

IDENTIFYING INCEL: CONSTRUCTING GENDERED SOCIAL IDENTITIES IN THE
MANOSPHERE

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ABSTRACT

Katherine Furl: Identifying Incel: Constructing Gendered Social Identities in the Manosphere
(Under the direction of Neal Caren)

How do male supremacist online communities foster distinct social identities, even when members engage in intense self-derogation? This study employs qualitative and computational methods to examine the themes and gendered essentialist rhetoric leveraged in the development of distinct social identities in Involuntary Celibate (*incel*) and Men Going Their Own Way (*MGTOW*) online communities. Through adopting subordinate social identities (*incel*) prerequisite on membership in a broader, pre-existing social category (*man*)—and through proclaiming the inherent superiority of other men, often assigned different, mutually exclusive identities (*alpha male* or *Chad*)—incel rhetoric maintains a patriarchal social system through male supremacist dogma *even while* establishing in-group members as an inferior subset of the broader category of “men.” Supposedly essential gender differences are reified through appeals to the inherent logic of numbers and by adopting scientific terminology and detached, “objective” language. Findings suggest the importance of continued vigilance toward passive gender essentialism in and beyond apparently “niche” online communities, and of maintaining a critical eye toward the ways scientific and statistical knowledge are misconstrued to fit extremist narratives online.

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INTRODUCTION

Literature across disciplines has uncovered the important role of strategic rhetoric in constructing and maintaining distinct social identities in diverse populations (Ullah 1990; Augoustinos & De Garis 2012; Chang, Chen & Krupka 2017). Employed in speeches, writing, and discourse, creating and sustaining social identities helps us understand our individual and collective locations in the social systems we navigate throughout our lives.

Typically, self-identification with a social group is accompanied by some degree of in-group favoritism, attributing a positive trait or traits to in-group members (Turner & Tafjel 1979; Tafjel, Billig, Bundy & Flament 1971). In-group favoring rhetoric can aid establishment of robust social identities by increasing group self-esteem (Reid & Hogg 2005; Hornsey 2008; Rubin, Badea & Jetten 2014). Though out-group favoritism has previously been observed (Dasgupta 2004), even in these instances group members frequently engage in in-group bolstering behaviors (Weeks, Weeks & Long 2017).

In a manner similar to in-group favoring rhetoric, essentialism—which presupposes characteristics and behaviors are immutable, have deep-seated biological origins, and are uniform across cultures—can be implemented in rhetoric in order to assist the formation and promotion of a wide range of social identities (Haslam, Rothschild & Ernst 2000:114; Salzinger 2003; Schilt 2015; Leachman 2016; Monson 2012). More specifically, gender essentialism focuses on the unchanging and biologically-rooted nature of gender differences, and has been used to justify existing (and preexisting) patriarchal social structures (Wood & Eagley 2012; Schilt 2015).

The explosive development of social networking platforms in recent decades illustrates how online environments provide users the unprecedented ability to connect and converse repeatedly and exclusively with like-minded others. Self-selection into online echo chambers accelerates creation of distinct, sometimes radical group identities in a manner not previously possible (Quattrociocchi 2016; Quattrociocchi 2017; Gillani, Yuan, Saveski, Vosoughi, & Roy 2018).

The propensity for accelerated radicalization online is exemplified in the collection of male supremacist movements constituting the *manosphere*, whose adherents enter positive feedback loops continuously validating anti-feminist, male supremacist ideologies (Ging 2017; Jaki, De Smedt, Gwózdź, Panchal, Rossa, & De Pauw 2019). One subpopulation under the manosphere umbrella—the *incel*, or Involuntary Celibate, online community—offers an avenue for better understanding how strategic rhetoric can facilitate construction of distinct social identities in online communities, even in the absence of explicit in-group favoritism in the majority of group discourse. The number and variety of constituent subpopulations in the manosphere, and their tendency to congregate on the same social media platform, Reddit.com, allows for complementary analysis of another manosphere community—Men Going Their Own Way, or *MGTOW*, whose group ideology is more traditionally in-group favoring.

This study asks: how can linguistic themes and rhetorical strategies facilitate creation and maintenance of robust social identities among members of the incel and *MGTOW* communities on Reddit? To what extent are distinct social identities in these communities promoted through employment of strategically employed, gender essentialist rhetoric? Finally, how might positive valuation of a broader social group encourage members of an acutely self-derogating community to overlook the community's seemingly overwhelming pessimism enough to willingly associate

themselves with said community online? To accomplish this, the study employs qualitative and computational cross-case comparison of the natural language occurring on forums catering to the incel and MGTOW communities on Reddit.

Results indicate that, while MGTOW community members are more likely to espouse explicit in-group favoritism in discourse, incel members also favor the in-group, albeit more implicitly. Incel members consistently attach negative portrayals to women in comparison to men, and promote relatively benevolent depictions of prototypical stock characters embodying a narrowly defined, idealized masculinity (referred to as “Chads” or “alpha males”). In doing so, incels endorse male supremacy even while blatantly espousing their own community members’ inherent inferiority within the broader social category of “men.” Discourse in each group employs gendered essentialist rhetoric, and gender differences are reified through appeals to the inherent logic of numbers and respect afforded science.

This study sheds light on the powerful influence of gendered essentialist rhetoric, particularly when disseminated through simplistic, digestible narratives played out by easily recognizable, prototypical stock characters stereotyped along gender and ethnoracial lines. This study also illustrates the persuasive power of even the most dubiously interpreted (pseudo)scientific literature and statistics. Findings suggest the need for further investigation into how similar discursive tactics can and have been employed across the spectrum of social respectability and expertise, and the need for continued vigilance as to how social systems tacitly endorse or legitimate similar worldviews, both on and offline.

BACKGROUND / LITERATURE REVIEW

Social Identity and Self-Categorization Theory

The mechanism at the heart of self-categorization theory (SCT), self-categorization involves self-referential processes distinguishing the in-group (“us”) from the out-group (“them”) (Dovidio & Gaertner 2010; Leonardelli & Toh 2015). Self-categorization plays a key role in the formation of social identity, the individual self-image derived from membership in any number of social categories (Hornsey 2008:206).

In-group and Out-group Favoritism

SCT’s early proponents documented the extensive presence of in-group favoritism in social groups, conceived of as “a striving for positively valued distinctiveness for one’s own group” (Turner & Tafjel 1979:190). Experiments conducted by early supporters of SCT reveal how even the most trivially introduced methods of distinguishing the in-group from the out-group (for example, whether one over- or underestimates the number of dots projected onto a screen) can lead to favorable comparisons toward the in-group at the expense of the out-group (Tafjel, Billig, Bundy & Flament 1971).

In-group favoring rhetoric, championing the in-group or deriding the out-group, is often leveraged as a means of increasing individual and collective self-esteem (Reid & Hogg 2005; Hornsey 2008; Rubin, Badea & Jetten 2014). Even in situations where a more forthright variety of in-group favoritism may be absent—in situations where a social group faces widely-held negative stereotypes, for example—group members have still been observed performing in-group bolstering behaviors, rating themselves more favorably on a given characteristic relative to

members of other groups (Weeks, Weeks & Long 2017). On the other hand, members of disadvantaged groups have also been observed exhibiting out-group favoritism, or biases favoring the corresponding advantaged group (Dasgupta 2004; von Hippel 2006). Such out-group favoring rhetoric falls in line with systems justification theory, where members of disadvantaged social groups participate in the dissemination of negative stereotypes about themselves and other group members as a means of justifying the existing social hierarchy (Jost & Banaji 1994). Proponents of systems justification theory attribute this negative self-stereotyping among members of disadvantaged social groups to a “tendency to rationalize the status quo,” and “to see it as good, fair, legitimate, and desirable” (Kay, Jost, Mandisodza, Sherman, Petrocelli & Johnson 2007:305).

Whether favoring the in-group or the out-group, distinction processes can be either explicit, with members fully aware of biases toward a certain social group; or implicit, where group members are not fully aware of the bias present in their rhetoric, but whose behaviors and beliefs are influenced by this bias nonetheless (Dasgupta 2004).

Uncertainty Threat

The mechanisms outlined in SCT are likely to occur in contexts of high uncertainty, where “strong and directive leadership and ideological and ethnocentric belief systems” encourage alignment with highly distinctive group identities, even (and perhaps especially) when these identities are associated with social and political extremism (Hogg 2014:338). For those on the fringe of a social group, peripheral group membership can itself inspire feelings of uncertainty, increasing reliance on behaviors that further cement an individual’s in-group status (Hohman, Gaffney & Hogg 2017). Uncertainty threat can even work to mitigate one’s preference for aligning exclusively with high-status social categories—high and low-status social groups can

become, momentarily, equally appealing in pursuit of uncertainty reduction (Reid & Hogg 2005).

The mechanisms outlined in SCT—particularly in-group and out-group favoritism, systems-justification theory, and reactions to uncertainty threat—lead to the study’s first research question: to what extent does *language*, employing a number of themes and rhetorical strategies, facilitate maintenance and development of distinct social identities among members of online communities, *even in the absence* of overt in-group favoritism?

(Gendered) Essentialism and Identity Politics

Another rhetorical tool key to understanding the processes outlined in SCT is essentialism. An essentialist viewpoint presupposes characteristics and behaviors observed among members of a given social group “have deeply rooted biological underpinnings” and “are historically invariant and culturally universal,” such that they cannot be attributed to the subjective processes of individual choice, socialization, or institutional and organizational forces (Haslam, Rothschild & Ernst 2000:114; Salzinger 2003).

Essentialism’s strategic use in maintaining group dominance has been explored extensively in the sociology of gender and sexuality, where scholars have observed the supposed inevitability of innate biological differences employed as a justification for perpetuating or returning to patriarchal social structures and divisions of labor (Wood & Eagley 2012; see also Schilt 2015). Sociologists of gender have investigated gender essentialism’s role in maintaining occupational sex segregation (Cech 2013), and how gender essentialism has become so normalized and pervasive it remains stubbornly present even in the minutiae of well-funded, nationally representative longitudinal surveys (Westbrook & Saperstein 2015).

The applicability of essentialist rhetoric is expansive: attributing a “naturalness” to social identities can be done with intents ranging from establishing the legitimacy of LGBT advocacy groups, to quickly and efficiently justifying the sociopolitical organization of fictional settings in popular massively multiplayer online role-playing games (Schilt 2015; Leachman 2016; Monson 2012). Essentialist rhetoric does not necessarily indicate group members’ wholehearted agreement, however: it may instead be used *strategically* by group members, allowing individuals with a plurality of backgrounds and experiences to work toward a central goal under the premise of a shared, immutable identity (Bernstein 2005).

The ubiquity of gender essentialism, in global belief systems and in strategically employed rhetoric, leads to the study’s second research question: to what extent does *gendered essentialist rhetoric*, explicit or implicit, facilitate formation of strong social identities in even the most seemingly self-hating online communities?

Interactional Identities: A Sociocultural Linguistic Approach

As an interdisciplinary field, sociocultural linguistics is “concerned with the intersection of language, culture, and society” (Bucholtz & Hall 2005:586). From a sociocultural linguistic perspective, social identity is interactional and emergent through time, evolving through social interaction, discourse, and language (Bucholtz & Hall 2005). While self-categorization and the formation of social identity may be applied to a wide array of intergroup processes, a sociocultural linguistic approach to social identity formation focuses primarily on the construction of group identities through discourse.

Indexicality and Implicatures

Novel social identities are often developed through indexing, or “the creation of semiotic links between linguistic forms and social meaning” (Bucholtz & Hall 2005:594). Indexing aids social

identity construction through the introduction and circulation of social categories into discourse; the juxtaposition of these categories (implicit or explicit) with other categories; and through appending elaborations and qualifiers to these categories (Bucholtz & Hall 2005:594).

Analysis of indexing is complicated by implicatures that “convey . . . information to savvy listeners while excluding possibly hostile out-group members” (Bucholtz & Hall 2005: 595). Employing implicatures in discourse allows in-group members to communicate a narrative or narratives exclusively to a select group of people, such that the language’s overall meaning and impact(s) differ across groups.

Linguistic Anthropology: Co-Constructing Social Identity

The concept of co-construction, developed in the field of linguistic anthropology, also speaks to the interactional, evolving nature of social identity development emphasized in sociocultural linguistics. Literary theorists in the Bakhtin circle view texts of all genres as fundamentally products of co-creation—rather than attributing texts in their entirety to a single author, these theorists consider texts to be situated in historical discourses with multiple authors (Bakhtin 1981; Voloshinov 1973; Jacoby & Ochs 1995). From this perspective, a collection of texts circulated in a social group can be considered in conversation with one another, a form of written discourse facilitating construction and maintenance of social identities among group members.

Radicalization, Tribalism, and Reddit.com

The mechanisms outlined in SCT, along with the discursive, evolutionary character of social identity development promoted in sociocultural linguistics and linguistic anthropology, can facilitate the rapid radicalization of social groups. In an online context, this radicalization can be attributed in part to a propensity for tribalism. Past scholarship has observed a shift in interactions over the internet from a focus on “arguing to learn”—where participants in a

conversation are invested in listening to one another and coming to new conclusions based on information presented by all parties—to a focus on “arguing to win,” where the goal is not to change one’s mind but to competitively “score points” against those who disagree, with arguments presented as unchanging, objective truth (Fisher, Knobe, Strickland & Keil 2018). Internet forums also afford users the ability to sort themselves into like-minded echo chambers, with targeted advertising and self-selected group membership working in tandem to lock social media users into positive feedback loops affirming preexisting worldviews and catalyzing radicalization (Quattrociocchi, Scala & Sunstein 2016; Garimella, De Francisci-Morales, Gionis & Mathioudakis 2018).

Reddit.com provides a unique look into the ways these echo chambers emerge. An open-source social media platform, Reddit gives users the opportunity to create their own communities, or “subreddits.” Reddit users, or “Redditors,” can subscribe to any number of subreddits, which appear on users’ front pages. Many of these subreddits focus on “geek-centric” topics like computing, science, or a specific fandom (Massanari 2017). Reddit’s over 10,000 active subreddits have been considered in past literature as their own self-contained “temporally situated, purposive Neo-tribes . . . operat[ing] on a very specific shared set of languages and conventions, rules, expectations, and rituals” (Robards 2018). Analyzing the themes and rhetoric employed in language among different online communities active on Reddit can uncover the ways in which such themes and rhetoric facilitate construction and maintenance of distinct social identities online.

The Alt-Right

The uncertainty-threat model of self-categorization—beginning with peripheral membership in a social group, leading to uncertainty in one’s legitimacy as a member of said social group, and

ultimately leading to increased reliance on self-categorization—can be seen throughout much of the alt-right. A multifaceted conglomeration of online social movements, disparate factions of the alt-right are linked through their “exploit[ation of] young men’s rebellion and dislike of ‘political correctness’ to spread white supremacist thought, Islamophobia, and misogyny through irony and knowledge of internet culture” (Marwick 2017:1).

The Manosphere

The collection of contemporary anti-feminist, male supremacist online men’s movements in the manosphere constitute one of several networks contained within the alt-right. Manosphere communities aim the majority of their derogatory rhetoric at women, and their alt-right ideologies are filtered through a particularly misogynistic lens (Marwick 2017). As a subset of the alt-right, the manosphere centers its hostility and disdain primarily—though not exclusively—on women, who are broadly characterized as manipulative, capricious, and emotionally and biologically inferior to men (Marwick 2017; Ging 2017).

The manosphere’s origins can be traced to a time preceding the internet, to the era of second-wave feminism and the Women’s Liberation movement of the 1970s. This period also saw the emergence of a complementary Men’s Liberation movement. Proponents of Men’s Liberation initially brought wider awareness to the costs men incurred through adhering to the values of hegemonic masculinity, while simultaneously acknowledging the privileges afforded to men in a patriarchal society (Messner 1998). However, as the decade went on the Men’s Liberation movement experienced a bifurcation into anti-feminist and pro-feminist factions, ultimately resulting in the emergence of a Men’s Rights Movement. Composed of the more moderate and conservative members of the initial Men’s Liberation movement, proponents of

Men's Rights focused solely on the detrimental experiences of men without acknowledging their privileged position within a patriarchy (Messner 1998; Messner 2016).

Masculinity Threat in the Manosphere

The perception of existing “threats” to what were (and continue to be) socially privileged statuses—whiteness, maleness, heterosexuality, middle/upper-class status, cisgender identity, or all of the above—transitioned into an online context in the alt-right, whose constituent communities “can all be broadly characterized as firmly supporting the counter-cultural rehabilitation of the white male individual through a hostile rejection of liberal-left discourse” (Kelly 2017).

The fear of a feminist takeover and the defensive enactment of hyper-masculine scripts this fear fuels can be interpreted as masculine overcompensation, with manosphere members compelled to assert extreme signifiers of masculine status characteristics in response to perceived threats to their status in the social hierarchy (Willer, Rogalin, Conlon & Wojnowicz 2013). Overcompensation among manosphere members fueled by the perceived precariousness of manhood's privileged status has been termed fragile masculinity, and has linked to “aggressive political stances” and other compensatory behaviors aimed at reasserting one's status as a “real man” (DiMuccio & Knowles 2020:25). Alt-right communities, and consequently communities in the manosphere, may also be predisposed to amplified radicalization online.

Case 1: MGTOW

Masculinity-uncertainty-threat and blatant in-group favoritism are clearly illustrated in one particular facet of the Manosphere: Men Going Their Own Way, or MGTOW. MGTOW community members adhere to an ideology consistent with the “Red Pill” philosophy (Ging 2017)—MGTOW members circumvent perceived oppression under a “gynocentric” system by

voluntarily (often entirely) forgoing relationships with women. For self-identified MGTOW members, “the existing system” of modern Western gender and sexual relations “is impossible to amend,” leading them to “expunge themselves of gynocentric influences, and to nurse their besieged masculinities with the support of other men online” (Lin 2017:78).

MGTOW members’ male supremacist ideology is inspired in part by a perceived threat to members’ male privilege. As alluded to in their group ideology, MGTOW are mainly composed of an (assumed) white, middle-class male population, with a focus on North American and European contexts (Lin 2017). Members claim to have become disillusioned with the perceived feminist agenda in the modern western world, fear the decline of traditional patriarchal norms, and in turn profess in-group members’ strength and virtue in foregoing relationships with modern, “westernized” women—much as would be expected from a group facing high levels of masculinity-uncertainty-threat.

Case 2: Incels

While the MGTOW community represents an “ideal type” of masculinity-uncertainty-threat, promoting self-categorization through the promulgation of in-group favoring or explicitly male supremacist rhetoric, a focus on another facet of the manosphere complicates our understanding of the varied ways communities may react to such threats. Incels, whose self-referential group name refers to members’ supposed status as “Involuntary Celibates,” eschew the “Red Pill” philosophy common among other facets of the manosphere in favor of the “Black Pill,” a philosophy affording little to no hope for a better future and urging members to disavow the potential for happiness and social betterment and instead “LDAR,” or “lie down and rot” (Ging 2017; Bratich & Banet-Weiser 2019). Incels maintain the misogyny and anti-feminism

prominent across the manosphere, placing the blame for their inability to engage in sexual relationships on women (Jaki, De Smedt, Gwóźdź, Panchal, Rossa & De Pauw 2019).

Despite focusing discourse on the fundamental flaws and shortcomings of individual community members and the community as a whole, incels nevertheless forge strong social identities through interactions with one another online. Though scholars have previously attributed the appeal of incel membership to in-group “attention, pity, and confirmation of their perceived hopeless situation” (Jaki, De Smedt, Gwóźdź, Panchal, Rossa & De Pauw 2019:256), another rhetorical tool could also be involved in maintenance and construction of robust social identities among incels: the *strategic use of gendered essentialist rhetoric*, aligning group members with a particular brand of identity politics. Essentialism as a tool for the strategic unification of group members is especially suited to groups with an ideologically conservative bent, including the alt-right, the manosphere, and incels—according to Jen Schradie’s (2019) observations of conservative efforts at social movement mobilization in North Carolina, right-wing movements tend to more readily adopt an “Evangelical” mode of knowledge dissemination than left-wing movements, where a singular “truth” can be passed from member to member through, for example, posting a link to an article on a group Facebook page.

Incels as a Social Movement Online Community (SMOC)

The incel community on Reddit can be considered a social movement online community, or SMOC, insofar as it constitutes “a sustained network of individuals who work to maintain an overlapping set of goals and identities tied to a social movement linked through quasi-public online discussions” (Caren, Jowers & Gaby 2012:167). During its time as a subreddit, r/braincels allowed members to self-select into a network sustained through submissions validating members’ shared worldviews and affirming the “Black Pill” ideology. The r/braincels subreddit

can also be considered “quasi-public.” While it remained a public subreddit, any Reddit user, even those not subscribed to r/braincels, could have r/braincels content appear in their feed, facilitating outsider recruitment. Even after its quarantine, r/braincels remained accessible to all those with internet access through use of an outside search engine. Despite this, extensive use of niche vernacular on the subreddit could leave those outside the group’s intended audience confused and discouraged from putting in the legwork necessary to decode such unfamiliar, potentially alienating language. The incel community on r/braincels, then, could employ their own unique form of indexing in community discourse to engage only with those visitors who were, to a certain extent, “in the know.”

The dissonance between ardent self-derogation seen in the incel community and unabashed male supremacy in the MGTOW community and in other facets of the manosphere leads to the study’s third research question: to what extent does in-group favoritism toward a broader social category mitigate the deterrent effects of out-group favoritism in a constituent subcategory?

DATA AND METHODS

Data: Publicly Available Reddit Content

Data for the study were obtained through the official Reddit pushift application programming interface, or API¹. Using a Python script², the author was able to gain access to a unique dataset containing submission content from a trio of relevant subreddits (r/incels, r/braincels, and r/MGTOW), in addition to a random selection of Reddit content from an analogous time period for comparison. Figure 1 displays submission activity on r/incels, r/braincels, and r/MGTOW over time, up to the point at which data were scraped using the pushift API.

r/incels

The original subreddit catering to incels on Reddit, *r/incels* was the primary hub for incel activity on the platform until its ban following widespread condemnation of the community promoting violence against women³. The ban arrived November 7th, 2017, shortly after Reddit publicized a commitment to “crack down” on content inciting violence and harm on October 25th of the same year. In addition to r/incels, groups associated with Nazism, white supremacy, and racism were also banned in the days following the crackdown⁴.

In total, 21,152 submission texts from r/incels were included in computational analyses.

¹ <https://pushshift.io/>

² Python Software Foundation. Python Language Reference, version 3. Available at <http://www.python.org>.

³ <https://www.nytimes.com/2017/11/09/technology/incels-reddit-banned.html>

⁴ <https://www.nytimes.com/2017/10/26/us/reddit-violence-policy.html>

r/braincels

Following the r/incels ban, *r/braincels* became the de facto “evasion” subreddit replacing r/incels. Like its predecessor, *r/braincels* was an online forum, or subreddit, catering to incels on Reddit; established prior to the ban of the original r/incels subreddit on November 7th, 2017, *r/braincels* quickly gained traction after the r/incels ban. The subreddit was quarantined on September 27th, 2018, due to the offensive nature of its content⁵. *R/braincels* was subsequently banned on October 1st, 2019, though much of its content remains publicly available via the pushshift.io Reddit API⁶.

In total, 68,144 submission texts from *r/braincels* were included in computational analyses.

r/MGTOW

Quarantined as of January 31st, 2020, *r/MGTOW* is a subreddit intended for members of the Men Going Their Own Way, or *MGTOW*, online community. Unlike incel members, *MGTOW* members claim to abstain from relationships with women voluntarily—in incel parlance, members of the *MGTOW* community would be termed “Volcels⁷.” *MGTOW* members adhere to a belief system in line with the more traditionally male supremacist “Red Pill” ideology,

⁵ During its time as a quarantined subreddit, *r/braincels* required Redditors to explicitly opt-in to viewing the subreddit’s content; within this period *r/braincels* content would never appear in non-subscribed Redditors’ feeds (<https://www.reddithelp.com/en/categories/rules-reporting/account-and-community-restrictions/quarantinedsubreddits>). As such, *r/braincels* is an excellent example of a primarily inward-facing social media network: while the beliefs and worldviews of *r/braincels* members may be perceived as extreme in members’ broader social networks in the physical world, content on the *r/braincels* subreddit is posted with the intent of reaching like-minded others.

⁶ Unfortunately, a large proportion of *r/braincels* data were not archived in the months immediately following the *r/braincels* quarantine, and this unarchived content is not available through the pushift API (see DeCook 2019 for more on the learned importance of archiving in online hate groups). While the author believes analysis of these data could be valuable, they have made a deliberative decision that accessing data not made publicly available through the Reddit API is both beyond the scope of this study, and has the potential to cross an ethical boundary regarding user privacy (see Markham & Buchanan 2012).

