

**Involuntary celibates (Incels) in the public eye:
The effect of portrayal, political affiliations, and self-
perceived mating success on the perception of a fringe
online-community.**

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Abstract

Over the past decade, a fringe online community called ‘Incels’ has truck mainstream attention. Incels are mostly men who self-identify as ‘involuntary celibates’ which entails not being able to find a sexual partner. There is no research regarding how the public perceives this relatively novel group of people and which individual differences moderate perception of Incels. Therefore, the aim of this paper was to investigate how the perception of Incels is moderated by social conservatism, social liberalism, liberal feminist attitudes, self-perceived mating success and sex. Moreover, it was investigated how different types of Incel depictions (extreme vs. neutral) affect public perception of Incels. Perception was measured in light of empathic concern for Incels, and the degree to which politically charged, or neutral motives were attributed to Incels and their engagement in their online communities. The study was executed as an online survey and gathered a convenience sample consisting of 103 mostly European young adults. It was found that a violent/extremist (vs. neutral) depiction of Incels elicited less empathic concern and more politically charged motive attributions for Incels. Furthermore, social liberalism and liberal feminist attitudes were found to predict less empathic concern and more politically charged motive attributions for Incels, regardless of the type of depiction. Correspondingly, social conservatism has shown to predict more empathic concern and more neutral motive attributions for Incels. These findings provide therapeutic implications in that political affiliation of a therapist can be a crucial factor for providing effective therapy for members of the Incel community based on the theory of empathy-induced altruism.

Keywords: Involuntary celibates, Empathic concern, Political affiliation, Self-perceived mating success, Motive attribution

On the evening of May 23, 2014, the 22-year old college student Elliot Rodger went on a rampage in Isla Vista, California, killing seven people and injuring 14 more. After exchanging gunfire multiple times with the police, he was found in his car killed by a final self-inflicted gunshot (“Elliot Rodger manifesto outlines plans for Santa Barbara attack”, 2014).

What seems to fall in line with the USA’s frequently occurring gun-violence, turned out to be a more distinct case which sheds light onto a new chapter of radicalisation in the age of the internet which has the potential of resulting in domestic terrorism (Hoffman, Ware, & Shapiro, 2020). After having stabbed his first three victims in his apartment, Elliot Rodger paused and uploaded a video to YouTube. In this video, Rodger revealed that his target demographic are female students of a sorority of the University of California, Santa Barbara. Furthermore, he outlined his motives for the attack to be the sexual and romantic rejection of his female peers. His video was titled, ‘Day of Retribution’ which further underlines that Rodger perceived himself as a victim of the student community, hence he saw his plans as an act of justified vengeance (Rodger, 2014).

This video is of high importance in understanding external variables which ultimately make this case that distinct. Rodger’s speech showed striking similarities with an internet subculture known as the ‘Incel community’. The term Incel is an acronym of ‘involuntary celibacy’ which describes being unable to find a sexual partner despite wanting to (Young, 2019). However, it is noteworthy that Incels do not necessarily dwell on the internet in Incel forums. A study from 1994 showed that in the US population, 14% of men and 10% of women had not had sexual activity for the past in the past 12 months (Laumann, Gagnon, Michael, & Michaels, 1994). Furthermore, Donnelly (1993) found that 16% of married couples did not engage in sexual intercourse for at least a month. According to Jaki et al. (2019), members of an online Incel community are predominantly adolescent males. This supports the view that being involuntary celibate does not necessarily mean that one is an active member of the online Incel community.

However, the online Incel community is a loosely constituted phenomenon that mainly manifests itself in fringe-blogs and forums such as the message board 4chan.org (Nagle, 2016), or subsections of reddit.com (Farrell, Fernandez, Novonty, & Alani, 2019). A central pivot-point of the Incel-ideology is the so-called ‘Red-Pill’. It is derived from the 1999 movie *The Matrix* in which the main protagonist gets to choose between a state of blissful ignorance (the blue pill) and the awakening to the ugly and uncomfortable truth about

existence (the red pill) (Ging, 2019). In the context of the Incel-ideology, the Red-Pill is described as a fundamental cognitive awakening that appraises modern feminism as a form of societal brainwashing which constitutes the root cause of every man's sexual or romantic rejection (Baele, Brace, & Coen, 2019).

Within these online Incel-communities, mental health problems are likely to be common among its members. Jaki et al. (2019) found that depression and suicidal ideation is common in Incel forums which underlines the detrimental effect of the Incel ideology on the individual's mental health. Correspondingly, Hoffman, Ware, & Shapiro (2020) report that 70% of surveyed Incels self-diagnose with depression.

A study by Scaptura & Boyle (2019) concluded that affiliation with the Incel-ideology is associated with fantasies of exerting violence and rape or the use of lethal weapons against perceived enemies. It can be said that the Incelsphere is a relatively novel community with a new potential of online radicalisation, hence, it is of importance to scientifically research this phenomenon with all its intricacies. More specifically, there is little present research that outlines how such a fringe community is perceived by the general population. The present study aims to fill this gap by investigating public perception of Incels and how these perceptions may vary based on perceiver's sex, political affiliation, and feminist beliefs and perceived mating success. In addition, this study attempts to investigate how different forms of portrayal of Incels influences the public's perception of them. The next section outlines how recent events related to Incels are depicted in the media.

Portrayal of Incels in the media and on the internet

Ever since Incels struck the attention of the media, the media portrayed Incels mainly in a negative and extremist light, emphasising their violence and misogyny, which does not represent the majority of the individuals who belong to this online community. On the 19th of February 2020, an armed man carried out a xenophobic attack in Eastern Germany targeting people with immigration background. His manifesto mainly evolved around issues of white supremacy. Curiously, it also contained a section in which he expressed prolonged loneliness and involuntary abstinence from sex (Jasser, Kelly, & Rothermel, 2020). As the manifesto is accessible to the public on the internet, it was discussed in social media platforms such as Twitter. Several users have labelled the attack to be rooted in the Incel-scene, referring to the misogyny expressed in the manifesto. Corresponding to that, several news outlets such as The Independent (Embury-Dennis, 2020), and Business Insider (Bostock, 2020) have also

described Inceldom as one of the attacker's key characteristics. However, the attacker's manifesto does not clearly fit into the Incel narrative, as he blamed state surveillance for his lack of sexual encounters, instead of women (Kelly, Rothermel, & Jasser, 2020).

Another example of categorical misinterpretation of the Incel community is observable in the online debate preceding the premiere of the 2019 film *Joker*, an origin story of a DC-Comics supervillain. Upon the release of the trailer for the movie, the online discourse preceding the premiere saw a heated debate about the potential nature and impact of the movie. On the mere basis of the trailer, a multitude of loaded statements and buzzwords were ascribed such as the film being an 'Incel training manual' or a 'validation for violent glory seekers' (Abad-Santos, 2019). Here, one can yet again observe that Inceldom as a construct is oftentimes associated with negative personality traits such as glorification of violence. Moreover, in 2019 the United States Military issued a warning about potential Incel violence regarding the cinema premiere of the *Joker* movie (Sharf, 2019). No specific threats of violence have occurred, nevertheless, connotations to the Incel community were drawn and, apparently, the worst was assumed. The incident of the *Joker* movie illustrates that public and even governmental perception of Incels is characterised by a fear of violent attacks.

Framed mainstream media coverage on those topics is noteworthy since the public perception on Incels is likely to be modified into associating the Incel ideology with far-right ideologies and violent extremism. Furthermore, in the now closed Incel forum 'Incels.me', users have expressed concerns about being misrepresented by the media and falsely framed as Caucasian right wingers (Jaki et al., 2019). A linguistic analysis by Jaki et al. (2019) of an Incel forum has concluded that racist language is rather infrequently used and not a substantial part of the Incel discourse. Furthermore, race in general is only categorised in terms of which race is more likely to escape Inceldom. In this hierarchy, black men ('blackcels') ranked the highest, while Asian ('ricecels') and Indian men ('currycels') are ranked the lowest (Young, 2019). Henceforth, it is questionable to generally attribute white supremacy to be typical for the Incel ideology.

All in all, media coverage of Incels has mainly focussed on those Incels responsible for extremist acts of violence. Furthermore, the media oftentimes assumes connections between Incels and distinct extremist ideologies. Given this media bias on Incels, this study examines the effect that different kinds of portrayals have on the public's perception of

Incels. One variable that is investigated in this context is empathic concern which is outlined in the next section.

Determinants for empathic concern for Incels

Currently, there is no research that investigates how people can empathise with such a fringe-community in which mental health issues are a risk factor. According to Rogers (1959), empathy is one of the cornerstones of a successful counselling relationship. Moreover, Batson (2011) showed that empathic concern is connected to altruistic motivation. In his paper, the author proposed this connection as the theory of empathy-induced altruism (Batson, 2011). In the specific case of Incels, it can be of therapeutic use to investigate which people are more likely to empathise with Incels. However, there is a noticeable amount of media coverage that reports on extreme cases of Incels. Therefore, this study also investigates how differently framed portrayals of Incels shape public perception. If this framing mainly includes extreme cases such as Elliot Rodger, it potentially creates a rather negative or hostile perception of Incels. Therefore, it is in question how such a depiction primes empathic concern for Incels when compared to a nuanced depiction that focusses more on the suffering within the Incel community. Furthermore, focusing on extremist or violent cases of Incels could also overshadow the fact that the process of endorsing the Incel ideology also includes vicious cycles of mental illness. Therefore, it is predicted that a portrayal of Incels which focuses on the violent/extremist cases leads to individuals showing less empathic concern for Incels.

