

INCEL IDEOLOGY, RADICALIZATION AND MENTAL HEALTH: A SURVEY STUDY

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Abstract

Incels (involuntarily celibates) are an online community of men who feel disenfranchised because they are unable to find a romantic and sexual partner. Incels tend to blame society for placing too much value in physical appearance and for endowing women with too much power in mate selection, a grievance that sometimes translates into violent misogyny. Mass-casualty Incel attacks have led the security services in the U.S., Canada, and the U.K. to classify Incels as a violent extremist threat. However, little empirical research is available to inform the understanding of Incels, or to qualify their potential danger to the public.

Filling this gap, this study presents an important empirical datum by reaching beyond media headlines and online activity, to assess Incel ideology, mental health, and radical intentions through in-depth surveys of 274 active Incels. Most Incels in our study reported mental health problems and psychological trauma of bullying or persecution. Incel ideology was only weakly correlated with radicalization, and ideology and radicalization were differentially correlated with mental health measures. Most Incels in the study rejected violence. The discussion considers implications of these findings for detection, policing, and non-criminal interventions focused on the Incel community.

Keywords: Incel, involuntarily celibate, Black Pill, ideology, radicalization, extremism, violence, psychopathology, mental health

Over recent years, concern has increased for violence perpetrated by involuntary celibates, or Incels, a misogynist subculture which exists almost entirely online and that has been linked to at least four mass murders in North America. Media and academic coverage of Incels has focused on the violent few ‘Incel killers,’ while little is known about the majority of Incels who have not acted violently. This skewed informational field creates a risk of conflating “Incel killers” with Incels more broadly, and in so doing stigmatizing the Incel community, creating grievances, and making the Incel identity more appealing to those predisposed to violence.

This paper aims to begin filling this knowledge gap by reporting results of an online survey of 274 Incels. Questions on the survey assessed beliefs, attitudes, violent thoughts and intentions, as well as personal history of trauma and mental health issues. Below, we will briefly summarize what is presently known about Incel violence, ideology, and subculture from mass media reports, as well as from academic research, identifying pertinent research directions before we report on the study’s methods and findings.

Incel Killer Jake Davison

On August 12, 2021, Jake Davison, a 22-year-old resident of Plymouth, Southwest England, murdered his mother and four other people, and injured two more before killing himself (Guardian News, 2021). A review of Davison’s online footprint, including his social media activity, revealed that he had accused women of choosing sexual partners based solely on physical features, preventing him from fulfilling his “right” to a “16 17 year old GF [girlfriend],” (Ross, 2021, para. 14). In the weeks leading up to his murderous spree, Davison had punched a 16-year-old boy, shouting “I f-ing hate women” as he walked away (Tech Gate, 2021, para. 4). Davison had posted videos of himself on YouTube, where he spoke about his beliefs in the *Black Pill* philosophy of the *Incel* community. According to family friends, Davison’s mother had tried to seek help for him for his Autism-Spectrum Disorder (ASD) and Attention Deficit Hyperactivity Disorder (ADHD) (Fielding, 2021). Researchers and the press identified the shooter as an Incel (Keen, 2021; Weaver & Morris, 2021).

Incels, or ‘involuntary celibates,’ are men¹ who feel disenfranchised for having failed at finding a romantic/sexual partner (Lindsay, 2020). Self-described Incels see themselves as victims of societies, which they believe favor *lookism*:

¹ There are women who share some of the Incel’s ideology, and identify as “femcels,” a phenomenon outside of this paper’s scope.

women's choice of sexual partners based solely on physical features (Halpin, 2021). Incels subscribe to biological determinism, believing that physical characteristics pre-destine certain men to never find a mate – thus turning Inceldom into a predetermined and insurmountable condition (Kelly et al., 2021; Moonshot, 2020). Incels have recently been classified as an ideologically motivated violent extremism and an emerging domestic terrorism threat by the counterterrorism communities in Canada (Canadian Security Intelligence Service, 2020), the U.K. (Hall, 2021) and the U.S. (Hoffman & Ware, 2020).

The U.S. National Strategy for Countering Domestic Terrorism included “involuntary celibate-violent extremism” as a “form of violence by single-issue ideologies” (National Security Council, 2021, p. 9).

The case of Jake Davison represents an entanglement of mental health problems, radical ideology, and mass violence that often marks cases of publicized Incel crimes (Misiak et al., 2019). This paper aims to illuminate the relationships among these three factors—radicalization, mental health, and Incel ideology. One of the questions of interest is how prevalent mental health issues are, as well as radical attitudes and intentions, in the larger Incel population. Another is how Incel ideology is related to both mental health and radical attitudes among Incels.

The Black Pill ideology

Incels believe in biological determinism, more specifically in the 20/80 rule, which states that 80% of women desire only 20% of men (i.e., rich and/or attractive, an ideal of masculinity exemplified by an internet meme called *Chad*; Moonshot, 2020). *Chads* are “usually good looking, muscular, tall, and wealthy, or ha[ve] otherwise high status” (Chad, 2021, para. 1) and are popular among *Stacys*, attractive, sexually promiscuous women who are “vain and obsessed with jewellery, makeup, and clothes” (Stacy, 2020, para. 1).² Men who do not fit the description of a *Chad* are destined for a life of loneliness, never to have a willing sexual partner or a relationship, Incels believe (Jaki et al., 2019).

