Viewer Perceptions of and Attitudes Towards Asexuality in Response to Entertainment Media Representation

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Abstract

With the popularity of LGBTQIA+ representation in media rising, it is important to understand the relation to viewers' attitudes, especially for underrepresented sexual minorities such as asexuality. A mixed method approach was employed, with 108 participants split into two conditions completing the Attitudes Towards Asexuals (ATA) Scale before and after viewing a clip from entertainment media. Open questions were also asked: how the clip made them feel, their opinion of the character, and their definition of asexuality. Thematic content analysis, and an analysis of the tone and emotions in the open responses supplemented the quantitative data.

The results indicate significant differences between the attitudes of LGBT compared to non-LGBT respondents, religious groups, and those with more compared to less familiarity with asexuality. The qualitative findings underline the importance of nuanced characters with whom diverse viewers can empathise. Overall, the insight from this research can inform and guide the development of asexual characters in entertainment media so that viewer's attitudes towards asexuality are positive. Complementary to this, future research should seek to clarify which impact different variations of an asexual representation have on viewers' attitudes, and whether the influence on a range of demographic groups is dependent on specific features.

Introduction

"I'm not gay. I mean, I don't think I am, but... I don't think I'm straight, either. I don't know what I am.

I think I might be nothing." (Bob-Waksberg, 2016)

When the Netflix show "Bojack Horseman" had character Todd reveal that his sexual orientation was 'nothing', then openly portrayed him as not experiencing sexual attraction (also known as *asexuality*), it was an important development in the portrayal of non-heteronormative characters in entertainment media: Todd became one of the only complex asexual characters in mainstream media, making this group more accessible to viewers. Although media character diversity is increasing, with regularly appearing LGBTQIA+1 characters rising from 3% in the 2009-2010 television season to 10.2% in the 2019-2020 season, many LGBT sexual minorities, like asexual individuals, remain under- or misrepresented (GLAAD, 2009; GLAAD, 2019).

More specifically, Todd in Bojack Horseman was the only recurring asexual character counted in the latest television season (GLAAD, 2019), limiting viewers' access to portrayals of this sexual minority. Characters in media, like Todd, can influence viewers' attitudes in various ways: previous research has shown that media can impact perceptions of topics in several ways (Chong & Druckman, 2007; McCombs, 2005). It is also possible for viewers to form bonds with media characters as they would with people within their immediate environment (Schiappa, Gregg & Hewes, 2005), which can potentially result in adjusted attitudes. Especially with limited other material on which people can base their attitudes, the effect of entertainment media representations of asexuality is important: both with respect to the visibility that it gives asexuality, and the potential influence on attitudes. Should a sole source produce negative attitudes among viewers, the effect would likely be widespread because of the lack of opportunities for counteraction, and consequently it could be detrimental for asexual individuals' position in society. Understanding the influence of an entertainment media portrayal of asexuality on viewers' attitudes can offer insight for the development of further media representations and perhaps increase the formation of positive attitudes.

Aside from media interest in topics of asexuality, academic interest in it is also growing. This is in response to increased visibility of the asexual community and little scientific research into the topic, especially on peoples' attitudes towards asexuality. It has been suggested that asexual individuals experience a unique form of sexual prejudice, with their lack of sexual

¹ Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, Intersex, Asexual/Ally, and more. Henceforth referred to as LGBT for improved legibility, but with no intent to exclude any subgroup; the inclusion of all persons who do not consider themselves heteronormative is implied.

interest being viewed as a deficiency, and heterosexuals tending to dehumanise and discriminate against asexual individuals (Hoffarth et al., 2015; MacInnis & Gordon, 2012). This may be because sexuality is typically portrayed as the norm as opposed to asexuality.

Theories of media influence on attitudes

Agenda-setting and framing.

As indicated, media can play a role in the attitude formation of people in several ways. *Agenda-setting* is the media's ability to influence the relevance that people ascribe to a topic, depending on how saliently information is presented (McCombs, 2005). For underrepresented LGBT minorities, low salience could influence the attitudes of people towards related topics regarding the minorities – and by association – the minorities themselves, simply because of the impact of coverage and endurance of an issue in media on how people think (Salwen, 1988).

Attitude formation can also be influenced by the way information in media is posed. *Media framing* refers to the media's ability to skew people's perceptions of reality in line with its motives, as even small changes in the way that a topic is presented can elicit major changes in opinion (Chong & Druckman, 2007; Gonta et al., 2017). Depending on how LGBT individuals are portrayed in entertainment media, people's attitudes may vary accordingly.

Contact hypothesis.

Attitudes are not only influenced through information in the media, but also by contact to others. The *general contact hypothesis* states that negative attitudes (prejudices) stem from generalisations about groups made with too little or incorrect information (Allport, 1954; Schiappa et al., 2005). The suggested way to change this is to challenge the beliefs of people by bringing them into contact with the group against which they are prejudiced (Allport, 1954). Four conditions are proposed as conducive for contact to result in the most positive outcomes: equal status, common goals, intergroup cooperation, and support from an outside authority (Allport, 1954; Pettigrew et al., 2011). In a face-to-face situation, these conditions result in increased intimate acquaintance, increased tolerance, and feeling part of a unitary team (Allport, 1954). This also applies to sexual minorities, and over the years, the theory has been expanded to situations where direct contact with the other group is limited.

For example, the *imagined contact hypothesis* provides evidence that simply imagining a positive contact experience suffices to improve intergroup attitudes (Crisp et al., 2008). However, imagined intergroup contact may not work when people already hold negative biases, as these are more likely to be affirmed (Dermody, Jones & Cumming, 2013).

Alternatively, the *parasocial contact hypothesis* holds that contact to other groups can be achieved through relationships with characters in media. One of the main proposals is that

people perceive fictional characters like real people and can form strong attitudes to a person or group, thus imitating real contact (Bond, 2018; Schiappa et al., 2005). Parasocial contact can be especially relevant for attitudes towards under- or misrepresented LGBT minority persons such as asexual individuals: in the same way that face-to-face contact can reduce prejudice and improve attitudes, contact with media characters that leads to an increased feeling of connectivity and belonging to the same group (team) can produce the same positive outcome.

Individual factors influencing attitudes towards LGBT subgroups

Aside from contact or media representation influencing attitudes, several influential demographic variables along which attitudes towards the LGBT community or specific LGBT minorities vary have been pinpointed in previous research, and can serve as indicators as to how different groups of people may respond to asexuality.

Viewer age.

Younger viewers generally hold more positive attitudes towards members of the LGBT community, with a pronounced rift between age cohorts (Ayoub & Garretson, 2017; Woodford et al., 2012). One reason could be the increasing presence of LGBT characters in entertainment media over the past decades (GLAAD, 2019). Adolescents form their identities and attitudes by observing others during this stage of life (Ayoub & Garretson, 2017; Bandura, 2002; Gillig & Murphy, 2016), so growing up with more prevalent portrayals of LGBT topics may explain the difference to older viewers who grew up during a time with fewer such themes in media.

Sexual orientation, gender, and gender traditionalism.