⁷ For a complete list of terminology and definitions relevant to the study, see Appendix A.

unlike the Nihilist “Black Pill” ideology adhered to by members of the incel community. Lifted from the Matrix film franchise, those who have “swallowed the Red Pill” view themselves as enlightened to the female-favoring, “gynocentric” slant of the modern western world. Red Pill adherents are then supposedly able to resist this slant and fight to restore men’s “rightful place” in the social hierarchy (Dignam & Rohlinger 2019).

In total, 102,463 submission texts from r/MGTOW were included in computational analyses.

Random Reddit Content

To better understand how language patterns in the incel and MGTOW communities differ from “typical” language patterns on Reddit, the author also scraped random data from across Reddit. Randomly selected Reddit content was scraped from October 28th to October 29th, 2018. During this period, r/braincels was active on Reddit, but had been quarantined.

In total, 101,523 submission texts from a random selection of subreddits were included in computational analyses.

Qualitative Analysis

This study’s qualitative data analysis involves the joint application of *iterative qualitative coding* promoted in an informed grounded theory approach, and generation of thick descriptions through close reading and line-by-line coding. Qualitative analyses were completed in tandem with computational analyses, each informing the other to provide a comprehensive understanding of the data.

Grounded Theory

This study employs an informed, modified grounded theory approach to qualitative data analysis. Taking a grounded theory approach allows qualitative researchers to disentangle “social fictions” promoted in populations of interest from the actions these social fictions inform (Glaser

1999). This makes grounded theory apropos to studying the discourse of online communities invested in disseminating particular social fictions among members. Rather than follow a strictly classical approach to grounded theory, the author incorporates aspects of informed grounded theory to achieve a more nuanced understanding of the data over time.

Informed Grounded Theory

Striving for a purely inductive approach, classical grounded theory advocates for a delayed literature review, waiting until near-completion of data analysis to engage with past research. While Glaser and Straus (1967) argue this delayed approach promotes researchers' unbiased engagement with data and the formation of data-driven theories, critics have linked this approach to several potential limitations. Employing grounded theory solely in the classical sense can make it "impossible for researchers to conduct studies in their own areas of expertise" and interferes with many of the "pragmatic and strategic" steps necessary to conduct academic research (Thornburg 2012). A classical, fully data-blind approach to grounded theory also runs the risk of "reinventing the wheel," with ignorance to past research findings leaving practitioners of classical grounded theory *less* innovative than would be possible had they engaged with past research prior to data analysis and theory formation (Thornburg 2012).

For the reasons outlined above, the author incorporates an informed approach to grounded theory as advocated by Thornburg (2012), "in which both the process and the product have been thoroughly grounded in data by GT [Grounded Theory] methods while being informed by existing research literature and theoretical frameworks." To accomplish this the study employs several of Thornburg's recommended strategies for ensuring data sensitivity, including theoretical agnosticism, engaging with past literature while maintaining a critical stance toward past theory throughout the research process (Henwood & Nick 2003; Thornburg

2012); theoretical pluralism, engaging with multiple theories so as to minimize risk of “confining or blinding” the scope of research (Thornburg 2012); and constant reflexivity, a process of “limit[ing] researcher effects on the data by awareness of self” in order “to prevent prior knowledge distorting the researcher’s perceptions of the data” (McGhee, Marland & Atkinson 2007:334).

Qualitative analyses proceeded in a multi-step, cyclical process, with the author returning to previous steps as findings were informed by successive phases of analysis. The author completed both unstructured deep readings and two cycles of qualitative coding. Qualitative coding was approached abductively, informed both by the author’s familiarity with the cases and through recurring consultation of extant, relevant literature.

Step 1: Deep Reading

The author first approached cases through exploratory deep reading to familiarize themselves with common terminology and themes across each community. Initial iterations of the project focused primarily on the incel community; thus, the author’s efforts in these early stages focused primarily on texts in reference to, or created by, incels. The author became aware of r/IncelTears⁸, a self-described “watchdog” subreddit monitoring particularly egregious incel content both on and off Reddit, and their Incel Language Dictionary, an attempt to make the highly indexed language employed by incels more accessible to outsiders. The dictionary⁹ available through this community played a formative role in constructing and validating thematic word lists for later analyses, and in compiling definitions of terms included in Appendix A.

⁸ While r/IncelTears was a public subreddit at the time the author was in the process of completing deep readings, it has since been converted to an invite-only, private subreddit. Since then, r/IncelTear (<https://www.reddit.com/r/IncelTear/>) has emerged as its successor, a public subreddit created on April 10, 2020, and which, as of this writing, has over 18,200 subscribers

⁹ https://www.reddit.com/r/IncelTear/wiki/incel-terminology#wiki_incel_language_dictionary

Step 2: Iterative Coding

First-cycle encoding. In first-cycle coding, the author focused primarily on classifying texts based on presence or absence of a number of broad themes. As such, first-cycle coding in this study can be considered an encoding process (Saldaña 2015:5). First-cycle coding focused on “captur[ing] and label[ing] subjective patterns” across texts, and thus can be considered values coding (Saldaña 2015:7). No text was limited to being labeled with a single code; if more than one code was appropriate for the text, the author labeled the text with multiple codes. Thus, first-cycle coding was conducted simultaneously (Saldaña 2015:6).

Initial thematic coding focused on a single case, using a dataset of 1,409 submission titles and texts from r/braincels, a subreddit catering to the incel community on Reddit. Texts in the single-case phase of first-cycle coding were analyzed to determine presence or absence of four broad themes: *anti-feminism/misogyny*; *racism/xenophobia*; *comparative physical appearance/body dissatisfaction*; and *hopelessness/suicidality*.

As the project evolved, it became evident qualitative coding would benefit from cross-case comparison. Subsequent first-cycle coding looked simultaneously at submission titles and texts from r/braincels and submission titles and texts from r/MGTOW¹⁰. In total, the cross-case phase of first-cycle coding encompassed 759 texts from the incel community, and 501 texts from the MGTOW community.

Texts from the cross-case phase of first-cycle coding were analyzed to determine presence or absence of the four themes from single-case phase first-cycle coding, as well as two new themes, in-group favoritism and essentialism. As these themes were more abstract than the

¹⁰ Incel community content analyzed in the cross-case phase of first-cycle coding were scraped from two periods: from November to December 2017, following the ban on the original incel subreddit, r/incels; and from April 2018, following the r/braincels quarantine. Content from the MGTOW community analyzed in this phase of first-cycle coding was scraped November to December 2017, in line with the first period of scraping of incel community content.

four themes from the initial phase of first-cycle coding—and informed through a turn to pre-existing literature—each theme is described below in more detail.

In the cross-case phase of first-cycle coding, texts were coded as containing in-group favoritism if language in the text reflected “people’s tendency to prefer groups associated with themselves as a confirmation of their high self-esteem” (Dasgupta 2004:143). In-group favoritism was coded as present both when appearing *explicitly*—where language literally states the superiority of in-group versus out-group members; or *implicitly*—where the in-group favoring character of the language is latent¹¹. Texts were coded as containing essentialism if any language affirmed the existence of “nonarbitrary, constraining relationship[s] between deep properties and more superficial ones” (Ortony 1989:180). Like in-group favoritism, essentialism has the potential to appear in both explicit and literal, or implicit and latent, forms.

In addition to determining presence or absence of themes in analyzed texts, the author also provided written rationale for why texts coded as containing themes were coded as such. Gaining a more nuanced understanding of the ways language was leveraged across each community assisted the author in developing a more comprehensive codebook for second-cycle coding.

Second-cycle encoding. In addition to looking at random selections of r/braincels and r/MGTOW submission titles and texts, second-cycle coding also looked at a random sample of submission comments from each community. Randomly selected content was additionally supplemented with subsets of high-like content from each community. “High-like” subsets included both content receiving the highest number of net likes over the whole of a subreddit’s lifespan, and content receiving the highest number of net likes within one standard deviation of

¹¹ That such a distinction was present within a single theme was one of the grounds for creating a more detailed codebook, replete with subcodes, to approach texts in second-cycle coding.

the mean net likes for each subreddit. In pulling content from these two “high-like” distributions the author incorporated content receiving a truly exceptional amount of endorsement across each community, as well as content receiving more moderate levels of endorsement in each community.

Second-cycle coding was guided by a more exhaustive codebook developed through reflections on first-cycle coding and returns to relevant literature. This second-cycle codebook evolved throughout second-cycle coding to best accommodate emergent themes in texts¹².

In-depth, line-by-line decoding and thick descriptions. Concurrent with second-cycle coding, the author selected a number of particularly illustrative submissions from each community for more in-depth analysis. These texts were coded line-by-line, with annotations detailing implicit assumptions and rhetorical strategies employed in discourse. Line-by-line coding emphasized “reflect[ing] on a passage of data to decipher its core meaning,” and thus can be considered a process of decoding (Saldaña 2015:5). Reflective memos assisted the author in crystallizing their thoughts regarding the overall message(s) conveyed by texts.

Texts selected for line-by-line decoding aided the author in generating thick descriptions of the rhetorical strategies at play among members of the incel and MGTOW communities. Commonly employed in ethnographic research, thick descriptions allow researchers to decipher “a multiplicity of complex conceptual structures, many of them superimposed upon or knotted into one another,” and render these into something comprehensible to a broader audience (Geertz 1973:314). These characteristics make the generation of thick descriptions appropriate for analyzing the language present in incel and MGTOW community content, as members often communicate through niche vernaculars specially tailored to other in-group members, and

¹² For an abbreviated version of the second-cycle codebook, see Table 3.

employ implicatures ensuring the underlying meanings of language remain evident only to a select group of people (Bucholtz & Hall 2005).

Computational

To determine whether linguistic themes and rhetorical strategies uncovered in qualitative analyses translate to the entirety of publicly available data scraped from each community, the author determined frequency and presence of terms contained in any of twenty qualitatively-informed terms lists within texts and across communities. In order to answer research questions related to the role of broader social categories like “men” and “women,” the author also determined frequencies of total words in each text containing lists of non-community-specific, gendered terms. The author also calculated sentiment analysis scores for each submission text.

Qualitatively-informed term lists and term frequencies. Based on deep readings and findings from qualitative coding, the author constructed twenty terms lists based on qualitatively-derived themes¹³. Two lists—“prototype: all” and “self-reference: all”—are compound lists, including terms from a number of more specifically oriented lists. Given the multifaceted use of terms and phrases contained in these lists, some terms appear in multiple lists as these terms embody multiple themes.

Taking into account Muddiman, McGregor & Stroud’s (2019) recommendations for organically-derived, manually validated, and context-dependent dictionaries, the terms lists employed in this study emphasize contextual validity over sheer number of terms. Many common terms in the incel and MGTOW communities carry two distinct meanings: one *non-community-specific* meaning recognizable to much of the western English-speaking population, and a *community-specific* meaning indexed such that only those familiar with the norms and

¹³ For full terms lists, see Appendix B. Definitions of niche terminology contained in terms lists are provided in Appendix A.

conventions of the community would be able to successfully decipher the term's true contextual meaning. When constructing terms lists, then, the author considered potential effects of both excess false positives were a term to be included in a given list, along with potential effects of excess false negatives were the term to be excluded. These lists are therefore not exhaustive so much as they are intended to be maximally valid given the contexts in which they are employed.

Self-Reference Frequencies. To make inferences about relative positive or negative self-evaluation across texts, the author generated a “self-reference” variable using the three of the terms lists above: “self-reference: all,” “self-reference: incel-specific,” and “self-reference: MGTOW.” The “self-reference” variable was differentially constructed across communities—for incel texts, self-reference = self-reference: all + self-reference: incel-specific; for MGTOW texts, self-reference = self-reference: all + self-reference: MGTOW-specific; and for texts randomly scraped from across Reddit, self-reference = self-reference: all.

Gender Frequencies. In addition to constructing the terms lists outlined above, the author also generated lists of non-community-specific gendered terms. These lists were largely guided by Danielle Sucher's “Jailbreak the Patriarchy” extension for Google Chrome,¹⁴ used in the past to analyze how men and women are discussed in large bodies of text¹⁵. In order to appropriately gauge the degree of male to female references in a text, the author created two variables with terms frequencies—one using only non-community-specific male and female terms (“Sucher frequency”), and another containing both community-specific and non-community-specific gendered terms (“gender frequency”) to generate a set of continuous “gender” variables. For texts containing a higher number of *male* terms, the scores for each of these variables will be

¹⁴ <https://github.com/DanielleSucher/Jailbreak-the-Patriarchy>

¹⁵ http://nealcaren.github.io/text-as-data/html/times_gender.html

more *positive*; for texts containing a higher number of *female* terms, the scores for each of these variables will be more *negative*.

Sentiment Analysis

To measure patterns in overall sentiment across communities, the author calculated AFINN and VADER sentiment scores for each text.

AFINN scores. Developed by Finn Årup Nielsen from 2009-2011, AFINN sentiment analysis provides valence scores based on presence or absence of a list of predetermined terms (Nielsen 2011). AFINN scores range from a maximum negative score of -5 to a maximum positive score of 5. When calculating scores, the AFINN sentiment analyzer produces a *summation* of total sentiment scores.

Nielsen developed AFINN sentiment analysis specifically for use on microblogs like Twitter, with strict character limits ensuring the additive nature of AFINN score calculation is not largely influenced by variations in word count across texts. On Reddit, however, submission word counts vary widely—the standard deviation for submission texts used in computational analyses is itself 211.44 words. Thus, when incorporating AFINN scores into regressions models the author controls for the confounding influence of word count using a centered word count variable.

VADER scores. The Valence Aware Dictionary and sEntiment Reasoner, or *VADER*, is another sentiment analyzer specifically designed for social media texts (Hutto & Gilbert 2017). Unlike AFINN scores, VADER scores deal with *proportions* of words in texts, allowing VADER scores to be interpreted without the need to control for word counts. Another useful aspect of VADER sentiment analysis is its ability to provide a variety of sentiment scores. In addition to *compound* scores taking into account the overall sentiment scores of language present

in texts, VADER also provides positivity, negativity, and neutrality scores, each looking at the ratios of language, symbols, and writing styles falling into “positive,” “negative,” and “neutral” classification categories, respectively.

Table 1a provides examples of texts receiving high and low AFINN scores (adjusted for word count) and VADER compound scores across communities. Table 1b provides examples of high VADER negativity, VADER positivity, and VADER neutrality scores across communities.

Generalized Estimating Equation models. Models in this study were run as Generalized Estimating Equation (GEE) regressions. A form of Generalized Linear Modeling (GLM), GEE models allow for clustering within subjects and specifying expected within-subject covariance (Ballinger 2004). Employing GEE models in this study allows the author to control for potential user-level fixed effects in statistical models. The author specified an autoregressive covariance structure across models, where strength of within-subject correlation decreases with lag (Littell, Pendergast & Natarajan 2000:1800). Specifying an autoregressive covariance structure is apropos to this study as the strength of correlation between texts written by the same user would presumably decrease over time. One would expect an incel or MGTOW community member to approach the language used in submitted content with a relatively identical mindset if submissions were posted in quick succession. More time between submissions by the same community member introduces potential variation in the community member’s state of mind—and thus their approach to crafting language—over time.

To determine whether patterns observed in qualitative analyses appear throughout content from each community, and to investigate how those patterns might change over time, the author tests a number of hypotheses based on qualitative findings and relevant literature:

H 1a: Incel texts will be associated with more negative sentiment than MGTOW texts and randomly selected Reddit texts.

H 1b: Incel and MGTOW texts will be associated with more extreme sentiment than randomly selected Reddit texts.

Models 1a and 1b illustrate GEE regression models used to test hypotheses 1a and 1b. Models are clustered by Reddit user and specify an autoregressive covariance structure.

Model 1a: $AFINN = \beta_0 + \beta_1 * \text{centered_word_count} + \beta_2 * C(\text{subreddit}) + \varepsilon_1$

Model 1b: $VADER = \beta_0 + \beta_1 * C(\text{subreddit}) + \varepsilon_1$

Models 1a and 1b were run with both incel content and randomly selected Reddit content as reference categories. Model 1b was run for VADER compound, negativity, positivity, and neutrality scores.

Propensity toward blatant self-derogation in the incel community leads the author to hypothesize:

H 2a: Presence of self-reference will be related to more negative sentiment in incel texts versus MGTOW texts, and compared to randomly selected Reddit texts.

H 2b: Greater frequency of self-reference will be related to more negative sentiment in incel texts versus MGTOW texts, and compared to randomly selected Reddit texts.

Models 2a and 2b look at the relationship between sentiment and *presence* of self-reference (testing hypothesis 2a), while models 2c and 2d look at the relationship between sentiment and *frequency* of self-reference (testing hypothesis 2b). Models are clustered by Reddit user, and specify an autoregressive covariance structure.

Model 2a: $AFINN = \beta_0 + \beta_1 * \text{word count} + \beta_2 * C(\text{subreddit}) + \beta_3 * \text{binary self-reference} + \varepsilon_1$

Model 2b: $VADER = \beta_0 + \beta_1 * C(\text{subreddit}) + \beta_2 * \text{binary self-reference} + \varepsilon_1$

Model 2c: $AFINN = \beta_0 + \beta_1 * \text{word count} + \beta_2 * C(\text{subreddit}) + \beta_3 * \text{frequency self-reference} + \varepsilon_1$

Model 2d: $VADER = \beta_0 + \beta_1 * C(\text{subreddit}) + \beta_2 * \text{adjusted frequency self-reference} + \varepsilon_1$

Models 2a through 2d were run with incel content as the reference category. Models 2b and 2d were run for VADER compound, negativity, positivity, and neutrality scores.

Given the relatively benevolent portrayal of prototypical stock characters embodying idealized masculinity in incel content¹⁶, the author hypothesizes:

H 3a: Incel texts containing any prototypical language embodying idealized masculinity will display more positive sentiment than incel texts containing no such language.

H 3b: Incel texts containing any prototypical language embodying idealized masculinity will display more positive sentiment than MGTOW and Random texts containing any such language.

H 3c: Incel texts containing a greater frequency of prototypical language embodying idealized masculinity will display more positive sentiment than incel texts containing a lower frequency of such language.

H 3d: Incel texts containing a greater frequency of prototypical language embodying idealized masculinity will display more positive sentiment than MGTOW and Random texts containing a greater frequency of such language.

Models 3a and 3b look at the relationship between *presence* of prototypical language embodying idealized masculinity and sentiment (testing hypotheses 3a and 3b), while models 3c and 3d look at the relationship between *frequency* of prototypical language embodying idealized masculinity and sentiment (testing hypotheses 3c and 3d). Models are clustered by Reddit user, and specify an autoregressive covariance structure.

Model 3a: $AFINN = \beta_0 + \beta_1 * \text{word_count} + \beta_2 * C(\text{subreddit}) + \beta_3 * \text{binary prototype ideal masculine} + \varepsilon_1$

Model 3b: $VADER = \beta_0 + \beta_1 * C(\text{subreddit}) + \beta_3 * \text{binary prototype ideal masculine} + \varepsilon_1$

Model 3c: $AFINN = \beta_0 + \beta_1 * \text{word_count} + \beta_2 * C(\text{subreddit}) + \beta_3 * \text{frequency prototype ideal masculine} + \varepsilon_1$

Model 3d: $VADER = \beta_0 + \beta_1 * C(\text{subreddit}) + \beta_3 * \text{adjusted frequency prototype ideal masculine} + \varepsilon_1$

Models 3a through 3d were run with incel content as the reference category. Models 3b and 3d were run for VADER compound, negativity, positivity, and neutrality scores.

Addressing the study's third research question—whether positive affect toward a broader social category (here, “men”) mitigates the potential deterrent influence of negative affect toward

¹⁶ This phenomenon will be further extrapolated upon in the Results section.

the narrower social identity for which membership in the broader social category is prerequisite (here, “incel”), the author hypothesizes:

H 4a: Higher frequency of non-community-specific “maleness” versus “femaleness” in incel texts will be correlated with more positive sentiment scores.

H 4b: Higher frequency of community-specific and non-community-specific “maleness” versus “femaleness” in incel texts will be correlated with more positive sentiment scores.

Models 4a through 4d below illustrate the GEE regression models run to test hypotheses 4a and 4b. Given the focus of these hypotheses, all four models were run only on incel texts. Models are clustered by Reddit user, and specify an autoregressive covariance structure.

Model 4a: $AFINN = \beta_0 + \beta_1 * \text{word count} + \beta_2 * \text{Sucher frequency} + \varepsilon_1$

Model 4b: $VADER = \beta_0 + \beta_1 * \text{adjusted Sucher frequency} + \varepsilon_1$

Model 4c: $AFINN = \beta_0 + \beta_1 * \text{word count} + \beta_2 * \text{gender frequency} + \varepsilon_1$

Model 4d: $VADER = \beta_0 + \beta_1 + \beta_1 * \text{adjusted gender frequency} + \varepsilon_1$

Models 4-b and 4-d were run for VADER compound, negativity, positivity, and neutrality scores.

Finally, in line with discursive co-construction of social identity over time (Jacoby & Ochs 1995) and the potential radicalizing influence of social media echo chambers (Garimella, Morales, Gionis & Mathioudakis 2018), the author hypothesizes:

H 5a: Incel texts will become more negative over time,

given incel community members’ tendency toward a cynical outlook potentially compounding as members feed off one another’s pessimism through time. The author also hypothesizes:

H 5b: Incel texts will become more negative over time, versus MGTOW content,

given MGTOW community members’ tendencies toward a more positive affect and the MGTOW community’s stronger propensity toward explicit in-group favoritism.

Models used to test hypotheses Hypotheses 5a and 5b mirror the models outlined above, with the addition of a normalized, time-level variable to determine changes in sentiment over

time¹⁷. Because the incel and MGTOW communities were active over different time periods, fitting sentiment over time for each community in the same model does not optimally address the hypothesis. To account for differences in activity over time across communities, time trend analyses were conducted separately on incel and MGTOW content. Models outlined below include clustering by user to account for user-level variations in employed language.

$$\textbf{Model 5a: AFINN} = \beta_0 + \beta_1 * \text{word_count} + \beta_2 * \text{norm_utc} + \varepsilon_1$$

$$\textbf{Model 5b: VADER} = \beta_0 + \beta_1 * \text{norm_utc} + \varepsilon_1$$

Model 5b was run for VADER compound, negativity, positivity, and neutrality scores.

¹⁷ As randomly selected Reddit data did not originate within any specific community, it makes little theoretical sense to include random data as a reference category when analyzing trends over time; thus, the models outlined below were only run on incel and MGTOW content.

RESULTS

Deep Reading and Iterative Coding: Emergent Themes

For broad themes coded in single-case and cross-case phases of first-cycle coding, this section outlines rough percentages conveying frequencies of thematic presence across texts. For the more extensive themes from second-cycle coding, the author feels providing equivalent percentages could be misleading and afford a false sense of precision. Frequencies of these themes are more appropriately visualized through terms frequencies in computational analyses, which provide an understanding of thematic presence “at a glance” and consider a larger number of texts than those analyzed qualitatively.

Tables 2a and 2b include percent frequencies of broad themes from single-case and cross-case phases of first-cycle coding, respectively. Table 3 displays themes outlined in second-cycle coding, with examples of common terms and/or rhetoric associated with each theme.

In-Group Favoritism

In content with language explicitly referencing in-group favoritism, incel and MGTOW members tie possession of a favorable trait to the in-group, while denying possession of that trait to the out-group, in degree or in whole. In the cross-case phase of first-cycle coding, language exhibiting in-group favoritism was present in approximately 1% ($n = 9$) of texts in content from the incel community; in the MGTOW community, in-group favoritism was present in approximately 17% ($n = 87$) of texts.

Explicit: male supremacism. In a submission from July 2018, MGTOW community member MSM10¹⁸ claims they will be “dropping truth bombs.” MSM10 shares how they “find solace in knowing that [they] won the coin flip, and [their] sex is the clear Superior.” In this and similar submissions, MGTOW community members explicitly espouse a belief in the superiority of the in-group through direct links to male supremacy. Here, a favorable trait is assigned universally to the broad social category of “men.”

Explicit: Pro-MGTOW. In a submission posted to r/MGTOW in May 2017, GTW2 attributes their newfound ability to “feel truly at peace” to their adherence to a MGTOW ideology, and to “go[ing their] own way.” In doing so, GTW2 went from feeling “frustrated” and “like [they were] missing out” to “feel[ing] amazing.” In GTW2’s submission and others in the MGTOW community, aligning oneself with the MGTOW identity and associated tenets purportedly allows for a higher quality of life than could otherwise be achieved. GTW2’s submission asserts the superiority of a more specific subset of the broader social category of men: those who have “gone their own way.”

Implicit: misogyny. In-group favoritism can also be identified through the implication of in-group superiority. In the single-case phase of first-cycle coding, anti-feminist/misogynist language was present in approximately 27% ($n = 375$) of texts from the incel community. In the cross-case phase of first-cycle coding, anti-feminist/misogynist language was present in approximately 34% ($n = 257$) of texts from the incel community; in the MGTOW community, anti-feminist/misogynist language was present in approximately 51% of ($n = 253$) texts.