This fatalistic worldview finds cohesiveness in the *Black Pill* ideology. Popularized by Incels in 2016 (Kelly et al., 2021), *Black Pill* plays off the *Red Pill*, a term itself derived from the 1999 movie *The Matrix* that generally

² The ‘bodyguard hypothesis’ states women seek dominant men for protection from undesirable males. Dominance is defined not just by strength, but also “wealth, looks, IQ, intimidating appearance, personality, social skills, and influence” (Chad, 2021, para. 8). *Stacys* will always chose the *Chad* to validate her ego (Stacy, 2020). Because *Chads* monopolize sexual relations with women, they leave other men empty-handed.

describes a kind of political awakening (Anti-Defamation League, 2019). *Black Pill* claims that men have no systemic power or privilege in today's society, and are at the social, economic, and sexual mercy of women (and feminists). *Black-pilled* Incels accept the belief that society is dominated by women and reject learning “game” to achieve a sexual relationship (Kelly et al., 2021). To them, swallowing the *Black Pill* means rejecting self-help mantras and accepting their miserable life circumstance (Frail, 2020).

This acceptance, however, can be disingenuous. Incels sometimes feel entitled to women's attention, which can translate into violent misogyny (Nelson, 2014). Accordingly, the Incel worldview has been portrayed as “one of the internet's most dangerous subcultures,” (Beauchamp, 2019, para. 1). Likewise, *Black Pill* ideology might act as a potential gateway to a “beta uprising” or “Incel rebellion” that would change society through violence (Dewey, 2019, para. 17).

The Incel Subculture

The Incel milieu represents an elusive subculture within what scholars call the *manosphere*, “a decentralized network of websites, gaming platforms, and chatrooms imbued with a heavy sense of misogyny and significant overlap with other violent ideologies, including but not limited to, right-wing extremism and white supremacy” (Clarke & Turner, 2020, para. 2).

Incels connect almost entirely online over a diverse and rapidly evolving range of platforms—from mainstream and alternative online forums like Reddit, 4chan, 8chan, and 8kun, to chatrooms dedicated to online gaming such as Discord. Incels.is and looksmx.org, two of the largest Incel discussion forums (Demographics of Inceldom, 2020), host over 15,000 (Incels.is, n.d.) and 10,000 (Looksmx.org, n.d.) registered users respectively. Some reports have claimed that offline isolation and online engagement in Incel echo chambers reinforce the *Black Pill* worldview since a large subset of Incels justify rape (*rapecells*) and other violence against women as a means of shaping their ideal society (Beauchamp, 2019). To date, at least 12 violent Incel attacks have been recorded.

One of the most notorious of these attacks took place on May 23, 2014, in Isla Vista, California, where Elliot Rodger killed six people and injured fourteen others before killing himself. As the tragedy unfolded, Rodger uploaded a YouTube video titled “Elliot Rodger's Retribution.” The video referenced language common to the Incel discussion board forums and framed the attacks as a punishment for women rejecting him (Garvey, 2014). He also e-mailed a manifesto to Incel acquaintances, who soon released it online. Although the

document makes no specific reference to Rodger identifying as, or killing in the name of, an Incel ideological objective, his method and manifesto have become influential among Incels.

Eighteen months after the Roger attack, on October 1, 2015, a heavily armed Chris Harper-Mercer opened fire inside Snyder Hall at the campus just outside of Roseburg (Portland), killing nine and wounding eight others before killing himself. In his manifesto, Harper-Mercer (2015) described himself as a 26-year-old “with no friends, no job, no girlfriend, a virgin” (para. 1). He mentioned Elliot Rodger and added, “I long ago realized that society likes to deny people like me these things” (Harper-Mercer, 2015, para. 1).

In 2018, shortly before killing 10 and injuring 16 in what was the deadliest vehicle-ramming attack in Canada’s history (Austen & Stack, 2018), Alek Minassian posted on Facebook, “Private (Recruit) Minassian Infantry 00010, wishing to speak to Sgt 4chan please. C23249161. The Incel Rebellion has already begun! We will overthrow all the Chads and Stacys! All hail the Supreme Gentleman Elliot Rodger!” (Madhani & Bacon, 2018, para. 11).

The Incel subculture is characterized by intense self-loathing (Romano, 2018), social awkwardness, self-perceived deficiencies, and alienation (Laidlaw, 2020). Community members’ mutual support in their hopelessness and helplessness (Williams & Arntfield, 2020) frequently turns into a glorification of suicide, which is encouraged as “a form of sacrificial violence and/or martyrdom” (Kelly et al., 2021). *Rope* (hanging oneself), *LDAR* (lay down and rot), *suifuel* (suicide fuel) or “it’s over,” and “it never began” are popular responses to and tags for posts that Incels believe are examples of the *Black Pill* (Moonshot, 2020).

As a result of notorious Incel violent attacks that exemplify the *Black Pill* worldview, Incel online activity has been compared to the “tools that have propelled the Islamic State and violent far-right extremists to increasing prominence and attention” (Hoffman & Ware, 2020, para. 7). However, to date, there is little empirical research to connect the *Black Pill* ideology, violent intentions, and mental health issues among Incels (Demographics of Inceldom, 2020).

Existing research

Hoffman, Ware and Shapiro (2020) identified 14 cases of violence with “Incel ideological influences” (p.8). These were divided into four categories: clear Incel-motivated terrorist attacks (3); attacks with mixed motives that evidence

Incel ideological influences (3); acts of targeted violence perpetrated by self-professed Incels (3); and, ex post-facto Inceldom (5), a category that includes individuals that “could not have been part of online Incel communities, as their actions predate the advent of most online forums” (p. 14), but whose “violent acts nonetheless conform to the patterns of social isolation generally, and rejection by women specifically, that animated subsequent Incel violence” (p. 14). The authors concluded that although only a small number of incidents have been linked to this movement, the nature of discourse in the community makes it hard to tell which posts present a threat, and which are just “cathartic satire or false bravado” (p. 24).