Both sexual orientation and gender identification have been shown to impact attitudes towards members of the LGBT community. Heterosexuals and men generally have more negative attitudes than non-heteronormative people and women (Woodford et al., 2012). Gillig & Murphy (2016) found that a narrative about a gay youth tended to elicit disgust among heterosexual youths, with more disgust reported by men than women. One reason proposed was a misalignment between viewer and character characteristics (Gillig & Murphy, 2016). Other authors have suggested that women may be more compassionate towards minority groups because sexism and genderism sensitize them to oppression, whereas men hold a more privileged position in society in this respect (Woodford et al., 2012; Worthen, 2018).

Related to this, gender traditionalism also influences attitudes towards LGBT people. Those who endorse more traditional gender roles are less tolerant in their attitudes (Whitley, 2001; Woodford et al., 2012). Especially cisgender men have been found to report higher rates of transphobia and homophobia, hostile sexism, and gender traditionalism, possibly because they experience anxiety about their masculinity when confronted with non-traditional gender

concepts (Brassel & Anderson, 2019; Harrison & Michelson, 2019; Nagoshi et al., 2008). Considering this, women may be more receptive to LGBT representations in media than men.

Religiosity.

People with more positive attitudes towards LGBT persons tend to be less religious or atheist (Whitley, 2001; Woodford et al., 2012). Among those who are religious, negative attitudes are most prominent among religious orientations that have set beliefs about traditional gender roles (Woodford et al., 2012). Because of the connection to traditionalist views on gender, it is conceivable that these views and not the religious group itself elicits the attitudes.

Political ideology.

Multiple studies have shown that liberals hold more favourable attitudes towards LGBT people compared to conservatives, and those with more positive attitudes tend to be more politically interested in general (Lee & Hicks, 2011; Norton & Herek, 2012; Whitley, 2001; Woodford et al., 2012). One reason for the relationship to liberalism may be that conservatives often prefer to adhere to convention and tradition (Woodford et al., 2012). As with religiosity, it is conceivable that traditionalism in conservatism influences attitudes, and that these attitudes encompass all LGBT subgroups based on perceived deviance from traditional gender norms.

Knowledge about the minority group.

A powerful influence on attitudes is knowledge. For instance, knowledge about the biological origin of sexual orientation has been shown to be strongly associated with more positive attitudes towards LGBT people and their rights (Billard, 2018; Bowers & Whitley, 2020; Woodford et al., 2012). One study indicated that knowledge about the biological origin has a more pronounced impact on conservatives than liberals (Bowers & Whitley, 2020). This has an implication for the content of LGBT portrayals in entertainment media: portrayals that inform viewers whilst simultaneously providing a means of contact otherwise not met may have the most influence on a group of people shown to be less accepting otherwise.

Research question and hypotheses

Because media can reach many people, it is essential to understand which impact LGBT representations have on viewers' attitudes and why. This is especially relevant for consumers for whom entertainment media is a primary source of contact, and even more so for under- or misrepresented groups due to the potential impact on their standing in society. Demographic variables relevant in attitudes towards LGBT persons have largely already been determined, but specific research on the attitudes to media portrayals of asexuality is missing. Viewers' thoughts on the media portrayal of asexuality and how these correspond with their attitudes are

especially interesting. The overarching research question is therefore: What is the effect of an entertainment media representation of asexuality on viewers' responses towards this group?

The initial hypothesis is on the influence of the media portrayal on viewers' attitudes, that *H1: Viewers' attitudes towards asexual individuals will be more positive after exposure to a positive/ neutral asexual representation than with no exposure to an asexual representation.* The reasoning behind this is that the opportunity to connect to a positive/ neutral representation of asexuality through parasocial contact may improve viewers' attitudes (Schiappa et al., 2005).

Regarding individual (demographic) differences, the findings are expected to replicate previous research: (a) H2a: Younger people report more positive attitudes toward asexual individuals compared to older people, (b) H2b: Women report more positive attitudes toward asexual individuals compared to men, (c) H2c: LGBT people report more positive attitudes toward asexual individuals compared to non-LGBT people, (d) H2d: Non-religious persons report more positive attitudes toward asexual individuals compared to religious persons, (e) H2e: Liberals report more positive attitudes toward asexual individuals compared to conservatives, and (f) H2f: If familiarity with asexuality is reported, the attitude will be more positive toward asexual individuals than if no or less familiarity is reported.

Method

Design

A descriptive cross-section questionnaire survey design was used with two groups to enable comparisons between the groups regarding the influence of (non)exposure to asexual portrayal on attitudes towards asexual individuals. The conditions ('asexual' and 'unrelated') deviated on a clip from entertainment media watched, with the former viewing a scene topicalizing asexuality, and the latter viewing a scene unrelated to (a)sexuality. The study was a mixed method research: a qualitative measure to supplement the quantitative data was included in the form of three open questions which were analysed in-depth on content.

Participants

165 responses were collected via convenience sampling on social media and SONA, and participation was voluntary. On SONA, participants received 0.25 credits as compensation. Data of a respondent under the age of 16, of two respondents who gave invalid responses to the open questions, and of 54 respondents with missing data, were removed. There were 108 remaining participants used for analysis, split across the two conditions.

The ages of 52 participants in the *asexual condition* ranged from 18 to 81 (M = 27.81; SD = 13.38). 44.2% identified as male and 55.8% as female. 80.8% identified as heterosexual,

3.8% as homosexual, 5.8% as bisexual and pansexual, and 1.9% as asexual or preferring to self-describe. 67.3% reported their primary nationality as German, 7.7% as Dutch, and 25% as Other (1 Belgian, 1 Brazilian, 1 Indonesian, 2 English/British, 1 Columbian, 1 Swiss, 3 Indian, 1 Bulgarian, 1 Swedish). 44.2% of participants reported identifying most with Christianity, 3.8% Islam, 1.9% Hinduism, 5.8% Buddhism, 40.4% as Nonreligious, and 3.8% as Other. Regarding political ideology, 5.8% identified as conservative, 48.1% as liberal, 11.5% as centre, 30.8% as non-political and 3.8% as other.

The ages of 56 participants in the *unrelated condition* ranged from 16 to 81 (M = 30.88; SD = 16.06). 32.1% identified as male, 62.5% as female, and 1.8% respectively as non-binary, transgender, and preferring to self-describe. 80.4% identified as heterosexual, 1.8% as homosexual, 7.1% as bisexual and pansexual, and 3.6% preferred to self-describe. 55.4% reported their primary nationality as German, 16.1% as Dutch, and 28.6% as Other (1 Albanian, 1 Romanian, 1 Swiss, 11 English/British, 1 Indian, 1 Turkish). 39.3% of participants reported identifying most with Christianity, 1.8% Judaism, 3.6% Islam, 1.8% Buddhism, 48.2% as Nonreligious, and 5.4% as Other. Regarding political ideology, 7.1% identified as conservative, 42.9% as liberal, 19.6% as centre, 23.2% as non-political and 7.1% as other.

Materials

Demographic questions and assessment of familiarity.