Additionally, there is no conclusive research about what effect political affiliation has on the perception of Incels. As outlined before, the topic of Incels receives politically stigmatised attention throughout the media. According to Czarnek, Szwed, & Kossowa (2018), members of a political ingroup tend to hold negative attitudes towards others who hold beliefs that conflict with their own. Since Incel ideology mainly revolves around opposing feminism, liberalism, and political correctness, it is predicted that individuals who endorse higher social liberalism and feminist attitudes would be less likely to show empathic concerns towards Incels.

Furthermore, empathic concern for Incels is also likely to be determined by biological sex. According to Toussaint & Webb (2005), women exhibit greater levels of empathy towards others than men. In the context of this study's topic however, the Incel ideology builds largely on anti-feminism and misogyny. Given that this factor specifically addresses

women in a derogatory manner, it is questionable that women exhibit a greater amount of empathic concern than men, when put into the context of Incels. Looking at this relation through a different lens, it was found that men showed more empathy towards male rape perpetrators than females (Osman, 2011). Moreover, according to Kahn et al. (2011) males may have a higher level of identification with a rape-perpetrator than females, which the authors see as the reason for significantly more rape victim-blaming by men than by females. Therefore, this study predicts that men are more likely to show empathic concern for Incels than women.

Lastly, mating success is likely to be associated with empathic concern for Incels. As mentioned before, the longer unwanted celibacy and loneliness, the higher the likelihood of identification with others who share the same fate (Høiland, 2019). This raises questions about whether individuals who experience little mating success are more likely to be able to empathise with Incels. Therefore, this study investigates whether this connection is plausible or not.

Attribution of motives for joining the Incel community

In order to tap deeper into the public perception of Incels, it is also of interest to investigate what people believe are the motives for joining an online Incel community. Research on Incels gives various reasons for individuals to join and to be invested in such online environments. Høiland (2019) has argued that cultural expectations about male sexual activity play an important role for men to end up identifying as Incels. She describes Incels who are ‘feeling left behind’ when compared to the sexual activity of peers, are rendered more likely to seek and identify with men who share their fate. Høiland (2019) also explains that becoming an Incel is constituted of a vicious circle of mental illness. Social anxiety, low self-esteem and low confidence is likely to lead to prolonged loneliness and a subsequent lack of mating success which in turn reinforces shyness, lack of confidence, a negative self-image and self-isolating behaviour. Correspondingly, Labbaf (2020) claims that joining an Incel forum allows members to vent their anger in an environment where it is socially acceptable and goes without backlash. He extends on this point and outlines that Incels consider such forums as “safe-spaces for members to find kinship, camaraderie, obtain emotional support and develop a sense of belonging through a shared sense of victimhood even through the promotion of violence against women” (Labbaf, 2020, p.18). Also, Donnelly et al. (2001)

reasoned that the utility of the internet for Incels is more about moral support and filling emotional needs.

However, there are also more negatively framed accounts for Incels' motives for joining the online community. According to Tolentino (2018), the sexual liberation of women caused difficulties for misogynistic men to find sexual partners. She extends on that point by claiming that "Incels aren't really looking for sex; they're looking for absolute male supremacy." (Tolentino, 2018). In addition to that, Scaptura & Boyle (2019) proposed that men who feel that the status of men as a group is under threat are more inclined to show 'Incel traits'. It was argued that status threat in men is related to endorsement of traditional gender roles. The study concludes that such status threat and subsequent unfavourable attitudes towards women, are related to 'Incel' traits. Moreover, Romano (2018) states that Incels feel hatred for women who rejected them because of a feeling of 'aggrieved entitlement', which entails a sense of entitlement to the sexual interest of women.

It can be said that motives such as entitlement to sex, misogyny or perceived endangered masculinity are more stigmatising and hence politically charged. In contrast, the previously mentioned motives such as mental health issues, loneliness, the venting of anger, and the search for emotional support can be considered less stigmatising and hence nuanced. This study investigates if a depiction of Incels that mainly includes violent/extremist cases evokes more politically charged motive attributions than a depiction that presents Incels in a more nuanced manner, and the moderating role of participant sex, political orientation, feminism, and self-perceived mating success.

The Present Study

There is little research that pinpoints how the general population perceives the Incel community. As outlined before, there is a fair amount of inconclusive media and political stigma about it. Therefore, the topic of this paper revolves around public perception on this novel phenomenon. The aim is to answer the question "*What are public attitudes towards Incels?*".

To answer this research question, the current study strives to examine perception on Incels along multiple variables. The first variable of interest is how different types of portrayal of Incels influences the public perception of Incels. As outlined before, the media can be biased when it comes to framing reports on Incels. In this context, it is expected that a

depiction that focuses mainly on extreme or violent iterations of Incels results in lower empathic concern for Incels. Hence, the first hypothesis is formulated as follows:

H1: Participants who were presented a more violent/extremist depiction of Incels show less empathic concern for Incels than participants who were presented a more nuanced depiction.

Furthermore, such violent/extremist depictions are also expected to elicit a more politically charged appraisal of Incels. The second hypothesis therefore reads:

H2: Participants who are presented a more violent/extremist depiction of Incels ascribe more politically charged statements to Incels than participants who were presented a more nuanced depiction.

The second variable of interest is gender differences. In the context of the misogynistic Incel ideology, men are expected to show more empathic concern towards Incels. Hence, the following hypothesis is formulated:

H3: Regardless of the type of depiction of Incels, women show lower empathic concern for Incels than men.

Incel-ideology is neither clearly left- or clearly right-wing leaning. However, the antagonisation of left-wing ideals such as feminism or sexual liberation is predominant in the Incel ideology. Due to these circumstances it is hypothesised that socially liberal individuals are less likely to empathise with Incels. Therefore, the fourth hypothesis claims:

H4: Regardless of the type of depiction of Incels, socially liberal individuals are less likely to show empathic concern towards Incels than socially conservative individuals.

Additionally, the role of feminist attitudes in the perception of Incels is investigated since Incel ideology revolves much around critiquing feminism. It is hypothesised that participants who share feminist attitudes are less likely to feel empathic concern for Incels. The fifth hypothesis hence reads:

H5: Regardless of the type of Incel depiction, individuals with higher (vs. lower) feminist attitudes are less likely to show empathic concern towards Incels.

Furthermore, this study predicts a connection between mating success and empathic concern for Incels, since lower mating success is said to be connected to more identification with the state of involuntary celibacy. Therefore, it is hypothesised that self-perceived mating success predicts less identification with Incels and therefore less ability to relate to and empathise with Incels. The sixth hypothesis is formulated as follows:

H6: Regardless of the type of Incel depiction, individuals with higher (vs. lower) self-perceived mating success are less likely to show empathic concern towards Incels.

Regarding the attribution of motives, no directional difference is predicted on how it is affected by social conservatism, social liberalism, liberal feminist attitudes, sex, or self-perceived mating success. Therefore, no hypotheses are formulated in these contexts and instead, the effects along those variables are explored.

Method

Participants

This study comprised a convenience sample of 131 responses in total. These participants were recruited from the researcher's social network – friends, family, fellow students, and social media groups of the University of Twente – through social media (no compensation).

Out of the recorded responses, 12 of those had to be deleted, since these participants did not complete finishing the questionnaire rendering their data useless. Additionally, responses of eight participants who did not pass the attention check items were removed from the dataset. Furthermore, three participants did not agree with the informed consent. Consequently, the data of these participants was not used for data analysis. Lastly, five participants were deleted, since they identified as an Incel. This is because this study aims at investigating the public's perception of Incels. The final sample hence consisted of 103 participants.

The final sample consisted of 62 women and 40 men. One participant selected 'Other/ prefer not to say' as their sex. The ages of the participants ranged from 16 to 61. However, 76.76% of the participants were 18-25 years old with the age mean of the sample being 25.06 ($SD = 7.97$). In terms of sexual orientation, the sample consisted of 79.6% heterosexuals, 2.9% homosexuals 15.5% bisexuals, 1% asexual, and 1% of participants who 'did not prefer to say'. Most participants were born in Germany (66%), and 16.7% were born in other European countries. The remaining 17.3% were born outside of Europe (Australia, Canada, China, Hong Kong, India, Malaysia, Philippines, Russia, South Africa, USA, and Vietnam). When it comes to racial/ ethnic background, 85.4% of the sample was White and 7.8% Asian. 1% were of Latino, Hispanic, or Spanish origin, 1% were African or Caribbean, and 3.9% of the participants indicated a mixed or multiple ethnic background. 1% indicated that they belonged to an 'Other ethnic group'. Lastly, 60.2% of the final sample have heard of Incels before filling in the survey whereas 39.8% did not.