Second-cycle thematic and line-by-line coding focused more specifically on how anti-feminist/misogynist rhetoric were leveraged in each community as a means of implying male

¹⁸ The author employs pseudonyms when referring to incel and MGTOW community members.

supremacy, alluding to perceived superiority of the in-group without stating it directly. When male supremacist rhetoric is leveraged in the incel community, it often possesses a more roundabout character than what one encounters in MGTOW content. Male supremacist content in the incel community also tends to be intertwined with the derogation of women. In a submission to r/braincels from June 2018, JE36 writes

I've noticed incels have started talking about how they don't have friends. Dude, that has nothing to do with hypergamous¹⁹ whores. Stacy is not preventing you from having guy friends. *Guy friends don't fucking care if you're ugly.* (emphasis added)

The rhetorical work being done in JE36's submission is more nuanced than the explicit male supremacist rhetoric used by MGTOW community members in previous examples. The juxtaposition of misogynist slurs ("hypergamous whores") and a relatively positive evaluation of men ("guys friends don't care if you're ugly") might not be blatantly staking the claim that men are superior, but it implies as much through invoking a cynical portrayal of women as shallow and looks-obsessed and an optimistic portrayal of "guy friends" looking beyond physical appearance in quick succession.

Out-Group Favoritism

Language in the incel community often reflected members' propensity toward out-group favoritism. When employing out-group favoring rhetoric, incel community members tie possession of a favorable trait to the out-group while denying possession of that trait to the in-group, in degree or in whole.

Explicit: comparative physical appearance/body dissatisfaction. In both the single-case and cross-case phases of first-cycle coding, language focused on comparative physical

¹⁹ "Hypergamity" refers to a system in which women are able to be more selective when choosing opposite-sex romantic or sexual partners than are men. For a comprehensive list of definitions for terminology employed in the Incel and MGTOW communities, see Appendix A.

appearance and/or body dissatisfaction was considered as a standalone category. In the single-case phase of first-cycle coding, language focused on comparative physical appearance and/or body dissatisfaction was present in approximately 30% ($n = 426$) of texts in content from the incel community. In the cross-case phase of first-cycle coding, language focused on comparative physical appearance and/or body dissatisfaction was present in approximately 28% ($n = 212$) of texts in content from the incel community; in the MGTOW community, language focused on comparative physical appearance and/or body dissatisfaction was present in approximately 10% ($n = 48$) of texts.

In a submission to the r/braincels subreddit from April 2018, incel community member UFR18 bemoans the fact that, despite having “swiped on all 300 girls in [their] city” on Tinder, they received “0 matches.” UFR18 goes on to explain why they believe this has occurred:

Women, whether irl [in real life] or online, they have many options and they have *no reason to choose a long midfaced subhuman like me over someone with a compact midface.* (emphasis added)

Here and in similar submissions, an explicit comparison is made between in-group and out-group members, with the out-group member judged in a more favorable light.

Implicit out-group favoritism. Out-group favoritism also occurs through the implication of out-group superiority. In their submission to r/braincels in July 2018, MSS22 pushes incel community members to “never stop asking girls out,” since

to be confidently approached by an ugly man is a huge insult to [women]. The fact that a non-Chad would even think that he has a chance with her is an immense blow to her self-confidence.

In total, MSS22’s submission amassed 992 net likes and 259 comments, placing it among the top liked submissions to the r/braincels subreddit. In doing so, MSS22 implies incel community members universally lack the ability to successfully obtain romantic relationships with women,

in contrast to the referenced “Chad” character²⁰. MSS22’s submission implies an out-group favoring mentality.

Interestingly, MSS22 titles this call to continue pursuing relationships with women—even when allegedly secure in the knowledge no relationship will ever materialize from such endeavors—a “Message to all incels.” Although MSS22 urges fellow incel members not to “get [their] hopes up” about potential relationships developing from their continued pursuit of women (“they’re never going to agree to go out with you”), their submission nevertheless exemplifies how unifying rhetoric appears in incel content. MSS22’s call to action is addressed to the incel Reddit community at large, an attempt to mobilize community members to continue pursuing women even as their ideology precludes the inevitable failure of their advances being reciprocated.

Essentialism

In the cross-case phase of first-cycle coding, essentialism was present in approximately 42% ($n = 322$) of texts from the incel community, and in approximately 38% ($n = 189$) of texts from the MGTOW community. In second-cycle coding, essentialism was found to occur in reference to a variety of topics; examples of each, along with interpretations, are provided below.

Essentializing Gender. In a submission to r/braincels posted on August 2018, incel community member XPM14 considers themselves “somewhere between incel and volcel [voluntary celibate].” XPM14 explains:

I don’t like women. They *aren’t good people* . . . I can imagine good scenarios, with good chicks, in a (sic) imagined world. This world’s not that though. *Women are absolutely evil* . . . [they] only care about pizza, Netflix, pride themselves on being bitchy and basic . . . it’s just evil. (emphasis added)

²⁰ “Chad” is a prototypical stock character recurring throughout content in both the Incel and MGTOW communities, representing an idealized masculinity and social-sexual success. “Chad” is discussed in more detail in the subsection covering *Prototypical Language: Ideal Masculine*.

XPM14’s submission illustrates a common theme in content across both the incel and MGTOW communities—that all women are the same.

XPM14 is far from alone in holding this belief: in cross-case first-cycle qualitative coding, “all women = same” or some derivative thereof (“all female youtubers = same,” “all feminists = same,” “all women = triggered”) appears consistently and frequently in the author’s justification memos for coding the presence of essentialist rhetoric in texts. The sentiment is so widely held to have merited its own acronym in the incel and MGTOW communities: AWALT, or “all women are like that.” While the traits attributed to all womankind vary across content, they are almost exclusively characteristics reviled among incel and/or MGTOW community members.

Like in-group favoring and out-group favoring rhetoric, gendered essentialist rhetoric in incel and MGTOW content has the capacity to be either explicit or implicit. An example of the latter can be seen in BLR3’s submission to the r/MGTOW subreddit from October 2017:

Title: I’ve never met an abusive man that wasn’t good with women.

Text: Crazy now that I think about it.

In this submission, BLR3 plays into a narrative common in misogynist circles: women are somehow naturally predisposed to attraction toward men who treat them poorly, even abuse them. BLR3 does not state this outright, framing their submission as a mere observation for community members to interpret as they will. Nevertheless, the post’s implication falls in line with gendered essentialism—its underlying message is that all women are attracted to abusive men²¹.

²¹ Another theme underlying this submission and much of the content in both the Incel and MGTOW communities is the essential nature of heterosexuality—that all men are attracted to women, and that all women are attracted to men. While this is usually implied rather than stated explicitly, there are some instances of content across communities stating users’ heteronormative beliefs outright.

Essentializing physical appearance. Second-cycle coding paid particular attention to the ways members of both incel and MGTOW communities essentialized physical appearance. UFR18's previously discussed submission to the r/briancels subreddit illustrates how comparisons of physical features play out in the incel community²². In their submission, UFR18 focuses on the length of their midface, stating their belief that this portion of their face is overly long. UFR18 concludes all women have "no reason to choose" UFR18 as a romantic or sexual partner, and that their long midface renders them "subhuman."

UFR18's submission captures much of the character of body dissatisfaction in incel content. Here, physical appearance (as a summation of one's physical features) and physical attractiveness are seen as synonymous. Moreover, evaluations of physical attractiveness are framed as both objective and universal. Ultimately, UFR18 links their own humanity (and, implicitly, the humanity of others) to the minutiae of their physical features aligning with some apparently universal ideal.

Biological essentialism. Posting on the r/MGTOW subreddit on February 2019, MMT8* presents fellow MGTOW members with an observation: in golf, "even when scoring benefits are given, women still underperform when compared to men." MMT8 notes that, despite "women stand[ing] further ahead when teeing off" and "hav[ing] more shots to complete each hole,²³" they still fall behind in the leaderboards of a televised golf tournament. MMT8 directs readers to their concluding sentence early on (beginning their submission with "the last sentence is the point of this post"):

Men have 11% larger brains, with 17% more neocortex connections, and about

²²At times, similar comparisons occur in the MGTOW community; however, such comparisons are more central to incel than MGTOW ideology.

²³ MMT8 follows this with the parenthetical "(please correct me if incorrect)," which at the very least lends their submission the illusion that they may be dissuaded by a dissenting opinion or contradictory evidence.

20% (minimum) more muscle mass. *Such statistical differences can explain the almost exact scoring differences between men and women.* (emphasis added)

The strategic rhetoric employed in MMT8's post is particularly illustrative of how biological essentialism can be leveraged by MGTOW community members to justify a male supremacist, misogynist worldview²⁴. MMT8 provides a list of percentages and dubiously presented, (pseudo)scientific comparisons between men and women in an attempt to legitimate their explanation for why men and women perform differently in the golf tournament.

Essentialism and socialization. In addition to essentialist rhetoric rooted in supposed biological origins, incel and MGTOW community members also broadly attribute traits and characteristics to different groups based on differential socialization across groups. Even here, however, there is nearly always an underlying belief that the root of observed differences across groups goes deeper than what would be seen if differences were attributable to socialization alone. In a post to the r/braincels subreddit from April 2019, incel community member INR19 contends "women don't watch movies the same way as men do," because "ladies have been spoon-fed the same character to self-insert as over and over again." While this portion of INR19's submission appears to attribute gendered differences in film consumption to the way male and female characters are disparately written, INR19 still pins the blame for these characters' differences on female viewers, rather than the screenwriters creating these characters:

[Women] don't like being surprised or challenged like [men] do . . . [and] that's why every female character written in the last 8 years is described by the actress that plays her as a "total badass" in every single interview.

²⁴ MMT8's post, especially the final two sentences, also provides an excellent example of reification through numbers, percentages, and "statistics," a phenomenon that will be discussed in more detail later on in the Results section.

While they do attribute some degree of influence to the manner in which female characters are written, INR19 still asserts women’s innate dislike for “being surprised or challenged” lies at the heart of this observed gender difference.

Reification

A phenomenon related to—and often accomplished through employment of—essentialism, reification entails “making the merely conventional seem inevitable” and “making the merely intersubjective seem objective” (Zerubavel 2015:70). In incel and MGTOW content, reification through appeals to the inherent logic of numbers, and to the respect and authority afforded (pseudo)science, play important roles in lending community discourse legitimacy.

Reification: appeals to numbers. Posting on the r/braincels subreddit in June 2019, DTD16 provides fellow community members with a “REMINDER²⁵” that “men pay 75% of all taxes while women consume 75% of all tax products and programs” (emphasis added). In a submission posted to r/MGTOW in February 2018²⁶, DMN10 writes that “90% of women have nothing to give that is worth the effort” (emphasis added). In these posts and others, incel and MGTOW community members incorporate numbers, percentages, and other dubiously framed “statistics” into their rhetoric in an effort to legitimate their claims.

While DTD16 and DMN10 introduce percentages in discourse, reification through appeals to numbers occurs in a variety of forms. Posting to the r/braincels subreddit on July 2018, TS15 titles a post “your NAWALT [not all women are like that] gf [girlfriend] 0.003 seconds after Chad texts her ‘wyd?’ [what are you doing?],” netting 2,167 net likes and 157 comments and making the submission one of the top-liked posts in the history of the forum.

²⁵ Discouraging “daily reminders” occur frequently in incel content.

²⁶ It’s worth noting this post’s proximity to Valentine’s Day.

Attempting to disprove others' assertion that all women might not be the same (“NAWALT”), TS15 centers their argument in part on an excessively precise measurement of time (“0.003 seconds”) before the hypothetical “gf” at the center of their narrative inevitably shows her true colors, abandons her boyfriend, and goes after “Chad.”

Reification: appeals to science. In addition to reifying essential gender differences—and therefore justifying misogynist beliefs—through appeals to numbers, incel and MGTOW content also frequently employs appeals to science, scientific terminology, and the institutions and publications circulating scientific knowledge to legitimate claims. Scientific terms are often employed flagrantly out of context: the terms “alpha” and “beta,” are lifted from the field of ethology (where they are applied to the behavior of non-human animals) and instead used to describe traits associated with “dominant” and “subordinate” human men. The Pareto principle, or “80:20 Rule” —which states 80 percent of effects can be attributed to 20 percent of causes²⁷— is lifted from its typical use in the fields of economics, computing, and marketing and transformed in incel discourse; here, the “80:20 Rule” instead alludes to the belief the “top” 80 percent of women are able to choose their romantic and sexual partners from the “top” 20 percent of men, while the “bottom” 80 percent of men must choose their romantic and sexual partners from the “bottom” 20 percent of women.

Incel and MGTOW community members often go as far as to cite scientific literature when making claims in discourse²⁸. In a submission to the r/MGTOW subreddit from April 2018 titled “Refuting These New Age Arguments. Serious Thinking,” HED31 asserts

there are 4 types of basic humans: Gay=male anatomy, female psychology.
Lesbian=Female anatomy, male psychology. Male=u know. Female=u know.
(Citation: estrogen levels at fetus development correlate with later gay sexual

²⁷ Sanders, R. 1987. “The Pareto Principle: Its Use and Abuse.” *Journal of Services Marketing*.

²⁸ For further discussion of the incorporation of scientific literature into incel discourse, see Gallagher 2020.

orientation, flamboyance, and getting reproductive drives activated at the smell of only MALE sweat PSYCHOLOGY TEXTBOOK 2008/ Eighth edition bitches).

While one would likely be hard-pressed to find any number of psychologists who agree with HED31's assertion, gaining scientific consensus for their claim is irrelevant: what their "citation" aims to do is afford their claim legitimacy among other MGTOW members and potential MGTOW recruits, a group HED31 believes will both accept their interpretation of the psychology textbook at face value, and will be more likely to respect their claims regarding the "4 types of basic humans" given they have appended a citation at all.

Prototypical Language

Common in rhetoric across incel and MGTOW content, *prototypical language* refers to a particularly community-relevant prototype, or to "fuzzy sets of interrelated attributes . . . captur[ing] overall similarities within groups and overall differences between groups" (Hogg 2016:8). In both communities, prototypical language was often employed to separate groups of people into distinct categories falling along gendered and/or ethnoracial lines.

Prototypical language: ideal masculine. Posting their submission to the r/braincels subreddit in June 2018, incel community member DTO20 describes an encounter with "this 6'2" dude with a square jaw and a strong chin." This individual is later referred to as "Chad," a common prototypical stock character meant to signal traits aligned with an idealized embodiment of masculinity in both the incel and MGTOW communities.

The traits exhibited in this prototypical, idealized masculinity are considered desirable across communities. In a post from May 2018 entitled "My Grandmother now calls me Chad," incel community member CE19 relates how, after CE19 "told [their grandmother] about Chads," their grandmother began referring to them as such; CE19 recalls how "when I helped [my grandmother] open a jar, she said 'it's nice to have a strong young man in the house, you're a

real Chad.” CE19 “felt so validated” by this and similar exchanges, since their grandmother “knows [they] want to be a Chad.” CE19’s submission received 1,414 net likes and 289 comments, making it one of the top liked submissions in the history of the r/braincels subreddit.

At the same time, however, many of the traits necessary for allotment into this prototypical, idealized masculinity are considered innate and impossible to work toward; the conviction this is so is particularly strong in the incel community. Per DTO20’s description of a “Chad,” one finds it difficult to increase their height, reshape their jaw, or “strengthen” their chin even with concerted effort, unless one turns to cosmetic procedures²⁹. As such, much of what constitutes the prototype of idealized masculinity (especially for incel community members) is considered to have developed inevitably, biologically or genetically predestined from (or prior to) birth.

Prototypical stock characters meant to embody idealized masculinity are often explicitly racialized: “Tyrone,” “Chang,” and “Chadpreet” exist as Black, East Asian, and South Asian analogues to the presumed-white “Chad,” respectively. Portrayals of these stock characters in incel discourse often play out in a stereotypical, racist manner: for example, portrayal of “Tyrone” as bestial and voraciously sexual brings to mind historical narratives meant to dehumanize Black men (Hodes 1993; Mann & Selva 1979) and deployment of “positive discrimination” ultimately maintaining white supremacy in the praise of Black athletes (Ferber 2007). Even as portrayals of these stock characters betray community members’ racism, xenophobia, and white supremacism, however, traits associated with these ethnoracial stock characters are often portrayed by incel (and MGTOW) community members as both desirable and impossible to obtain through effort alone; and, like “Chad,” these racialized stock characters

²⁹ Cosmetic surgery also comes up often in the incel community (<https://www.thecut.com/2019/05/incel-plastic-surgery.html>)

are often depicted as ultimately benevolent. WG31 titles a submission to the r/braincels subreddit from September 2018 “wholesome Tyrone,” accumulating 936 net likes and 80 comments; OTD4 titles their own r/braincels submission from September 2019 “Based³⁰ Tyrone stops the creating (sic) of another mentalcel³¹,” receiving 865 net likes and 106 net comments. Both submissions received some of the highest numbers of net likes in the history of the r/briancels subreddit.

Prototypical language: non-ideal masculine. MGTOW community member GTW2—who attributes their newfound ability to “feel truly at peace” to membership in the MGTOW community—reveals how this newfound peace allows them to “easily ignore the whores,” and follows this with an assertion that

Besides, [women] get enough attention on Tinder from pussy-thirsty *manginas*, *simps*, and *cucks*. They don’t need attention from yet another *beta male*.
(emphasis added)

Here, GTW2 lists off a number of terms referring to men who, in one way or more, fail to measure up to the standards of prototypical, idealized masculinity. Men referred to with non-ideal masculine terms are not necessarily excluded from the MGTOW community—GTW2 even refers to themselves as “*yet another beta male*.” However, incel community members largely consider the traits associated with non-ideal masculinity to apply to a distinct, third category of men, falling somewhere between the ideal masculine prototype (at the top) and incels (at the bottom) of the male social-sexual hierarchy.

Consistent with the anti-feminist character of discourse across communities, the typical “cuck” in incel and MGTOW content is presented as a strawman and a self-proclaimed male

³⁰ In this context, “based” means [“being yourself and not caring what others think of you.”](#)

³¹ A “mentalcel” is a member of the incel community whose identity as an incel is to some degree contingent upon a mental health issue.

feminist. Given that incel and MGTOW community members propagate a firm belief that women prefer “assholes” to “nice guys,” any male feminist who *does* happen to be in a relationship with a woman is presumed to be cuckolded, the woman automatically presumed to seek sexual fulfillment outside the relationship with a more aggressive, often sexist, man more in line with the idealized masculine prototype outlined above.

Prototypical language: feminine. In both the incel and MGTOW communities, women are often referred to with pointedly dehumanizing terms (take, for example, the robotic “foid” and “femoid”), or perceived as neatly fitting the criteria of one of a handful of prototypical feminine stock characters (“Stacy” or “Becky”).

In contrast to prototypical stock characters embodying idealized masculinity, prototypical feminine stock characters are nigh-universally portrayed in a negative light, *even when* considered attractive or desirable. The contrasting portrayals of the idealized, masculine “Chad” character, and the equally attractive but less idealized feminine “Stacy” stock character help further illustrate this distinction.

In a submission to the r/braincels subreddit from September 2018, PHE9 boasts they “got a Stacy and a Chad expelled from University yesterday.” PHE9 reveals they had been “casually walking down the hall,” only to witness “an unknown Chad” in front of them “walk up to this blonde³² Stacy and slap her ass.” The “Chad” in PHE9’s story blames this on PHE9, and the “Stacy” in the story believes him. Notably, the “Chad” who had perpetrated the sexual harassment eventually disappears from the narrative, while the “Stacy,” who PHE9 admits has been the *victim* of sexual harassment, takes center stage as the main antagonist. PHE9 criticizes the “Stacy” for proceeding to “d[o] a whole fucking rant on sexual harassment” on her Facebook

³² Both the “Chad” and “Stacy” stock characters are nearly always presumed to possess, or are outright described as possessing, blonde hair, blue eyes, and tanned skin.

page, and upon encountering her during a University investigation into the incident, refers to her as “the despicable girl.” While the “Chad” who had perpetrated the sexual harassment was, per PHE9’s submission, eventually expelled, PHE9 particularly relishes the fact that the “Stacy” “was suspended³³ [for] putting [PHE9’s] name in public before any evidence was put forth.” PHE9 takes comfort in their belief that university officials “sympathized with [them]” and “helped punish [‘Stacy’] as well.”

DTO20’s encounter with a “Chad” and a “Stacy” in their own submission to the r/braincels subreddit also illustrates the differential portrayal of prototypical, idealized masculinity and prototypical desirable, but less idealized, femininity in incel content. The “Chad” in DTO20’s submission eventually encounters a “Stacy,” who asks the “Chad” if they know who DTO20 is. DTO20 has been trailing the “Chad,” who explains to the “Stacy” that DTO20 is “just drafting.” After thanking the “Chad” for coming to their defense, DTO20 continues walking only to “hea[r] Stacy saying ‘something something weirdo.’” While the entire submission is rooted in humor³⁴, the cynical portrayal of the “Stacy” stock character (who refers to DTO20 as a “weirdo”) stands in contrast to the positive portrayal of the “Chad” stock character (who justifies DTO20’s strange behavior to the “Stacy”).

Prototypical language: ethnoracial. In the single-case phase of first-cycle coding, texts were coded for presence of themes related to race, racism, ethnicity, and/or ethnocentrism/xenophobia. Here, ethnoracial language was present in approximately 7% ($n = 92$) of texts in content from the incel community. In the cross-case phase of first-cycle coding,

³³ This directly contradicts the information PHE9 provides in the title, where the “Stacy” in the narrative is expelled along with the “Chad.”

³⁴ The punchline involves a comparison between DTO20 tailing the “Chad” and the phenomenon of “drafting” in aerodynamics.

ethnoracial language was present in approximately 7% ($n = 55$) of texts in content from the incel community; in the MGTOW community, ethnoracial language was present in approximately 4% ($n = 20$) of texts.

In second-cycle coding, particular attention was given to the employment of prototypical ethnoracial language. In addition to the “positively” framed, racist depictions of ethnic/racialized prototypical stock characters embodying idealized masculinity, members of the incel community often preface their own identities—and the identities of others—with ethnic/racialized qualifiers, such that a South Asian incel community member may refer to themselves as “curry” or “currycel,” while an East Asian incel community member may refer to themselves as “rice” or “ricecel;” “ethniccel” is sometimes used as a catch-all term for incel members whose “involuntary celibacy” is to some degree attributed to a non-white ethnoracial identity. Slurs referencing Asian incel community members tend to be couched in particularly cynical language: UMG6 titles a submission to the r/braincels subreddit from September 2018 “The Plight of the Currycel in America” and receives 114 net likes and 12 comments. MNR9 titles their own submission to the r/braincels subreddit from the same month “Currycels on suicidewatch (sic)” and receives 1,406 net likes and 74 comments, making it one of the top liked submissions in the history on the r/briancels subreddit.

Given the misogynistic character of incel and MGTOW discourse, it’s not entirely unexpected that racist slurs originating in each community at times take on a simultaneously gendered, misogynist component (i.e., use of the slur “noodlewhore” to refer to East Asian women). At times, racist and/or xenophobic rhetoric co-occurs with anti-feminist/misogynist rhetoric. Writing on May 2018 on the r/braincels subreddit, BRD18 argues that “Diversity” does not have anything to do with “non-white races,” but instead amounts to “femoid supremacy.”

Comparisons

Most obviously, comparisons are made between physical appearances of in-group and out-group members, as seen in language containing themes of comparative physical appearance and/or body dissatisfaction. However, salience of comparative rhetoric in incel and MGTOW content expands beyond the realm of physical features alone. Take DTO20's assertion in a submission to the r/braincels subreddit they had been "*walk-mogged* by Chad." Commonly employed in incel content, the term "mog" originates from the acronym "AMOG" or "alpha male of the group," refers to overshadowing another person, and usually focuses on "personal aesthetic attributes"³⁵. Though their submission deviates from the more common use of the term "mog" to compare physical appearances across groups or individuals, DTO20's focus on how the "Chad" they encountered was "outwalking" and "outpacing" them, and thus "mogging" them, keeps the term centered on interactions where one man is bested, socially or sexually, by his "better" along some measure.

Victimhood / aggrieved entitlement

In "Suicide by Mass Murder: Masculinity, Aggrieved Entitlement, and Rampage School Shootings," Kalish and Kimmel (2010) define aggrieved entitlement as an emotion unique to men living in a culture endorsing hegemonic masculinity, "a fusion of that humiliating loss of manhood and the moral obligation and entitlement to get it back" (pp. 454). This sense of aggrieved entitlement, and the perceived victimhood it entails, have been studied in the context of the incel community in past research (Ging 2017; Vito, Admire & Hughes 2018; Lindsay 2020); these themes also emerge in content from the incel and MGTOW communities in this study.