Before measuring participants' attitudes towards asexual individuals by means of a scale and open questions, participants were asked for the demographic variables (a) age, (b) nationality, (c) gender identification, (d) sexual orientation, (e) religious orientation, and (f) political ideology. Participants were also presented a one-item measure assessing their familiarity with asexuality on a 4-point Likert scale ('Not familiar', 'Somewhat unfamiliar', 'Somewhat familiar', 'Familiar') part-way through the questionnaire. For this study, familiarity (rather than knowledge) with asexuality was assessed under the assumption that participants who were more familiar with asexuality would also have more knowledge.

Attitude Towards Asexuals (ATA) Scale.

The Attitudes Towards Asexuals (ATA) Scale (Hoffarth et al., 2015) was used in English to measure participants' attitudes towards asexual individuals before and after viewing a short media clip. The 16 items include modified questions from the Attitudes toward Lesbians and Gays (ATLG) Scale (e.g., 'Asexuality is a problem or defect'), questions assessing attitudes towards asexuality (e.g., 'Asexuality is an inferior form of sexuality'), beliefs about asexual individuals (e.g., 'Asexual people are sexually repressed'), and denial of the existence of asexuality (e.g., 'Asexuality is probably just a phase'). Participants responded on a 9-point

Likert scale, ranging from "strongly disagree" to "strongly agree" and coded ascendingly from 1 to 9, whereby higher scores indicate stronger anti-asexual attitudes. The ATA Scale has a strong reliability ($\alpha = .94$) and convergent validity with other related measures (Hoffarth et al., 2015). With the data of this study, the scale also exhibited strong reliability ($\alpha = .88$).

Media clips.

Two clips from the series "Bojack Horseman" were used, with the groups viewing either the clip in which the asexual character, Todd, is openly portrayed as asexual (asexual condition), or where sexuality is not mentioned (unrelated condition). In the asexual condition (Velzerat, 2017), Todd Chavez attends an 'Asexual meetup' and is taught about asexuality and a-romanticism by a married asexual couple, following his assertation that it is "pretty wild for an asexual to get married". In the unrelated condition clip (king Horseman, 2018), Todd Chavez is depicted behind a desk with a rudimentary sign behind him displaying 'Todd's Publicity Company (Publici-Todd)'. As publicist for another character, Bojack Horseman, Todd gives dissatisfactory advice on potential acting roles, with no mention of (a)sexuality.

Qualitative measures.

Three open questions assessed all participants' responses having seen the short media clips. First, they were asked 'How did the short clip make you feel?', then 'What is your opinion of the main character?', and lastly 'How would you define asexuality?'. Besides this, an attention check was included to assess whether participants had paid attention to the media clip.

Software.

The statistical software SPSS (IBM SPSS Statistics 24) was used to analyse the quantitative data, and the text analysis programme LIWC (LIWC2015; Pennebaker et al., 2015) was utilised for the qualitative responses.

Procedure

After accessing the questionnaire via SONA or a link provided to the platform Qualtrics (https://www.qualtrics.com/), participants were briefly introduced to the study and asked to provide informed consent before proceeding. Questions about demographics were presented first, then participants were presented with a questionnaire measuring their attitudes towards asexuality. Two other topics (on bisexuality and transgenderism) of other involved researchers were included, thus order in which the participants saw the parts about asexuality, bisexuality, or transgenderism was randomised. Within the parts, participants were randomly allocated to one of two conditions. For the asexuality part, participants were allocated to either 'asexual condition' (video clip where the asexuality of the main character was openly broached) or 'unrelated condition' (video clip where the sexuality was not broached).

After the ATA Scale, participants were asked one question to rate how familiar they are with asexuality, then asked to watch the video respective to the condition. Having watched the video, participants answered questions to determine whether they paid close attention to the clip's content, and they were then asked to respond to three open questions. Following this, participants were shown the ATA Scale again, measuring their attitudes post-exposure to the clip. This second measurement was included to check for differences between attitudes prior to and post watching the clip. At the end of the survey, participants were thanked for their participation and debriefed about the nature of the study, as this was not disclosed up-front to minimise the risk of only people already interested in the topic participating.

Analysis

Quantitative analysis: ATA Scale results.

For the quantitative analysis, (non)exposure to media and/or demographic group are independent variables, and scores on the measures of attitude dependent variables. Using SPSS, the mean scores on the ATA Scale were calculated (pre- and post-video measure), then the frequency of the demographic data analysed. The difference between the measures was also computed to provide an overview of potential attitude change, and to allow for a preliminary assessment of the direction of any change due to the media clip. To test the first hypothesis, a one-way ANCOVA was conducted to compare differences between the two groups on the post-video measure, with the pre-video measure as a covariate. To test H2a through H2f, ANOVA tests were conducted to determine if there were any differences in average scores of the respective groups. Further, differences between the reported nationalities were investigated.

Qualitative analysis: responses to the open questions.

The qualitative data obtained from the open questions was analysed using the text analysis programme LIWC, to determine the valence (more positive or negative) expressed. This analysis supplemented responses to the ATA Scale to gain further insight into attitudes towards an asexual character and asexuality. Before analysis, one respondent's answers were translated from German to English, and minor spelling corrections were made where applicable to ensure the most accurate outcome of the analysis. Furthermore, abbreviations and acronyms were fully formulated for the same reason.

Besides this, the responses of all participants to all three questions were manually appraised to provide in-depth insight into the thoughts that respondents had towards asexual individuals. Using thematic content analysis, themes were developed by reading the texts, and noting commonalities between them by highlighting passages that repeatedly came up, then revised by iteratively applying them to the texts. Overlapping themes were combined for

improved overview. Lastly, ANOVA tests were conducted with several LIWC categories: "tone", which is an evaluation of overall valence based on the content of the texts with a score between 1.00 and 100, as well as "positive emotions" and "negative emotions", which are given as the percentages of positive and negative emotions expressed in the texts based on the appearance of specific positively or negatively connotated words. At this point it is noteworthy to briefly intermit that the percentages do not indicate whether the emotion was directed at asexuality. However, the ANOVA tests were conducted nonetheless to provide an indication of potential differences on the open questions between different demographic groups.

Results

Quantitative analysis: ATA Scale results

The test criteria for accepting (or rejecting) the hypotheses was set prior to analysis. To accept the first hypothesis, the attitudes towards asexual individuals in the asexual condition had to be significantly higher than the attitudes in the unrelated condition after viewing the media clip, under consideration of potential differences in attitudes prior to watching the different media clips. To accept hypotheses H2a through H2e, there had to be a significant difference in the expected directions per demographic variable. To accept hypothesis H2f, the attitude measured before the video clip had to be significantly higher for people who indicated knowing what asexuality is than for those who indicated not knowing what it is. The level of significance was set at p < 0.05 for all hypotheses.

The scores for both conditions on the pre- and post-clip measurement ranged from 1.00 (lowest and most positive score) to about mid-scale with the highest score of 5.63 on the post-clip measurement of the unrelated condition. An overview of the average scores on both ATA measurements, the standard deviations, and the changes between the measurements is given in Table 1. Testing the first hypothesis, a one-way ANCOVA revealed that there was no statistically significant difference between the conditions on the scores for the second ATA measurement when controlling for the scores on the first ATA measurement [F(1,105) = 2.37, p = .127]. Furthermore, there was no significant difference between the conditions on the changed attitude score [F(1,106) = 2.60, p = .110]. Despite statistical significance lacking, there is a noticeable decrease from pre- to post-clip measure in the upper-bound scores of the asexual condition suggestive of an improvement in attitudes, and a slight increase in the unrelated condition. Nonetheless, the first hypothesis is rejected.