Design and Procedure

This online questionnaire study was a cross-sectional study using a one factorial between-subjects design with various constructs measured as moderators. Before the present study was executed, it was approved by the BMS Ethics Committee of the University of Twente. Before being able to partake in the study, the participants were given an informed consent form which had to be agreed with. The participation for this study was completely voluntary.

The survey began with demographic questions about age, sex, previous knowledge about Incels and identification with Incels. Moreover, participants were asked to fill in questionnaires measuring feminist attitudes, political orientation, and self-perceived mating success scale. After this, participants were randomly assigned to one of the two conditions. This determined which type of Incel depiction was presented to them. The introduction of both stimuli emphasised that there is no time limit for reading the stimulus and that concentration is advised since the following questions are answered based on the stimulus. After having read the stimulus, the participants were then asked to indicate their empathic concern for Incels and motives they attribute to them. As the survey ends, participants were shown a debriefing text which fully discloses the aim and the subsequent variables of this research.

Measures and Stimuli

Text-based stimuli (depictions of Incels). Participants were randomly assigned to one of the two conditions which presented them with each one text-based stimulus about Incels (See Appendix A). Both text-based stimuli described Incels in a way that participants who are not familiar with the topic are provided with a general picture of who Incels are. However, the two depictions differed in terms of how much the violent and extremist side of Incels was emphasised. The description of Incels in both stimuli was substantiated by academic references, which were also shown in-text to the participants.

The first stimulus aimed at mirroring a perspective on Incels, which only takes into account the violent and extremist side of the Incel community. After giving a brief definition of the Incel community, this stimulus puts more emphasis on extreme views of Incels such as the call for the abolishment of women's rights as described by Jaki et al. (2019). The link between the Incel-ideology and fantasies about rape and violence according to Scaptura &

Boyle (2019) was also included. Additionally, a referenced sentence was added which was formulated as follows: “There have been nearly 50 people killed in the context of Incel related violence (Hoffman, Ware, & Shapiro, 2020)”. This was added to underline the previous sentence and to shift the reader’s attention to the violent potential of Incels. To further continue this bias, the stimulus then proceeds to present the case of Elliot Rodger and his internet fandom among Incels, referring to a news article by Humphreys (2019). It is also briefly mentioned that the r/Incels forum on Reddit was banned due to the potential coordination and glorification of violence that has occurred on it.

In contrast, the second stimulus aimed to present a more nuanced perspective on Incels. It shares the same introductory paragraph as the first stimulus, briefly defining the Incel community. After this, the general Incel ideology is outlined including the perceived victimhood status of men in modern society. After that, the focus is shifted towards portraying involuntary celibacy as a self-sustaining system along the explanations of Høiland (2019) for example: “Høiland (2019) found that involuntary celibacy is linked to unhappiness, anger, and depression. Moreover, the longer the celibacy lasts, the more likely the affected individual is to perceive it as a permanent state”. It is also added that Incels do not only hate external forces such as feminism, but also hate themselves, by putting emphasis on the defeatist view that according to Incels, impairments in physical appearance determine and maintain their celibacy, once again referring to Høiland (2019). The closing sentence aims at wrapping up a view on Incels, that takes into account the allure of an ingroup but also its mental health implications which make Incels a potential danger to themselves: “Hence, although the affected individuals might find comfort in dwelling in an online community of like-minded people, that environment can also be harmful for their mental well-being”.

Manipulation checks for scenarios. To check whether the two stimuli were perceived differently in terms of violent/extremist or nuanced representations, manipulation check items were implemented. Here, the participants are directly asked how they rate Incels along six pre-defined trait items. Those ranged from items associated with the violent/extremist depiction (violent, dangerous, misogynistic/ hate women), and items associated with the nuanced depiction (mentally ill, searching for belonging, self-loathing). Participants were asked to indicate to which extent they thought each trait describes Incels on a 7-point Likert scale.

Empathic concern. In order to measure empathic concern for Incels, participants were asked how they felt about Incels. The empathic concern measure contained a list of 10

adjectives (sympathetic, kind, compassionate, warm, soft-hearted, tender, empathic, concerned, moved, and touched) which the participants rated on a 5-point Likert scale ranging from 1 (does not at all describe how I feel) to 5 (describes how I feel extremely well). These adjectives were derived from research conducted by Batson et al. (1981) in which those 10 adjectives together loaded on an empathic concern factor. The items were combined into a scale by averaging their scores. The scale has demonstrated very good reliability (Cronbach's $\alpha = .88$).

Motive attributions. Seven statements about the reasons for joining an Incel community have been constructed based on what previous research and media have reasoned about Incels. Each statement completes the sentence "People become part of the online Incel subculture and engage in the Incel discourse, because..." Three of the statements are categorised as politically charged, namely "...they have sexist/ misogynistic motives", "...they feel their masculinity is under attack", and "...they think they are entitled to sex". The remaining four statements are categorised as more neutral, namely "...they suffer from mental health issues", "...they seek emotional support", "...they want to vent their frustration", and "...they are lonely". These statements were presented to the participants in random order. Here, the participants' perceived accuracy of each statement was to be rated on a 7-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). Factor analyses have shown that both the politically charged and the neutral items load on one factor each (See Appendix B). However, when averaging and combining these items into a politically charged scale, and a neutral scale, it only showed acceptable reliability with a Cronbach's α of .70 for the former, and a Cronbach's α of .68 for the latter. All motive attribution items are not combined into a scale and instead analysed separately. This is done to be able to gain a more accurate picture on how each item is connected to the other variables of interest.

Additionally, these statements occur in the next question, where they are presented in a rank order question. Here, the participants are asked to rank the statements according to their fit as motives for joining an Incel community ranging from 1 (lowest rank) to 7 (highest rank). Unlike the previous Likert-scale version, a ranked question prevents the participants from for example rating several items with the same score. Instead, the participants are constrained to put the items into a custom order based on their perceived accuracy of the different items. Before analysis, the seven items were coded, namely 0 (politically charged), and 1 (neutral).

Self-perceived mating success. Self-perceived mating success was assessed using an 8-item scale derived from a paper by Landolt, Lalumière, & Quinsey (1995). This scale consists of eight statements e.g. ‘Members of the sex that I am interested in notice me.’ or ‘I can have as many sexual partners as I choose.’ Participants rated these statements on a 7-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). The scores of two of the items had to be reversed. When averaging the items into one scale, they have demonstrated very good reliability (Cronbach’s $\alpha = .89$).

Political orientation. Political orientation was measured using two scales. The first scale is the Social and Economic Conservatism scale (SECS). This 12-item scale was derived from a study by Everett (2013). The included items are words such as ‘Abortion’, or ‘Traditional values’. Participants were asked to rate from 0 to 100 how they feel about each item where 0 represents very negatively, and 100 represents very positively. Seven of these items specifically measure Social conservatism and were therefore used in the analysis. The item ‘Abortion’ is reversely coded, meaning higher scores on this item stand for lower scores in Social conservatism. The items were combined into a scale and the scores were averaged. The overall scale has demonstrated very good reliability (Cronbach’s $\alpha = .84$).

The second scale was derived from a study by Surridge (2016), in which this scale was specifically used for measuring Social liberalism. It includes five items each of which is a political statement e.g. ‘Schools should teach children to obey authority’, or ‘People who break the law should be given stiffer sentences.’. These statements were rated on a 5-point Likert scale ranging from 1 (Strongly disagree), to 5 (Strongly agree). All items are reversed so that higher ratings on each item indicate higher Social Liberalism. The five items have been averaged and combined into one scale. This scale has demonstrated moderate reliability (Cronbach’s $\alpha = .65$). Additionally, the items of this scale have shown to load on two different factors (See Appendix B). Furthermore, the scale’s Cronbach’s α does not increase to a satisfactory level if any item is deleted (See Appendix B).

Feminist attitudes. Additionally, feminist attitudes were measured by employing a short form of the Liberal Feminist Attitudes and Ideology Scale (LFAIS-SF) by Morgan (1996). The scale includes 10 statements for example “A woman should have the same job opportunities as a man”. These items were rated on a 6-point Likert scale ranging from 1 (Strongly disagree) to 6 (Strongly agree) with no middle-point. Two items were reworded to fit the scale into the European context. Furthermore, the scoring of four items was reversed. Originally, this scale includes 11 items. However, one item that included a policy specific to

the US context was excluded, since the author of the original paper recommended to do so when samples outside of the US are used (Morgan, 1996). When combining and averaging the items into one scale, the product has demonstrated very good reliability (Cronbach's $\alpha = .88$).

Demographic variables. Finally, demographic variables were measured. Participants were asked their sex, age, sexual orientation, ethnicity, and country of birth. Moreover, they were also asked whether they have heard of Incels before. In addition to that, they were asked if they identify as an Incel or not.