Other researchers used text-based analyses of Incels’ online communication on social media, mainly Reddit and popular Incel discussion forums. For example, in a thematic analysis of 77 posts from former Incels on Reddit (r/AskReddit), Hintz and Baker (2021) showed that Incel identity is linked with physical appearance, disability, mental health issues, abuse at home, and personality issues, all of which were more prevalent than beliefs about masculinity, sex, and relationships.

Another study examined narratives that emerge from Incel online posts, revealing perceived discrimination by physical appearance and masculine entitlement over women (Jones, 2020). Studies that used quantitative and qualitative textual analysis and automatic profiling techniques observed misogyny, homophobia, and racism in Incels’ online postings in discussion forums (Jaki et al., 2019; Baele et al., 2019). Incel online discourse has also revealed experiences of depression, hopelessness, suicidal ideation (Jones, 2020), and violent fantasies about rape (Scaptura & Boyle, 2020).

However, it is not clear whether highly radicalized online discourse characterizes the Incel community as a whole or is instead a salient representation of a small radical subgroup of Incels. Indeed, Jaki et al. (2019) found that only a small subset of Incel forum users, about 10 percent, were responsible for most of the hateful content. Similarly, Baele et al. (2019) also found that an extremely active small group of users were responsible for a disproportionate amount of output.

More generally, while studies of Incel online activities offer important clues about Incel subculture, ideology, and mass psychology, the online medium limits generalizability of these findings. Online personas may differ dramatically from offline attitudes, beliefs, and behavior (Blumer & Döring, 2012), so estimating real-world danger from Incel community from their online activity is not straightforward for two reasons. First, online expression can only capture radical

attitudes, which predict less than one percent of radical action (Fajmonova et al., 2017; Moskalenko, 2021). Second, the most violent actors in a radical group tend to behave differently online than the rest of the group: violent members of right-wing-extremist movements were less prolific posters online than their non-violent counterparts (Scrivens et al., 2021).

This study, therefore, offers an important empirical datum by reaching beyond the potentially misleading online activity, to empirically connect Incel ideology and mental health with radical ideas and intentions through in-depth surveys of 274 active Incels in one of the most populous Incel online discussion forums.

Methods

This study is the product of several years of collaboration between the U.S. based counter radicalization program *Light upon Light*, founded by Jesse Morton and dedicated to preventing and countering all forms of violent extremism,³ *Incels.co*, the most active Incel-related online discussion forum; and Naama Kates, producer of the *Incel Podcast*.

Researchers at *Light upon Light* designed a comprehensive 68-question survey, which included quantitative (multiple-choice, Likert scale, and checklists) and short-form open-ended qualitative questions. An informed consent explained the survey's purpose, emphasizing anonymity and warning that some of the questions may cause psychological distress. Participants were advised that they could elect not to answer a question and/or drop out of survey participation at any time. They were provided with links to *Light upon Light's* confidential helpline number and contact information for the researchers. After completing the survey, participants were given the option of participating in a random raffle of four gift cards: one for \$50; two cards worth \$25 each, and one \$20 voucher from GameStop.

The survey was posted to the *Incels.co* forum website with an invitation for adult forum members that self-identified as Incels to participate. The survey ran on *Incels.co* from December 7, 2020, to January 2, 2021.

Results

SPSS statistical package (Version 21) was used for all analyses reported below.

³ Lightuponlight.online

In total, 311 participants filled out the survey. Of the 311, 17 individuals did not identify as Incels. Additional 16 respondents reported their age as under 18 years old. These 33 participants' responses were eliminated, leaving 278 self-identified adult Incels. Of these, 4 survey responses were identical to another survey response and were eliminated as redundant. The final dataset contained unique responses from 274 self-identified adult Incels.

Demographics

Participants' ages ranged from 18 to 69, with the mean of 24.84 (SD=6.78). The majority (147 people; 53.6%) were White/Caucasian; 28 (10.2%) were Asian; 24 (8.8%) were Black; 20 (7.3%) were Hispanic; 19 (6.9%) were Middle Eastern; and 36 (13.1%) were Mixed/Other.

Religious beliefs

The majority of participants (61%) did not have a religious affiliation. Thus, 98 people (36%) were atheists, and another 67 (25%) self-identified as agnostics. Christians comprised 19.4% of the sample (54 individuals), while 14 (5.1%) were Muslims, and 12 (4.4%) believed in Hinduism/Taoism. Jews made up 1.5% of the sample (4 individuals). 24 participants (8.8%) said they believed in some other religion.

Gender and Sexual Orientation

Two hundred and seventy-two participants (99%) self-identified as male. Two participants (1%) did not answer the question about their gender.

Almost all (256 people, 94%) said they were heterosexual. Thirteen participants (5%) said they were bisexual. One participant (0.4%) said he was homosexual, and four (2%) called their sexual orientation "other."

Education

Thirty-one participants (11%) received "some high school" instruction. 80 participants (29%) received a high school diploma or an equivalent. 63 (23%) took some college classes. 21 (8%) received a two-year college degree. 57 (21%) graduated from a four-year college with a bachelor's degree. 16 (6%) received a graduate or professional degree. Finally, four (2%) took some graduate courses.

Mental Health

Several questions on the survey asked about mental health. Some of these focused on self-reported symptoms of psychological problems, while others asked about diagnosed psychopathology.