³⁵ <https://www.reddit.com/r/IncelTear/wiki/incel-terminology>

Victimhood is often construed as the in-group (men) suffering at the hands of the out-group (women). Discussing their belief in women's inherently evil nature, incel community member XPN14 claims women "deprive men of even the most basic happiness," while DLS1 concludes a submission to the r/MGTOW subreddit with the assertion "women can really ruin your life." Victimhood is also communicated as a sense of injustice, as in GTW2's submission to the r/MGTOW subreddit where they encourage fellow MGTOW community members to "look down at the beautiful asphalt that was laid there for you by your *unappreciated fellow man*" when going on a walk (emphasis added). GTW2's submission makes the case that men are not only the exclusive layers of asphalt; they also fail to receive proper credit for singlehandedly accomplishing this task.

It can be jarring to encounter perceived victimhood in close proximity to rhetoric aimed at mocking or dehumanizing the out-group; nonetheless, the two often appear simultaneously in content across communities. In a submission posted to the r/braincels subreddit from September 2019, SN62 asks readers to "imagine being mocked by a 1/10 fooid for just existing." That SN62 takes this opportunity to assign a hypothetical woman a numerical score³⁶ based on her physical appearance, and refers to her with the robotic, objectifying slur "fooid" rather than afford her full humanity, goes unaddressed. Nevertheless, the submission received 907 net likes and 159 comments, making it one of the top liked submissions in the history of the r/braincels subreddit.

Hopelessness / Suicidality

In the single-case phase of first-cycle coding, language referencing hopelessness and/or suicidality was present in approximately 22% ($n = 312$) of texts in content from the incel community. In the cross-case phase of first-cycle coding, language referencing hopelessness

³⁶ SN62 also assigns this hypothetical woman the *lowest* possible score.

and/or suicidality was present in approximately 29% ($n = 223$) of texts in content from the incel community; in the MGTOW community, language referencing hopelessness and/or suicidality was present in approximately 6% ($n = 30$) of texts.

Outright suicidality appears more commonly in incel content, where community members discuss the possibility of “roping,” or hanging themselves, and preface content as “suifuel” or “suicide fuel³⁷” as a warning the content to follow might trigger suicidal ideation in members.

A recurrent theme in hopeless rhetoric across the incel and MGTOW communities involves (modern, western) society’s impending collapse. In a submission to the r/braincels subreddit from December 2017, AA16 laments how in “contemporary first world culture . . . every aspect of social life has been branded and packaged for mass consumption.” AA16 contends the inevitable outcome is that

Humans have lost all social instincts (compassion, charity, leadership, etc.) and are dying mentally and emotionally as a result. This madness cannot continue for much longer. The only alternative to civilization’s collapse is mass psychosis which will end up leading to civilization’s collapse anyway. // *Abandon all hope.* (emphasis added)

Even in discussing impending societal collapse, however, MGTOW members maintain a degree of self-esteem absent in incel community members’ framing of society’s inevitable downfall. In a submission to the r/MGTOW subreddit from February 2017, ICF5 states that since MGTOW community members “didn’t break the system, it isn’t [their] responsibility to fix it.” Instead, ICF5 encourages “every MGTOW” to “focus on preparing so [they] can enjoy the decline,” and even shares some of their own “personal plan” for preparation. In their submission, ICF5 insists

³⁷ This term finds a contrast in “lifefuel,” appended to content seen as providing members with the motivation to live.

society's downfall is not attributable to MGTOW community members—implicitly attaching a positive valuation to the in-group—while holding out hope that, given the right preparation, it will be possible for MGTOW community members to even “*enjoy* the decline” (emphasis added).

Truth / Worldview

CE19's grandmother begins referring to CE19 as “Chad” only after CE19 “showed her Chad memes, told her about incelism, told her about Chads and the 80/20 rule³⁸.” By appending “-ism” to the term “incel,” CE19 takes the terminology used to describe their community affiliation and transforms it into “a distinctive practice, system, or philosophy.³⁹” Beyond the “pills” members of each community are expected to swallow, then, association with the incel community predicates an understanding and acceptance of a particular ideological viewpoint.

Additional worldviews discussed in both incel and MGTOW community content are considered widespread in the modern western world, but lack the strict adherence to—or are opposed by—incel and MGTOW community members. These include “hypergamy,” a social system in which women have comparatively more capacity to find desirable romantic and sexual partners than men⁴⁰; “gynocentrism,” a social system which unfairly prioritizes women; and “misandry,” a supposed irrational hatred toward men.

³⁸ The “80/20 Rule” is discussed in more detail in the section covering the reification through appeals to numbers and scientific language; for a definition of the term, see Appendix A.

³⁹ https://www.google.com/search?xsrf=ALeKk01gP8En876B-1aliW9YjdcOkAETsA%3A1596378094861&ei=7ssmX5KENNKLYtMPILqQGA&q=-ism&oq=-ism&gs_lcp=CgZwc3ktYWIQAzoECAAQRlCrQlirQmDBRGgAcAR4AIABTogBTpIBATGYAQCgAQQgAQdn d3Mtd2l6wAEB&scient=psy-ab&ved=0ahUKEwiSs5Xq2_zqAhXShXIEHRQdBAMQ4dUDCAw&uact=5

⁴⁰ Here, again, we see the theme of presumed universal heterosexuality.

Finance / Economics

In an October 2019 submission to the r/MGTOW subreddit, DLS1 reveals “a friend of [theirs] married a c*nt who made him pay almost 20k in debt, then dumped him.” DLS1 explains how they “found out about” the woman’s debt “and that [DSL1’s friend] was paying it.” In this submission and elsewhere in MGTO community content, heterosexual romantic relationships with women are construed as financial traps, with men in such relationships bound to be taken advantage of.

Financial and economic themes in the MGTO community are not always so venomous. Often, focusing on gaining financial knowledge is seen as a viable avenue for MGTO members to achieve some measure of happiness and success. In a post submitted to r/MGTOW in July 2019, BNF8 shares plans to put together a new home office “to organize finances for [their] small business.” BNF8 is excited about this, stating it is “time to build an Empire!” In another submission to r/MGTOW in April 2017, TGN12 provides advice to fellow community members and urges them to “learn financial planning methods” as one of many suggested steps toward personal betterment.

Discussions with financial or economic overtones were not solely the domain of MGTO community members. In DTD16’s “REMINDER” post to the r/braincels subreddit, the supposed gendered dynamics of the modern economic system also play an important part in the submission’s message. DTD16 asserts

If you are a tax paying man, it does not matter if you have a girlfriend, a wife, or if you have never spoken to a female in your entire life, YOU are still paying for pussy. YES, YOU.

As seen in DTD16’s post, men’s apparent financial exploitation at the hands of women doesn’t end simply because a man opts out of a heterosexual romantic relationship; men, regardless of their relationship status, will inevitably “pay for pussy.” This contrast reflects a broader

disjuncture between the agency prevalent in MGTOW discourse, and the inevitability of circumstances commonly observed in incel discourse.

Computational

Table 4 provides descriptive statistics for the total body of computationally analyzed texts. The bottom portion of the table gives a feel for patterns in sentiment scores across communities. Notably, mean and median AFINN scores—raw and adjusted for word count—are highest in randomly selected Reddit texts and lowest in incel texts, with AFINN scores for MGTOW texts falling somewhere in between. Similar trends in sentiment across communities are seen in VADER compound scores, which are highest in random Reddit texts and higher in MGTOW texts than in incel texts. The opposite pattern appears in VADER negativity scores: these are highest in incel texts and higher in MGTOW texts than in random Reddit texts. The least amount of variation in sentiment across groups occurs in VADER positivity scores, although these are still lowest in incel texts. Finally, VADER neutrality scores are similar in incel texts and MGTOW texts, though they are higher in random Reddit texts.

Table 5 presents user-level variables across communities, including mean, minimum, and maximum number of submissions from a given user in each community and the total number of users associated with each community. Here, “unique” refers to users within each community, and not necessarily to users across communities⁴¹.

Terms Lists over Time

Based on findings from the qualitative analyses and consultation of relevant literature, the author constructed twenty separate thematic terms lists for conducting computational analyses. In order of generation, thematic terms lists include: 1.) Physical Appearance / Body Dissatisfaction; 2.)

⁴¹ Indeed, 266 users submitted content to both r/incels and r/MGTOW, and 923 users submitted content to r/briancels and r/MGTOW.

Anti-feminism / Misogyny; 3.) Ethnoracial Language; 4.) Hopelessness / Suicidality; 5-9.) Prototypical Language (including Prototypical Language: All, Prototypical Language: Idealized Masculinity, Prototypical Language: Non-idealized Masculinity, Prototypical Language: Femininity and Prototypical Language: Ethnoracial); 10.) Comparisons; 11.) Unifying Language; 12.) Genetics; 13.) Truth; 14.) Victimhood/Aggrieved Entitlement; 15.) Violence; 16.) Worldview; 17.) Finance; 18-20.) Self-References (including Self-Reference: Universal, Self-Reference: Incel-specific, and Self-Reference: MGTOW-specific). Terms lists containing non-community-specific male words (“Sucher Men”) and non-community-specific female words (“Sucher Women”) were also generated. For full terms lists, see Appendix B.

Table 6 displays relative presence of themes in texts across communities. Separate columns show proportions of texts containing one or more terms in each terms list. Generally, themes are present more frequently in incel and MGTOW texts versus randomly selected Reddit texts, though there are a few exceptions. Violence (a list containing terms like “abuse,” “annihilate,” “destroy,” and “kill”) is actually more likely to be present in random Reddit texts than in texts from r/braincels, though only by a slight margin. In some cases, thematic presence was considerably more likely in one community than the other: economics/finance (a list containing terms such as “assets,” “cash,” and “investment”) was nearly twice as likely to be present in MGTOW texts than incel texts (where thematic presence was more in line with random Reddit texts). Prototypical language: all, prototypical language: ideal masculine, prototypical language: feminine, and prototypical language: ethnoracial appeared more in incel texts than MGTOW texts, while prototypical language: non-ideal masculine was about equally likely to occur in MGTOW texts and incel texts.

Figures 2a through 2d illustrate how different forms of prototypical language were employed across communities over time, displaying term frequencies in texts, adjusted for word count, in the r/incels, r/braincels, and r/MGTOW subreddits.

Sentiment Analysis

Tables 7a through 7c present results of GEE models looking at relationships between sentiment, presence and/or frequency of linguistic themes, and community of origin in submission texts.

Table 7a displays the output of models 1a and 1b, and tests hypotheses 1a and 1b: that incel texts will display *more negative* sentiment than MGTOW and randomly Reddit texts, and that incel and MGTOW texts will contain *more extreme* sentiment than random Reddit texts. With random Reddit texts as the reference category, incel and MGTOW texts are each significantly *more negative* than random Reddit texts, indicated by AFINN score (controlling for distance from mean word count) and VADER compound score. For incel and MGTOW texts, VADER negativity scores are significantly *higher*, and VADER positivity scores significantly *lower*, than respective scores for random Reddit texts. Incel and MGTOW texts are also significantly *less neutral* than random Reddit texts as measured by VADER neutrality scores.

With incel texts as the reference category, MGTOW texts are significantly *more positive* than incel texts, indicated by AFINN score (controlling for distance from mean word count) and VADER compound score. For MGTOW texts, VADER negativity scores are significantly *lower*, and VADER positivity scores significantly *higher*, than respective scores for incel texts. MGTOW texts are also significantly *more neutral* than incel texts based on VADER neutrality scores.

Results of models 1a and 1b reveal that even when controlling for user-level fixed effects, sentiment in incel and MGTOW texts are more negative and more extreme than sentiment in random selected Reddit texts, and incel texts are both more negative and more

extreme than MGTOW texts. These findings are in line with hypotheses 1a and 1b outlined above.

Table 7b displays the output of models 2a through 2d, and tests hypotheses 2a through 2d: presence and greater frequency of self-reference will be related to *more negative* sentiment in incel texts versus MGTOW and randomly selected Reddit texts, and that presence and greater frequency of self-reference will be related to *more positive* sentiment in MGTOW texts versus incel texts.

Presence of self-reference is related to *higher* VADER positivity scores in incel texts; AFINN scores (controlling for distance from mean word count) and VADER compound, negativity, and neutrality scores did not significantly differ based on the presence of self-reference in incel texts. Comparing incel and MGTOW texts, presence of self-reference is related to *higher* AFINN scores (controlling for distance from mean word count) and *higher* VADER compound scores in MGTOW texts versus incel texts; relationships between presence of self-reference and VADER negativity, positivity, and neutrality scores do not significantly differ between MGTOW texts and incel texts. Comparing incel and random Reddit texts, presence of self-reference is related to *higher* AFINN scores (controlling for distance from mean word count), and *higher* VADER compound and negativity scores, and *lower* VADER neutrality scores in random Reddit texts compared to incel texts; presence of self-reference and VADER positivity score does not significantly differ between random Reddit and incel texts.

Results from models 2a and 2b fall somewhat in line with hypothesis 2a, which states presence of self-reference will be related to more negative sentiment in incel versus MGTOW texts (which was observed) and random Reddit texts (where inconsistencies across interaction terms make conclusive takeaways more difficult).

Looking at *frequency* of self-reference in texts, greater frequency of self-reference in texts is related to *lower* VADER compound and positivity scores in incel texts; AFINN score (controlling for distance from mean word count), and VADER negativity and neutrality scores, did not significantly differ in incel texts based on frequency of self-reference. Comparing incel and MGTOW texts, greater frequency of self-reference is related to *higher* AFINN score (controlling for distance from mean word count), *higher* VADER compound and positivity scores, and *lower* VADER negativity score in MGTOW versus incel texts; the relationship between frequency self-reference and VADER neutrality score does not significantly differ across incel and MGTOW texts. Comparing incel and random Reddit texts, greater frequency of self-reference is related to *higher* AFINN scores, *lower* VADER compound and neutrality scores, and *higher* VADER positivity score in random Reddit texts versus incel texts; the relationship between VADER negativity score and frequency self-reference does not significantly differ between incel texts and randomly selected Reddit texts.

Results from models 2c and 2d fall somewhat, but not entirely, in line with hypothesis 2b, which states *higher frequency* of self-reference will be related to *more negative* sentiment in incel versus MGTOW texts (which was observed), and compared to random Reddit texts (which was not).

Table 7c displays the output of models 3a through 3d, and tests hypotheses 3a through 3d: both presence and higher frequency of prototypical language embodying idealized masculinity will be related to *more positive* sentiment in incel texts—versus MGTOW texts and randomly selected Reddit texts, and versus incel texts where such language is absent (or present to a lesser degree).

Compared to incel texts where prototypical language embodying idealized masculinity is absent, incel texts where such language is present are related to *higher* VADER compound and neutrality score and *lower* VADER negativity score; AFINN score (controlling for distance from mean word count) and VADER positivity score did not significantly differ based on presence of prototypical language embodying idealized masculinity in incel texts. Relative to incel texts, presence of prototypical language embodying idealized masculinity is related to *higher* VADER negativity score and *lower* VADER neutrality score in MGTOW texts; the relationship between presence of such language and AFINN score (controlling for distance from mean word count), and VADER compound and positivity scores, does not significantly differ between incel and MGTOW texts. Relative to incel texts, presence of prototypical language embodying idealized masculinity is related to *higher* AFINN scores (controlling for distance from mean word count), *higher* VADER negativity scores, and *lower* VADER positivity and neutrality scores in random Reddit texts; the relationship between presence of such language and VADER compound score does not significantly differ between incel and random Reddit texts.

As presence of prototypical language embodying idealized masculinity correlated with higher VADER compound and lower VADER negativity scores in incel texts, results from models 3a and 3b align with hypothesis 3a outlined above. Results also align somewhat with hypothesis 3b, which states incel texts containing *any* prototypical language embodying idealized masculinity will be associated with more positive sentiment than MGTOW texts containing such language (which was observed), and more positive sentiment than random Reddit texts containing such language (which was not).

Looking at *frequency* of prototypical language embodying idealized masculinity in texts, incel texts with greater frequency of such language were related to *lower* VADER negativity

and positivity scores, and *higher* VADER neutrality score compared to incel texts with lower frequency of such language; AFINN score (controlling for distance from mean word count) and VADER compound score do not significantly differ across incel texts based on frequency of prototypical language embodying idealized masculinity. Compared to incel texts, greater frequency of prototypical language embodying idealized masculinity is related to *lower* VADER compound score in MGTOW texts; the relationships between frequency of language embodying idealized masculinity and AFINN score (controlling for distance from mean word count), and VADER positivity, negativity, and neutrality scores, do not significantly differ across incel and MGTOW texts. Compared to incel texts, greater frequency of prototypical language embodying idealized masculinity is related to *higher* AFINN score (controlling for distance from mean word count), *lower* VADER compound, positivity and neutrality scores, and *higher* VADER negativity score in random Reddit texts.

Given decreases in both VADER negativity and positivity scores with greater frequency of language embodying idealized masculinity in incel texts, results from models 3c and 3d do not conclusively support hypotheses 3c, which states greater frequency of prototypical language embodying idealized masculinity in incel texts would correlate with more positive sentiment compared to incel texts with lower frequency of such language. Results from models 3c and 3d also do not exhaustively support hypothesis 3d, which states greater frequency of prototypical language embodying idealized masculinity would be related to more positive sentiment in incel versus MGTOW texts (which was seen in VADER compound scores but nowhere else) and random Reddit texts containing similar frequencies of such language (where the direction of interaction terms was too inconsistent to make any conclusive inference).

Table 8a displays output of models 4a and 4b, and tests hypothesis 4a: higher degrees of non-community-specific “maleness” versus “femaleness” in incel texts will be related to *more positive* sentiment scores. Here, higher degrees of non-community-specific male versus female terms are related to *higher* VADER positivity scores and *lower* VADER neutrality scores in incel texts; AFINN scores (controlling for distance from mean word count), and VADER compound and negativity scores, do not differ significantly across incel texts based on non-community-specific “maleness” versus “femaleness.”

Results of models 4a and 4b align with hypothesis 4a outlined above, given higher VADER positivity scores are related to higher degrees on non-community-specific “maleness” versus “femaleness” in incel texts.

Table 8b displays the output of models 4c and 4d, and tests hypothesis 4b: that higher degrees of non-community- *and* community-specific specific “maleness” versus “femaleness” in incel texts will be related to *more positive* sentiment. When adding community-specific terms to our measure of “maleness” versus “femaleness” in incel texts, higher “maleness” versus “femaleness” of a text is related to *lower* VADER negativity and positivity scores, and *higher* VADER neutrality scores.

Results of models 4c and 4d do not support hypothesis 4b, which states higher degrees of community-specific and non-community-specific “maleness” versus “femaleness” will be associated with more positive sentiment in incel texts. These results also reveal an interesting, initially unexpected pattern in the data: correlation between higher degrees of community and non-community-specific “maleness” versus “femaleness” and increased VADER neutrality score.

Tables 9a and 9b present the output of models 5a and 5b, and test hypotheses 5a and 5b: sentiment of incel texts will become *more negative over time*, and sentiment of incel texts will become more negative over time *versus MGTOW texts*. Table 9a displays differences in sentiment scores of incel texts over time, while table 9b displays differences in sentiment scores of MGTOW texts over time. Contrary to hypothesis 5a, VADER negativity scores of incel texts significantly *decrease* with time; however, VADER positivity scores also decrease with time. VADER neutrality scores *increase* with the passage of time in incel texts. Neither AFINN scores nor VADER compound scores significantly change with the passage of time in incel texts. In table 9b, sentiment of MGTOW texts does not significantly change along any of the sentiment scores calculated in this study. Results of model 5 do not support hypotheses 5a and 5b, which state incel texts will be associated with more negative sentiment over time, and will be associated with more negative sentiment over time versus MGTOW texts, respectively.

Given the unexpected results seen in table 9a, the author conducted follow-up analyses looking at trends in sentiment separately within each incel subreddit (r/incels and r/braincels). The author ran two additional GEE models, clustered by user and specifying autoregressive covariance structures, looking at sentiment over time in r/incels and r/braincels texts separately.

Tables 9c and 9d present results of GEE models looking at the relationship between sentiment scores and the passage of time in r/incels and r/braincels texts, respectively.

Looking at sentiment over time in r/incels texts, VADER compound and positivity scores *decrease* over time, while VADER neutrality score *increases* over time; AFINN scores (controlling for distance from mean word count) and VADER negativity scores do not significantly differ over time in r/incels texts. Decreases in VADER positivity and VADER compound scores, along with null results for VADER negativity score, are more in line with

hypotheses 5a and 5b than are the results from table 9a, where the time trends of r/incels and r/braincels are considered together.

Focusing on sentiment over time in r/braincels texts, AFINN score (controlling for distance from mean word count) and VADER compound and positivity scores, *decrease* over time, while VADER negativity score *increases* over time; VADER neutrality score does not significantly change over time in r/braincels texts. These results fall more in line with hypotheses 5a and 5b than the results seen in table 9a, where time trends in r/incels and r/braincels texts are considered together.

DISCUSSION

This study aims to understand how themes and rhetoric strategically employed in language can facilitate maintenance and construction of distinct social identities online, even in the absence of blatant in-group favoritism. The study also looks into the potential facilitative role of strategically employed, gendered essentialist rhetoric in constructing and maintaining social identities in online communities. Finally, the study examines how in-group favoritism toward a broader social category may mitigate the deterrent character of out-group favoritism within a smaller subcategory upon which membership in the larger social category is prerequisite. To do so, the study compares language present in two anti-feminist online communities active on the social media platform Reddit.com: the involuntary celibate (incel) community, whose members engage in a great deal of self-derogation, and the Men Going Their Own Way (MGTOW) community, whose members are more traditionally in-group favoring. This study employs iterative, qualitative coding of publicly available Reddit submissions from each community, along with computational analyses of thematic terms frequencies and sentiment analysis scores across texts.

Discussion of Qualitative Findings

Qualitative analyses reveal that while male supremacist rhetoric is more explicitly employed in the MGTOW community than in the incel community, it is nevertheless present in both. Male supremacist rhetoric is more immediately apparent in MGTOW content, sometimes with a specific focus on the apparent superiority of MGTOW members versus other men.

Conversely, incel content often relies on the *implication* of male supremacy rather than stating it outright. This is accomplished through relatively cynical portrayals of women versus men (and, following this, relatively positive portrayals of men versus women), as well as through comparatively benevolent depictions of non-incel men embodying idealized masculinity.

Gendered essentialist rhetoric was also present in each community, though its employment was especially important in the incel community, given incel members disavow the utility of individual agency for improving one's prospects. The importance of (gendered) essentialist rhetoric in each community is further emphasized by creation and employment of *prototypical* language, reflecting embodiments of idealized masculinity, masculinity that fails to measure up to this supposed ideal, and to femininity. Particularly in the incel community, prototypical language often also takes on an *ethnoracial* character, and this sometimes intersects with gendered components of prototypical language.

In order to legitimate their arguments, incel and MGTOW community members each have a penchant for *reifying* gendered essentialist differences through appeals to the inherent logic of numbers (through incorporating dubiously supported percentages, measurements, and statistics), and appeals to the respect afforded scientific terminology and institutions (through citing, often out of context, academic texts).

Much of the (individual and collective) self-derogation among incels is reminiscent of systems justification theory, though the author cautions against going so far as to conclude incel community members on Reddit engage in systems justification “at the expense of personal and group interest” (Jost & Banaji 1994). Instead, the derogation of women in incel content—which places blame for myriad social issues almost exclusively on women—falls more in line with what Kay et al. (2007) refer to as “an alternative route” toward systems justification; here, “(non-

complementary) victim-blaming” toward women in unfulfilling or abusive relationships, alongside “(complementary) victim-enhancement” toward men portrayed as put upon, disrespected, and ignored, help justify maintaining the status quo.

What is interesting is that “the status-quo” is not necessarily outside the interest of incels, even if it is maintained through self-inflicted, negative stereotypes toward individual community members and the community as a collective. In many ways, sorting men into distinct prototypical social categories based on their embodiment of a narrow, idealized masculinity—and conscious exclusion of in-group members from this idealized masculine prototype—reflects components of scholarly work on hybridized masculinity⁴² (Bridges & Pascoe 2014). Though incels may appear to be in ideological opposition to some of the pro-feminist men previously analyzed in this scholarship (see Bridges 2010), the net results of discourse for each group are stunningly similar: both groups “discursively align participants with hegemonic masculinity even as their practices might seem to distance them from it” (Bridges & Pascoe 2014:250).

Strategic reification through appeals to numbers and science also mirrors what Accomotti and Tadmon (2020) refer to as “reification of merit,” which “fuels inequality . . . by reinforcing the authoritativeness of evaluation and by making observers more accepting of the idea that individuals can be meaningfully sorted into a merit hierarchy” (pp. 3). By classifying groups of people into hard-and-fast, apparently unchanging categories, and attempting to reinforce those categorizations through appeals to the authority afforded certain forms of evidence—even when such evidence is grossly misrepresented—incel (and MGTOW) community members play into a similar acceptance of the authority of evaluation.