The full online questionnaire can be found in Appendix C. This includes the informed consent, the debriefing, the two text-based stimuli. Also, all of the aforementioned scales and its items are presented in full in Appendix C.

Data Analysis

The data were quantitative nature and was therefore analysed using the programme Statistical Package for Social Sciences 25 (SPSS 25). Furthermore, the PROCESS macro extension has been installed to be able to run moderation analyses which are outlined later in this section (Model 1; Hayes, 2018).

Before testing the hypotheses, it was checked whether the stimuli evoked different representations of Incels for the participants. It was expected that participants presented with the violent/extremist depiction rate the items “dangerous”, “misogynistic/ hate women”, and “violent” higher than participants who were presented with the nuanced depiction. Furthermore, it was expected that participants presented with the nuanced depiction rate the items “mentally ill”, “searching for belonging”, and “self-loathing” higher than participants who were presented with the violent/extremist depiction. To check these assumptions, each manipulation check item was used as dependent variables for an independent samples t-test with the depictions as the independent variable. In the context of this analysis, the file was also split along participants who have heard of Incels before ($n = 62$) and those who have not ($n = 41$). The manipulation was checked for those participants who have not heard of Incels before.

Hypothesis 1 predicted that participants presented with the extreme/ violent depiction of Incels show less empathic concern for Incels, and hypothesis 2 predicted that they attribute more politically charged motives to Incels than participants presented with the nuanced depiction of Incels. These were tested with independent samples t-tests Incel depiction as the

independent variable, and empathic concern (hypothesis 1) and the rated motive items (hypothesis 2) as the dependent variables. Hypothesis 2 was also tested using the ranked motive items. This was done to investigate if there are notable differences how participants who were presented with different Incel depictions ranked each item. These motive items were treated individually. For that matter, the data file was split along the two Incel depictions and frequencies of each ranked item was calculated. Here, it was of interest how many times each item was placed on the highest rank depending on the type of Incel depiction. Both hypothesis 1 and hypothesis 2 were investigated only in the light of those participants who reported not having heard of Incels before partaking in this study ($n = 41$). The reason for this is that the first two hypotheses specifically revolved around the two text-based stimuli. Therefore, the possibility of belief bias via previous knowledge about Incels was minimised.

Regarding hypothesis 3-6, five moderation analyses were conducted using the PROCESS macro for SPSS (Model 1; Hayes, 2018). For each moderation analysis empathic concern was the outcome variable whereas Incel depiction (violent/extremist or nuanced) was the independent variable. The variables sex, social conservatism, social liberalism, liberal feminist attitudes, and self-perceived mating success were implemented as moderator variables (entered into the moderation model one by one). The moderation analyses were performed by mean-centring the predictors to compute the interaction terms. 5000 bootstrap samples were used to compute the conditional effects. This way, bias-corrected confidence intervals were created. The hypotheses were tested by inspecting the regression coefficients between each moderating variable and empathic concern. This is because hypotheses 3-6 assumed an effect regardless of the type of Incel depiction. However, the interaction between the depiction condition and moderator was also reported to explore whether moderator variables influenced the effect that Incel depictions have on empathic concern. Furthermore, the conditional effects were investigated to explore whether the effect of each moderator variable on empathic concern differed based on the type of Incel depiction.

In addition to testing the apriori hypotheses, several other statistical tests were executed to explore the effect of political orientation, perceived mating success, liberal feminist attitudes, and sex on the attribution of motives. Hence, one-sided Pearson correlations were executed between the scores of social conservatism, social liberalism, self-perceived mating success, liberal feminist attitudes, and each scaled motive item. After this, the role of sex in motive attributions was considered. To explore this, an independent t-test

was executed with sex as the grouping variable, and the scaled motive items as the test variable.

Results

The means and standard deviations of the variables empathic concern, self-perceived mating success, social conservatism, social liberalism, and liberal feminist attitudes, are illustrated in Table 1 and Table 2. Furthermore, the ranked and rated motive items are presented individually with each mean and standard deviation. In Table 1, those means and standard deviations are displayed for participants of the violent/extremist depiction and the Nuanced depiction. Table two displays these means and standard deviations for female and male participants.

Table 1

Descriptive statistics for Violent/extremist depiction and Nuanced depiction

	Scale range	Mean (SD)	
		Violent/extremist depiction	Nuanced depiction
Empathic concern	1-5	2.01 (.67)	2.26 (.77)
Self-perceived mating success	1-7	4.98 (1.18)	4.68 (1.04)
Social Conservatism	0-100	45.14 (18.77)	47.37 (21.27)
Social Liberalism	1-7	3.50 (.68)	3.34 (.71)
Liberal Feminist Attitudes	1-6	5.39 (.69)	5.29 (.84)
Motive 1 (sexist and misogynistic) (S)	1-7	5.67 (1.21)	4.94 (1.52)
Motive 2 (endangered masculinity) (S)	1-7	5.42 (1.50)	5.16 (1.44)
Motive 3 (entitlement to sex) (S)	1-7	5.77 (1.27)	5.24 (1.38)
Motive 4 (venting of frustration) (S)	1-7	5.98 (1.11)	5.84 (1.20)
Motive 5 (emotional support) (S)	1-7	5.06 (1.44)	5.24 (1.46)
Motive 6 (mental health issues) (S)	1-7	4.90 (1.28)	4.88 (1.57)
Motive 7 (lonely) (S)	1-7	5.69 (1.40)	5.98 (1.06)
Motive 1 (sexist and misogynistic) (R)	1-7	3.80 (1.84)	4.96 (1.93)
Motive 2 (endangered masculinity) (R)	1-7	4.11 (1.85)	4.52 (1.73)
Motive 3 (entitlement to sex) (R)	1-7	3.56 (1.85)	4.27 (1.86)
Motive 4 (venting of frustration) (R)	1-7	3.43 (1.79)	3.11 (1.58)
Motive 5 (emotional support) (R)	1-7	4.56 (1.92)	3.98 (2.14)
Motive 6 (mental health issues) (R)	1-7	5.23 (2.09)	4.72 (1.96)
Motive 7 (lonely) (R)	1-7	3.27 (2.00)	2.41 (1.47)

Note. $N = 103$, SD = Standard deviation, S = Scaled item, R = Ranked item, $n(\text{Violent/extremist depiction}) = 22$, $n(\text{Nuanced depiction}) = 19$.

Table 2

Descriptive statistics for Female and Male participants

	Mean (SD)	
	Female participants	Male participants
Empathic concern	2.08 (.75)	2.24 (.69)
Self-perceived mating success	5.01 (1.11)	4.56 (1.10)
Social Conservatism	43.65 (19.4)	51.21 (19.74)
Social Liberalism	3.47 (.58)	3.32 (.84)
Liberal Feminist Attitudes	5.64 (.447)	4.86 (.90)
Motive 1 (sexist and misogynistic) (S)	5.47 (1.38)	5.03 (1.44)
Motive 2 (endangered masculinity) (S)	5.69 (1.18)	4.62 (1.64)
Motive 3 (entitlement to sex) (S)	5.71 (1.10)	5.15 (1.61)
Motive 4 (venting of frustration) (S)	5.94 (1.11)	5.85 (1.23)
Motive 5 (emotional support) (S)	5.00 (1.54)	5.38 (1.29)
Motive 6 (mental health issues) (S)	5.03 (1.36)	4.68 (1.52)
Motive 7 (lonely) (S)	5.79 (1.24)	5.93 (1.28)
Motive 1 (sexist and misogynistic) (R)	4.14 (2.05)	4.84 (1.70)
Motive 2 (endangered masculinity) (R)	3.91 (1.88)	5.00 (1.45)
Motive 3 (entitlement to sex) (R)	3.70 (1.89)	4.30 (1.83)
Motive 4 (venting of frustration) (R)	3.54 (1.84)	2.82 (1.33)
Motive 5 (emotional support) (R)	4.35 (2.06)	4.07 (2.00)
Motive 6 (mental health issues) (R)	5.01 (2.02)	4.89 (2.10)
Motive 7 (lonely) (R)	3.30 (1.83)	2.05 (1.45)

Note. $N = 103$, SD = Standard deviation, R = Ranked item, S = Scaled item, n (Female participants) = 62, n (Male participants) = 40.

Inferential statistics

Before the hypothesis testing, it was investigated whether the different Incel depictions manipulated the participants as intended. For this issue, only significant results are displayed as seen in Table 3. An independent samples t-test showed that there are significant differences between the two depictions when it comes to the three manipulation check items (See Table 3). The results therefore indicate that participants presented with the violent/extremist depiction rated items associated with characteristics of the first stimulus namely “violent”, “dangerous”, and “misogynistic/ hate women” significantly higher than participants presented with the nuanced depiction. However, there was no significant difference in terms of the manipulation items associated with the second stimulus namely “mentally ill”, “searching for belonging”, or “self-loathing”.