Table 1 *Mean scores (scale ranging from 1-9) on the attitude questionnaire and changes in score per condition.*

Condition	Score		Change in score
	Pre-clip measure	Post-clip measure	
Asexual	M = 2.31; $SD = 1.14$	M = 2.11; $SD = 1.01$	M =22, $SD = .43$
Unrelated	M = 2.21; $SD = 1.1$	M = 2.11; $SD = 1.18$	M = .09, $SD = .38$

Note. The negative value shows a reduction in mean score between the pre- and post-clip measure. This indicates a more positive attitude in the post-clip measure, with lower scores equating to more positive attitudes.

Table 2 provides an overview of the means for all the following tested groups. A one-way ANOVA testing hypothesis H2a indicated no significant differences between a younger (16-45 years) and older (46-81 years) cohort – split at around the median age of many countries (Central Intelligence Agency, n.d.; Eurostat, 2019) – in mean scores on the first measurement of attitudes [F(1,107) = 1.09, p = .299] or the second [F(1,107) = 1.39, p = .241]. Testing hypothesis H2b, there were no differences indicated between gender identification on the first [F(4,104) = 1.08, p = .371] or second measurement [F(4,104) = 0.41, p = .802]. For this reason, hypotheses H2a and H2b are rejected.

The ANOVA testing hypothesis H2c indicated a significant difference between LGBT and non-LGBT respondents on both the first [F(1,107) = 9.44, p = .003] and second measurement of attitudes [F(1,107) = 11.13, p = .001], whereby the mean score of non-LGBT participants was higher than the mean scores of LGBT participants: explicitly, this means that LGBT participants reported more positive attitudes than non-LGBT participants. Regarding hypothesis H2d, between religious, non-religious, and 'other' respondents, the test also indicated a significant difference on the first [F(2,106) = 7.83, p = .001] and second measurement [F(2,106) = 11.62, p < .001]. A Tukey post hoc test showed that the difference was between religious and non-religious participants on both the first (p = .001) and second (p < .001) measurement. On the second measurement, there was also a statistically significant difference between religious and 'other' participants (p = .045). The attitudes held by non-religious participants were therefore significantly more positive towards asexual individuals than the other groups in the respective measures. Testing H2e regarding political groups revealed a significant difference on the first measurement [F(4,104) = 2.54, p = .044], but not the second [F(4,104) = 2.06, p = .092]. The Tukey post hoc test did not reveal any statistically

significant differences between the individual political groups in either measurement. Thus, hypotheses H2c and H2d are accepted, and hypothesis H2e is rejected.

With regard to hypothesis H2f, between the answers on familiarity with asexuality the ANOVA indicated a significant difference on the first [F(3,104) = 5.11, p = .002] and second measurement [F(3,104) = 4.01, p = .01]. For the first measurement, a Tukey post hoc test revealed that participants who indicated familiarity with asexuality (by responding with either "Familiar" or "Somewhat familiar") scored more positively on the first measurement of attitudes than participants who indicated unfamiliarity, with the exception of the "somewhat unfamiliar" group which revealed no statistically significant differences to the other groups. It follows that participants who reported more familiarity hold more positive attitudes than those who reported less familiarity. Furthermore, because the mean scores for "familiar" (M = 1.89) and "somewhat familiar" (M = 1.85) visibly differ from those of "somewhat unfamiliar" (M = 2.78), hypothesis H2f is accepted.

A post hoc ANOVA test showed that LGBT respondents scored on average 3.24 on familiarity, indicating that most LGBT participants were either 'somewhat familiar' or 'familiar' with asexuality. There was a significant difference to non-LGBT participants [F(1,106) = 20.00, p < .001], who averaged 2.2, showing a tendency of participants to respond in the direction of 'somewhat unfamiliar'.

Although no hypotheses were drawn, differences in nationality were explored. Between the nationalities German, Dutch, and Other, the test indicated no significant differences on the first [F(2,106) = 1.30, p = .276] or second measurement [F(2,106) = 1.92, p = .152].

Table 2Mean scores for each tested group on the attitude questionnaire.

Group	N	Score				
		Pre-clip measure	Post-clip measure			
		Age				
Younger group	91	M = 2.21; $SD = 1.12$	M = 2.05; $SD = 1.11$			
Older group	17	M = 2.51; $SD = 1.13$	M = 2.40; $SD = 0.99$			
		Gender identification				
Male	41	M = 2.52; $SD = 1.18$	M = 2.28; $SD = 1.13$			
Female	64	M = 2.08; $SD = 1.08$	M = 1.99; $SD = 1.09$			
Non-binary	1	M = 2.88	M = 2.25			
Transgender	1	M = 1.81	M = 2.06			
Self-described	1	M = 2.06	M = 1.75			
Sexual orientation						
LGBT	21	M = 1.61; $SD = 0.60$	M = 1.43; $SD = 0.46$			
Non-LGBT	87	M = 2.41; $SD = 1.16$	M = 2.26; $SD = 1.14$			

Religiosity							
Religious	55	M = 2.65; $SD = 1.18$	M = 2.55; $SD = 1.18$				
Non-religious	48	M = 1.86; $SD = 0.93$	M = 1.66; $SD = 0.80$				
Other	5	M = 1.75; $SD = 0.61$	M = 1.43; $SD = 0.33$				
		Political ideology					
Liberal	49	M = 2.05; $SD = 1.06$	M = 1.87; $SD = 1.01$				
Centre	17	M = 2.41; $SD = 1.07$	M = 2.37; $SD = 1.14$				
Conservative	7	M = 2.75; $SD = 1.16$	M = 2.38; $SD = 1.09$				
Non-political	29	M = 2.57; $SD = 1.20$	M = 2.41; $SD = 1.20$				
Other	6	M = 1.35; $SD = 0.53$	M = 1.43; $SD = 0.50$				
Familiarity							
Not familiar	27	M = 2.80; $SD = 1.11$	M = 2.64; $SD = 1.11$				
Somewhat unfamiliar	29	M = 2.45; $SD = 1.14$	M = 2.17; $SD = 0.99$				
Somewhat familiar	34	M = 1.85; $SD = 1.04$	M = 1.81; $SD = 1.17$				
Familiar	18	M = 1.89; $SD = 0.85$	M = 1.73; $SD = 0.78$				
Nationality							
German	66	M = 2.18; $SD = 1.03$	M = 2.00; $SD = 1.05$				
Dutch	13	M = 2.03; $SD = 1.15$	M = 1.85; $SD = 1.09$				
Other	29	M = 2.53; $SD = 1.29$	M = 2.44; $SD = 1.10$				

Note. N = number of participants in this category.

Qualitative analysis: responses to the open questions

The text analysis programme LIWC gave insight into the word count, overall tone, and positive and negative emotions in the answers to the three open questions. Aside from this, the LIWC data was analysed in SPSS in relation to the conditions and demographic variables, and the texts were appraised for themes extending throughout the answers.

