td>hasn’t, but, else</td>
<td>-.01</td>
<td>.745</td>
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<tr>
<td><strong>Emotional Processes</strong></td>
<td>happy, cried</td>
<td>.023</td>
<td>.145</td>
</tr>
<tr>
<td><strong>Positive Emotion</strong></td>
<td>love, nice, sweet</td>
<td>.01</td>
<td>.356</td>
</tr>
<tr>
<td><strong>Negative Emotion</strong></td>
<td>hurt, ugly, nasty</td>
<td>.02</td>
<td>.228</td>
</tr>
<tr>
<td><strong>Anxiety</strong></td>
<td>nervous, worried, tense</td>
<td>.03*</td>
<td>.052</td>
</tr>
<tr>
<td><strong>Anger</strong></td>
<td>hate, kill, annoyed</td>
<td>.08***</td>
<td>&lt; .001</td>
</tr>
<tr>
<td><strong>Sadness</strong></td>
<td>grief, cry, sad</td>
<td>-.07***</td>
<td>&lt; .001</td>
</tr>
<tr>
<td><strong>Social Processes</strong></td>
<td>talk, us, they, mate</td>
<td>-.03*</td>
<td>.040</td>
</tr>
<tr>
<td><strong>Family</strong></td>
<td>mom, brother, daughter</td>
<td>-.03</td>
<td>.109</td>
</tr>
<tr>
<td><strong>Friend</strong></td>
<td>pal, buddy, neighbor</td>
<td>-.02</td>
<td>.290</td>
</tr>
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<td><strong>Female references</strong></td>
<td>girl, her, mom</td>
<td>-.02</td>
<td>.144</td>
</tr>
<tr>
<td><strong>Male references</strong></td>
<td>boy, his, dad</td>
<td>-.05**</td>
<td>.005</td>
</tr>
</tbody>
</table>

*Table Notes: p = probability value that indicates statistical significance; ***p < .001, **p < .01, *p < .05; r = correlation coefficient*
encouraged open, flexible thinking. The same could be said for the effects of emotional and social processes. Future research is needed for more context.

Another important next step for further research would be to examine more directly the effects of Q’s messaging on followers’ online and offline behavior. For example, do specific patterns in Q’s messaging correspond to subsequent QAnon-inspired violence and conflict in the real world? What types of Q drops are most likely to garner support among existing followers and who is most vulnerable to QAnon messaging? Such questions represent critical next steps in this line of research.

The quantitative analysis of QAnon messaging in the context of social psychological influence theory presented in this paper opens new and exciting avenues for scholars and practitioners to pursue. It constitutes a first step in the study of QAnon, especially for specialists in the field of psycholinguistics. It is the hope of the authors of this article that scholars across a range of disciplines, such as psychology, behavioral sciences, semiotics, sociology, criminology, and terrorism studies, will generate additional hypotheses and produce elucidating knowledge about QAnon.

**NOTES**


3. Suber and Ware, “Examining Extremism: QAnon.”


8. Ibid.


26. Adrian J. Ivakhiv, “Do Your Own Research: Conspiracy Practice as Media Virus,” Immanence [blog], 5 January 2021: https://blog.uvm.edu/aivakhiv/2021/01/05/do-your-own-research-conspiracy-practice-as-media-virus/

27. Walster and Festinger, “The Effectiveness of ‘Overheard’ Persuasive Communications.”


37. Ibid.