The first hypothesis claimed that participants who were shown the violent/extremist depiction show less empathic concern for Incels when compared to those who were shown the nuanced depiction. Independent samples t-test results revealed a significant difference in the empathy scores between the two depictions (Table 3). It implied that participants who received the nuanced depiction were more inclined to score higher on empathic concern than those who received the violent/extremist depiction. Therefore, the first hypothesis was confirmed.

Table 3

t-test statistics for text-based stimuli, manipulation checks, empathic concern, and scaled motive items

Variable	Violent/extremist depiction		Nuanced depiction		<i>t</i> (37)	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Manipulation check “violent”	4.77	1.602	2.95	1.545	3.699	.001	1.158
Manipulation check “dangerous”	5.14	1.521	3.26	1.759	3.658	.001	1.146
Manipulation check “misogynistic / hate women”	5.36	1.217	3.42	1.539	4.511	.000	1.413
Empathic concern	2.1	.671	2.626	.795	-2.299	.027	-.72
Motive 1 (sexist and misogynistic)	5.41	1.182	3.79	1.548	3.794	.001	1.188
Motive 3 (entitlement to sex)	5.59	1.333	4.47	1.389	2.624	.012	.822

Note. *M*= Mean, *SD*= Standard deviation; *n* (Violent/extremist depiction) = 22, *n* (Nuanced depiction) = 19.

The second hypothesis claimed participants presented with the violent/extremist depiction tend to attribute more politically charged motives than participants presented with the nuanced depiction. The independent samples *t*-test indicated that participants who were shown the violent/extremist depiction (vs. the nuanced depiction) scored significantly higher on two politically charged motive items, namely sexist and misogynistic motives, and entitlement to sex (Table 3). Additionally, Table 4 illustrates how many times the participants of each stimulus assigned the highest rank to each motive item. Here, the politically charged motive items were given the highest rank seven times by participants who received the violent/extremist depiction, whereas participants who received the nuanced depiction gave those items the highest rank three times (Table 4). Furthermore, participants who were given the violent/extremist depiction ranked the neutral motive items 15 times the highest, whereas

participants of the nuanced depiction ranked these items the highest 16 times. Based on these results, it was revealed that a violent/extremist depiction renders the participants more likely to ascribe politically charged motives to Incels than a nuanced depiction. Therefore, hypothesis 2 was confirmed.

Table 4

Frequencies of top ranks of each ranked motive item.

	Violent/extremist depiction	Nuanced depiction
	Highest rank frequency (Rank 7)	Highest rank frequency (Rank 7)
Motive 1 (sexist and misogynistic)	3	0
Motive 2 (endangered masculinity)	1	2
Motive 3 (entitlement to sex)	3	1
Motive 4 (venting of frustration)	5	4
Motive 5 (emotional support)	0	5
Motive 6 (mental health issues)	2	0
Motive 7 (lonely)	8	7
Sum of top rank frequency of politically charged motives	7	3
Sum of top rank frequency of neutral motives	15	16

Note. n (Violent/extremist depiction) = 22, n (Nuanced depiction) = 19.

The third hypothesis assumed lower empathy towards Incels exhibited by female participants when compared to male participants. The regression coefficient between participant sex and empathic concern was non-significant ($p = .085$) which indicates that differences in sex did not predict scores for empathic concern (Table 5). Hence, the third hypothesis was rejected. More specifically, the conditional effects analysis (Table 6) confirmed that the effects of male or female participants on empathic concern were not influenced by either condition.

Table 5

Moderation analysis, outcome variable: empathic concern

Moderator variable	Predictors	Coeff.	Std. Error	t	p	95% CI
Sex	Incel depictions	.249	.143	1.738	.085	-.035, .534
	Sex	.085	.141	.607	.545	-.194, .364
	Incel depictions x sex	-.277	.282	-.0807	.422	-.786, .331
Social conservatism	Incel depictions	.25	.137	1.82	.072	2.006, 2.279
	Social conservatism	.01	.003	2.851	.005	.003, .017
	Incel depictions x Social conservatism	.008	.007	1.125	.264	-.006, .022
Social liberalism	Incel depictions	.208	.139	1.497	.137	-.068, .484
	Social liberalism	-.29	.100	-2.906	.005	-.488, -.092
	Incel depictions x Social liberalism	-.081	.200	-.405	.686	-.477, .315
Liberal feminist attitudes	Incel depictions	.236	.143	1.651	.102	-.048, .520
	Liberal feminist attitudes	-.189	.095	-1.994	.049	-.378, -.001
	Incel depictions x Liberal feminist attitudes	.012	.189	.061	.951	-.364, .387
Self-perceived mating success	Incel depictions	.254	.143	1.771	.080	-.031, .539
	Self-perceived mating success	.005	.065	.078	.938	-.123, .134
	Incel depictions x Self-perceived mating success	-.212	.130	-1.636	.105	-.470, .045

Note. N= 103.

Table 6

Conditional effects

	Coeff.	Std. Error	t	p
Female participants	.342	.184	1.858	.066
Male participants	.133	.203	.653	.515
Low social conservatism	.094	.195	.482	.631
High social conservatism	.406	.196	2.074	.041
Low social liberalism	.265	.197	1.342	.183
High social liberalism	.152	.197	.769	.444
Low liberal feminist attitudes	.227	.205	1.108	.271
High liberal feminist attitudes	.245	.203	1.206	.231
Low self-perceived mating success	.492	.202	2.433	.017
High self-perceived mating success	.016	.206	.077	.938

Note. N= 103.

The fourth hypothesis emphasised that social liberalism predicts less empathy towards Incels than social conservatism. As reported in Table 5, Social conservatism generally predicted higher scores for empathic concern ($p = .005$). However, the interaction effect between social conservatism and depiction condition was non-significant. Despite the non-significant interaction, the conditional effects analyses (Table 6) revealed that in the case of the nuanced depiction, higher social conservatism scores (one standard deviation above the mean) significantly predicted empathic concern scores ($b = .406$, $p = .041$). Furthermore, social liberalism significantly predicted lower empathic concern ($p = .005$) regardless of the type of depiction (Table 5). However the interaction effect between social liberalism and depiction condition was non-significant (and so were the conditional effects for high and low social liberalism) Based on these results, the fourth hypothesis was confirmed.

The fifth hypothesis assumed that regardless of the type of Incel depiction, individuals with high (vs. low) liberal feminist attitudes are less likely to show empathic concern for Incels. As illustrated in Table 5, liberal feminist attitudes predicted lower empathic concern scores ($p = .049$). Therefore, hypothesis 5 was confirmed. However, the interaction effect of

liberal feminist attitudes and depiction condition was not significant. The conditional effects for low and high feminists were also non-significant.

The sixth hypothesis assumed that regardless of the type of Incel depiction, individuals with high (vs. low) self-perceived mating success are less likely to show empathic concern for Incels. The results (Table 5) indicated that self-perceived mating success does not predict scores on empathic concern ($p = .938$). Hence, hypothesis 6 was rejected. Although the interaction effect was non-significant, the conditional effects revealed that in the context of the nuanced Incel depiction, participants scoring low on self-perceived mating success (one standard deviation below the mean) were more likely to show empathic concern for Incels (Table 6).

Additional analyses

Several additional analyses have been executed to test the exploratory hypotheses. As mentioned before, this study explored which effect variables such as political affiliation, perceived mating success, liberal feminist attitudes, and sex have on the attribution of motives. The subsequent results of Pearson correlations between the abovementioned variables and the scaled motive items are illustrated in Table 7.

Table 7

Pearson correlations

	1.	2.	3.	4.	5.	6.	7.	8	9.	10.	11.	12.
1. Empathic concern	1											
2. Social Conservatism	.294**	1										
3. Social liberalism	-.295**	-.563**	1									
4. Liberal feminist attitudes	-.207**	-.533**	.512**	1								
5. Self-perceived mating success	0.005	-0.129	.252**	.188*	1							
6. Motive 1 (sexist and misogynistic)	-.502**	-.274**	.241**	.238**	0.025	1						
7. Motive 2 (endangered masculinity)	-.177*	-.199*	0.151	.323**	0.067	.373**	1					
8. Motive 3 (entitlement to sex)	-.438**	-0.105	.255**	.186*	0.048	.602**	.359**	1				
9. Motive 4 (venting of frustration)	-.253**	0.029	0.131	.056	-0.083	.488**	.274**	.494**	1			
10. Motive 5 (emotional support)	.194*	0.149	0.026	-.081	-0.063	-.165*	0.090	-0.023	.306**	1		
11. Motive 6 (mental health issues)	-0.037	0.019	-0.115	-.020	0.061	.277**	0.127	.181*	.351**	0.140	1	
12. Motive 7 (lonely)	-0.016	0.156	0.038	-.049	-0.042	0.161	.255**	.287**	.647**	.477**	.281**	1

Note. $N = 103$.

**. Correlation is significant at the 0.01 level (1-tailed).

*. Correlation is significant at the 0.05 level (1-tailed).