⁴² For an in-depth theoretical look at embodiments of hybridized masculinity across the manosphere, see Ging 2017.

That incel and MGTOW community members feel compelled to append loosely interpreted, out-of-context numbers and/or scientific literature to their submissions brings to mind past work on the concept of pseudoknowledge, where scholarly work is both reinterpreted and interwoven with more “conventional” wisdom to suit the purpose of a given narrative (Introne, Yildirim, Iandoli, DeCook & Elzeni 2018). Through construction and promulgation of such pseudoknowledge, incel and MGTOW community members are able to legitimate even their more extreme, hateful beliefs and worldviews in the eyes of those for whom that legitimation is most critical: fellow community members and potential “converts” to the community.

Discussion of Computational Findings

Qualitatively-informed, inferential statistical models examine sentiment scores of texts across communities based on presence and frequency of self-reference, prototypical language embodying idealized masculinity, and the “maleness” versus the “femaleness” of a given text (considering both exclusively non-community-specific gendered terms, and community-specific and non-community-specific gendered terms together). Results of these models support a number of the author’s hypotheses. Incel texts and MGTOW texts are associated with more negative sentiment than randomly selected Reddit texts, while self-reference in incel texts is associated with more negative sentiment than self-reference in MGTOW texts. Presence and greater frequency of prototypical language embodying idealized masculinity are associated with more positive sentiment in incel texts, and is related to more positive sentiment in incel texts than in MGTOW texts containing such language. Greater frequency of non-community-specific “maleness” versus “femaleness” in texts is associated with more positive sentiment in incel texts.

Results of GEE models did not support the author’s hypotheses that self-reference would be associated with more negative sentiment in incel texts versus randomly selected Reddit texts; that prototypical language embodying idealized masculinity would be related to more positive sentiment in incel texts than in random Reddit texts; and that greater frequency of non-community-specific and community specific “maleness” versus “femaleness” in texts would be associated with more positive sentiment in incel texts. While initial models failed to support hypotheses that incel texts would be associated with more negative sentiment over time and would be associated with more negative sentiment over time versus MGTOW texts, results from follow-up models disaggregating incel texts from the r/incels and r/braincels subreddits were more closely aligned with these hypotheses.

Results of statistical models looking at VADER neutrality merit additional reflection, as many indicate increased neutrality where such an increase was not initially expected. Results of these models reveal *increased* VADER neutrality with greater frequency of self-reference in incel texts, along with both presence and greater frequency of prototypical language embodying idealized masculinity in incel texts.

A look through the publicly available VADER sentiment lexicon text file⁴³ illustrates which words are considered neutral in VADER sentiment analysis and which are not. The word “securitizations,” for example, receives a quite neutral rating of 0.1, while its root word “secure” receives a considerably more positive rating of 1.4. Other “neutral” words (receiving scores of 0.1 within the VADER sentiment lexicon) include such formal, relatively esoteric terms as “amorphously,” “faillie,” “graticule,” “heronry,” “lamedh” and “misericorde⁴⁴.” That results of

⁴³ https://github.com/cjhutto/vaderSentiment/blob/master/vaderSentiment/vader_lexicon.txt

⁴⁴ Notably, “graticule,” “lamedh,” and “misericorde” all set of Microsoft Word’s automated spell checker.

statistical models looking at VADER neutrality scores indicate increased neutrality where such increases were not initially expected may be related to increased reliance on a detached, “scientific” or “objective” tone among incel members as a means of further legitimating their claims.

Consider the “high neutral” text example from the r/incels subreddit in table 1b, which received a VADER neutrality score of 1.0⁴⁵. The submission contends a “bulbous, wide nose = automatically repulsive to 99% of women.” While such language is more neutral than table 1b’s examples for high VADER negativity scores (which contain such loaded terms as “hate,” “stupid whores,” “suicide,” and “die”), one would still reasonably interpret the phrase “automatically repulsive” as reflecting some measure of negativity. Sentiment in incel language may indeed become less extreme when it contains greater frequencies of self-referencing language, and in the presence/with greater frequency of prototypical language embodying idealized masculinity. However, this is likely due to incel community members couching otherwise widely stigmatized, deeply pessimistic beliefs within deceptively “neutral” language, rather than due to viewpoints reflected in incel texts becoming less extreme in these circumstances.

⁴⁵ This score indicates very high proportional neutrality of a text.

CONCLUSION

Incel community members sometimes contest their inclusion in the manosphere, and consequently the alt-right (DeCook 2019). The author hopes this study's findings advance the case that the themes and strategies employed in incel discourse promote a male supremacist worldview even while explicitly derogating in-group members, through comparatively positive portrayals of non-incel men (falling within a shared, broader social category of "men" versus "women") when membership within the incel community is widely understood to be contingent upon one's status as a man.

This study's findings demonstrate the powerful influence of rhetoric made possible by condensing rich, complex social phenomena down to simplistic narratives, played out through a handful of easily understood, prototypical stock characters. Efforts to simplify the intricacies of our social worlds, and granting those simplifications an apparent "logic"—no matter how unfounded—can inspire identification with intensely self-hating communities, or at the very least mitigate some of the aversion one might expect to see associated with such intense self-hatred.

Compounding this mitigation is the relatively positive portrayal of a distinct subcategory falling under the umbrella of broader social category shared with the self-derogating community, along with the relatively positive portrayal of the broader social category of "men" versus "women." Positive portrayal of a distinct subgroup—intertwined with simultaneous negative portrayals of a distinct out-group that does not fall within this broad social category—can also detract from potential aversion toward identifying with communities grounded in even acute self-derogation.

Reification through appeals to the supposed logic inherent in numbers, the respect afforded science, and the strategic employment of sexist or racist biological essentialism as a quick means of affording one's argument legitimacy didn't emerge from the ether and suddenly appear on r/MGTOW, nor did they spontaneously spring into existence in incel discourse. These are tools, of oppression and suppression, predating the internet, long put to use in promoting (white) male supremacy, and often still unchallenged in the present day.

For an historical example, consider Durkheim's *The Division of Labor in Society*. Durkheim lauds the endeavors of Dr. Lebon, who "has been able to establish directly, *with mathematical precision*, this original resemblance between the sexes, in regard to the preeminent organ of physical and mental life, *the brain*" (pp. 18, emphasis added). Durkheim argues any society granting women political freedoms equal to men is backward or "primitive," and that this is so *because of* a "mathematically precise" measurement of some aspect of their physiognomy—here, the difference (or similarity) in circumference of men's and women's skulls. Durkheim's reliance on differential physical appearance across groups, attributed to biological/evolutionary roots and lent credence through associations with "precise" measurements and mathematics, parallels several rhetorical strategies leveraged in incel and MGTOW discourse over a century after the book's initial release.

Sir Francis Galton, the proliferator of eugenics, dedicated much intellectual effort to determining how humans could selectively "breed out" undesirable human traits and "retain" desirable ones, as he firmly believed such traits were not only innate, but hereditary (Gillham 2001; Comfort 2018). The man who invented the correlation coefficient and popularized the regression models so embedded in scientific research to this day (to the extent they play no small role in this study's claims to empirical hypothesis testing) also resolutely stood by a

pseudoscientific field not only directly and indirectly responsible for untold human suffering—it also acts as an eerily similar, historical mirror to language still flourishing in the present day, there for anyone on the internet to stumble upon.

To assume damage done by the discourse observed in this study occurs only online, or is little more than the intentionally provocative, comedic stylings of “trolls,” is a dangerous underestimation of its negative impacts on broader society. The communities profiled in this study have been linked to numerous murder-suicides⁴⁶. The July 19, 2020 murder of judge Esther Salas and her son Daniel was perpetrated by Roy Den Hollander, who in addition to identifying as an avowed men’s rights activist was also a lawyer with an Ivy-League education, a professional and educational background far from the margins of society. The damage inflicted by discourse common in the incel and MGTOW communities can also be observed across the internet—as Natalie Wynn notes in a video essay examining incels, a very similar obsession with the minutiae of one’s physical appearance and a related sense of hopelessness can be seen in online communities catering to individuals transitioning their gender presentation to better align with their gender identity⁴⁷.

Banning these communities from Reddit can seem like a tangible step toward preventing these and similar forms of online hatred, and it is certainly a better approach than doing nothing. However, the author believes doing so is only a temporary fix, a virtual band-aid. Reddit users can hop onto the next “evasion” subreddit, just as they did from r/incels to r/braincels, and from r/braincels to yet another “evasion” subreddit, r/shortcels (Gothard, Dodds & Danforth 2020).

⁴⁶ <https://www.bbc.com/news/world-us-canada-43892189>;
<https://www.washingtonpost.com/graphics/2019/local/yoga-shooting-incel-attack-fueled-by-male-supremacy/>
<https://msmagazine.com/2020/07/27/misogyny-murder-and-the-mens-rights-movement/>

⁴⁷ <https://www.youtube.com/watch?v=fD2briZ6fB0>

Even if Reddit were to successfully suppress incel activity, this in no way rules out the incel community congregating elsewhere, perhaps on community-curated forums permitting even more extreme, hateful content without recourse. Even here, a ban on just such a forum (incels.me) was followed by a move to a successor forum (incels.co), and similar moves could easily continue on, ad infinitum (Baele, Brace & Coan 2019). In the process of re-organizing themselves after a quarantine or ban, the incel community could also potentially resurface with renewed motivations to archive the sorts of hateful language outlined in this study (DeCook 2019).

From the author's perspective, a more effective strategy would entail adopting a more critical stance toward the presence of similar ideologies and beliefs often left unchecked in contexts well beyond these supposedly "niche" online communities, up to and including widely circulated and well-regarded longitudinal surveys used in creating and testing social scientific knowledge (Westbrook & Saperstein 2015). By leaving passive gender essentialism unchecked, we do more than ignore the problem—we are complicit in perpetuating a social environment catalyzing formation of groups stoking extreme vitriol and violence, the intensity of which the author hopes was effectively conveyed through the examination of salient quotes in this paper. We do ourselves a disservice when we fail to take these communities seriously, to view their hatred as a problem, and to link this hatred to broader systems and beliefs far too often overlooked or uncritically provided legitimating platforms.

Future research can expand upon this study's findings by more fully exploring the spectrum along which these and similar rhetorical strategies are employed in discourse, from widely stigmatized and subaltern communities to those whose authority, sociocultural influence, and/or expertise are near-universally either accepted, unchallenged, or both. Drawing parallels

between the strategies employed by communities most “respectable” individuals and groups feel compelled to maximally distance themselves from in their public-facing personas, and those persons whose every word and opinion has the potential to create ripple effects in policy and mass consciousness, can provide a clearer understanding of how to approach these strategies critically, to unpack any insidious undercurrents in their employment, and ultimately to produce and disseminate a body of knowledge more capable to doing the most possible social good.

TABLES AND FIGURES

Table 1a. Examples of High and Low Overall Sentiment Across Communities

Sentiment Score:	AFINN, adjusted for word count	VADER compound
r/incels (high)	<p>“ayy lmao” (2.0)</p> <p>“Its a great pleasure ;)” (1.5)</p> <p>“Thank god” (1.5)</p> <p>“good night boys take care” (1.0)</p>	<p>“Hello. I want to share some tips that will help out people over here. I am a normie from estern europe. Ive been with the same GF for 8 years now, ever since 10th grade, she looks as hot as they get but all woman look hot in estern europe...” (0.998)</p>
r/incels (low)	<p>“Meanwhile, I wanna fucking die.” (-1.4)</p> <p>“feels bad” (-1.5)</p> <p>“subhuman. trash. fuck you. fuck you. fuck you...” (-1.7)</p> <p>“im fuckin lonely :(“ (-2.0)</p>	<p>“Im so angry at myself and the world.I look in the mirror and all I see if a hideous, fucking deformed monstrosity, fit to be a caricature of the beastly villain or the disfigured village idiot in an animated comedy...” (-0.993)</p>
r/braincels (high)	<p>“Just lol!!! 🤔🤔🤔 Lol Lol lol JUST JUST lol!!!!...” (2.0)</p> <p>“Wow life is awesome!” (2.0)</p> <p>“Fantastic song.” (2.0)</p> <p>“good luck brozers” (2.0)</p>	<p>“I FIGURED IT OUT! Usually Im super nice and get along with everyone. Ill be there for anyone that needs me. More than once Ive been called a ‘Nice Guy’...” (0.995)</p>
r/braincels (low)	<p>“fuck theyre stupid” (-2.0)</p> <p>“LIFE IS A LITERAL FUCKING NIGHTMARE, FUCK FUCK...” (-2.4)</p> <p>“OUT BITCH” (-2.5)</p> <p>“Despair despair despair despair despair” (-3.0)</p>	<p>“All my life girls ignored or hated me. Not a single girl I met in school, work, university or through some of my few friends has ever expressed *any* interest in me...” (-0.990)</p>
r/MGTOW (high)	<p>“LMAO 🤔” (2.0)</p> <p>“It’s amazing. Justice.” (2.0)</p> <p>“Im happy :)” (1.5)</p> <p>“Good Question!” (1.5)</p>	<p>“Chances are you want to be more successful. Chances are you realise success takes a lot of work. Chances are you wish there was a scientifically proven method that made success a little bit more... fun. Well, Shawn Achor, bestselling author of The Happiness Advantage, studied for years at Harvard to try and find just that, and his solution was incredibly interesting...” (0.999)</p>
r/MGTOW (low)	<p>“shit is awful” (-2.3)</p> <p>“Pure.Fucking.Hell.That is all” (-2.3)</p> <p>“Bitching bitching bitching bitching bitching b...” (-3.0)</p> <p>“Stupid bitch” (-3.5)</p>	<p>“I truly think society is stuck in some kind of cyclical race to the bottom at this point. If you look at past generations, men were men, women were women, and everybody for the most part worked together for the common good. Of course, there have always been places where the death trip prevailed. Look at the famines and purges in almost every Communist country. Look at the constant division of factions in the Middle East and Africa, constant fights over religion and government. Modern genocides...” (-0.999)</p>
Random (high)	<p>“good luck :)” (3.0)</p> <p>“Cute n awesome” (2.0)</p>	<p>“Being innovative or creative looks like an inherent trait to most of us, doesn’t it? However, if you’ve been one of those</p>

	<p>“Love astronomy!!” (1.5) “Great vibe!” (1.5)</p>	<p>lucky ones who had “creativity” as an academic discipline at school, you’d know that it can at least be nurtured. So what happened along the way?...” (0.999)</p>
<p>Random (low)</p>	<p>“Sadly no.” (-1.5) “PROVE ME WRONG BITCH!” (-1.8) “Im fucking terrified” (-2.3) “Fucking kill me” (-2.3)</p>	<p>“I hate my job. I hate that I have barely any free time. But I have to work because I have to pay for school myself. But I hate working with customers who come in and say racist shit or whine at me for free shit when I’m literally the only person in the store so I can’t pass them onto anyone else. I can’t get another job because I’m lucky getting even \$11/hr here...” (-0.995)</p>

Table 1b. Examples of High VADER Sentiment Across Communities

Sentiment Score:	VADER negative	VADER positive	VADER neutral
r/incels (high)	<p>“Stupid whores deserve it.” (0.787)</p> <p>“Suicide fuel” (0.818)</p> <p>“I hate sluts” (0.881)</p> <p>“Eventually Ill die” (1.000)</p>	<p>“TOP KEK” (0.643)</p> <p>“Honestly, any recommendation is appreciated” (0.677)</p> <p>“Please share your experiences” (0.693)</p> <p>“xD xD xD” (1.00)</p>	<p>“Or at the very least never had a bulbous wide nose. Bulbous, wide nose = automatically repulsive to 99% of women” (1.000)</p>
r/braincels (high)	<p>“Kill yourself” (0.825)</p> <p>“:(absolute despair” (0.839)</p> <p>“He died alone.” (0.848)</p> <p>“bitter rant” (1.000)</p>	<p>“They’re perfect” (0.787)</p> <p>“Wish me sweet dreams.” (0.894)</p> <p>“thank you kindly” (0.851)</p> <p>“jk lol” (1.000)</p>	<p>“Just pointing out a fact, take your own conclusions.” (1.000)</p> <p>“Was it accurate” (1.000)</p> <p>“Change my mind” (1.000)</p>
r/MGTOW (high)	<p>“Absolute insanity.” (0.787)</p> <p>“wtf is this shit?” (0.787)</p> <p>“Kill confirmed.” (0.825)</p> <p>“Strange but sad.” (0.847)</p>	<p>“Free MEN! Free! Free at last!” (0.782)</p> <p>“Congratulations r/MGTOW!” (0.807)</p> <p>“Brahs, freedom.” (0.808)</p> <p>“love u” (0.808)</p>	<p>“I thought we were the rational, logic sex?” (1.000)</p> <p>“Just an observation. Your thoughts?” (1.000)</p> <p>“The three Ps of MGTOW.” (1.000)</p>
Random (high)	<p>“sad life” (0.756)</p> <p>“Dealbreaker. Disappointed.” (0.756)</p> <p>“And I’m tired, wtf” (0.770)</p> <p>“I hate being poor.” (0.773)</p>	<p>“say something nice :) :)” (0.815)</p> <p>“Links Welcome! :)” (0.863)</p> <p>“getting better. Peace!” (0.870)</p> <p>“Jk ily” (1.000)</p>	<p>“At least I can still press reload with mouse” (1.000)</p> <p>“Mini itx or fractal design node 202?” (1.000)</p> <p>“put psn below” (1.000)</p>

Table 2a. Relative Frequencies of Themes, Single-Case First-Cycle Coding

Subreddit:	r/braincels (<i>N</i> = 1,409) <i>n</i> Present (% Present)
Comparative Physical Appearance / Body Dissatisfaction	426 (30.2%)
Anti-Feminism/Misogyny	375 (26.6%)
Hopelessness/Suicidalilty	312 (22.1%)
Racism/Xenophobia	92 (6.5%)

Table 2b. Relative Frequencies of Themes, Cross-Case First-Cycle Coding

Subreddit:	r/braincels (<i>N</i> = 759) <i>n</i> Present (% Present)	r/MGTOW (<i>N</i> = 501) <i>n</i> Present (% Present)
In-Group Favoritism	9 (1.2%)	87 (17.4%)
Essentialism	322 (42.4%)	189 (37.7%)
Comparative Physical Appearance / Body Dissatisfaction	212 (27.9%)	48 (9.6%)
Anti-Feminism/Misogyny	257 (33.9%)	253 (50.5%)
Hopelessness/Suicidalilty	223 (29.4%)	30 (6.0%)
Racism/Xenophobia	55 (7.3%)	20 (4.0%)

Table 3. Themes from Qualitative Coding

Code	Subcode	Definition	Examples
In-Group Favoritism	Explicit	In-group favoring rhetoric where positive valuation of the in-group/in-group members is explicit	Claiming men are superior to women, claiming MGTOW/redpilled men are superior to non-MGTOW/redpilled men
	Implicit	In-group favoring rhetoric where positive valuation of the in-group/in-group members is not made explicit, but is implied	Implying the superiority of men through extreme negative evaluations of women
Out-Group Favoritism	Explicit	Out-group favoring rhetoric where positive valuation of the out-group/out-group members is explicit	Referring to in-group as “trash” or “subhuman” while describing the out-group more favorably
	Implicit	Out-group favoring rhetoric where positive valuation of the out-group/out-group members is not made explicit, but is implied	Assuming the in-group will not succeed when the out-group will
Essentialism	Gendered	Rhetoric endorsing a belief that all individuals with a common gender identity share immutable, unchanging traits/characteristics	“AWALT [all women are like that]”
	Physical Appearance	Rhetoric endorsing a belief that one's physical appearance is immutable and unchanging	Attractiveness as the summation of physical features
	Biological	Language tying the unchanging nature of a characteristic/behavior to biological roots	Claiming men are better at golf because they have more neocortex connections
	Socialization	Language tying the unchanging nature of a characteristic/behavior to socialization processes	Claiming women are conditioned to only support one type of fictional female film character
Reification	Appeals to Numbers	Reducing complex social phenomena down to numerical values to lend legitimacy to a claim	Appending percentages to generalist claims about men and/or women, ranking physical attractiveness on a 1-10 scale
	Appealy to Science	Attempts to increase the perceived legitimacy of a claim through an appeal to the authority afforded to science	Links to or commentary on scientific journal articles, presenting (even anecdotal) arguments as “evidence”
Prototypical Language	Ideal Masculine	Language employed in the creation of/reference to prototypical characters embodying idealized masculinity	“Chad,” “alpha”

	Non-Ideal Masculine	Language employed in the creation of/reference to prototypical male characters who do not embody idealized masculinity	“Simp,” “cuck,” “normie”
	Feminine	Language employed in the creation of/reference to prototypical female characters	“Stacy,” “Becky,” “roastie,” “landwhale”
	Ethnoracial	Language employed in the creation of/reference to prototypical characters linked to a certain race/ethnicity	“Tyrone,” “Chang,” “curry,” “ricecel”
Victimhood/ Aggrieved Entitlement		Language conveying perceived victimhood of the author, and/or the belief that the author and others like them have been wronged (usually tied to a disdain for modern feminism)	Men as underappreciated, Gendered double-standard
Hopelessness/Suicidality		Language conveying a sense of hopelessness, suicidal ideation, and/or other references to suicidality.	“LDAR [lie down and rot],” “rope,” “it’s over”
	Social Collapse	Language conveying a sense of hopelessness related directly to society’s inevitable downfall	The apparent degradation of modern morality, discussions centered on “preparing for the end”
Comparisons		Language relying on a comparison of some kind	Ratings/rankings, “mogging”
Truth		Language asserting the truth of a phenomenon	“Objective,” “evidence,” “reality”
Worldview		Any term related to a particular of the world; the author may either support or refute this perspective	“Redpill,” “blackpill,” “bluepill,” “hypergamy,” “gynocentrism,” “misandry,” “lookism”
Finance		Content with financial or economic themes	Women as financial traps

Table 4. Descriptive Statistics for Submission Texts

Community:		r/incels	r/braincels	r/MGTOW	Random	Total
Word Count	Mean:	120.68	86.48	161.08	111.21	123.56
	Median:	66.00	44.00	87.00	53.00	61.00
	(Min,	(2.00,	(2.00,	(2.00,	(2.00,	(2.00,
	Max):	6,034.00)	5,971.00)	6,507.00)	7,240.00)	7,240.00)
	St. Dev.:	193.89	146.83	243.99	210.43	211.44
Created UTC	(Min,	(1.467760e9,	(1.508567e9,	(1.343498e9,	(1.540739e9,	(1.343498e9,
	Max):	1.509677e9)	1.569866e9)	1.586530e9)	1.540802e9)	1.586530e9)
Comments	Mean:	24.55	14.57	17.67	11.15	15.19
	Median:	13.00	8.00	10.00	3.00	7.00
	(Min,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,
	Max):	1,627.00)	1,834.00)	741.00)	20,041.00)	20,041.00)
	St. Dev.:	37.11	25.44	24.13	132.82	81.09
Net Likes	Mean:	14.75	13.25	25.03	1.00	13.24
	Median:	7.00	2.00	7.00	1.00	1.00
	(Min,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,
	Max):	960.00)	2,970.00)	2,365.00)	4.00)	2,970.00)
	St. Dev.:	28.33	43.10	58.22	0.05	42.13
AFINN score (raw)	Mean:	-3.13	-2.46	-1.90	2.05	-0.754
	Median:	-1.00	0.00	0.00	1.00	0.00
	(Min,	(-360.00,	(-11,428.00,	(-926.00,	(-2,278.00,	(-11,428.00,
	Max):	351.00)	555.00)	373.00)	959.00)	959.00)
	St. Dev.:	15.09	57.63	17.07	14.64	31.12
AFINN score (adjusted for Word Count)	Mean:	-0.0393	-0.0405	-0.0114	0.0303	-0.00577,
	Median:	-0.0143	0.00	0.00	0.0137	0.00
	(Min,	(-3.00,	(-4.50,	(-7.00,	(-4.500,	(-7.00,
	Max):	2.00)	3.00)	4.00)	3.00)	4.00)
	St. Dev.:	0.185	0.235	0.181	0.153	0.189
VADER Compound	Mean:	-0.0571	-0.0326	0.0859	0.257	0.107
	Median:	0.00	0.00	0.106	0.361	0.0772
	(Min,	(-1.00,	(-1.00,	(-1.00,	(-1.00,	(-1.00,
	Max):	0.999)	1.00)	1.00)	1.00)	1.00)
	St. Dev.:	0.699	0.641	0.712	0.603	-0.669
VADER Negative	Mean:	0.122	0.115	0.0959	0.0604	0.0900
	Median:	0.107	0.0940	0.0850	0.0380	0.0710
	(Min,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,
	Max):	1.00)	1.00)	1.00)	1.00)	1.00)
	St. Dev.:	0.106	0.121	0.0872	0.0793	0.0979
VADER Positive	Mean:	0.110	0.107	0.112	0.113	0.111
	Median:	0.101	0.0930	0.102	0.099	0.0990
	(Min,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,
	Max):	1.00)	1.00)	1.00)	1.00)	1.00)
	St. Dev.:	0.0910	0.107	0.0898	0.106	0.0998