Open question 1: General feelings in response to the clip.

On the first question, 'How did the short clip make you feel?', 71.2% of responses in the asexual condition had a positive tone (indicated by a score above 50), whereas 28.6% of responses in the unrelated condition did. The tone differed significantly between the asexual and unrelated conditions on the first open question [F(1,106) = 18.10, p < .001] with a mean of 69.49 (SD = 37.09) in the asexual condition with an average of 7.16% of the text reflecting positive emotions and 6.00% negative emotions. In the unrelated condition, the mean was 38.27 (SD = 39.01) with an average of 5.24% positive emotions and 4.51% negative emotions. It follows from this that the asexual condition responses had a more positive valence, though it is noteworthy that the lower percentages of both positive and negative emotions expressed in the unrelated condition are suggestive of a more neutral tone, and not necessarily a more negative tone. Nonetheless, the difference in tone and emotion seem to support hypothesis 1.

There were no significant differences in tone between the age groups, genders, sexualities, religious ideologies, political ideologies, or prior familiarity with asexuality, and none of the tested groups differed in positive emotions expressed, thus there was no support in these findings for hypotheses H2a through H2f. However, regarding negative emotions, there was a significant difference between age groups in the unrelated condition [F(1.54) = 7.94, p]= .007], with the younger group's responses on average containing 3.18% negative emotions and the responses of the older group's on average 10.65%. There was also a difference on political ideologies in the asexual condition [F(4,47) = 4.52, p = .004], for which a Tukey post hoc test revealed significant differences comparing the political ideology "Centre" to "Liberal" (p = .002) and "Non-political" (p = .002), due to the a mean of 34.09% negative emotions of respondents who identified as "Centre" compared to a mean of 3.16% and 1.12% of respondents who identified as either "Liberal" or "Non-political", respectively. The findings for negative emotions to some extent support hypotheses H2a and H2e. Furthermore, it is notable that, though not statistically significant, the difference in tone between LGBT and non-LGBT participants was closer to significance in the asexual condition [F(1,50) = 3.20, p =.080] than in the unrelated condition [F(1,54) = 0.07, p = .799].

More in-depth insight was gained with respondents' quotes. Some recurring themes in the texts from the asexual condition were (a) interest or curiosity in the topic which was mentioned 7 times, (b) disinterest, indifference, or no emotional response towards the topic mentioned 15 times, (c) varied positive sentiments in response to the portrayal mentioned 16 times, (d) negative or mixed sentiments in response to the portrayal mentioned 8 times, and empathic feelings towards the main character mentioned 4 times. Some texts exhibited more than one theme, and other texts indicated confusion or focused on other aspects, such as how the dialogue entertained them (non-recurrent theme). See Appendix Table 3 for quotes.

The responses within the unrelated condition recurrently expressed no emotions or confusion because the clip was not related to asexuality, for example with participant 26 writing: "Neutral. I watched it twice but did not find the connection with asexuality [...]". Participant 50 wrote: "Confused. Did not understand what the clip has to do with sexual orientation". Several participants commented on how the humour of the show made them feel, with mixed sentiments, or expressed uncertainty about who the main character was.

Open question 2: Overall opinions of the main character.

On the second question, 'What is your opinion of the main character?', 28.8% of respondents in the asexual condition, and 46.4% of participants in the unrelated condition, had a positive tone. There was a significant difference in tone between the conditions on the second

open question [F(1,106) = 6.65, p = .011], with a mean score of 36.73 (SD = 36.78) with an average of 3.49% of the text reflecting positive emotions and 5.69% negative emotions in the asexual condition and 55.45 (SD = 38.52) with an average of 7.06% positive and 2.48% negative emotions in the unrelated condition. The difference between the asexual and unrelated conditions in positive emotions expressed was significant [F(1,106) = 4.33, p = .040], as was the difference between negative emotions [F(1,106 = 4.01, p = .048]]. This shows that on the second open question, participants in the asexual condition had a less positive valence than the unrelated condition, and they also expressed overall less emotions. Of the emotions expressed, the asexual condition texts contained more negative than positive emotions, which was reversed in the unrelated condition.

Like the first open question, there were no significant differences in tone between the age groups, genders, sexualities, religious ideologies, political ideologies, or prior familiarity with asexuality in either condition, thus no support was found for hypotheses H2a through H2f.

Within the asexual condition, recurring opinions of the asexual character came up, with participants describing him as (a) unlikeable/ unsympathetic a total of 3 times, (b) likeable/ sympathetic 7 times, (c) typical/ normal 3 times, (d) insecure/ unsure (general) 16 times, and (e) insecure/ unsure (about his sexuality) 18 times. Several participants also wrote that they had no opinion, with participant 57 elaborating that "It was too short to Form an opinion" and participant 45 that they "[...] cannot form a full opinion on the character from one clip [...]". Participant 27 described their opinion as "Neutral; Disinterested". Opposed to the theme of insecurity, participant 116 wrote that "[...] he seems to be proud and happy [...]". See Appendix Table 4 for further quotes.

The responses from participants in the unrelated condition again indicated confusion as to who the main character was, with many writing that they had no opinion. The opinions that clearly referred to Todd were both positive and negative, with one participant writing that "The publicist guy seemed a bit nuts but friendly!" (Participant 53) or "he clearly had some ambitions and seemed like an honest, nice guy" (Participant 74). Others wrote that they "don't really like him because of his character traits and way of speaking. The asexuality is actually one of the only traits that make him interesting in the show I think" (Participant 26), or that the "Main beanie guy is annoying" (Participant 71).

Open question 3: Individual definitions of asexuality.

Lastly, in response to the third question, 'How would you define asexuality?', an overall positive tone was held by 88.5% of participants in the asexual condition, and 73.2% of the unrelated condition. The average score for tone expressed in the asexual condition was 88.43

(SD=26.35), and the text consisted of on average 10.24% positive and 0.81% negative emotions. In the unrelated condition, the average score for tone was 77.9 (SD=33.85), with the text containing 9.13% positive and 0.56% negative emotions. The difference in tone was not significant on the third open question [F(1,106)=3.22, p=.076]. Both groups' texts had a positive valence, and they contained similar percentages of (mostly positive) emotions.

For question three there were also no significant differences in tone between the age groups, genders, sexualities, religious ideologies, political ideologies, or prior familiarity with asexuality in either condition. There was a significant difference in negative emotions expressed between age groups in the unrelated condition [F(1,54) = 5.44, p = .023], due to the younger group's responses on average containing .22%, and the older group's responses averaging 2.11% negative emotions. Unrelated to the hypotheses, nationality was explored and revealed a significant difference between nationalities in the unrelated condition [F(2,53) = 6.28, p = .004], where a Tukey post hoc test showed that "Other" nationalities had a lower score on tone than German (p = .022) and Dutch (p = .005) respondents. There was also a significant difference between nationalities in negative emotions the unrelated condition [F(2,53) = 4.29, p = .019], though the Tukey post hoc tests only showed a difference between "Other" and "Dutch" (p = .016) respondents, whereby the mean percentage of positive emotions included was 5.32% as opposed to 14.24%, respectively.