Firstly, Pearson correlation analyses have indicated that individuals with higher social conservatism scores were less likely to attribute sexist and misogynistic motives ($p = .003$) and endangered masculinity ($p = .023$) to Incels. Secondly, Pearson correlation analyses have found that individuals with higher social liberalism scores were more likely to attribute sexist and misogynistic motives ($p = .007$) and entitlement to sex ($p = .005$) to Incels (See Table 7).

Additionally, the effect of both liberal feminist attitudes and self-perceived mating success on the attribution of motives have been investigated. It was found that individuals with higher liberal feminist attitudes were more likely to attribute sexist and misogynistic motives ($p = .008$), endangered masculinity. ($p = .000$), and entitlement to sex ($p = .030$) to Incels. When it comes to self-perceived mating success, no significant correlation was found for any of the motive items (See Table 7).

Lastly, an independent samples t-test has found two significant differences between women and men when it comes to motive attributions as it is displayed in Table 8. It was revealed that women are significantly more likely than men to attribute endangered masculinity, and entitlement to sex as motives to Incels. Hence, two out of three politically charged motive items were significantly more attributed by women than by men.

Table 8

t-test statistics for sex and scaled motive items

Variable	Female		Male		$t(100)$	p	d
	M	SD	M	SD			
Motive 2 (endangered masculinity)	5.69	1.182	4.63	1.644	3.817	.000	.774
Motive 3 (entitlement to sex)	5.71	1.107	5.15	1.610	2.081	.040	.422

Note. M = Mean, SD = Standard deviation; n (Female) = 62, n (Male) = 40.

All in all, it was found that social conservatism, social liberalism and liberal feminist attitudes had a significant effect on empathic concern for Incels. There were differences found between the different Incel depictions and empathic concern for Incels. However, the variables sex and self-perceived mating success did not relate to empathic concern unlike it was predicted. Furthermore, analyses including motive attribution items revealed some noteworthy patterns for all variables, except for self-perceived mating success.

Discussion

The aim of this study was to fill the gap of research on how the public perceives the Incel community. More specifically, it was investigated how variables such as participant sex, political affiliation, self-perceived mating success, and liberal feminist attitudes influence both empathic concern and motive attributions towards Incels. Additionally, two different types of Incel portrayal were used as text-based stimuli to further investigate whether the way Incels are depicted primes the public's perception of Incels.

The results of this study suggest that participants who were presented a violent/extremist depiction of the Incel community were less inclined to show empathic concern towards Incels than participants who were presented a nuanced depiction. Furthermore, it was found that individuals with a social conservative political orientation tend to express more empathic concerns for Incels than individuals with a social liberal political orientation. Additionally, it was found that individuals who hold liberal feminist attitudes are also less likely to show empathic concern for Incels.

However, the other variables of interest (participant sex, and self-perceived mating success) did not turn out to have a significant effect on empathic concern for Incels. Furthermore, analyses regarding motive attribution revealed several notable patterns. Politically charged motives were more likely to be attributed by participants who were female, who received the violent/extremist depiction, and who scored high on social liberalism and liberal feminist attitudes.

Theoretical and Practical Implications

This is the first empirical work to investigate public attitudes toward Incels, who are an online community who has recently taken much public attention. This study's focus was of relevant practical ambition, since it explored the effect that various individual differences have on empathic concern for Incels. There is no scientific literature that explores what characteristics predispose one to hold more empathic and benevolent attitudes towards this controversial group of people. This gap was filled by this study, namely the effect that different Incel portrayals and peoples' political affiliations have on empathic concern for Incels. The fact of the matter is that this study has successfully demonstrated that people have different levels of empathic concern for Incels depending on how they are depicted. . This implies that negative framing has a considerable effect on the levels of empathic concern

that people feel for Incels. It is also noteworthy that a negative depiction also renders people less likely to attribute neutral motives to Incels such as that they are lonely, mentally ill, or seek emotional support. When it comes to making progress in recognising Incels as a group that is in need of professional help, negative or sensationalist media bias is hence questionable. In order to reduce negative public stigma about Incels, it is of practical importance to shed more light on those parts of the Incel community, who are not associated with the more violent and extremist cases.

The results for gender differences are not consistent with the previously made hypothetical connections. While males show greater empathy towards male rape perpetrators than females, the same cannot be said when it comes to Incels. This implies that cognitive representations about Incels differ substantially from those about rape perpetrators, which means that these two groups of people cannot be compared to one another. Hence, the rationale made regarding empathic concern might be flawed. Nevertheless, women were more likely than men to attribute politically charged motives such as entitlement to sex and perceived threat to masculinity. Since one of the main points of the Incel rhetoric is that women rejected them, it might be that women tend to see entitlement to sex, and/ or masculinity issues as a more salient reason for individuals to join the Incel community.

The findings confirmed that socially liberal participants tend to show less empathic concern for Incels than socially conservative participants. This is in line with previous research showing that a political ingroup tends to hold negative attitudes and prejudice towards a group with dissimilar beliefs (Czarnek, Szwed, & Kossowska, 2018). Because Incels tend to oppose progressive and socially liberal beliefs such as gender egalitarianism and modern feminism, socially liberal individuals may have perceived Incels as the political outgroup, and therefore they showed lower empathy for them.

Furthermore, additional analyses have revealed that Social conservatism predicts less politically charged motive attributions, whereas Social liberalism predicts the opposite. These results revealed a clear pattern. The underrepresentation of neutral motive attributions and overrepresentation of politically charged motives namely misogyny and perceived entitlement to sex among socially liberal participants could suggest a less nuanced or less benevolent approach to the topic of Incels when it comes to socially liberal individuals. Additionally, it was found that if Incels are depicted in a nuanced manner, individuals with high (vs. low) social conservatism are more likely to show empathic concern for Incels. This underlines the previous notion that focussing on violent/extremist cases of Incels negatively

influences the perception of the Incel community.

Also, a significant relation was found between empathy and liberal feminist attitudes as it was predicted earlier. The results regarding liberal feminist attitudes hence solidified the findings that politically related ideologies such as social liberalism and liberal feminist attitudes might predispose one not to be able to empathise with Incels. Also, additional analyses have revealed a notable trend when it comes to liberal feminist attitudes and motive attributions. As outlined before, the higher scores in liberal feminist attitudes, the more likely were the participants to attribute motives to Incels such as misogyny, perceived entitlement to sex, and perceived threat to masculinity. This means that liberal feminist beliefs are related to an appraisal of Incels which prevalently takes into account negative aspects.

Since the Incel community is characterised by mental health issues such as depression (Hoffman, Ware, & Shapiro, 2020), it is of importance to try and motivate the members to seek professional help. Furthermore, this might serve to counteract the danger of further radicalisation. However, the media bias against Incels might prevent the public from being aware of the non-violent Incels who are in need of professional help. Furthermore, if Incels perceive themselves misunderstood by society, the likelihood of putting trust in mental health services might diminish.

The results of this study yield noteworthy implications for the therapeutic handling of Incels. By exploring which of the study's variables have an effect on empathic concern towards Incels, one might be able to better tailor counselling staff to Incels, in order to be able to help Incels in overcoming mental health issues more effectively. When applying the afore-mentioned theory of empathy-induced altruism by Batson (2011), socially conservative individuals are more likely to show empathic concern and thus be motivated to help Incels. The opposite can be assumed for individuals with socially liberal or liberal feminist views. Furthermore, empathy is one of the fundamental prerequisites for effective therapeutic service (Rogers, 1959). Therefore, when it comes to providing counselling or therapy for members of the Incel community, one might consider the political beliefs of the therapists as a factor for their quality of handling Incels.

Based on the results of this study, the variable with the least impact was self-perceived mating success. No general connection to empathic concern could be established and it did not correlate significantly with any of the motive items. However, low self-perceived mating success predicted higher empathic concern when it comes to the nuanced depiction of Incels. This might be an indicator for that there is a threshold for self-perceived

mating success to have a significant effect on empathic concern. In other words, a violent/extremist depiction might suppress the likelihood of identification with the state of involuntary celibacy when it comes to people who reported low mating success. Furthermore, if Incels are presented in a more nuanced manner, individuals who have a low self-perceived mating success might be able to identify more with them which could explain the raised levels of empathic concern for them.

Strengths, limitations, and recommendations for future research

The text-based stimuli used in the study can be considered a strength. They were constructed based on how different previous scientific literature approached the topic. The first stimulus successfully primed people who have never heard of Incels towards the extreme characteristics when compared to the second stimulus. Therefore, these stimuli can be reused by future research if further study in this field is to be done. Also, the motive attribution items have shown to load on one factor each. These items successfully revealed patterns of how individuals with e.g. liberal feminist attitudes perceived the motives that people have for joining the Incel community. Future research could use these items as a basis for the construction of more in-depth items to extend the scope of motive attributions that the public may have regarding Incels.

However, this study does not come without its shortcomings. One major limitation of this study is that among the sample as 60.2% of the had prior knowledge about Incels. When looking at the remaining 39.8%, a significant difference was found between the two Incel depictions and empathic concern. However, the small subsequent sample size yielded low statistical power. Hence, the chances are reduced that the above-mentioned results of hypothesis 1 and 2 reflect a true effect of the two Incel depictions, and it is therefore not advised to generalise these findings. Therefore, future research could strive to gather a larger sample in order to heighten the chances of obtaining more participants who have no prior knowledge about Incels.