Participants were asked to respond using a 5-point Likert scale (1=not at all to 5=very much) “how intensely do you experience:” “depression,” “anxiety,” and “autism-spectrum traits.”

Nearly all participants (261, 95%) experienced some depression, responding above 1 on the 5-point Likert scale. The mean intensity of depressive symptoms reported by participants was $M=3.80$, $SD=1.2$.

Similarly, nearly all participants (257, 94%) reported some anxiety. The average intensity of self-reported anxiety among participants was $M=3.67$ ($SD=1.24$).

Finally, 199 participants out of 274 (74%) reported experiencing some autism-spectrum traits. Participants self-reported intensity of autism-spectrum traits averaged at $M=2.57$ ($SD=1.33$).

Participants were also asked whether they have ever received a formal diagnosis for depression, anxiety, or autism-spectrum disorder. Of the 274 participants, 102 (37%) reported having been diagnosed with depression. Similarly, 101 participants (37%) reported having been diagnosed with anxiety. Finally, 50 participants (18%) have received a formal diagnosis of autism-spectrum disorder. Overall, 147 (56%) of the surveyed Incels reported not having ever received any formal diagnosis of mental illness.

Bullying and persecution

Participants were asked, “Have you experienced bullying?” Only 37 out of 274 participants (14%) said they have never experienced bullying. One hundred seventy-seven participants (65%) reported experiencing bullying as a child (“ages 12 and below”); 190 (69%) said they experienced bullying as a teen (ages 13-18), and 69 (25%) said they have experienced bullying as an adult. To measure the compounded effect of long-term bullying, a scale was composed by adding the three variables measuring bullying in childhood, teenage years, and adulthood, with “yes” answers counting as 1, and “no” as 0. The resulting “bullying” scale ranged from 0 to 3 ($M=1.59$, $SD=.98$).

A separate question asked about persecution for their identity as Incels, “Have you ever been persecuted for identifying as an Incel” (yes/no). Of 274 responses,

101 (37%) reported a history of persecution, and the rest (173, 63%) did not share this experience. There was a significant correlation between a history of persecution as an Incel and a history of being bullied ($r(274)=.28, p<.01$), such that those who have reported a history of being bullied were significantly more likely to also report a history of persecution for their Incel identity.

Comparing Incels' self-reported and diagnosed mental illness with that of general population

To compare self-report of mental health among Incels in this study against a base-rate of mental health self-report among adults, we used data from a representative survey of about 60,000 American adults, commissioned by the Center for Disease Control (CDC) and collected at about the same time during the pandemic as Incel data in this study (winter of 2020; Panchal et al., 2020). The Panchal et al. (2020) study used a 7-item measure of anxiety (Generalized Anxiety Disorder (GAD-7) Questionnaire and a 10-item measure of depression (Center for Epidemiologic Studies Depression scale (CES-D-10)). Although a comparison between average scores on a 7-item measure of anxiety and a 10-item measure of depression with the single-item measures used in this study is not ideal, it can still offer a useful context for interpreting self-reported psychological issues in the Incel population.

From the CDC survey of U.S. adults, the rate of self-reported depression was 28.4%, and the rate of self-reported anxiety was 35.8% (Panchal et al., 2020)—both markedly lower than the rates among Incels in this study (95% and 94%, respectively).

Data from a representative national survey of about 39,000 American adults (Hasin et al., 2018) were used as a base-rate against which to compare rates of history of diagnosed depression among Incels in this study. In the Hasin et al. (2018) sample, 20.8% reported a history of diagnosis of depression. This was markedly lower than the 37% rate reported by the Incels in this study.

Data from a representative national survey of about 9,000 American adults (Kessler et al., 2005) were used as a base-rate against which to compare rates of diagnosed anxiety disorders among Incels in this study. In this sample of the general population of U.S. adults, 28.8% reported a history of diagnosis of an anxiety disorder. This was also lower than the 37% rate reported by the Incels in this study.

According to the CDC, rates of self-reported or diagnosed autism in U.S. adults are not available due to a lack of existing surveillance systems to monitor the

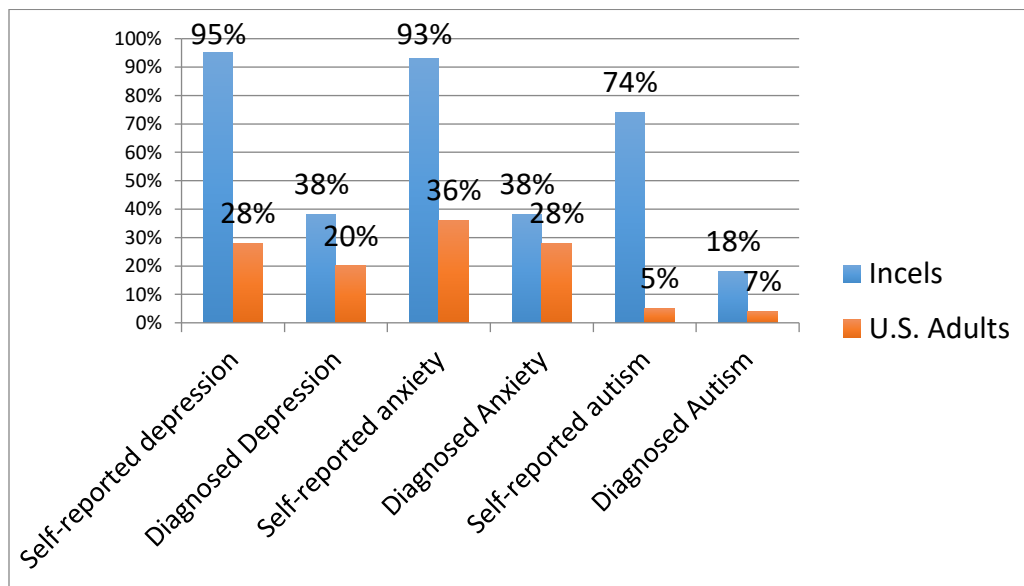
prevalence (Centers for Disease Control and Prevention, 2020). However, a study estimated rates of ASD among U.S. adults based on existing state-based data for children and by adjusting for higher mortality rates among persons with ASD (Dietz et al., 2020). According to this estimate, approximately 3.6% of male adults in the U.S. suffer from ASD. This is in contrast to the rate of diagnosed ASD in the sample of Incels in this study (18%).