VADER	Mean:	0.768	0.778	0.792	0.826	0.799
Neutral	Median:	0.770	0.782	0.795	0.832	0.802
	(Min,	(0.00,	(0.00,	(0.00,	(0.00,	(0.00,
	Max):	1.00)	1.00)	1.00)	1.00)	1.00)
	St. Dev.:	0.124	0.145	0.112	0.124	0.127

Table 5. User Clusters Across Communities

Community:	r/incels	r/braincels	r/MGTOW	Random	Total
Total Submission Texts	21,152	68,144	102,463	101,523	293,282
Total Unique Users	4,151	14,050	29,644	79,261	124,800
Mean Submissions per User	5.1	4.9	3.5	1.3	2.3
Min. Submissions per User	1	1	1	1	1
Max. Submissions per User	376	516	456	731	731

Table 6. Percent Selftexts Containing Thematic Terms, Across Communities

Community:	r/incels	r/braincels	r/MGTOW	Random
Anti-Feminism/ Misogyny	20.05	19.87	22.90	2.26
Comparisons	50.82	41.67	52.04	37.40
Economics/ Finance	17.28	13.41	30.67	15.18
Genetics	15.22	10.82	9.43	4.60
Hopelessness/Suicidality	21.60	19.61	11.33	5.94
Physical Appearance	38.62	33.34	24.23	15.76
Prototypical Language: All	37.76	33.37	18.14	1.85
Prototypical Language: Feminine	8.94	12.30	6.16	0.293
Prototypical Language: Ideal Masculine	19.42	15.98	4.60	0.443
Prototypical Language: Non-Ideal Masculine	9.25	8.88	9.30	0.778
Prototypical Language: Ethnoracial	1.29	3.50	0.456	0.221
Ethnoracial Language	12.76	17.17	8.72	7.56
Self-Reference: Universal	70.07	60.16	71.86	69.06
Self-Reference: Incel- Specific	29.07	22.98	1.54	0.0493
Self-Reference: MGTOW- Specific	0.643	0.745	27.35	0.0374
Sucher Men	61.44	54.57	76.05	44.10
Sucher Women	53.58	44.92	66.74	18.11
Truth	42.19	34.98	47.05	28.66
Unifying Rhetoric	14.92	11.86	20.80	9.32
Victimhood/ Aggrieved Entitlement	6.25	6.97	6.84	0.338
Violence	18.50	13.57	24.36	14.24
Worldview	9.99	10.06	11.27	0.106

Table 7a. GEE Regression Analysis, Relationship between Community and Sentiment Score, Reference = Random

Sentiment Score	AFINN (<i>N</i> = 293,220) β , (SE)	VD comp (<i>N</i> = 293,220) β , (SE)	VD neg (<i>N</i> = 293,220) β , (SE)	VD pos (<i>N</i> = 293,220) β , (SE)	VD neu (<i>N</i> = 293,220) β , (SE)
Incel	-4.8855*** (0.315)	-0.2905*** (0.005)	0.0555*** (0.001)	-0.0058*** (0.001)	-0.0494*** (0.002)
MGTOW	-3.2130*** (0.340)	-0.1678*** (0.005)	0.0349*** (0.001)	-0.0019* (0.001)	-0.0328*** (0.001)
Centered Word Count	-0.0144* (0.006)				
Intercept (Random)	1.8630*** (0.116)	0.2562*** (0.003)	0.0609*** (0.001)	0.1138*** (0.001)	0.8250*** (0.001)
(QIC, QICu)	(3.0239e5, 3.0132e5)	(6.6561e8, 6.6324e8)	(3.2097e10, 3.1983e10)	(2.8888e10, 2.8784e10)	(1.8055e10, 1.7990e10)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 124,800)

Table 7a (continued). GEE Regression Analysis, Relationship between Community and Sentiment Score, Reference = Incel

Sentiment Score	AFINN (<i>N</i> = 293,220) β , (SE)	VD comp (<i>N</i> = 293,220) β , (SE)	VD neg (<i>N</i> = 293,220) β , (SE)	VD pos (<i>N</i> = 293,220) β , (SE)	VD neu (<i>N</i> = 293,220) β , (SE)
MGTOW	1.6725** (0.618)	0.1227*** (0.005)	-0.0206*** (0.001)	0.0038*** (0.001)	0.0166*** (0.001)
Random	4.8855*** (0.315)	0.2905*** (0.005)	-0.0555*** (0.001)	0.0058*** (0.001)	0.0494*** (0.002)
Centered Word Count	-0.0144* (0.006)				
Intercept (Incel)	-3.0225*** (0.382)	-0.0344*** (0.004)	0.1165*** (0.001)	0.1080*** (0.000)	0.7757*** (0.001)
(QIC, QICu)	(3.0239e5, 3.0132e5)	(6.6561e8, 6.6324e8)	(3.2097e10, 3.1983e10)	(2.8888e10, 2.8785e10)	(1.8055e10, 1.7990e10)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 124,800)

Table 7b. GEE Regression Analysis, Relationship between *Presence* Self-Reference and Sentiment Score Across Communities

Sentiment Score	AFINN (<i>N</i> = 293,220) β , (SE)	VD comp (<i>N</i> = 293,220) β , (SE)	VD neg (<i>N</i> = 293,220) β , (SE)	VD pos (<i>N</i> = 293,220) β , (SE)	VD neu (<i>N</i> = 293,220) β , (SE)
MGTOW	0.8994 (0.674)	0.0419*** (0.006)	-0.0202*** (0.002)	0.0030* (0.001)	0.0171*** (0.002)
Random	3.0192*** (0.709)	0.1960*** (0.007)	-0.0661*** (0.002)	0.0036 (0.003)	0.0620*** (0.004)
Self-Reference	0.2952 (1.235)	-0.0058 (0.005)	-0.0017 (0.001)	0.0039*** (0.001)	-0.0021 (0.001)
Self-Reference: MGTOW	1.0688*** (0.276)	0.1074*** (0.007)	-0.004 (0.001)	0.0007 (0.001)	-0.0003 (0.002)
Self-Reference: Random	2.7146*** (0.611)	0.1359*** (0.008)	0.0152*** (0.002)	0.0031 (0.003)	-0.0179*** (0.004)
Centered Word Count	-0.0153* (0.007)				
Intercept (Incel)	-3.2512** (1.236)	-0.0308*** (0.004)	0.1177*** (0.001)	0.1053*** (0.001)	0.7771*** (0.002)
(QIC, QICu)	(3.030e5, 3.018e5)	(6.6959e8, 6.6694e8)	(3.2141e10, 3.2013e10)	(2.8926e10, 2.8811e10)	(1.8079e10, 1.8007e10)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 124,800)

Table 7b (continued). GEE Regression Analysis, Relationship between *Frequency Self-Reference* and *Sentiment Score* Across Communities

Sentiment Score	AFINN (<i>N</i> = 293,220) β , (SE)	VD comp (<i>N</i> = 293,220) β , (SE)	VD neg (<i>N</i> = 293,220) β , (SE)	VD pos (<i>N</i> = 293,220) β , (SE)	VD neu (<i>N</i> = 293,220) β , (SE)
MGTOW	0.4664 (0.339)	0.1008*** (0.006)	-0.0162*** (0.001)	0.0005 (0.001)	0.0156*** (0.001)
Random	2.8101*** (0.376)	0.2952*** (0.006)	-0.0562*** (0.001)	0.0020 (0.001)	0.0538*** (0.002)
Self-Reference	0.2655 (0.560)	-0.1795*** (0.036)	0.0254 (0.016)	-0.0329* (0.014)	0.0097 (0.019)
Self-Ref: MGTOW	0.5908*** (0.115)	0.9257*** (0.089)	-0.1867*** (0.023)	0.1336*** (0.022)	0.0506 (0.027)
Self-Ref: Random	1.4430*** (0.128)	-0.2387** (0.075)	0.0336 (0.024)	0.1535*** (0.030)	-0.1854*** (0.040)
Centered Word Count	-0.0188* (0.009)				
Intercept (Incel)	-3.6062* (1.417)	-0.0293*** (0.004)	0.1157*** (0.001)	0.1090*** (0.001)	0.7753*** (0.001)
(QIC, QICu)	(3.0453e5, 3.0295e5)	(6.7010e8, 6.6660e8)	(3.2239e10, 3.2071e10)	(2.9015e10, 2.8864e10)	(1.8135e10, 1.8040e10)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 124,800)

Table 7c. GEE Regression Analysis, Relationship between *Presence* Prototype: Ideal Masculine and Sentiment Score Across Communities

Sentiment Score	AFINN (<i>N</i> = 293,220) β , (SE)	VD comp (<i>N</i> = 293,220) β , (SE)	VD neg (<i>N</i> = 293,220) β , (SE)	VD pos (<i>N</i> = 293,220) β , (SE)	VD neu (<i>N</i> = 293,220) β , (SE)
MGTOW	1.6807* (0.709)	0.1276*** (0.005)	-0.0222*** (0.001)	0.0038*** (0.001)	0.0183*** (0.001)
Random	4.8853*** (0.444)	0.2955*** (0.005)	-0.0568*** (0.001)	0.0059*** (0.001)	0.0506*** (0.002)
Prototype Ideal Masc.	0.1065 (0.851)	0.0278*** (0.007)	-0.0072*** (0.001)	0.0003 (0.001)	0.0068*** (0.001)
Prototype Ideal Masc.: MGTOW	0.2115 (0.642)	-0.0223 (0.015)	0.0156*** (0.001)	0.00016 (0.001)	-0.0167*** (0.002)
Prototype Ideal Masc.: Random	4.4422* (1.866)	-0.0143 (0.037)	0.0251*** (0.005)	-0.0103** (0.004)	-0.0148* (0.006)
Centered Word Count	-0.0145* (0.006)				
Intercept (Incel)	-3.0429*** (0.524)	-0.0393*** (0.004)	0.1177*** (0.001)	0.1080*** (0.001)	0.7745*** (0.001)
(QIC, QICu)	(3.0244e5, 3.0134e5)	(6.6572e8, 6.6326e8)	(3.2103e10, 3.1984e10)	(2.8892e10, 2.8786e10)	(1.8058e10, 1.7991e10)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 124,800)

Table 7c (continued). GEE Regression Analysis, Relationship between Frequency Prototype: Ideal Masculine and Sentiment Score Across Communities

Sentiment Score	AFINN (<i>N</i> = 293,220) β , (SE)	VD comp (<i>N</i> = 293,220) β , (SE)	VD neg (<i>N</i> = 293,220) β , (SE)	VD pos (<i>N</i> = 293,220) β , (SE)	VD neu (<i>N</i> = 293,220) β , (SE)
MGTOW	1.6779* (0.704)	0.1238*** (0.005)	-0.0213*** (0.001)	0.0033*** (0.001)	0.0178*** (0.001)
Random	4.8834*** (0.436)	0.2910*** (0.005)	-0.0563*** (0.001)	0.0052*** (0.001)	0.0508*** (0.002)
Prototype Ideal Masc.	0.0825 (0.705)	0.0036 (0.088)	-0.1998*** (0.044)	-0.1811*** (0.030)	0.3778*** (0.053)
Prototype Ideal Masc.: MGTOW	0.2165 (0.421)	-1.2939** (0.379)	0.2068 (0.133)	-0.1039 (0.229)	-0.1071 (0.210)
Prototype Ideal Masc.: Random	4.4070* (1.874)	-1.9435*** (0.320)	1.2933*** (0.233)	-0.1184* (0.052)	-1.717*** (0.239)
Centered Word Count	-0.0145* (0.006)				
Intercept (Incel)	-3.0409*** (0.516)	-0.0347*** (0.004)	0.1172*** (0.001)	0.1086*** (0.000)	0.7743*** (0.001)
(QIC, QICu)	(3.0244e5, 3.0133e5)	(6.6571e8, 6.6325e8)	(3.2102e10, 3.1984e10)	(2.8892e10, 2.8785e10)	(1.8057e10, 1.7991e10)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 124,800)

Table 8a. GEE Regression Analysis, Relationship between Sucher Frequency and Sentiment Score, Incel

Sentiment Score	AFINN (<i>N</i> = 89,296) β , (SE)	VD comp (<i>N</i> = 89,296) β , (SE)	VD neg (<i>N</i> = 89,296) β , (SE)	VD pos (<i>N</i> = 89,296) β , (SE)	VD neu (<i>N</i> = 89,296) β , (SE)
Sucher Frequency	0.5162 (0.565)	0.0252 (0.028)	0.0024 (0.013)	0.0335** (0.011)	-0.0362* (0.015)
Centered Word Count	-0.0568 (0.035)				
Intercept (Incel)	-4.5182** (1.493)	-0.0368*** (0.004)	0.1166*** (0.001)	0.1075*** (0.000)	0.7758*** (0.001)
(QIC, QICu)	(9.7220e4, 9.5082e4)	(5.6845e8, 5.5592e8)	(1.7419e10, 1.7035e10)	(2.2170e10, 2.1681e10)	(1.2193e10, 1.1924e10)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 17,741)

Table 8b. GEE Regression Analysis, Relationship between Gender Frequency and Sentiment Score, *Incel*

Sentiment Score	AFINN (<i>N</i> = 89,296) β , (SE)	VD comp (<i>N</i> = 89,296) β , (SE)	VD neg (<i>N</i> = 89,296) β , (SE)	VD pos (<i>N</i> = 89,296) β , (SE)	VD neu (<i>N</i> = 89,296) β , (SE)
Gender Frequency	0.7926 (0.709)	-0.0101 (0.017)	-0.0420*** (0.008)	-0.0194** (0.006)	0.0612*** (0.009)
Centered Word Count	-0.0599 (0.037)				
Intercept (<i>Incel</i>)	-5.4575* (2.272)	-0.0369*** (0.004)	0.1178*** (0.001)	0.1079*** (0.001)	0.7739*** (0.001)
(QIC, QICu)	(9.7979e4, 9.5596e4)	(5.7123e8, 5.5730e8)	(1.7504e10, 1.7077e10)	(2.2278e10, 2.1735e10)	(1.2253e10, 1.1954e10)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 17,741)

Table 9a. GEE Regression Analysis, Relationship between Posted UTC and Sentiment Score, *Incel*

Sentiment Score	AFINN (<i>N</i> = 89,296) β , (SE)	VD comp (<i>N</i> = 89,296) β , (SE)	VD neg (<i>N</i> = 89,296) β , (SE)	VD pos (<i>N</i> = 89,296) β , (SE)	VD neu (<i>N</i> = 89,296) β , (SE)
Normalized UTC	-0.8172 (0.568)	-0.0060 (0.004)	-0.0006*** (0.001)	-0.0032*** (0.000)	0.0038*** (0.001)
Centered Word Count	-0.0563 (0.034)				
Intercept (<i>Incel</i>)	-4.2438*** (1.189)	-0.0366 (0.004)	0.1167*** (0.001)	0.1078*** (0.000)	0.7755*** (0.001)
(QIC, QICu)	(9.7146e4, 9.5057e4)	(5.6806e8, 5.5581e8)	(1.7407e10, 1.7032e10)	(2.2155e10, 2.1677e10)	(1.2185e10, 1.1922e10)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 17,741)

Table 9b. GEE Regression Analysis, Relationship between Posted UTC and Sentiment Score, *MGTOW*

Sentiment Score	AFINN (<i>N</i> = 102,463) β , (SE)	VD comp (<i>N</i> = 102,463) β , (SE)	VD neg (<i>N</i> = 102,463) β , (SE)	VD pos (<i>N</i> = 102,463) β , (SE)	VD neu (<i>N</i> = 102,463) β , (SE)
Normalized UTC	0.1153 (0.112)	-0.0002 (0.004)	-0.0001 (0.000)	0.0006 (0.000)	-0.0005 (0.001)
Centered Word Count	-0.0119*** (0.002)				
Intercept (<i>MGTOW</i>)	-1.3714*** (0.085)	0.0878*** (0.004)	0.0959*** (0.000)	0.1117*** (0.000)	0.7924*** (0.001)
(QIC, QICu)	(1.0874e5, 1.0853e5)	(6.0683e7, 6.0561e7)	(3.8458e9, 3.8380e9)	(3.8458e9, 3.8380e9)	(2.3666e9, 2.3619e9)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 29,644)

Table 9c. GEE Regression Analysis, Relationship between Posted UTC and Sentiment Score, *r/incels*

Sentiment Score	AFINN (<i>N</i> = 68,144) β , (SE)	VD comp (<i>N</i> = 68,144) β , (SE)	VD neg (<i>N</i> = 68,144) β , (SE)	VD pos (<i>N</i> = 68,144) β , (SE)	VD neu (<i>N</i> = 68,144) β , (SE)
Normalized UTC	-0.3421 (0.426)	-0.0434* (0.019)	7.6533-05 (0.004)	-0.0078*** (0.003)	0.0079* (0.004)
Centered Word Count	-0.0059 (0.003)				
Intercept (<i>r/incels</i>)	-3.6572*** (0.659)	-0.1244*** (0.0029)	0.1213*** (0.005)	0.0979*** (0.003)	0.7809*** (0.006)
(QIC, QICu)	(2.1463e4, 2.1380e4)	(9.9587e6, 9.9175e6)	(4.4180e8, 4.3998e8)	(6.0748e8, 6.0497e8)	(3.2399e8, 3.2264e8)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 14,050)

Table 9d. GEE Regression Analysis, Relationship between Posted UTC and Sentiment Score, *r/braincels*

Sentiment Score	AFINN (<i>N</i> = 21,152) <i>β</i> , (SE)	VD comp (<i>N</i> = 21,152) <i>β</i> , (SE)	VD neg (<i>N</i> = 21,152) <i>β</i> , (SE)	VD pos (<i>N</i> = 21,152) <i>β</i> , (SE)	VD neu (<i>N</i> = 21,152) <i>β</i> , (SE)
Normalized UTC	-1.0980** (0.329)	-0.0307*** (0.005)	0.0036*** (0.000)	-0.0044*** (0.001)	0.0008 (0.001)
Centered Word Count	-0.0835 (0.052)				
Intercept (<i>r/braincels</i>)	-5.2681* (2.114)	-0.0233*** (0.004)	0.1143*** (0.001)	0.1081*** (0.001)	0.776*** (0.001)
(QIC, QICu)	(7.7083e4, 7.4612e4)	(5.9636e8, 5.7720e8)	(1.6301e10, 1.5777e10)	(2.2228e10, 2.1514e10)	(1.1643e10, 1.1269e10)

* = $p < .05$, ** = $p < .01$, *** = $p < .001$

Notes: Observations were clustered by user (*N* clusters = 4,151)

Figure 1. Submissions to Incel and MGTOW Subreddits, Over Time

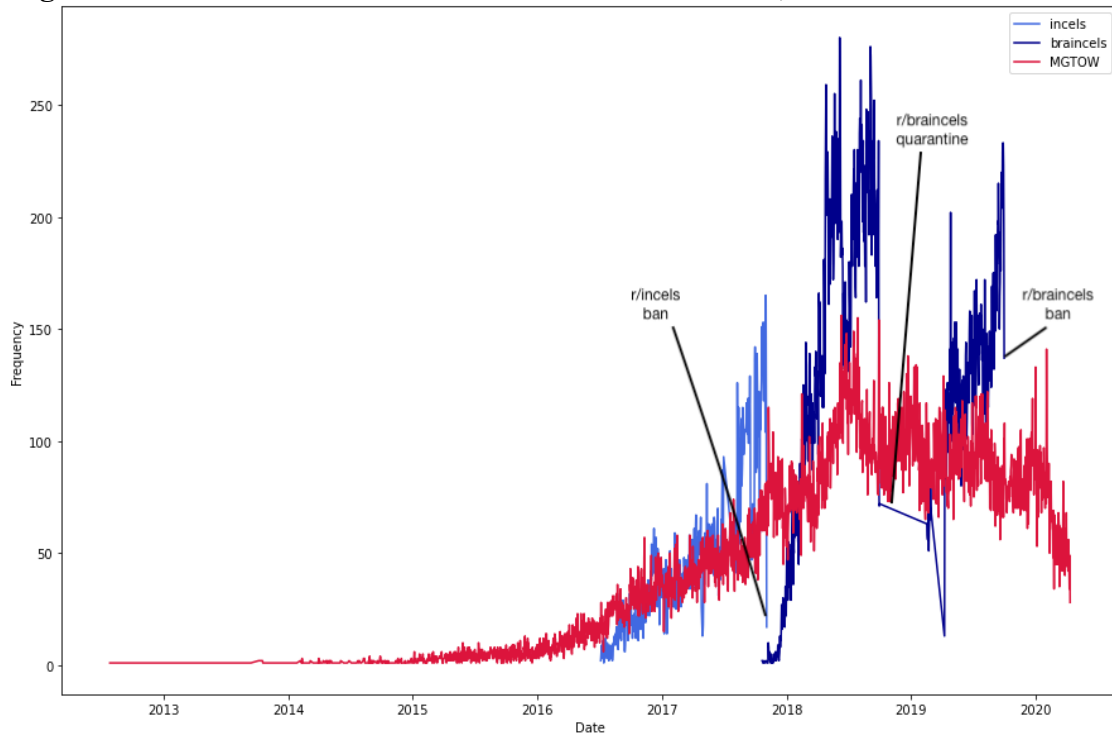


Figure 2a. Frequency of Terms in “Prototypical Language: Ideal Masculine” List Over Time, Adjusted for Word Count

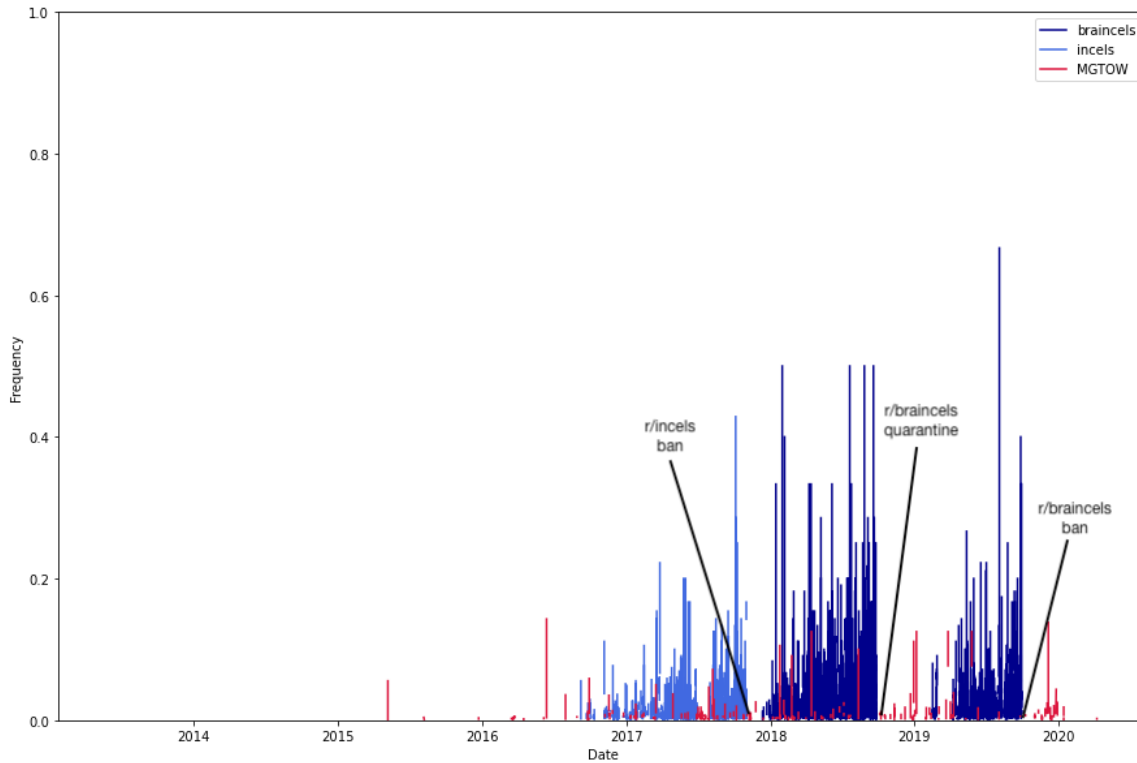


Figure 2b. Frequency of Terms in “Prototypical Language: Non-ideal Masculine” List Over Time, Adjusted for Word Count