In the asexual condition, most participants defined asexuality in terms of (lack of) sexual attraction or interest, with some participants acknowledging a capacity for romantic intimacy, e.g.: "Asexuality is the sexual identity of a person who does not inherently feel sexual attraction towards anyone, regardless of gender. This does not include romantic attraction, and does not indicate any physical incapability to having sexual intercourse" (Participant 12). Some responses stood out because they differed from the majority, for instance with one participant writing: "a person who is not interested in sexuality. There must be a kind of graduality from zero interesse to very much interested" (Participant 47). Other participants wrote: "[...] I also believe asexuality, transgender, bisexual and etc. is not something that you already have since born, it's something that can be change like the way you decide you're a asexual or you're a bisexual. You could change it into heterosexual if you want to actually" (Participant 78) or "I would define asexuality as an individual's complete lack of libido regardless of one's sexual orientation" (Participant 93). One participant defined asexuality as "the absence of sexual contact" (Participant 103).

In the unrelated condition, participant responses mimicked those of the asexual condition. Most defined it as a lack of sexual attraction, with some including the aspect of

romantic attraction, and some responses stood out. One person wrote that "asexuality has many forms. It's a spectrum just as all other categories of sexuality" (Participant 28). Another that "asexuality means not being able to identify with a specific gender. It's more like not knowing about one's own sexual belonging" (Participant 43). Unlike the asexual condition, a couple of participants also wrote about not having sufficient knowledge of asexuality to define it.

Discussion

Overview

The aim of this research was to examine the effect of an entertainment media representation of asexuality on viewer's attitudes towards asexuality. Overall, the results obtained from the ATA Scale and open questions indicate no definitive positive influence on attitudes towards asexuality following an asexual media portrayal. In answer of the research question, "What is the effect of an entertainment media representation of asexuality on viewers' responses towards this group?", there was no direct effect of the asexual media representation visible on the second measurement of attitudes, but the qualitative responses of participants were ambivalent with varied participant opinions. They indicate that both negative and positive feelings were elicited, though the former pertained more to the character and the latter to the fundamental representation of asexuality.

Age and gender differences

Against expectations based on previous findings in literature, initial analyses revealed no significant differences between different age categories in the ATA Scale scores, or between genders on either the quantitative scores from the ATA Scale or in tone or emotions expressed in the open questions. An explanation for this could be sought in the age distribution of the sample, as the median age of 22 is below the European national average of 43.1 in 2018, from which the highest percentage of participants stemmed (Eurostat, 2019). Furthermore, the arbitrary split of 45 years used to group younger and older participants may have played a role, as there were fewer participants above this age than below. The non-representativeness and distribution of the participants may have influenced the results. However, a closer look at the responses of the youngest as opposed to the oldest participants in the asexual condition to the first open question does show a discrepancy, with younger participants predominantly responding positively to the portrayal, and the responses given by older participants predominantly (but not exclusively) suggestive of increased distance to the topic. This is supplemented by the finding that on the first and third open question responses, older participants on average included more negative emotions in their responses than younger

participants did. The implications of this finding suggest that entertainment media ought to consider introducing positive asexual representations into storylines targeting an older viewer group to reduce the distance to this topic.

Political differences

There were also no significant differences between individual political ideologies in the quantitative data, though interestingly the political ideology "Centre" differed from "Liberal" and "Non-political" in terms of a higher percentage of negative emotions expressed in response to the first and third open question. Although the greatest difference was expected to those that identified as "Conservative", the fewer negative emotions expressed by "Liberals" compared to other groups was expected based on prior research. Aside from this, it was not expected that those who are "Non-political" have comparatively very low percentages of negative emotions in their texts, as previous studies have concluded that those who are more politically interested generally hold more positive attitudes to members of the LGBT community (Lee & Hicks, 2011; Norton & Herek, 2012; Whitley, 2001; Woodford et al., 2012). Perhaps it is an error to equate political ideology with interest in politics. From another perspective, perhaps a different phrasing of the demographic question would have changed which category the participants ascribed to, lest there were misunderstandings about the meaning of each provided category. Similarly, it might be recommendable to measure political ideology with a specified scale rather than using self-report, as political ideology could possibly be considered a sensitive topic to which some participants do not respond entirely accurately.

Furthermore, taking the responses to the third open question into consideration, there are no apparent differences in the definitions of asexuality that could explain the unexpected findings of those who are "Non-political". Opposite to the low negative emotions indicated by the LIWC analysis, amongst participants who defined themselves as being "Non-political", there were responses that suggested viewing asexuality as a choice or as sexual indecision, rather than as having biological aetiology. The findings are not in line with previous research as there is no replication of the finding by Bowers and Whitley (2020) that knowledge of biological aetiology is associated with more positive attitudes. It is possible that for open question three, for which participants were asked to define asexuality (i.e. not an affective question), the LIWC text analysis is inappropriate and distorted the results accordingly; the output of the emotions expressed cannot reliably be compared with attitudes on asexuality.

The qualitative insights based on the content of participants' texts suggest that focus on providing knowledge of asexuality may benefit viewer's attitudes, as many from the asexual condition commended the provision of information about asexuality and a-romanticism in the

clip. However, whether providing knowledge is more important for specific people or if the impact of on a certain group is more pronounced than on others remains open.

Differences between sexual orientations

In line with previous research, there were differences between LGBT and non-LGBT respondents on the ATA Scale. These could be understood in terms of familiarity, as LGBT respondents indicated being more familiar with asexuality than non-LGBT respondents, but previous findings from research could also serve as an explanation. For example, as suggested by research conducted by Whitley (2001) and Woodford et al. (2012), the participants that identified as LGBT may hold more flexible views regarding sexuality and are thus more tolerant than those who did not identify as LGBT. However, there were no significant differences in tone and emotion expressed in the responses to the open questions, which is surprising considering that perceived similarity was assumed to positively influence attitudes towards media characters, based on Bandura (2002) and Ooms, Hoeks, and Jansen (2019). It is conceivable that this influence is not as strong as presumed or that the cartoon style of the characters inhibits identification; however, the larger difference between LGBT and non-LGBT participant's tone on the first open question in the asexual condition as opposed to the unrelated condition at least hints at some influence on their opinions. From another viewpoint, it may be that the asexual representation did not necessarily speak to LGBT respondents more than others, as the difference in score on the ATA Scale could also be explained in terms of familiarity with asexuality. This could point to less impact of parasocial contact (Schiappa et al., 2005) on attitudes towards asexual media characters than previously thought and more impact of knowledge of and familiarity with asexuality, but future research would have to test this interpretation with exposure to an asexual representation over an extended period of time.

Religious differences

Between the religious and non-religious participants, the difference in attitudes (based on the scores on the ATA Scale but not on the responses to the open questions) replicates findings from previous studies, as a relationship between more positive attitudes towards members of the LGBT community and less religiosity has already been established (Whitley, 2001; Woodford et al., 2012). The lack of difference on the responses to the open questions in both asexual and unrelated condition suggests that the asexual representation cannot be credited with influencing the attitudes. The significant difference between the religious and "other" participants on the second measurement of the ATA Scale was also not replicated on tone or affective content of the responses to the open questions. A conclusion is difficult to draw, as of the five participants that chose the "other" category, two reported being agnostic (non-

religious), one as belonging to Jainism, and another did not elaborate. Due to the small number of participants in this group and the significance occurring only on the second ATA Scale measurement, it is possible that stimulating people to think about asexuality – either by having them fill out the ATA Scale and/or responding to the open questions – may have led to participants adjusting their tone in the open questions or attitude on the second measurement. However, then it would be expected to see a similar pattern for other demographic groups.