Rates of undiagnosed autism-spectrum disorder (ASD) have been found to be about 25% higher than the rate of diagnosed autism (Wiggins et al., 2019). Together with the estimated rate of diagnosed ASD (Dietz et al., 2020), this projects to the total of about 7% in the general population suffering from both diagnosed and undiagnosed ASD. This was also lower than the rate of self-reported ASD symptoms (74%).

Figure 1 depicts self-reported rate of depression, anxiety, and ASD among Incels in this study alongside comparable data from studies of the general population of American adults.

Figure 1

Self-reported and diagnosed depression, anxiety, and ASD among Incels versus U.S. adults



In short, self-report depression, anxiety, and autism-spectrum disorders were higher in the sample of Incels in this study than they were in studies of American adults. Similarly, rates of diagnosed depression, anxiety, or ASD were also higher in the Incel sample in this study than they were in studies of representative samples of American adults.

Psychotherapy use and effectiveness

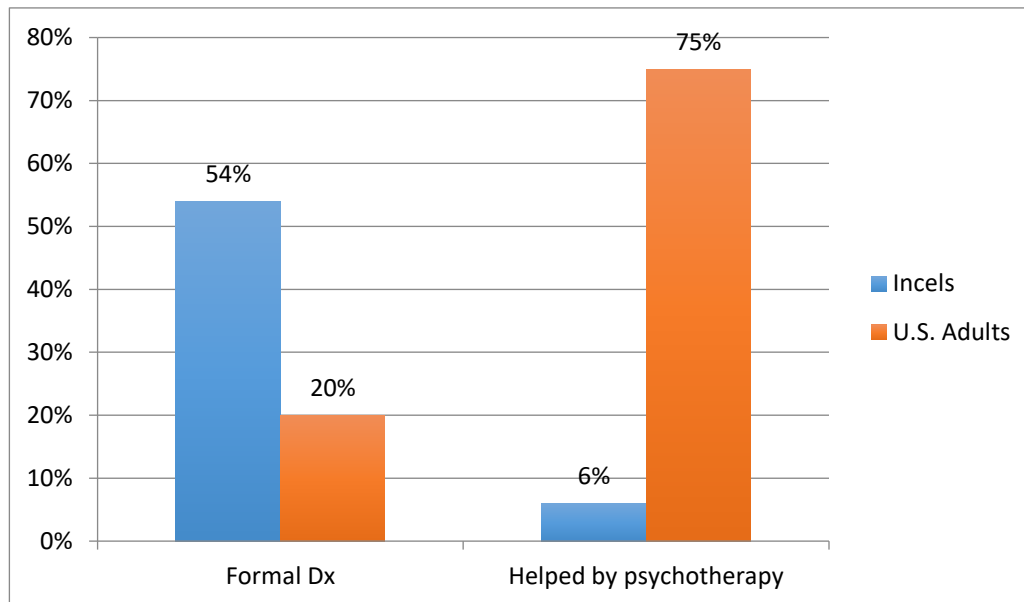
Participants were asked, “Have you tried therapy?” One hundred and forty (51%) replied “yes”, while 134 (49%) said “no.” Keeping in mind that over 90% of the sample reported either depression or anxiety, this means that only about 50% of Incels suffering from mental health problems had resorted to therapy.

Participants were also asked, “If you have tried therapy, how did it make you feel?” Only 16 participants (6%) reported that therapy made them feel “better.” Most (47%, N=130) reported “no change,” and 15% (N=42) reported that therapy made them feel “worse.”

By contrast, meta-analyses of multiple large-scale studies of psychotherapy efficacy in adults have reported that psychotherapy was more effective than no treatment for most patients (Lipsey & Wilson, 1993). Depending on the duration of treatment, between 50% and 75% of patients reported positive changes as a result of psychotherapy (Howard et al., 1986). Figure 2 summarizes the contrasts between Incels and average adults.

Figure 2

Incels are 2.5 times more likely than U.S. adults to have been formally diagnosed with a psychopathology, but Incels are 12 times less likely to find psychotherapy helpful



While Incels are much more likely to suffer from psychological problems such as depression, anxiety, and autism-spectrum disorders than average American adults, they are far less likely to seek psychotherapy, and less likely to find relief through psychotherapy than an average adult.

Incel ideology, radical attitude, and radical intentions

Questions about the *Black Pill* included the following five statements, with respondents asked to answer whether they agree with them in a “yes or no” format: “Do you believe in the *Black Pill*,” “*Black Pill* is objective;” “*Black Pill* is true;” “*Black Pill* is comforting;” “*Black Pill* is refreshing.” With “yes” coded as 1 and “no” coded as 0, these variables were analyzed together as a scale. The 5-item scale had adequate reliability (Cronbach’s Alpha=.80). The five items were added to comprise a measure of endorsement of the *Black Pill* ideology. The resulting variable, *Black_Pill_endorsement*, had a minimum of 1 and a maximum of 5 (M=3.59, SD=.71).