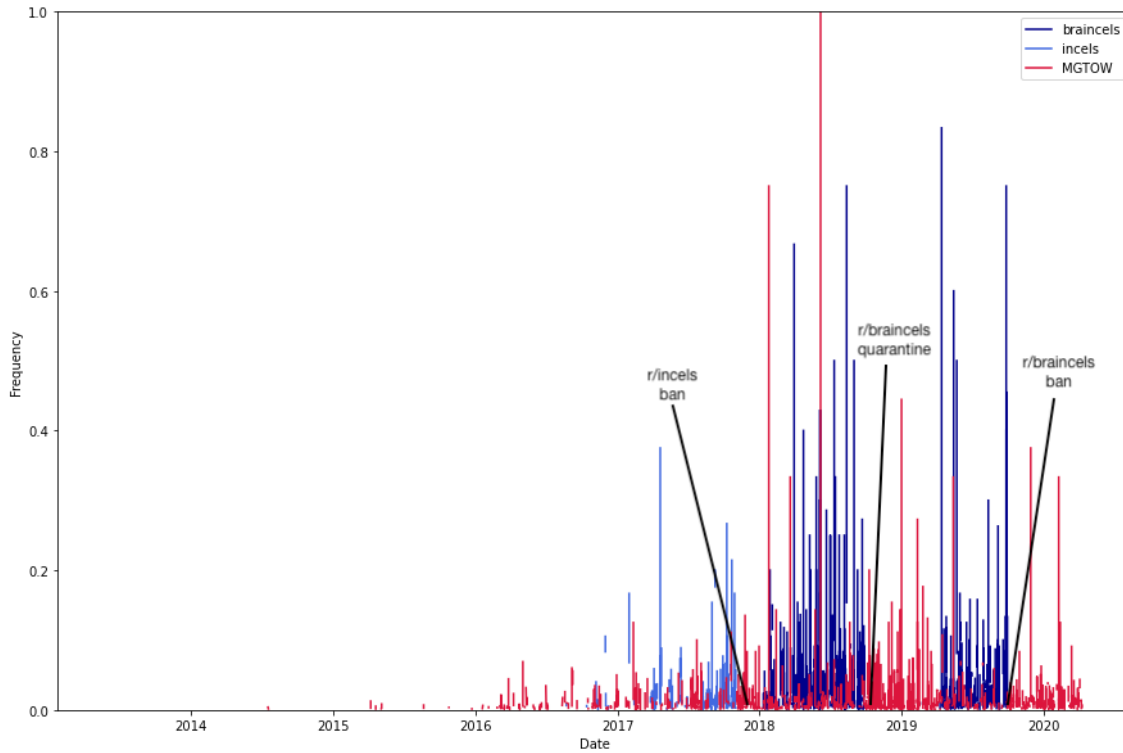


Figure 2c. Frequency of Terms in “Prototypical Language: Feminine” List Over Time, Adjusted for Word Count

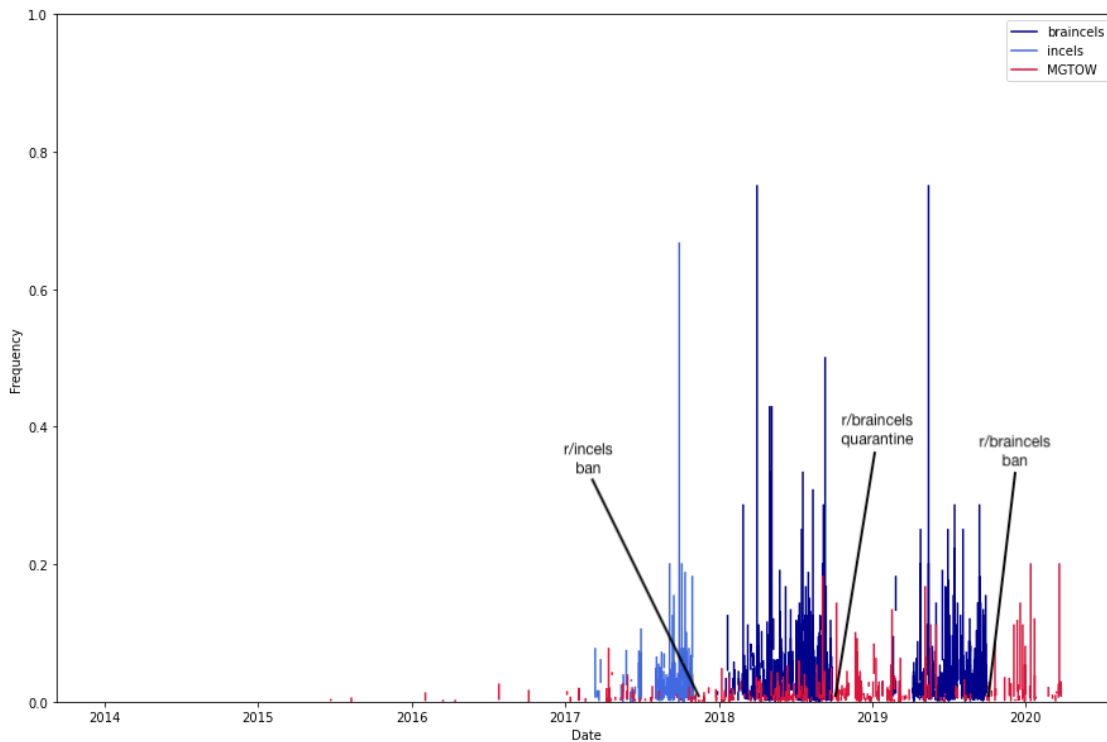
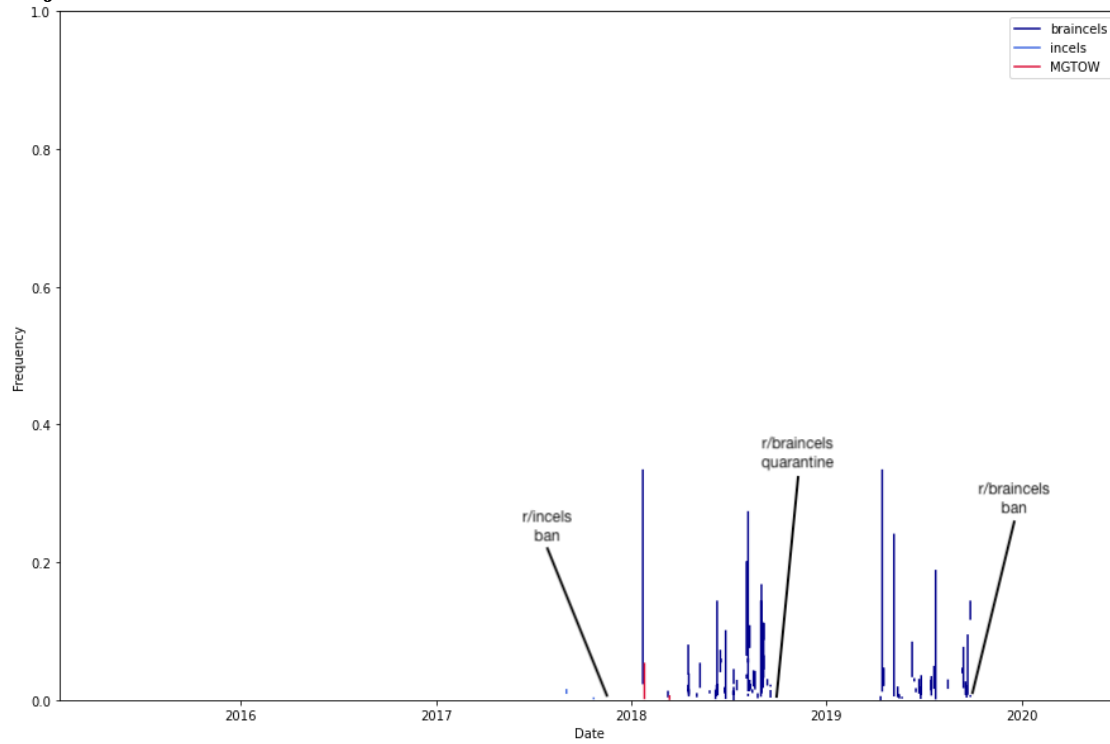


Figure 2d. Frequency of Terms in “Prototypical Language: Ethnoracial” List Over Time, Adjusted for Word Count



APPENDIX A: DEFINITIONS OF INCEL AND MGTOW TERMS

6'0": for members of many manosphere communities, a height of 6'0" or above is seen as a necessary requirement for sexual desirability.

Similar: 6 foot, 6 feet, 6", six foot, six feet

80:20 Rule: based on the Pareto principle more appropriately used in the fields of economics and computing; in the manosphere, refers to a belief that the "top" 80 percent of women are able to select romantic and sexual partners exclusively from the "top" 80 percent of men, while the "bottom" 80 percent of men are left to select romantic and sexual partners from the "bottom" 20 percent of women. (*See also*: Hypergamy)

Similar: 80-20 rule, 80 20 rule, eighty-twenty rule, eighty twenty rule

Alpha: a term more appropriately used in studies of animal behavior, an "alpha" is a dominant member of a social group. Within manosphere discourse, "alpha" men are considered most adept at attracting female romantic and sexual partners. (*See also*: Chad, Beta)

Ascend: in the incel community, 'ascending' refers to breaking free of the incel label, by losing one's status as an involuntary celibate.

AWALT: an acronym short for "all women are like that." (*See also*: NAWALT)

Similar: amalt [all men are like that]

Based: to be true to oneself; to not care what others think. In far-right and alt-right circles, this is typically used to describe individuals whose own worldviews and ideologies are endorsed within a given community.

Becky: a prototypical female stock character, similar to "Stacy" but embodying a less idealized version of femininity; "Becky" is to "Stacy" what "Chadlite" is to "Chad"

Similar: beekie

Beta: A term more appropriately used in studies of animal behavior, a "beta" is a subordinate member of a social group. Within manosphere discourse, "beta" men are considered capable at attracting female romantic and sexual partners, but are less adept at doing so than are "alpha" men. (*See also*: alpha)

Betabux: A belief that women rely on subordinate, "beta" men for financial resources, but turn to dominant, "alpha" men for sexual gratification.

Similar: betabuxx, beta bux, beta buxx, beta bucks, alpha fux beta bux, alpha fuxx beta buxx, alpha fucks beta bucks

Boyo: term of comradery online, usually between two men.

Black pill: a derivative of the "red pill," but more cynical; those who have "swallowed the black pill" see no hope for a better future. (*See also*: red pill, blue pill)

Similar: blackpill, black pill, blackpilled

Blue pill: reference to the Matrix film franchise; to "swallow the blue pill" is to remain blissfully unaware of the supposed "gynocentric" slant of the modern western world. (*See Also*: normie, blue pill, black pill)

Similar: bluepill, blue pill, bluepilled

Canthal tilt: a measure of the tilt of one's eyes; a positive canthal tilt means that one's eyes tilt downward as they approach the center of the face. (*See also*: hunter eyes)

Chad: A prototypical stock character common in incel content, and also used occasionally in MGTOW content; embodies an idealized masculinity. (*See also*: alpha, tyrone, chang, chadpreet, chaddam, chadlet, chadlite)

Similar: gigachad, chad thundercock

Chaddam: a racialized, Arab derivative of the Chad prototype.

Chadlet: Someone termed a “Chadlet” embodies many or all of the traits associated with the “Chad” prototypical stock character, bar their height.

Chadlite: Not quite as idealized as Chad, Chadlites are the “lite” version, still able to attract the sexual and romantic advances of women but without the godlike deference reserved for Chad; “Chadlite” is to “Chad” what “Becky” is to “Stacy”

Chadpreet: a racialized, South Asian derivative of the Chad prototype.

Chang: a racialized, stereotypically East Asian derivative of the Chad prototype.

Chincel: an incel whose involuntary celibacy is contingent, at least in part, upon the size and shape of their chin. (*See also:* jawcel)

Cope: to “cope” is to cultivate a supposedly misplaced sense of hope that one’s lot in life has the potential to improve. (*See also:* hopecel)

Cuck: short for “cuckold,” often used to refer to any self-identified male feminist. (*See also:* beta, numale, simp, soyboy)

Curry: a derogatory slur for people (primarily men) of South Asian origin.

Similar: currie, currycel

Dating market value: the supposed “value” one brings to the heterosexual dating pool, based on a combination of physical appearance, socioeconomic status, and (while this final component is often debated in the manosphere) personality.

Similar: dmv

Ethniccel: an incel whose involuntary celibacy is contingent, at least in part, upon their non-white ethnoracial identity.

Fakecel: one who either pretends to be, or is falsely assured that they are, an incel. (*See Also:* truecel, volcel)

Fatcel: incels whose involuntary celibacy is, at least in part, contingent upon their excessively adipose physiques. (*See also:* landwhale)

Femoid: a robotic, dehumanizing reference to a woman.

Similar: foid, moid [a male analog]

Feminazi: a pejorative term for radical feminists popularized by conservative talk radio host Rush Limbaugh.

fWHR: an acronym short for “facial width to height ratio,” a skull measurement believed by incels and other members of the manosphere to be linked to both physical attractiveness and social-sexual success.

Genetic Lottery: to win the “genetic lottery” is to be born with the genetic traits deemed necessary in the incel community to be sexually successful (*See also:* genetic trash)

Genetic Trash: to be “genetic trash” is to lack the traits deemed necessary by the Incel community to be sexually successful (*See also:* genetic lottery)

Gynocentrism: a social system with a supposedly pro-woman slant.

Similar: gynocentric

GYOW: an acronym short for “go your own way.”

Heightism: discrimination on the basis of one’s height. (*See also:* chadlet, manlet, shortcel)

High-t: short for “high testosterone.”

Similar: high t, low-t/low t (low testosterone)

Hit the wall: for women, aging past a certain arbitrary boundary (be that 25 years old, 20 years old, 18 years old, etc.) after which a woman’s “value” greatly decreases (or entirely disappears) in the eyes of incel and MGTOW community members.

Hopecel: a derisive reference to incel community members with too much hope for the future. (*See also:* cope)

Hunter eyes: eyes exhibiting a number of characteristics considered by incels to be physically attractive in men. “Hunter eyes” are narrow, deep-set, and tilt downward as they near the center of the face (*See also:* canthal tilt).

Hypergamy: a social system wherein women are capable of being significantly choosier when selecting opposite-sex romantic and/or sexual partners than men (*See also:* 80:20 rule)

Similar: hypergamous

It’s over: a common phrase within the incel community asserting the futility of members’ unfortunate circumstances.

Similar: it’s been over, it never began

Jawcel: an incel whose involuntary celibacy is contingent, at least in part, upon the shape and angle of their jaw.

JBW: acronym short for “just be white;” the belief that white people are favored when it comes to sexual and/or relationship prospects.

KEK: A Korean approximation of the acronym “lol,” or “laugh out loud,” originally used in massively multiplayer online roleplaying games (MMORPGs) before being incorporated into manosphere discourse.

Similar: top kek

Landwhale: an overweight, obese, or otherwise less-than-extremely-thin woman, perceived as undesirable by many groups within the manosphere. Unlike fatcels, these women are assumed to continue to have “access” to male romantic and sexual partners. (*See also:* Fatcel, Hypergamy)

Similar: land whale

Lanklet: a derogatory reference to men overly slender, lanky builds (*See also:* manlet)

LDAR: an acronym short for “lie down and rot.”

Lookism: discrimination on the basis of one’s physical appearance.

Looksmaxx: any attempt to improve one’s physical appearance, often considered futile by incel community members.

Similar: looksmax, looks maxx, looks max

Looksmatch: one’s “looksmatch” is a member of the opposite sex considered to possess an equivalently ranked physical appearance; some members of the incel community believe their inability to successfully obtain relationships with their “looksmatch” constitutes a form of injustice.

Similar: looks match

Mentalcel: a member of the incel community whose involuntary celibacy is to some degree contingent upon a mental health issue.

Misandry: hatred or contempt for men.

Similar: misandrism

Mog: to mog is to best or dominate another man along some measure; often but not always related to some aspect of physical appearance.

NAWALT: acronym short for “Not All Women are Like That,” an assertion that women cannot universally be considered the same; a belief often met with resistance within the manosphere. (*See also:* AWALT, Oneitis, Unicorn)

Normie: outsiders, unaware of the meanings behind community-specific discourse.

Norwood: reference to the Norwood scale for measuring the progression of male pattern baldness.

Similar: nw

Noodle: a derogatory term referring to a person of East Asian origin.

Similar: noodecel, rice, ricecel

Noodlewhore: a derogatory term for East Asian women.

NPC: an acronym short for “non-player character” and originating in video games; in alt-right discourse refers to an individual without a sense of self, who blindly follows popular opinion.

Numale: term used to describe any man lacking the traits associated with traditional conceptions of hegemonic masculinity. (*See also:* beta, cuck, simp, soyboy)

Oneitis: a “condition” where one considers, or has considered, a woman “different” from other women; doing so is usually deemed delusional by incel and MGTOW community members. (*See also:* NAWALT, unicorn)

Orbit: men who orbit or “revolve around” women, putting them on a pedestal and constantly defending them even when this defense is not merited or desired. (*See Also:* cuck, white knight)

Out of 10: a supposedly objective, universally agreed-upon numerical scale for rating physical appearance, along which men and women are both repeatedly ranked throughout the manosphere. (*See also:* Genetic Lottery, Genetic Trash, Lookism, Sub-8)

Similar: psl scale, decile scale, /10

Philtrum: the indentation above the center of the upper lip, the length of which is considered by many members of the incel community to be an important aspect of physical attractiveness.

Red pill: a reference to the Matrix film franchise; to “swallow the red pill” is to gain awareness of the “gynocentric” slant of the modern western world.

Similar: redpill, red pill, redpilled

Roastie: a derogatory term for women, comparing the appearance of the genitalia of sexually active women to roast beef.

Similar: roast, roastie, toastie roastie, toasty roastie

Rope: a reference to suicide by hanging. (*See also:* Suifuel)

Simp: acronym short for “sucker idolizing mediocre pussy.” (*See also:* beta, bluepill, cuck, numale, soyboy)

Shortcel: an incel whose involuntary celibacy is contingent, at least in part, upon their short stature.

Soyboy: an effeminate (typically left-leaning) man; originates from misunderstanding the relationship between the body’s estrogen production and consumption of soy products.

Stacy: a prototypical stock character embodying many aspects of idealized femininity, though often depicted more cynically than the prototypical, idealized masculine Chad character. (*See also:* Becky, Chad)

Similar: stacie

Sub-8: a label in reference to individuals whose physical appearances are perceived as falling below an 8 out of 10 along a supposedly universal, objective rating scale. (*See also:* genetic lottery, genetic trash, out of 10, lookism, subhuman)

Similar: sub 8, sub-eight, sub eight

Subhuman: term used to relegate someone to less than human status; among incel community members, this is often used in reference to either the individual or collective self. (*See also:* genetic lottery, genetic trash)

Suifuel: “suicide fuel,” content with the potential to trigger suicidal thoughts, ideation, or behavior. (*See also:* rope)

Similar: sui fuel

Thot: an acronym short for “that ho over there,” used broadly as a derogatory slur against women online.

Truecel: those whose professed status as Involuntary Celibates is considered legitimate.

(*Antonym:* fakecel)

Tyrone: a racialized, stereotypically Black derivative of the Chad prototype.

Similar: jamal, jamaal

Unicorn: a woman considered to be “different” from other women, and thus incredibly rare; the existence of such women is often disputed by incel and MGTOW community members. (*See also:* NAWALT, oneitis)

Volcel: someone for whom celibacy is voluntary; unlike incels, these individuals are presumed to have the ability to pursue sexual relationships if they so choose. (*See also:* fakecel)

Wage cuck: a man who earns a living through a job, but is financially taken advantage of by his unfaithful female partner (*See also:* alpha fux beta bux)

White knight: a man “white knights” when he defends a woman online (usually this defense is unsolicited); the assumption among members of the manosphere is that this defense is only motivated by the hope of falling into favor with the woman being defended. (*See also:* orbit, simp)

Wristcel: Members of the Incel community whose membership is, at least in part, contingent upon what is perceived to be the inadequate circumference of their wrists.

APPENDIX B: TERMS LISTS

- 1.) **Physical Appearance:** '6 foot', '6 feet', '6 ft', '6"', 'abs', 'acne', 'alpha', 'arms', 'attract', 'attractive', 'attractiveness', 'bald', 'balding', 'baldness', 'beta', 'bone structure', 'brows', 'canthal tilt', 'chadlet', 'chadlite', 'chin', 'eyes', 'fat', 'fatcel', 'feet', 'fwhr', 'gangly', 'hair', 'hairline', 'hands', 'hb9', 'heightism', 'hunter eyes', 'jaw', 'jawline', 'jawcel', 'lanklet', 'lanky', 'legs', 'lips', 'lookism', 'lookmatching', 'looks match', 'looks matched', 'looks matching', 'looksmatch', 'looksmatched', 'looksmax', 'looksmaxx', 'mog', 'mogged', 'mogger', 'moggers', 'mouth', 'muscle', 'muscular', 'norwood', 'nose', 'nw', 'obese', 'obesity', 'out of 10', '10', 'out of ten', 'overweight', 'philtrum', 'psl scale', 'rate', 'rated', 'rates', 'rating', 'recede', 'receding', 'scrawny', 'shortcel', 'shoulders', 'six feet', 'six foot', 'six ft', 'six pack', 'skin', 'skinny', 'stomach', 'sub 8', 'sub eight', 'sub-8', 'sub8', 'teeth', 'thin', 'tooth', 'torso', 'ugliness', 'ugly', 'underweight', 'wrist', 'wristcel'
- 2.) **Anti-feminism / Misogyny:** 'awalt', 'angry feminist', 'becky', 'beckie', 'bitch', 'bitched', 'bitches', 'bitching', 'bitchy', 'blue pill', 'blue pill', 'bluepill', 'bluepilled', 'cock carousel', 'crazy feminist', 'crone', 'cunt', 'feminazi', 'femoid', 'foid', 'gynocentric', 'gynocentrism', 'hag', 'hypergamous', 'hypergamy', 'landwhale', 'land whale', 'man hater', 'man haters', 'man hating', 'misandrist', 'misandry', 'oneitis', 'personality detector', 'pussies', 'pussy', 'roastie', 'roasties', 'roastys', 'roast', 'roasty', 'toasty', 'toastie', 'simp', 'skank', 'skanky', 'slut', 'slutty', 'stacie', 'stacy', 'the wall', 'thot', 'unicorn', 'whore'
- 3.) **Ethnoracial Language:** 'african', 'arabic', 'arabian', 'aryan', 'asian', 'asianness', 'black', 'blackness', 'chaddam', 'chadpreet', 'chang', 'china', 'chinese', 'curries', 'curry', 'currycel', 'ethniccel', 'race', 'racism', 'racial', 'ethnicity', 'ethnic', 'ethnics', 'ethnocentrism', 'european', 'indian', 'jamaal', 'jamal', 'japan', 'japanese', 'jbw', 'just be white', 'k*ke', 'middle eastern', 'middle east', 'n***a', 'n***er', 'noodle', 'noodlecel', 'noodlewhore', 'paki', 'pakistani', 'pakistan', 'rice', 'ricecel', 'tyrone', 'white', 'whiteness'
- 4.) **Hopelessness / Suicidality:** 'black pill', 'black pill', 'blackpilled', 'blackpill', 'cope', 'coping', 'depress', 'depressed', 'depressing', 'end it', 'ending it', 'ends it', 'futile', 'futility', 'gave up', 'give up', 'given up', 'gives up', 'hopeless', 'hopelessness', 'is fucked', 'it's over', 'its over', 'ldar', 'lie down and rot', 'never began', 'never begin', 'never begun', 'no hope', 'no point', 'pointless', 'rope', 'roped', 'roping', 'sub-8', 'sub8', 'sui', 'sui fuel', 'suicidal', 'suicide', 'suicide fuel', 'suifuel'
- 5.) **Prototypical Language: All:** 'alpha', 'amalt', 'awalt', 'becky', 'beckie', 'beta', 'chad', 'chaddam', 'chadlet', 'chadlite', 'chadpreet', 'chang', 'chincel', 'cuck', 'cucked', 'cuckolded', 'cuckolding', 'curries', 'curry', 'currycel', 'ethniccel', 'femoid', 'foid', 'gigachad', 'hb9', 'jamaal', 'jamal', 'jawcel', 'landwhale', 'land whale', 'lanklet', 'libtard', 'mangina', 'moid', 'nice guy', 'noodle', 'noodlecel', 'noodlewhore', 'normie', 'npc', 'numale', 'oneitis', 'orbiter', 'orbits', 'orbiting', 'rice', 'ricecel', 'roast', 'roastie', 'roasty', 'simp', 'simps', 'sjw', 'snowflake', 'stacie', 'stacy', 'sub-8', 'sub8', 'thundercock', 'thot', 'toastie', 'toasty', 'tyrone', 'unicorn', 'volcel', 'white knight'
- 6.) **Prototypical Language: Idealized Masculinity:** 'alpha', 'chad', 'chaddam', 'chadlet', 'chadlite', 'chadpreet', 'chang', 'gigachad', 'jamaal', 'jamal', 'thundercock', 'tyrone'
- 7.) **Prototypical Language: Non-idealized Masculinity:** 'beta', 'cuck', 'cucked', 'cuckold', 'cuckolded', 'cuckolding', 'lanklet', 'mangina', 'nice guy', 'numale', 'orbiter', 'orbits', 'orbiting', 'simp', 'soyboy', 'sub-8', 'sub8'
- 8.) **Prototypical Language: Femininity:** 'awalt', 'becky', 'beckie', 'femoid', 'foid', 'hb9',