Differences in familiarity

The significant difference dependent on the familiarity of participants with asexuality is related to knowledge that participants likely had about asexuality, whereby the results are in agreement with current academic literature that more knowledge about a sexual minority generally leads to more positive attitudes (Billard, 2018; Bowers & Whitley, 2020; Woodford et al., 2012). Besides this, a partial explanation could be that LGBT participants were more likely to state familiarity with asexuality than non-LGBT participants; due to belonging to the same minority community, perhaps people who identify as LGBT are more likely to have encountered asexual persons or the concept of asexuality, and thus hold more positive attitudes. Furthermore, the significant impact of familiarity with asexuality on attitudes underlines the necessity for (entertainment) media to topicalize sexual minorities: without access to varied representations, viewers cannot be acquainted and familiarised with them, yet familiarity seems to be an important factor influencing attitudes.

Qualitative insight

From the qualitative analysis and subjective appraisal of the responses to the open questions, further insights were gained. For example, on the first open question there was an almost equal number of participants whose texts included positive themes to those with less positive or negative themes. Interestingly, more participants from the asexual condition than the unrelated condition had a positive tone in their response to the first open question about how the clip made them feel. The content of the responses often praises the portrayal of asexuality. Contrary to this, on the second open question about their opinions of the main character, this was reversed, and more participants from the unrelated condition had a positive tone than from the asexual condition. This tends to suggest that although people are happy to see the topic broached in entertainment media, many are unsympathetic to the character that was portraying asexuality for reasons unrelated to his being asexual. The less positive tone of voice in the asexual condition can also be explained by many participants mentioning how insecure the character seems. However, it is unclear what the effect of an insecure character on participant's attitudes is. Overall, although this shows the importance of the character on

attitudes formed in response to media portrayals, it also appears that viewers already interested in asexuality are happy that it is portrayed either way. For viewers new to the topic, it is perhaps therefore all the more important that their contact with the character representing asexuality leaves a positive impression.

Additional findings

Finally, although not initially a variable of interest, the differences between the nationalities "Other" and "German" or "Dutch" (unrelated condition) in tone and positive emotions on the third open questions are interesting. In the unrelated condition, most "Other" participants gave their nationality as British or English, suggesting a potential cultural influence on the phrasing of the definition of asexuality. Another contributing factor may be the ages of these participants, as a quick check of the average age of the British participants in the unrelated condition shows that it is much higher than the average age of all participants taken together (M = 51.91). Upon closer inspection of the content of the responses, none stuck out as particularly negative, thus this finding should also be interpreted cautiously under consideration of potential methodological limitations of LIWC, discussed below.

Strengths

This study had diverse participants, with a large age range (16-81), several different nationalities, gender orientations, sexualities, and religious or political ideologies, allowing for insight into how different groups may view asexuality or an asexual representation. For a study of this nature, the number of participants recruited was satisfactory. Furthermore, participants were randomly split into the asexual versus unrelated condition, reducing bias stemming from prior interest of participants into the topic.

By conducting in-depth qualitative analyses, the study has contributed to a field in which there is not yet much academic knowledge. Allowing participants to explore their thoughts in an open-question format meant that they could express themselves more in-depth than with a closed-question format. Including this in combination with the ATA measures allowed for methodological triangulation of the content from the open questions with the quantitative scores obtained. Consequently, the study offers more detailed and multifaceted insight into people's attitudes towards asexuality than with exclusively quantitative research and could thus help direct future media representations of asexuality to generate more awareness of and positive responses towards asexuality.

Limitations

Although the diverse participant demographics are a strength, it is also a limitation in that non-random convenience sampling was used as a recruitment strategy. This may have

potentially skewed the participant demographics as most participants were from the involved researchers' social surroundings. For this reason, the results of this study must be carefully generalised. Furthermore, despite the randomisation there were some noticeable demographic differences between the asexual and unrelated groups: for example, a higher percentage of women in the unrelated group than in the asexual group, and three participants who identified other than male or female in the unrelated group whereas there were none such in the asexual group. However, these factors were considered when contemplating the findings of the study.

The study suffered from many dropouts, with only 108 cases utilisable in the analysis, although 165 (partial) responses were recorded. Based on the responses to the open questions this is perhaps traceable to misunderstandings, for example about the repetition of the ATA Scale, as well as to confusion regarding the relevance of the clip in the unrelated condition. Considering that most participants reported their nationality as other than native English-speaking and one participant responded to the open questions in German, it is conceivable that a language barrier also caused many respondents to terminate participation partway through. Aside from this, cooperation on the study with other researchers meant that participants also filled out the Attitudes Regarding Bisexuality Scale - Male/Female Form (Mohr & Rochlen, 1999) and Attitudes Toward Transgendered Individuals Scale (Walch et al., 2012); thus, the total length (ca. 45 minutes) of the Qualtrics survey may have contributed to the dropout rate.

The confusion regarding the clip in the unrelated condition may have been avoidable with a different clip. In the current study the main objective was matching the scenes on length and the asexual character involved, although the unrelated scene did not mention sexuality. Based on the responses to the open questions it appears that not using a scene that topicalized sexuality meant that participants' confusion may have outweighed other emotions or opinions towards the main character. Additionally, the main character presented another issue in that participants in the unrelated condition oftentimes focused on the other character in the scene. In hindsight, it was not clear which character was of interest, as both characters talk in the clip and – for participants who know the series – it may have been further misleading because the other character is the main character of the series itself.

As a methodological limitation, the analysis with LIWC was conducted despite a low average word count of participant responses on the open questions. On the official LIWC website it is stated that texts with fewer than 50 words should be viewed with a degree of scepticism (LIWC, n.d.). The result of this may be that the analyses of tone and emotion within the responses may not be fully accurate, which is visible in a mismatch between some results and the subjective appraisal of the content of the open responses. However, because this study

primarily emphasised the content of the responses, using the statistical data generated with LIWC as supplement to underline the direction in which the responses of the different groups went, this limitation should not have severely impacted any conclusions drawn.

Conclusions

Due to the limited media representation of asexual characters it is important that those available present asexuality in such a way that viewers respond positively – or at least neutrally. From this study it becomes apparent that the current sole representation of asexuality in entertainment media elicits mixed responses, but also that certain participant groups may benefit from specific targeting due to a generally less positive attitude than other groups.

The responses of participants to the asexual character suggest that future entertainment media should emphasise a more serious, multi-faceted character whose asexuality is still a prominent feature, and with whom viewers can relate emotionally. The identification with the character may be further influenced by the type of media (i.e. cartoon vs. real people), but this requires additional research. Furthermore, many participants appeared to appreciate the knowledge which they gained from the short clip, and as knowledge or familiarity with asexuality has been shown to relate to more positive attitudes, it is advised that future programmes include a (subtle) educational element, too.