Another set of questions assessed beliefs about the necessary conditions to qualify as part of the Incel community, “In order for someone to claim they are an Incel, they must be...” These questions were scored “true or false,” and

included the following: “male,” “heterosexual,” “over 18 years old,” “virgin,” “physically unattractive,” “not have kissed another person for at least a certain time, e.g., 6 months;” “have not had sex in at least some time, e.g., 6 months;” “be an outcast of society, a “sufferer”; and “believe in the *Black Pill*.” With “true” coded as 1 and “false” coded as 0, these nine variables were analyzed as a scale (Cronbach’s Alpha=.83) and added to comprise a measure of entry cost into the Incel community. The resulting variable, *High_entry_cost*, had a minimum of 1 and a maximum of 9 (M=6.15, SD=1.85).

Three questions (scored on a five-point Likert scale, with 1=“not at all”, and 5=“very much”) asked about attitudes toward Incel violence. “I admire Elliot Rodger for his Santa Barbara attack,” (M=1.83; SD=1.25). “I admire Alek Minassian for his Toronto attack” (M=1.73; SD=1.21). “I admire Chris Harper Messer for his Portland attack” (M=1.66; SD=1.70).

Additionally, three questions assessed radicalization in intention by asking about willingness to act violently. These were also scored on a 5-point Likert scale, with 1=“not at all,” and 5=“very much.” “I would rape if I could get away with it” had a mean of 1.78, SD=1.32. “I sometimes entertain thoughts of violence toward others” had a mean of 2.40, SD=1.47. “How dangerous do you believe yourself to be, specifically as a result of being Incel?” had a mean of 1.67, SD=1.09.

In order to better understand the relationship between Incel ideology, radical attitudes, and radical intentions among Incels, the following items were factor-analyzed: *Black_Pill_Endorsement*; *High_entry_cost*; *Admire_Roger*; *Admire_Minassian*; *Admire_Messer*; *Would_rape*; *Violent_thought*; and *Dangerous_self*.

Factor analysis using Principal Component analysis with Oblimin rotation⁴ produced a solution in three iterations, with two eigenvalues greater than 1. The two obtained factors were only slightly correlated ($r=.15$).

One factor contained the two questions assessing Incel ideology: *Black_Pill_Endorse* and *High_Entry_Cost*. The second factor contained the six

⁴ Oblimin rotation was chosen because it allows for correlated factors, in contrast to Varimax, which assumes zero correlation among factors. Because the theorized factors, ideology, and radical attitudes/intentions are theoretically and empirically correlated across ideological groups as varied as American Muslims (Fajmonová et al., 2017), Ukrainian nationalists (Moskalenko & McCauley, 2009) and QAnon (Moskalenko, 2021), we expected them to be correlated in the Incel population as well, warranting the use of Oblimin rotation.

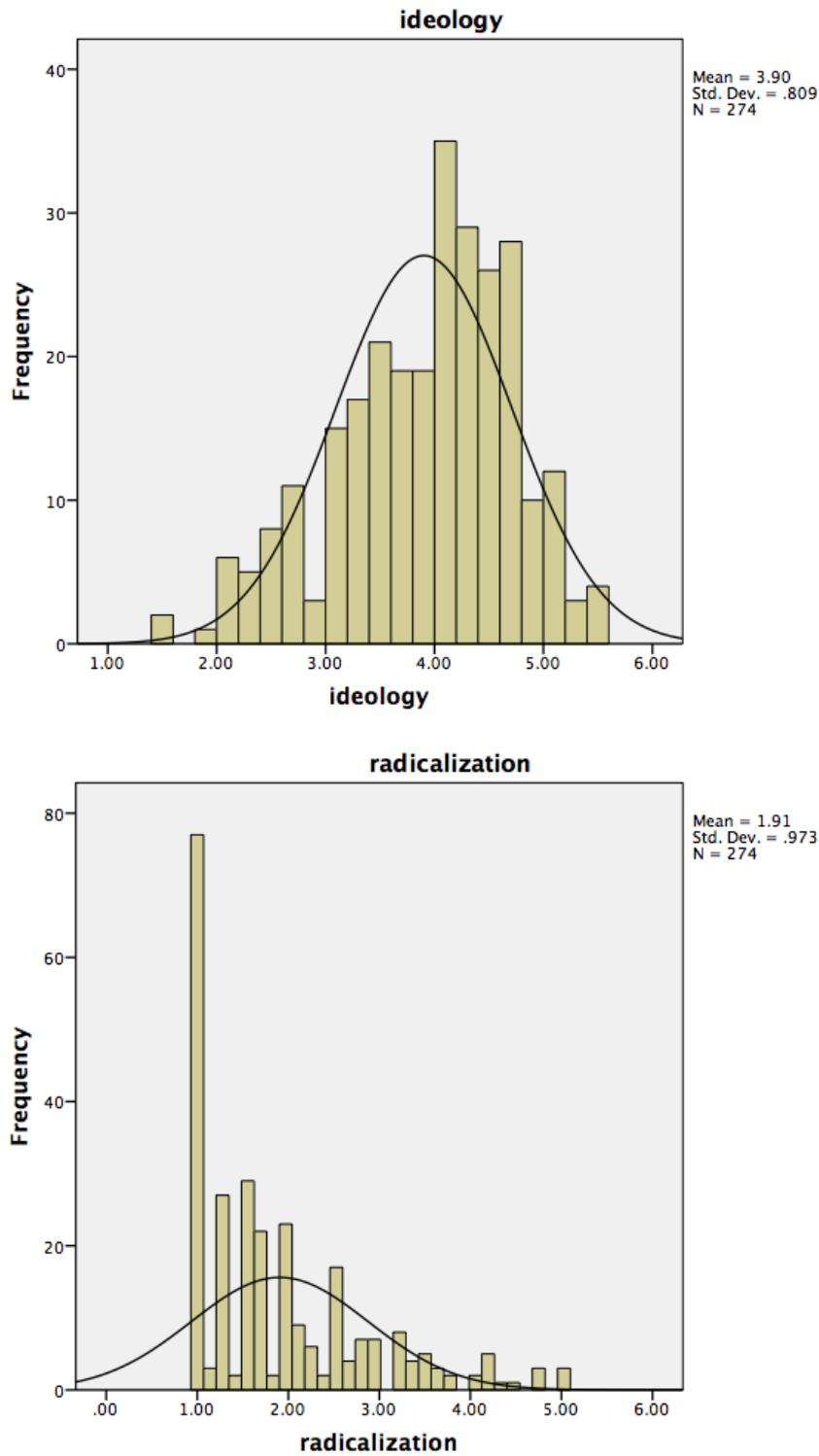
questions assessing radical attitudes and intentions. No item loaded on both factors with a loading greater than .20.