- 'landwhale', 'land whale', 'oneitis', 'noodlewhore', 'roast', 'roastie', 'roasty', 'stacie', 'stacy', 'thot', 'toastie', 'toasty', 'unicorn'
- 9.) **Prototypical Language: Ethnoracial:** 'chaddam', 'chadpreet', '**chang**', 'curries', 'curry', 'currycel', 'ethniccel', 'jamaal', 'jamaal', 'jamaal', 'jamaal', 'noodle', 'noodlecel', 'noodlewhore', '**rice**', 'ricecel', 'tyrone'
- 10.) **Comparisons:** 'best', 'better', 'compare', 'comparative', 'comparatively', 'comparison', 'comparing', 'fatter', 'fattest', 'greater', 'hierarchies', 'hierarchy', 'hierarchical', 'high', 'higher', 'highest', 'high iq', 'high-iq', 'high status', 'high-status', 'high t', 'high-t', 'inferior', 'inferiority', 'least', 'less', 'lesser', 'lookmatching', 'looks match', 'looks matched', 'looks matching', 'looksmatch', 'looksmatched', '**low**', '**lower**', '**lowest**', '**low iq**', '**low-iq**', '**low status**', '**low-status**', '**low t**', '**low-t**', '**mog**', 'mogged', 'mogger', 'moggers', 'mogging', '**more**', 'most', '**older**', '**oldest**', 'out of 10', 'out of ten', 'psl scale', '**rank**', '**ranking**', '**rate**', '**rating**', 'scale', 'shorter', 'shortest', 'sub 8', 'sub-8', 'superior', 'superiority', 'taller', 'tallest', 'thinner', 'thinnest', 'worse', 'worst', 'younger', 'youngest'
- 11.) **Unifying Language:** '**all men**', 'all of us', 'come together', 'coming together', 'came together', 'boyo', '**bro**', 'brother', 'brothers', 'fellow', 'fellows', 'fella', 'fellas', 'gentlemen', 'gyow', 'like me', 'my dude', 'my dudes', 'my guy', 'my guys', '**our**', 'unite', 'united', 'uniting'
- 12.) **Genetics:** 'canthal tilt', 'bone structure', 'genetic lottery', 'genetic trash', 'gene', 'inherit', 'inherited', 'inheriting', 'fwhr', 'subhuman', 'subhumans', 'skull', 'heritable', 'hereditary', 'biology', 'biological', 'biologically', 'hormone', 'hormonal', 'pheromone', 'philtrum', 'testosterone', 'estrogen', '**low t**', '**low-t**', '**high t**', '**high-t**'
- 13.) **Truth:** 'accuracy', 'accurate', 'accurately', 'actual', 'actually', 'actualize', 'actualized', 'actualization', 'actualizing', 'actualizes', 'based', 'black pill', 'black pill', 'blackpill', 'blackpilled', 'correct', 'correction', 'correctness', 'evidence', 'evident', 'evidently', 'fact', 'factual', 'factually', 'fakecel', 'legit', 'legitimacy', 'legitimate', 'logic', 'logical', 'logically', 'objective', 'objectively', 'proof', 'prove', 'proven', 'real', 'realism', 'realistic', 'reality', 'realize', 'really', 'reason', 'reasonable', 'reasonably', 'red pill', 'red pill', 'redpill', 'redpilled', 'science', 'scientific', 'true', 'truth', 'truthful', 'truthfulness'
- 14.) **Victimhood:** 'beta bucks', 'betabucks', 'betabux', 'betabux', 'beta buxx', 'betabuxx', 'cuck', 'cucking', 'cucked', 'cuckold', 'cuckolding', 'cuckolds', 'cuckolded', 'feminazi', 'feminazis', 'gynocentric', 'gynocentrism', 'hypergamous', 'hypergamy', 'man hater', 'man hating', 'misandrist', 'misandry', 'wage cuck'
- 15.) **Violence:** 'abuse', 'abused', 'abusing', 'abusive', 'abuser', 'abusers', 'annihilate', 'annihilates', 'annihilation', 'annihilated', 'annihilating', 'beat', 'beats', 'beaten', 'beating', 'break', 'breaks', 'broke', 'breaking', 'broken', 'brutal', 'brutally', 'brutality', 'destroy', 'destroys', 'destroying', 'destroyed', 'destroyer', 'destroyers', '**hit**', 'hitting', 'hurt', 'hurts', 'hurting', 'kick', 'kicked', 'kicking', '**kill**', 'killer', '**killed**', 'killing', 'murder', 'murders', 'murdered', 'murderer', 'murdering', 'punch', 'punched', 'punching', 'rape', 'raped', 'raping', 'rapist', 'slap', 'slapped', 'slapping', 'smash', 'smashed', 'smashing'
- 16.) **Worldview:** 'black pill', 'blackpill', 'blackpilled', 'black pill', 'blue pill', 'blue pill', 'bluepill', 'bluepill', 'bluepilled', 'gynocentric', 'gynocentrism', 'misandry', 'heightism', 'hypergamy', 'hypergamous', '**it's over**', '**its over**', '**ldar**', 'lookism', 'red pill', 'red pill', 'redpill', 'redpilled'
- 17.) **Finance:** 'asset', 'bitcoin', 'cash', '**crypto**', 'currencies', 'currency', 'dating market value', 'dmv', 'economic', 'economy', 'finance', 'financial', 'fund', 'funded', 'funding', 'invest', 'invested', 'investing', 'investment', 'invests', 'market', 'markets', 'market value', 'market values',

- 'money', 'paid', 'pay', 'paying', 'pays', 'poor', 'poverty', 'save', 'saving', 'saved', 'spend', 'spending', 'spent', '**stock**', 'stock market', 'stock markets', 'value', 'valuable', 'valued', 'wealth', 'wealthy'
- 18.) **Self-Reference: Universal:** 'i', 'me', '**mine**', 'my', 'myself', '**our**', 'ourselves', 'self', 'selves', 'us'
- 19.) **Self-Reference: Incel-specific:** 'braincel', 'currycel', 'escortcel', 'ethniccel', 'fatcel', 'gymcel', 'heightcel', 'incel', 'involuntary celibate', 'jawcel', 'mentalcel', 'noodlecel', 'ricecel', 'shortcel', 'truecel', 'volcel', 'wristcel'
- 20.) **Self-Reference: MGTOW-specific:** 'go his own way', 'go my own way', 'go their own way', 'go your own way', 'gyow', 'going his own way', 'going my own way', 'going our own way', 'going their own way', 'going your own way', 'gone his own way', 'gone my own way', 'gone their own way', 'gone your own way', 'mgtow', 'went his own way', 'went my own way', 'went their own way', 'went your own way'
- 21.) “**Sucher Men:**” 'actor', 'uncle', 'boy', 'boyhood', 'boyish', '**bro**', 'dad', 'duke', 'dude', 'dudelier', 'dudeliest', 'dudely', 'emperor', 'masculine', 'fiance', 'fellow', 'gentleman', 'gentlemen', '**god**', 'godhood', 'godliness', 'godly', 'gramps', 'grandpa', 'grandpas', 'guy', '**he**', 'hero', 'himself', 'husband', 'husbands', 'king', 'kings', 'gentlemen', 'lord', '**male**', 'papa', '**man**', 'manhood', 'mankind', 'manliness', 'manly', 'paternal', '**men**', 'menz', 'mgtow', 'dad', 'poppa', 'mr', 'nephew', 'priest', 'prince', 'king', 'radmasc', '**sir**', '**son**', 'uncle', 'widower', 'husband', 'bloke', 'boyfriend', '**groom**', 'brother', 'knight', 'male', 'grandson', '**groom**', 'maleness', 'patriarchy', 'patroniz', 'father', 'patroniz', 'waiter', 'd00dz', 'daddies', 'daddy', 'dudebro', 'heroes', 'kinsman', 'kinsmen', 'klansman', 'layman', 'laymen', 'madman', 'madmen', 'mascul', 'misandr', 'nobleman', 'noblemen', 'stepbrother', 'stepfather', 'superman', 'supermen'
- 22.) “**Sucher Women:**” 'actress', '**aunt**', 'girl', 'girlhood', 'girlish', '**sis**', 'sistas', '**mom**', '**moms**', 'duchess', 'duchesses', 'lady', 'womanlier', 'womanliest', 'womanly', 'ladies', 'countess', 'countesses', 'empress', 'empresses', 'fem', 'fiancee', 'ladies', 'girlier', 'girliest', 'goddess', 'goddesshood', 'goddessliness', 'goddessly', 'grandma', 'gal', 'she', 'heroine', 'herself', 'wife', 'wives', 'queen', 'maiden', 'female', 'mama', 'woman', 'womanhood', 'womankind', 'womanliness', 'womanly', 'maternal', 'paternity', 'women', 'ladiez', 'wgtow', 'mom', 'momma', '**ms**', 'mrs', 'niece', 'priestess', 'princess', 'queen', 'radfem', '**she**', "ma'am", 'daughter', 'widow', 'wives', 'girlfriend', 'bride', 'sister', 'dame', 'damsel', 'female', 'girlhood', 'grandma', 'granddaughter', 'femaleness', 'matriarchy', 'matroniz', 'mother', 'waitress', 'wife', 'laydeez', 'mommies', 'mommy', 'galpal', 'kinswoman', 'kinswomen', 'klanswoman', 'ladiez', 'laywoman', 'laywomen', 'madwoman', 'madwomen', 'femin', 'misogyn', 'noblewoman', 'noblewomen', 'stepsister', 'stepmother', 'superwoman', 'superwomen'

Note: terms in bold were only included when not attached to longer, non-relevant text

REFERENCES

- Accominotti, Fabien & Daniel Tadmon. 2020. "How the Reification of Merit Breeds Inequality: Theory and Experimental Evidence."
- Augoustinos, Martha & Stephanie De Garis. 2012. "'Too Black or Not Black Enough': Social Identity Complexity in the Political Rhetoric of Barack Obama." *European Journal of Social Psychology* 42(5):564-577.
- Baele, Stephane J., Lewys Brace & Travis G. Coan. 2019. "From 'Incel to 'Saint': Analyzing the Violent Worldview behind the 2018 Toronto Attack." *Terrorism and Political Violence* pp. 1-25.
- Ballinger, Gary A. 2004. "Using Generalized Estimating Equations for Longitudinal Data Analysis." *Organizational Research Methods* 7(2):127-150.
- Bernstein, Mary. 2005. "Identity Politics." *Annu. Rev. Sociol.* 31:47-74.
- Bratich, Jack and Sarah Banet-Weiser. 2019. "From Pick-up Artists to Incels: Con(fidence) Games, Networked Misogyny, and the Failure of Neoliberalism." *International Journal of Communication* 13:25.
- Bridges, Tristan. 2010. "Men Just Weren't Made to Do This: Performances of Drag at 'Walk a Mile in Her Shoes Marches.'" *Gender & Society* 24(1):5-30.
- Bucholtz, Mary and Kira Hall. 2005. "Identity and Interaction: A Sociocultural Linguistic Approach." *Discourse Studies* 7(4-5):585-614.
- Cech, Erin. 2013. "The self-expressive edge of occupational sex segregation." *American Journal of Sociology* 119(3):747-89.
- Chang, Daphne, Roy Chen & Erin Krupka. 2019. "Rhetoric Matters: A Social Norms Explanation for the Anomaly of Framing." *Games and Economic Behavior* 116:158-178.
- Comfort, Nathan. 2018. "Sociogenomics is Opening a New Door to Eugenics." *MIT Technology Review*.
- Dasgupta, Nilanjana. 2004. "Implicit Ingroup Favoritism, Outgroup Favoritism, and their Behavioral Manifestations." *Social Justice Research* 17(2):143-169.
- DeCook, Julia Rose. 2019. *Curating the Future: The Sustainability Practices of Online Hate Groups* (Doctoral dissertation, Michigan State University).
- DiMuccio, Sarah H. and Eric D. Knowles. 2020. "The Political Significance of Fragile Masculinity." *Current Opinion in Behavioral Sciences* 34:25-28.

- Dignam, Pierce Alexander and Deana A. Rohlinger. 2019. "Misogynistic Men Online: How the Red Pill Helped Elect Trump." *Signs: Journal of Women in Culture and Society* 44(3):589-612.
- Dovidio, John F. and Samuel L. Gaertner. 2010. "Intergroup Bias." *Handbook of Social Psychology*.
- Durkheim, Emile. 2014. *The Division of Labor in Society*. Simon and Schuster.
- Ferber, Abby L. 2007. "The Construction of Black Masculinity: White supremacy Now and Then." *Journal of Sport and Social Issues* 31(1):11-24.
- Fisher, Matthew, Joshua Knobe, Brent Strickland, B and Frank C. Keil. 2018. "The Tribalism of Truth." *Scientific American* 318(2):50-53.
- Gallagher, Nate. 2020. "The Blackpill and the Suffering Apparatus: Science, Masculinity, and Race as Represented on Involuntary Celibate (Incel) Virtual Forums."
- Garimella, Kiran, Gianmarco De Francisci Morales, Aristides Gionis and Micheal Mathioudakis. 2018. "Political Discourse on Social Media: Echo Chambers, Gatekeepers, and the Price of Bipartisanship." In *Proceedings of the 2018 World Wide Web Conference* pp. 913-922.
- Geertz, Clifford. 1973. "Thick Description: Toward an Interpretive Theory of Culture." *The Interpretation of Cultures*.
- Gillani, Nabeel, Ann Yuan, Martin Saveski, Soroush Vosoughi & Deb Roy. 2018. "Me, My Echo Chamber, and I: Introspection on Social Media Polarization." In *Proceedings of the 2018 World Wide Web Conference* pp. 823-831.
- Gillham, Nicholas W. 2001. "Sir Francis Galton and the birth of Eugenics." *Annual Review of Genetics*, 35(1):83-101.
- Ging, Debbie. 2017. "Alphas, Betas, and Incels: Theorizing the Masculinities of the Manosphere." *Men and Masculinities* 1097184X17706401.
- Glaser, Barney & Anselm Strauss. 1967. "The Discovery of Grounded Theory." Alsin de Gruyter, New York.
- Glaser, Barney. G. 1999. "The Future of Grounded Theory." *Qualitative Health Research* 9(6):836-845.
- Gothard, Kelly, Peter S. Dodds & Christopher M. Danforth. 2020. "Exploring Incel Language and Subreddit Activity on Reddit."
- Haslam, Nick, Louisa Rothschild and Donald Ernst. 2000. "Essentialist Beliefs about Social

- Categories.” *British Journal of Social Psychology* 39(1):113-127.
- Hauser, Christine. 2017. “Reddit Bans ‘Incel’ Group for Inciting Violence Against Women. *New York Times*.
- Hauser, Christine. 2017. “Reddit bans Nazi Groups and Others in Crackdown on Violent Content.” *New York Times*.
- Henwood, Karen & Nick Pidgeon. 2003. “Grounded Theory in Psychological Research.”
- Hodes, Martha. 1993. “The Sexualization of Reconstruction Politics: White Women and Black Men in the South after the Civil War.” *Journal of the History of Sexuality*, 3(3):402-417.
- Hogg, Michael A. 2014. “From Uncertainty to Extremism: Social Categorization and Identity Processes.” *Current Directions in Psychological Science* 23(5):338-342.
- Hogg, Michael A. 2016. “Social Identity Theory.” In *Understanding Peace and Conflict Through Social Identity Theory* pp. 3-17. Springer, Cham.
- Hohman, Zachary P., Amber M. Gaffney & Michael A. Hogg. 2017. “Who Am I if I Am Not Like My Group? Self-uncertainty and Feeling Peripheral in a Group.” *Journal of Experimental Social Psychology* 72:125-132.
- Hornsey, Matthew J. 2008. “Social Identity Theory and Self-Categorization Theory: A Historical Review.” *Social and Personality Psychology Compass* 2(1):204-222.
- Hutto, Clayton J. & Eric Gilbert. 2014. “Vader: A Parsimonious Rule-Based Model for Sentiment Analysis of Social Media Text.” In *Eighth International AAAI Conference on Weblogs and Social Media*.
- Introne, Joshua, Iram Gokce Yildirim, Luca Iandoli, Julia DeCook & Shaima Elzeini. 2018. “How People Weave Online Information into Pseudoknowledge.” *Social Media + Society*, 4(3):2056305118785639.
- Jacoby, Sally & Elinor Ochs. 1995. "Co-construction: An introduction." pp.171-183.
- Jaki, Sylvia, Tom De Smedt, Maja Gwózdź, Rudresh Panchal, Alexander Rossa and Guy De Pauw. 2019. “Online Hatred of Women in the Incels.me forum: Linguistic Analysis and Automatic Detection.” *Journal of Language Aggression and Conflict*, 7(2):240-268.
- Jost, John T & Mahzarin R. Banaji. 1994. “The Role of Stereotyping in System-justification and the Production of False Consciousness.” *British Journal of Social Psychology* 33(1):1-27.
- Kalish, Rachel & Michael Kimmel. 2010. “Suicide by Mass Murder: Masculinity, Aggrieved Entitlement, and Rampage School Shootings. *Health Sociology Review* 19(4):451-464.

- Kay, Aaron C., Jost, John T. Mandisodza, Anesu N., Sherman, Steven J., Petrocelli, John V. and Amy L. Johnson. (2007). "Panglossian Ideology in the Service of System Justification: How Complementary Stereotypes Help Us to Rationalize Inequality." *Advances in Experimental Social Psychology* 39, 305-358.
- Kelly, Annie. 2017. "The Alt-Right: Reactionary Rehabilitation for White Masculinity." *Soundings* 66(66):68-78.
- Leachman, Gwendolyn M. 2016. "Institutionalizing Essentialism: Mechanisms of Intersectional Subordination within the LGBT Movement." *Wis. L. Rev.*: 655.
- Leonardelli, Geoffrey J. and Soo Min Toh. 2015. "Social Categorization in Intergroup Contexts: Three Kinds of Self-Categorization." *Social and Personality Psychology Compass* 9(2):69-87.
- Lin, Jie Liang. 2017. "Antifeminism Online. MGTOW (Men Going Their Own Way)."
- Lindsay, Arthur. 2020. "Swallowing the Black Pill: A Qualitative Exploration of Incel Antifeminism within Digital Society."
- Littell, Ramon C., Jane Pendergast & Ranjini Natarajan. 2000. "Modelling Covariance Structure in the Analysis of Repeated Measures Data." *Statistics in Medicine* 19(13):1793-1819.
- Mann, Coramae Richey & Lance H. Selva. 1979. "The Sexualization of Racism: The Black as Rapist and White Justice." *The Western Journal of Black Studies*, 3(3):168.
- Markham, Annette & Elizabeth Buchanan. 2012. "Ethical Decision-making and Internet Research: Version 2.0. Recommendations from the AoIR Ethics Working Committee. Available Online: aoir.org/reports/ethics2.pdf.
- Marwick, Alice & Rebecca Lewis. 2017. "Media Manipulation and Disinformation Online." *New York: Data & Society Research Institute*.
- Massanari, Adrienne. 2017. "#Gamergate and The Fapping: How Reddit's Algorithm, Governance, and Culture Support Toxic Technocultures." *New Media & Society* 19(3):329-346.
- McGhee, Gerry, Glenn R. Marland & Jacqueline Atkinson. 2007. "Grounded Theory Research: Literature Reviewing and Reflexivity." *Journal of Advanced Nursing* 60(3):334-342
- Messner, Michal A. 1998. "The Limits of 'The Male Sex Role' An Analysis of the Men's Liberation and Men's Rights Movements' Discourse." *Gender & Society* 12(3):255-276.
- Messner, Michael. 2016. "Forks in the Road of Men's Gender Politics: Men's Rights vs Feminist Allies." *International Journal for Crime, Justice and Social Democracy* 5(2):6.

- Monson, Melissa J. 2012. "Race-based fantasy realm: Essentialism in the World of Warcraft." *Games and Culture* 7(1):48-71.
- Muddiman, Ashley, Shannon C. McGregor & Natalie Jomini Stroud. 2019. "(Re)claiming Our Expertise: Parsing Large Text Corpora with Manually Validated and Organic Dictionaries." *Political Communication*, 36(2):214-226.
- Ortony, Andrew. 1989. "Psychological Essentialism." *Similarity and Analogical Reasoning* pp.179-195.
- Nielsen, Finn Årup. 2011. "A New ANEW: Evaluation of a Word List for Sentiment Analysis in Microblogs." *arXiv preprint arXiv:1103.2903*.
- Quattrociocchi, Walter, Antonio Scala and Cass R. Sunstein. 2016. "Echo Chambers on Facebook." Available at SSRN 2795110.
- Quattrociocchi, Walter. 2017. "Inside the Echo Chamber." *Scientific American*, 316(4):60-63.
- Reid, Scott A. and Michael A. Hogg. 2005. "Uncertainty Reduction, Self-Enhancement, and Ingroup Identification." *Personality and Social Psychology Bulletin* 31(6):804-817.
- Robards, Brady. 2018. "Belonging and Neo-Tribalism on Social Media Site Reddit." In *Neo-Tribes* pp. 187-206. Palgrave Macmillan, Cham.
- Rubin, Mark, Constantina Badea and Jolanda Jetten. 2014. "Low Status Groups Show In-Group Favoritism to Compensate for their Low Status and Compete for Higher Status." *Group Processes & Intergroup Relations* 17(5):563-576.
- Saldaña, J. 2015. *The Coding Manual for Qualitative Researchers*. Sage.
- Salzinger, Leslie. 2003. *Genders in Production: Making Workers in Mexico's Global Factories*. Univ of California Press.
- Schilt, Kristen. 2015. "Born This Way: Thinking Sociologically about Essentialism." *Emerging Trends in the Social and Behavioral Sciences: An Interdisciplinary, Searchable, and Linkable Resource* 1-14.
- Schradie, Jen. 2019. *The Revolution that Wasn't: How Digital Activism Favors Conservatives*. Harvard University Press.
- Tajfel, Henri, Michael G. Billig, Robert P. Bundy and Claude Flament. 1971. "Social Categorization and Intergroup Behaviour." *European Journal of Social Psychology* 1(2):149-178.

- Thornberg, Robert. 2012. "Informed Grounded Theory." *Scandinavian Journal of Educational Research* 56(3):243-259.
- Turner, John C., Rupert J. Brown and Henri Tajfel, H. 1979. "Social Comparison and Group Interest in In-Group Favouritism." *European Journal of Social Psychology* 9(2):187-204.
- Ullah, Philip. 1990. "Rhetoric and Ideology in Social Identification: The Case of Second Generation Irish Youths." *Discourse & Society* 1(2):167-188.
- Vito, C., Admire, A., & Hughes, E. (2018). "Masculinity, Aggrieved Entitlement, and Violence: Considering the Isla Vista Mass Shooting." *Norma*, 13(2):86-102.
- von Hippel, Courtney D. 2006. "When People Would Rather Switch than Fight: Out-Group Favoritism among Temporary Employees." *Group Processes & Intergroup Relations* 9(4):533-546.
- Weeks, Kelly Pledger, Matthew Weeks and Nicolas Long. 2017. "Generational Perceptions at Work: In-Group Favoritism and Out-Group Stereotypes." *Equality, Diversity and Inclusion: An International Journal*.
- Westbrook, Laurel and Aliya Saperstein. 2015. "New Categories Are Not Enough: Rethinking the Measurement of Sex and Gender in Social Surveys." *Gender & Society* 29(4):534-560.
- Willer, Robb, Christabel Rogalin, Bridget Conlon & Michael T. Wojnowicz, 2013. "Overdoing Gender: A Test of the Masculine Overcompensation Thesis." *American journal of sociology* 118(4):980-1022.
- Wood, Wendy and Alice H. Eagly. 2012. "Biosocial Construction of Sex Differences and Similarities in Behavior." Pp. 55-123 In James M. Olson and Mark P. Zanna, editors: *Advances in Experimental Social Psychology* Vol. 46, Burlington: Academic Press, 2012.
- Zerubavel, Eviatar. 2015. "The Five Pillars of Essentialism: Reification and the Social Construction of an Objective Reality." *Cultural Sociology* 10(1):69-76.