Additionally, in the analyses for hypothesis 3, 4, 5 and 6, all participants were included which includes those who have heard of Incels before. Here previous knowledge on Incels can be considered a confounding variable which could have had predetermined the beliefs of participants about Incels, creating belief bias. Such a bias renders its subjects to endorse an argument if its conclusion aligns with their previous beliefs and values (Kaplan, 2017). What exact knowledge the participants had about Incels prior to this study is

unknown. In the context of this study, the participants might have seen the motive items as conclusions that were either aligned with or contrary to the previously held beliefs about Incels. Furthermore, a possible negative belief bias about Incels could explain the generally unfavourable level of empathic concern within the entire sample which in turn could explain why some hypotheses about empathic concern have been rejected. In order to minimise potential belief bias, future research could avoid belief bias if for example the topic itself is disguised. One could employ comparable text-based stimuli and omit or reword the name and jargon of the Incel-community. For example, notable words such as ‘involuntary celibacy’ or ‘red-pilled’ itself could be replaced by words that do not change the context but are unrelated to the real Incel-community. This way, participants would not necessarily associate the subject of the study with previous knowledge. Also, since it is unknown what exactly this study’s participants knew about Incels previously, it is also possible for future research to ask participants to report any previous knowledge in order to control for belief bias.

An additional minor limitation resides in the text-based stimuli themselves, because the Incel depictions only differed significantly in terms those manipulation check items who were based on the violent/extremist Incel depiction. This implies that the first stimulus successfully highlighted the violent characteristics of Incels, while the second stimulus failed to highlight the nuanced characteristics of Incels. Manipulation was achieved, however, the extent of it could have been more clear-cut if the second stimulus successfully highlighted other issues Incels face like mental illness, self-loathing, and searching for belonging. When looking at the second stimulus, more than half of the text concerns description of the Incel-ideology and mental health issues of these communities are only presented at the end. This imbalance could have had a primacy effect on the participants, highlighting only essential characteristics of the Incel ideology and neglecting nuanced characteristics. Therefore, a recommendation for future research would be to refine the second stimulus in a new study in order to enhance the manipulation effect towards the more nuanced characteristics of the Incel community. This implies that the text should keep the general description of Incels brief while giving more information about the specific nuanced characteristics.

Although it was found that participants who scored high on social liberalism were more likely to attribute politically charged motives and less likely to show empathic concern, these results are not usable for further interpretation. This is because the scale that was used for measurement only demonstrated moderate reliability, and its items loaded on two factors. This can be explained by the fact that this scale is described as a standard measure for social

liberalism in the UK (SurrIDGE, 2016). Since this sample contained mostly Germans and only 3% Britons, it can be argued that the scale was not suitable for the sample, and hence unreliable. This limitation means that differences in empathic concern can only be reliably connected social conservatism. Therefore, for future research in a comparable context it is advised to use a different scale if social liberalism was to be further investigated regarding empathic concern for Incels.

Another limitation is the measurement for mating success. Since the scale that was employed only measured mating success as the subject perceived it, the results could have been affected by social desirability bias. This means that participants might have perceived low mating success as socially undesirable and responded accordingly. In the context of this online study, mating success seemed to have no connection to empathic concern for Incels. However, when minimising social desirability bias, future research could further investigate whether such a connection exists. One way to control for social desirability bias is to implement a social desirability scale into the survey. Additionally, instead of using online self-report questionnaires, it is also possible to measure mating success in a qualitative interview context.

Conclusion

Despite a number of limitations, , this study successfully highlighted the effect that different portrayals of Incels have on the public's likelihood to feel empathic concern for them. Also, it was established that socially conservative individuals (i.e., those with lower socially liberal and feminist beliefs) are more likely to have empathic concern for Incels, and attribute less politically charged motives to them. These results yield some insights that have practical implications when it comes to spreading constructive awareness about the Incel community and which factors to consider when approaching them to offer help. Overall, it is recommended to replicate this study while incorporating the above-mentioned recommendations to circumvent the limitations that this study suffered from.

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Appendix

A: Text-based stimuli

a. Violent/extremist depiction

The term "Incels" stands for involuntary celibates and describes members of an online subculture (mostly men) who define themselves as unable to find a romantic or sexual partner despite desiring one. Incels are known to communicate on social media and online forums such as Reddit, 4chan, Facebook groups, or custom forums dedicated to Incels (incels.net, incels.co, youarenotalone.co).

Research found that the Incel discourse revolves around Incels blaming feminism and the sexual liberation of women for their involuntary celibacy (Scaptura & Boyle, 2019). Moreover, the Incel ideology claims that women are genetically predisposed to be hypergamous (striving for the maximum amount of sexual partners) and attracted only to Alpha men (physically attractive and muscular men) (Ging, 2017). On Incels.wiki, a Wikipedia-like website run by members of the Incel community, the authors claim that women have an unconscious need to be dominated by men and imply that the subordination of women is natural. A linguistic analysis of an Incel forum shows more extreme views, such as Incels calling for the abolishment of women's rights "to the extent that women should not be allowed to vote and should be regarded as the property of their husbands" (Jaki et al., 2019).

In their study, Scaptura & Boyle (2019) found that affiliation with the Incel ideology is associated with fantasies of exerting violence and rape towards women or the use of lethal weapons against perceived enemies. There have been nearly 50 people killed in the context of Incel related violence (Hoffman, Ware, & Shapiro, 2020). The first widely recognised of those incidents was that of 22-year old Elliot Rodger in 2014. Before killing seven people and injuring 14 more, the attacker recorded a video titled "Day of Retribution" in which he explained his attack as revenge on women who had rejected him all of his life. In some Incel forums, Rodger is praised as a hero (Humphreys, 2019). Moreover, Incel groups often advocate for violence. For example, users of the r/Incel Forum on Reddit have discussed how to get away with rape (Bell, 2017). This forum had over 40.000 members before being banned in 2017.

b. Nuanced depiction

The term "Incels" stands for involuntary celibates and describes members of an online subculture (mostly men) who define themselves as unable to find a romantic or sexual partner despite desiring one. Incels are known to communicate on social media and online forums such as Reddit, 4chan, Facebook groups, or custom forums dedicated to Incels (incels.net, incels.co, youarenotalone.co).

In these online environments, Incels discuss their involuntary celibacy, oftentimes theorising about what has brought them into this position. Research has found that Incels refer to the base of their ideology as being "Red-Pilled", which entails the view that Western society is being sexist towards men (Labba, 2020). More specifically, modern feminism and sexual liberation of women is said to be the root cause for their involuntary celibacy. According to this ideology, sexual liberation has left women hypergamous (striving for the maximum amount of sexual partners and only being attracted to 'alpha men' e.g. physically attractive and muscular) (Young, 2019). These alpha men are said to attract most women leaving only unattractive women for beta (i.e., less attractive) men and none for Incels (Hoffman, Ware, & Shapiro, 2020). Incels believe that their physical appearance or "not winning the genetic lottery" destines them for a life of involuntary celibacy. Høiland (2019) found that involuntary celibacy is linked to unhappiness, anger, and depression. Moreover, the longer the celibacy lasts, the more likely the affected individual is to perceive it as a permanent state.

Incels' posts on social media and forums often involve self-loathing and suicidal ideation. Alongside the notion that looks matter more than personality in society, Incels express dissatisfaction and resentment about their own appearance (Høiland, 2019). Hence, although the affected individuals might find comfort in dwelling in an online community of like-minded people, that environment can also be harmful for their mental well-being.

B: Statistical analysis tables**a. Factor analysis tables**

Table 9

Factor analysis matrix for politically charged motive items

Item	Factor 1
Motive 1 (sexist and misogynistic)	0.790
Motive 2 (endangered masculinity)	0.472
Motive 3 (entitlement to sex)	0.762

Note. Extraction Method: Unweighted Least Squares.

Table 10

Factor analysis for neutral motive items

Item	Factor 1
Motive 4 (venting of frustration)	0.735
Motive 5 (emotional support)	0.477
Motive 6 (mental health issues)	0.368
Motive 7 (lonely)	0.892

Note. Extraction Method: Unweighted Least Squares.