From an academic perspective, this study contributes in-depth insight into viewer's attitudes towards asexuality and an asexual representation, a heretofore relatively scarcely researched topic in comparison to other LGBT minority groups. It is possible to conduct further research building on this study, to pay more attention to specific demographic groups, or to assess the influence of different types of asexual representation on viewers. Specifically, future research may investigate the impact of an insecure representation (insecure character and insecure in their sexuality) on viewer attitudes towards asexuality or research the effect of different variations of asexual representation on attitudes. Especially for the latter suggestion there are many directions in which research could branch to develop this field.

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Appendix

Table 3Sentiments expressed within the asexual condition on question 1

Theme	Quote	Tone	Att.*	Sexuality	Religion
Interest/ curiosity (7)	"[] feel really curious. [] first time that I heard that asexuals hold romantic feelings for another []." (Participant 3)	91.78	1.44 (1.25)	LGBT	Christian
	"[] Because I have not speak to asexual people, it is interesting to hear about their feelings and asexuality." (Participant 103)	89.84	2.06 (1.50)	Non- LGBT	Non- religious
Disinterest/indifferent (15)	"[] I feel indifferent although very slightly more knowledgeable." (Participant 9)	25.77	3.63 (3.81)	Non- LGBT	Buddhist
	"It didn't make me feel anything special to be honest. [] the thought of having a romantic relationship without sexual interest in the partner sounds a little bit strange. []" (Participant 85)	94.01	3.63 (3.63)	Non- LGBT	Christian
Positive sentiments (16)	"[] glad that there are shows [] representing people that are usually under-represented in any media. [] encouraging to see that the purpose of the dialogue in the scene was specifically to educate the viewers about asexuality." (Participant 12)	98.27	1.00 (1.00)	LGBT	Non- religious
	"[] intrigued to see the topic of asexuality discussed [] proud of the acceptance shown in the clip." (Participant 17)		1.38 (1.38)	Non- LGBT	Non- religious
	"Relieved as the main character got real-life representation of asexuality, helping them to accept their own sexuality." (Participant 35)	99.00	1.75 (1.31)	LGBT	Non- religious
	"Good and more comfortable with asexual people." (Participant 39)	99.00	4.44 (3.00)	Non- LGBT	Christian

	"[] great to actually have a representation of asexuality in a TV show, []. I also liked that the topic was introduced as quite normal and like a regular conversation, which maybe makes some people realize that it is indeed just one of many sexual orientations []." (Participant 42)	73.64	1.19 (1.13)	Non- LGBT	Non-religious
	"Happy and elated about the portrayal of asexuality []." (Participant 49)	95.81	1.13 (1.13)	LGBT	Non- religious
	"Accepted:) As an asexual I feel like no one really talks about it. A lot of people don't even know what it is or means and to have a pretty big TV show like this have a segment about it is very nice." (Participant 65)	99.00	1.00 (1.00)	LGBT	Non-religious
Negative/ mixed sentiments (8)	"I don't like tv-series making some sort of 'jokes' about these serious topics + making the characters being asexual look a bit weird. Nevertheless, I think it is good that they put attention on topics like asexuality to make more people familiar with it." (Participant 30)	68.66	1.56 (1.50)	Non- LGBT	Non- religious
	"Although I agree with the message of the clip, the way it was acted out felt a bit robotic []. However, I am happy to see that people are so casual and open about asexuality being normal." (Participant 34)	95.29	1.00 (1.00)	Non- LGBT	Non- religious
	"Uncomfortable" (Participant 77)	1.00	3.81 (3.00)	Non- LGBT	Non- religious
	"Watching this video made me feel intolerant []. I understand that some people might feel less sexual attraction than others but I do not see why you have to put a label on it []. However, I did enjoy that the character received so much acceptance for his lifestyle." (Participant 94)	99.00	2.75 (3.13)	Non- LGBT	Christian
Empathy (4)	"It made me sad that the asexuality of the main character made him so insecure about if he is a love worthy	1.00	1.00 (1.00)	LGBT	Non- religious

human being. I had a lot of empathy for him being unsure about doing the right thing or deserving to be married." (Participant 45) "[…] Nonawakens empathy and 89.84 2.06 Nonunderstanding in me. [...]" (Participant religious (1.50)**LGBT** 103)

Note. Att* is the attitude score from the first questionnaire (and the second questionnaire).

Table 4Opinions given in the asexual condition on question 2

Theme	Quote	Tone	Att.*	Sexuality	Religion
Unlikeable/ un- sympathetic (3)	"[] a bit unlikeable mainly because he does not indicate confidence in his sexuality. []" (Participant 3)	1.00	1.44 (1.25)	LGBT	Christian
(-)	"He acts stupid, I don't like that. []" (Participant 30)	94.75	1.56 (1.50)	Non- LGBT	Non- religious
Likeable/ sympathetic (7)	"[] he seems like a person that tries to be a good human being. He looks like a nice, empathic person to be around." (Participant 45)	98.27	1.00 (1.00)	LGBT	Non- religious
	"To me, the main character seemed very open minded, which I regard as a positive trait. [] all in all he came across as a very genuine person []." (Participant 105)	25.77	2.00 (2.25)	Non- LGBT	Christian
Typical/ normal (3)	"I find him a typical example of a person who does not fit into the standards of sexuality set by an orthodox society. Due to blatant heteronormativity, and lack of representation and information about any non-hetero sexualities, even asexual people themselves are confused about how their sexuality might affect certain aspects of their lives []." (Participant 12)	41.35	1.00 (1.00)	LGBT	Non-religious
	"The main character looks like a normal person. [] a little bit self-conscious about himself. A person	66.89	3.63 (3.63)	Non- LGBT	Christian

	who needs to talk to his friends or other closer people around him to make him feel good in his own body and his actions." (Participant 85)				
Insecure/ unsure (general) (16)	"I think the main character is seeking validation and someone to accept his sexuality. He seems scared of being judged. He is quite sure of his sexuality though and has no problems mentioning it to others. []" (Participant 17)	1.03	1.38 (1.38)	Non- LGBT	Non- religious
	"Insecure and confused but brave to tell his friends about his upcoming marriage as an asexual." (Participant 39)	1.00	4.44 (3.00)	Non- LGBT	Christian
	"Someone who is a bit unsure of himself and on the other hand open minded and trusting his friends." (Participant 47)	25.77	1.81 (1.31)	Non- LGBT	Christian
Insecure/ unsure (sexuality) (18)	"Seemed insecure about the fact that he is asexual." (Participant 13)	1.00	4.06 (4.13)	Non- LGBT	Christian
	"He seemed a bit insecure and cautious, maybe he still has some questions about his own sexuality []." (Participant 42)	3.73	1.19 (1.13)	Non- LGBT	Non- religious
	"He seems to be lovely but unsure about himself or his sexuality." (Participant 62)	25.77	3.25 (2.38)	Non- LGBT	Non- religious
	"The character still seems to feel insecure in his asexual identity as he still seeking approval and reassurance from his friends." (Participant 94)	95.81	2.75 (3.13)	Non- LGBT	Christian

Note. Att* is the attitude score from the first questionnaire (and the second questionnaire).