With the factors neatly separated, and factor content easily interpretable, an average of the two items in Factor 1 was computed to produce a measure of ideological commitment. The two-item scale “Ideology” had a Cronbach Alpha=.81 ($M=3.90$, $SD=.81$). The six items that loaded on Factor 2 had a Cronbach’s Alpha of .87. The six items were averaged to produce a measure of radicalization, “Radicalization” ($M=1.91$, $SD=.97$). The two obtained variables, Ideology and Radicalization, were slightly correlated ($r=.12$, $p=.02$).

Notably, the distribution of individual scores on these two variables, Ideology and Radicalization, shows a different pattern. Ideology is largely normally distributed and slightly skewed to the right, with most Incels’ responses clustering around the mid-point of the 5-point scale and 70% scoring above the mid-point. In other words, most Incels in the study were moderate to extreme in their ideology. By contrast, Radicalization is skewed to the left, with 79% of Incels scoring below the scale’s mid-point. In other words, most Incels in this study ($N=219$) rejected radical attitudes and radical intentions, and only a small minority ($N=55$) endorsed them. Figure 3 depicts this contrast between Incel endorsement of ideology versus their endorsement of radical attitude and intention.

Figure 3

Distribution of individual scores on Ideology versus Radicalization



To summarize, factor analysis uncovered two separate factors, one containing variables focused on Incel ideology, the other containing variables focused on radical attitudes and intentions. The two factors were not strongly correlated, suggesting that Incel ideology does not predict radical attitudes or radical intentions. Moreover, the distribution of responses on the Radicalization scale calculated using the factor-analytic solution demonstrated that most Incels reject radical attitudes and intentions.

Trauma and psychopathology vs. ideology and radicalization

To examine how history of psychological trauma (bullying and persecution) and psychopathology relate to radicalization and ideological commitment among Incels, we correlated the two scales, Ideology and Radicalization, with self-reported (S-R) depression, anxiety, Post-traumatic Stress Disorder (PTSD), and autistic traits, as well as with diagnosed (Dx) depression, anxiety and autistic traits, and with self-reported history of bullying and persecution. Table 1 lists the Pearson's r correlations (with corresponding degrees of freedom) that resulted from these analyses.

Table 1

Radicalization among Incels is predicted by different variables than Incel Ideology.

	Radicalization	Ideology
Bullied	$r(274)=.18^{**}$	$r(274)=.02$
Persecuted as Incel	$r(274)=.03$	$r(274)=.13^*$
Depression Dx	$r(274)=.06$	$r(274)=1.0$
Depression S-R	$r(274)=.13^*$	$r(274)=.27^{**}$
Anxiety Dx	$r(274)=-.02$	$r(274)=.13^*$
Anxiety S-R	$r(274)=1.0$	$r(274)=1.0$
Autism Dx	$r(274)=.22^{**}$	$r(274)=-.03$
Autism S-R	$r(270)=.22^{**}$	$r(270)=.12^*$
Helped by therapy	$r(188)=-.10$	$r(188)=-.10$

Note.

*correlation significant at $p<.05$

**correlation significant at $p<.01$

The analyses showed a differential pattern of correlations between Ideology and Radicalization and measures of bullying and persecution, as well as mental health measures. Thus, a history of being bullied and a diagnosed autism correlated significantly with Radicalism but did not correlate with Ideology. Conversely, having been persecuted as an Incel and a diagnosis of anxiety were significant predictors of Ideology but not of Radicalization. Finally, while self-reported depression and self-reported autistic traits correlated with both Ideology and Radicalization, self-reported depression was a better predictor of Ideology than of Radicalization, and self-reported autism was a better predictor of Radicalization than of Ideology.

Discussion

This study reports results from a survey completed by over 300 self-identified Incels who were users of the Incel.co online forum. The questions asked about mental health issues (diagnosed and self-reported depression, anxiety, and autism, as well as history of mental health services utilization); history of bullying and persecution; Incel ideology (*Black Pill* and Incel community boundaries); and radical attitudes and intentions.