Table 11

Factor analysis for Social Liberalism items and Cronbach's α if item deleted

	Factor		Cronbach's Alpha if Item Deleted
	1	2	
Item 1: People who break the law should be given stiffer sentences.	.346	.416	0.554
Item 2: Young people today don't have enough respect for traditional European values.	.762	.146	0.511
Item 3: For some crimes, the death penalty is the most appropriate sentence.	-.073	.814	0.673
Item 4: Censorship of films and magazines is necessary to uphold moral standards.	.576	.000	0.597
Item 5: Schools should teach children to obey authority.	.495	-.079	0.646

Note. Extraction Method: Unweighted Least squares. Rotation Method: Oblimin with Kaiser Normalization

C: Online survey

a. Informed consent

PROJECT TITLE: Involuntary Celibates (Incels) in the public eye

INVESTIGATORS: Lorenz Ostermann (MA student), *Department of Psychology, Health, and Technology, University of Twente, Netherlands.*

PURPOSE

This study investigates people's perception of a group of people who have no sexual/romantic experiences despite the desire to do so called the "Incels" (involuntary celibates) . We kindly ask you to participate in this study, as we are trying to understand what determines the many iterations of this perception. **This survey is only open to participants who are 18+ years old.**

PROCEDURES

If you agree to participate, you will be asked general demographics questions (age, sex, sexual orientation, nationality, etc.), and your views and attitudes about political matters and perception of your own mating success. Then, you will be presented with a short description

of a group of people who have no sexual or romantic experiences or partners despite the desire to do so called "Incels" (involuntary celibates). After reading this text, you will be asked a few questions about your perceptions about Incels.

It is important to keep in mind that there are no right or wrong answers. We are interested in the attitudes and experiences of individuals. Therefore, our research relies on your own honest opinion. At the end of the survey, you will be provided with more details about this study.

Your participation will last approximately **12 minutes**. People who participate via SONA Systems will be compensated with **0.5 credits**.

PARTICIPANT RIGHTS

Your participation in this study is completely voluntary. You are free to decline to participate, refuse to answer any individual questions, or withdraw from the study at any time without the need to give any reason.

RISKS AND BENEFITS

This study contains a description of an online subculture that some people might deem as disturbing or offensive. Although this study will not benefit you personally, we hope that our results will add to the knowledge about how people's emotions can influence their attitudes and decisions.

CONFIDENTIALITY

Your responses are completely anonymous and cannot be traced back to you because no personally identifying information such as names is asked in this survey. The information you provide will not be disclosed to third parties, and they will be aggregated with the responses of other participants and examined for hypothesized patterns. Your anonymous responses will be used for scientific research into various aspects of personality and social psychology and will be published.

QUESTIONS

For further information about this study, you may contact Lorenz Ostermann, **l.m.ostermann@utwente.nl**, the person in charge of this research study.

If you would like to talk with someone other than the researchers to discuss problems or concerns, to discuss situations in the event that a member of the research team is not available, or to discuss your rights as a research participant, If you have any questions about the rights of research participants, please contact the Ethical Review Committee of the Behavioral and Management Sciences Faculty, University of Twente, Netherlands, **ethicscommittee-bms@utwente.nl**.

CONSENT AND AUTHORIZATION PROVISIONS

In order to continue with this survey, you have to agree with the aforementioned information and consent to participate in the study.

Clicking "**I agree and consent to participating in this study**" indicates that you have been informed about the nature and method of this research in a manner which is clear to you, you

have been given the time to read the page, and that you voluntarily agree to participate in this study.

b. Demographics questions

First, we will ask you to describe your background (age, sex, ethnicity, nationality, etc.) as part of demographic information...

1. How old are you?
2. What is your sex?
3. What is your sexual orientation?
4. What is your country of birth?
5. What best describes your ethnic/racial background?

Sometimes people who have no romantic or sexual partners despite desiring to have one define themselves as "Incels". Incels have been known to communicate on Internet sites and platforms such as Reddit and Facebook groups.

6. Have you heard of Incels?
7. Do you identify as an Incel?

c. Attention check instruction

Attention!

There are attention check questions in this survey. They are there to ensure that participants read the information carefully and provide quality data. If you are paying attention to the questions and instructions, it is very easy to pass these checks.

d. Social conservatism scale

How positive or negative do you feel about each issue on the scale of 0 to 100, where 0 represents very negative, and 100 represents very positive?

- 1: Abortion (reversed)
- 2: The family unit
- 3: Religion
- 5: Traditional marriage
- 6: Patriotism
- 7: Military and National Security

e. Social liberalism scale

On a scale from ranging from 1 (Strongly disagree) to 5 (Strongly agree), please indicate to what extent you agree or disagree with the following statements.

- 1: People who break the law should be given stiffer sentences.
- 2: Young people today don't have enough respect for traditional European values.
- 3: For some crimes the death penalty is the most appropriate sentence.
- 4: Censorship of films and magazines is necessary to uphold moral standards.
- 5: Schools should teach children to obey authority.

f. Self-perceived mating success scale

The following statements are about how you perceive your mating behaviour/success. Please indicate how well these statements describe you ranging from 1 (Strongly disagree) to 7 (Strongly agree).

- 1: Members of the sex that I am interested in, tend to like me back.
- 2: Members of the sex that I am interested in notice me.
- 3: I receive many compliments from members of the sex that I am interested in.
- 4: Members of the sex that I am interested in are not very attracted to me. (reversed)
- 5: I receive sexual invitations from members of the sex that I am interested in.
- 6: Members of the sex that I am interested in are attracted to me.
- 7: I can have as many sexual partners as I choose.
- 8: I do not receive many compliments from members of the sex that I am interested in. (reversed)

g. Liberal feminist attitudes scale

On a scale from ranging from 1 (Strongly disagree) to 6 (Strongly agree), please indicate to what extent you agree or disagree with the following statements.

- 1: Women should be considered as seriously as men as candidates for the Presidency of a country.
- 2: Although women can be good leaders, men make better leaders.
- 3: A woman should have the same job opportunities as a man.
- 4: Men should respect women more than they currently do.
- 5: Many women in the work force are taking jobs away from men who need the jobs more. (reversed)
- 6: Doctors need to take women's health concerns more seriously.

7: Women have been treated unfairly on the basis of their gender throughout most of human history.

8: Women are already given equal opportunities with men in all important sectors of their lives.(reversed)

9: Women are treated as second class citizens in Europe.

10: Women can best overcome discrimination by doing the best they can at their jobs, not by wasting time with political activity. (reversed)

h. Introduction for text-based stimuli

On the next page, you will be shown a brief text that describes a group of individuals who have no sexual/romantic experiences or partners despite the desire to do so called the "Incels" (involuntary celibates). Incels have been known to communicate on Internet sites and platforms such as Reddit and Facebook groups.

There is no time limitation to read the text, so feel free to take as long as you need. Please read the text carefully as you will be asked some questions about the text afterwards.

i. Empathic concern scale

Please rate how well the below items reflect your own feelings and opinions about Incels ranging from 'Does not at all describe how I feel' to 'Describes how I feel extremely well'. Please answer those truthfully and note that there are no right or wrong answers.

When thinking about Incels, I feel...

1: sympathetic

2: kind

3: compassionate

4: warm

5: soft-hearted

6: tender

7: empathic

8: concerned

9: moved

10: touched

j. Motive attribution (scaled)

Please rate the extent to which you think the following motives/reasons explain why some people become part of the online Incel subculture and engage in the Incel discourse?

People become part of the online Incel subculture and engage in the Incel discourse, because....

- 1: ...they have sexist and misogynistic motives.
- 2: ...they feel their masculinity is under attack.
- 3: ...they think they are entitled to sex.
- 4: ...they want to vent their frustration.
- 5: ...they seek emotional support.
- 6: ...they suffer from mental health issues.
- 7: ...they are lonely.

k. Motive attribution (ranked)

Can you now please rank order the listed reasons/motives below according to what you think is the most accurate one? You can order the motives by dragging and dropping. Number 1 means the most relevant reason/motive, and number 7 means the least relevant one.

People become part of the online Incel subculture and engage in the Incel discourse, because....

- 1: ...they have sexist and misogynistic motives.
- 2: ...they feel their masculinity is under attack.
- 3: ...they think they are entitled to sex.
- 4: ...they want to vent their frustration.
- 5: ...they seek emotional support.
- 6: ...they suffer from mental health issues.
- 7: ...they are lonely.

l. Manipulation check items

Based on the previous description about Incels, how would you rate Incels in the following traits?

I think Incels are...

- 1: violent
- 2: mentally ill
- 3: dangerous

4: misogynistic/ hate women

5: searching for belonging

6: self-loathing

m. Debriefing

Thank you very much for participating in our study!

Precisely, our study investigates how the perception and empathy towards Incels is moderated by factors such as gender, mating success, and political affiliation/ attitudes. Furthermore, there were two conditions, one of which focused only on violent/extremist iterations of the Incel ideology, while the other condition took a more nuanced approach.

We thank you for your help and the decision to participate in our study. If you know of any friends or acquaintances that are eligible to participate in this study, we request that you do not discuss it with them until after they have had the opportunity to participate. Prior knowledge of the questions asked during the study can invalidate the results. We greatly appreciate your cooperation.

For further information about this study, you may contact **Lorenz Ostermann, l.m.ostermann@utwente.nl**, the person in charge of this research study.

If you have any questions about the rights of research participants, please contact the Ethical Review Committee of the Behavioral and Management Sciences Faculty, University of Twente, Netherlands, **ethicscommittee-bms@utwente.nl**.

If you are feeling distressed and are unable to contact a person associated with this study, please contact the **Counselling centre at the University of Twente at +31 53 489 2035**. Thanks again for your participation.