Incel mental health

One of the study's findings is the remarkably high rates of mental health problems observed among Incels. In both self-report measures and on questions of diagnosed psychopathology, Incels reported troublingly high rates of anxiety, depression, and autism-spectrum disorders. When compared with nationally representative surveys of American adults, Incels were consistently higher on all these measures. Moreover, those Incels who have received a formal diagnosis of psychopathology rarely have found relief through mental health services. This is also in contrast to the majority of American adults who have used psychotherapy and found it helpful. This is an important finding that should be considered by security professionals and policy makers focused on the Incel community. It suggests a potentially fruitful direction in creating "off-ramps" that would include Incel-focused mental health interventions with mental health providers aware of, and trained to respond to, Incels' psychological needs.

Perhaps related to mental health issues among Incels is a high rate of reported history of bullying and persecution. Eighty-six percent of those surveyed reported having been bullied, and 37% reported having been persecuted for their Incel identity. If replicated by future studies, this finding opens a possibility for

early interventions by school psychologist social workers, with bullying incidents as indicators to help identify individuals at risk.

These results paint a troubling picture of a population in distress, yet with seemingly little help. It is possible that individuals afflicted with mental health problems, who are bullied and ostracized through their formative years, are more likely to be drawn to the Incel online community, where they might feel accepted. At the same time, it is possible that the Incel online experiences, alienating and colored by hopeless rhetoric, exacerbate any existing mental health problems. Longitudinal studies are needed to assess these hypotheses. What is clear from our data is that Incels are in dire need of psychological help.

Incel ideology and radicalization

One of the study goals was to elucidate the relationship between Incel ideology and radical attitudes and intentions. A factor analysis revealed that ideology and radicalism were two separate factors among Incels that were not highly correlated. In other words, subscribing to Incel ideology was not a good predictor of radical attitudes or intentions, and vice versa. This is consistent with research of other radical groups that shows that radical ideas are typically not good predictors of radical action (Sageman, 2021; Moskalenko, 2021).

What is more, while ideology was normally distributed in this study's sample of Incels (most participants falling somewhere in the middle of the Likert scale of endorsing beliefs), radical intentions showed a skewed pattern, with only a small minority of participants endorsing them. This echoes existing research on Incel online activity that found that a small vocal subset of the larger group of users were responsible for most activity and posted most hateful content (Jaki et al., 2019; Baele et al., 2019). As in these studies of Incel online activity, most participants in our study rejected radical attitudes and radical intentions. This was also true of those participants who strongly endorsed Incel ideology.

Interestingly, we observed a differential pattern of correlations between Incel ideology and radicalism. Thus, individuals who scored high on Incel ideology, but not on radicalization, reported more history of persecution for their Incel identity and a history of clinically diagnosed anxiety. They also tended to self-report more depression. On the other hand, those who scored high on radicalization, but not on ideology, were more likely to report a history of bullying and a formal diagnosis of autism. This pattern suggests that the small subset of Incels who embrace radical ideas and nourish radical intentions are qualitatively different from the non-radical majority. Specifically, radicalized

Incels are more likely to be on the neuro-divergent spectrum and more likely to have been bullied than non-radicalized Incels.

Implications

An important implication from these findings is that news stories about Incel violence such as Jake Davison do not represent the larger Incel community, which tends to be mostly peaceful. Because of how reclusive Incels tend to be, the general public typically gains information about Incels only through news stories about Incel killers. Salient and frightening, these stories can color public perceptions about the Incel community through availability heuristic (Keller, 2006), making them seem as a highly violent and dangerous group.

However, the findings from this study paint a very different picture. Most Incels in this study (79%) rejected violence. Most reported a history of bullying and/or persecution. Most reported mental health struggles, suffering from diagnosed and undiagnosed depression, anxiety, and autism-spectrum disorders, and finding little help from psychotherapy.

Given these parameters, stigmatizing and further traumatizing this already vulnerable population would not seem prudent. Classifying Incels as terrorist group based on the action of a tiny minority among them might do more damage than it would help protect the society. Instead, P/CVE community (preventing and countering violent extremism) and mental health professionals should seek to design interventions that would address Incels' unique psychological needs, which may include social deficits, a history of psychological trauma, and extreme isolation.

At the same time, our data present evidence of a troubling minority of Incels who embrace the most violent manifestations of the Incel subculture, glorifying Incel killers and fantasizing about raping and inflicting violence themselves. We observed specific markers that characterize this sub-population, including a history of having been bullied and an autism-spectrum diagnosis. Although more research is needed to establish these findings' reliability, they suggest a fruitful direction for security practitioners and mental health professionals to identify Incels who demonstrate these markers and to tailor targeted interventions to curb their potential for radicalization.

Limitations and future directions

This study was conducted online with users of a dedicated Incel forum, Incel.co. It is possible that the users of this forum are systematically different from the general Incel population, in the same way as TikTok users tend to be younger and more urban than users of Facebook or Twitter (Hellemans et. al, 2021). Future research should explore whether similar patterns of results can be found among Incels outside of the forum.

Another limitation of the study design is the short measures of mental health issues, including self-report measures of depression and anxiety that were chosen to limit the duration of the survey for participants. To establish our study's findings' reliability, more established, multi-item measures of self-reported depression and anxiety should be used.

Finally, in this study, a number of Incel-subculture specific items (admiration for three notorious Incel killers; intentions to rape; entertaining violent thoughts about others; and self-perception as dangerous to others because of one's Inceldom) all comprised a single cohesive factor with specific correlates distinct from those that predicted Incel ideology. We interpreted this factor as Incel radicalization. Future studies should include an established measure of political radicalization in addition to these Incel-specific items, in order to test the validity of our interpretation.

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