Exploring anti-asexual bias and future clinical contact intentions with asexual people among undergraduate psychology students

Vu Kym Le

The University of Adelaide

This thesis is submitted in partial fulfilment of the Honours degree of Bachelor of Psychological Science (Honours) at The University of Adelaide.

Word count: 9,144 words

Table of Contents

List of Tables

Abstract

Asexuality is defined as a lack of sexual attraction, which is believed to exist within 0.4 – 1.05% of the general population. In order to provide culturally competent and safe care, mental health professionals must assess their attitudes and biases towards asexual people. Although attitudes towards asexual people have been investigated among the general population and in a sample of university students, there has been little research on the attitudes held by mental health professionals. This thesis investigates undergraduate psychology students, as future mental health professionals, on their attitudes towards asexual people. The main aims were to determine demographic predictors and potential correlates of anti-asexual bias. Furthermore, we investigated how the predictors of anti-asexual bias affects students' willingness to engage in future clinical work with asexual people. The study recruited 231 participants from undergraduate psychology programs to complete an online survey assessing their attitudes towards asexual people, bias against singles, and gender ideologies. In addition, participants rated how comfortable and confident they felt about working with asexual people within mental health settings in the future. Participants who reported greater endorsement of traditional gender role ideology, and negative bias against singles, also reported greater levels of anti-asexual bias. Participants who reported lower levels of anti-asexual bias rated higher levels of comfort and confidence in future clinical contact with asexual people. Drawing on these findings, this thesis concludes by discussing the implications of anti-asexual bias in clinical settings and the provision of culturally safe and affirmative care for asexual people.

Keywords: asexuality, clinical care, attitudes, prejudice, cultural safety

Declaration

This thesis contains no material which has been accepted for the award of any other degree of diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made. I give permission for the digital version of this thesis to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time.

Contribution Statement

In writing this thesis, my primary supervisor and I collaborated to generate the research question, design, and appropriate methodology to carry out this research project. I completed the ethics application, created the research survey, and disseminated the survey to appropriate social media platforms and on the research participation system for first year psychology students. I was responsible for managing the credit system for first year students. My primary supervisor recommended some key articles, and I conducted a further literature search to write the literature review. I conducted the screening and analysis of the data and wrote up all aspects of the thesis with comments and feedback provided from my supervisors.

1 Introduction

In the context of human sexuality, 'asexuality' is defined as a lack of, or low levels of, sexual attraction (Bogaert, 2004, 2006, 2012, 2015; Brotto, Knudson, Inskip, Rhodes, & Erskine, 2010; Carrigan, 2011; Graves, et al., 2017; Prause & Graham, 2007; Robbins, Low, & Query, 2016). In academic research, human asexuality was first documented in the work of Kinsey and colleagues (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953), who noted a group of individuals who did not fit within the Kinsey scale (ranging from exclusively heterosexual to exclusively homosexual), and were labelled as 'group X'. In 1979, Storms expanded on the work of Kinsey and posited that asexuality was a fourth category of sexual orientation, describing asexual individuals as those who are not attracted to people of any gender and thus, score low on both hetero- and homo-eroticism. Since then, Bogaert operationalized asexuality as referring to individuals who 'had never felt sexual attraction to anyone at all' and identified 1.05% of individuals in a British national sample ($n > 18,000$) who were considered to be asexual (Bogaert, 2004, p. 284). Several studies have since indicated asexuality to exist in approximately 0.40 – 1.05% of the general population across a range of countries (Aicken, Mercer, & Cassell, 2013; Bogaert, 2004; Greaves, et al., 2017; Poston & Baumle, 2010; Zheng & Su, 2018).

Experts have debated whether asexuality is best categorized as a sexual orientation, paraphilia, pathology, or absence of a sexual orientation (Brotto & Yule, 2017; Deutsch, 2018). Most asexual organisations (e.g. The Asexual Visibility and Education Network; AVEN, 2020) have adopted the view of asexuality as a sexual orientation, and this also reflects the current consensus among experts (Bogaert, 2006; Deutsch, 2018; Van Houdenhove, Enzlin, & Gijs, 2017). Bogaert (2006) defined sexual orientation as 'subjective sexual attraction', which is

separate from sexual behaviour and romantic attachment. As such, he argued that people who identify as asexual are not necessarily repressed or inhibited when it comes to physical arousal or sexual climax, nor that being asexual precludes sexual activity or masturbation for reasons other than sexual attraction. Other experts have also noted similarities in identity development among asexual people and other diverse sexualities (Bogaert, 2012; Brotto et al., 2010; Scherrer; 2008; Van Houdenhove, Gijs, T'Sjoen & Enzlin, 2015; Van Houdenhove et al., 2017). Thus, the current evidence and consensus among experts favours the categorisation of asexuality as a valid sexual orientation. The definition of asexuality, as described by AVEN, was adopted by researchers as it reflected the shared experiences of the asexual community. However, this definition is largely characterised by negative descriptions (i.e. lacking/absence of sexuality), warranting researchers to call for a potential revision of its definition towards a more positive framework for understanding and studying asexuality (Van Houdenhove et al., 2017).

The current definition of asexuality highlights a commonality in terms of an emphasis on the absence of sexual attraction. The term 'allosexual' is used by the asexual community to describe people who are non-asexual (Steelman & Hertlein, 2016). However, it is important to acknowledge that the definition of asexuality serves as a blanket term, concealing a significant degree of heterogeneity within the group (Brotto et al., 2010; Carrigan, 2011; Mollet, 2020; Zheng & Su, 2018). Asexual identities operate on a spectrum which varies based on their degree of sexual attraction (Brotto & Yule, 2017; Mollet, 2020; Steelman & Hertlein, 2016). Identities such as grey-asexual and demisexual are included in the spectrum of asexuality, describing limited sexual attraction in specific circumstances or until certain criteria are met (Brotto & Yule, 2017; Carrigan, 2011; Dawson, McDonnell, & Scott, 2016). In particular, the term 'gray-asexual' defines individuals who fall into a grey area between sexual and asexual (Brotto & Yule, 2017;

Mollet, 2020; Steelman & Hertlein, 2016). 'Gray-asexual' is also an umbrella term which includes, but is not limited to, individuals who (1) experience sexual attraction, but have low sex drive, (2) can enjoy and desire sex, but only in specific or limited circumstances, (3) do not normally experience sexual attraction, but may experience it sometimes, and (4) experience sexual attraction and drive, but these experiences are not strong enough to act upon (Steelman & Hertlein, 2016). The term 'demisexual' also falls within the gray-asexual umbrella and defines individuals who only experience sexual attraction after forming an emotional bond (Brotto & Yule, 2017; Mollet, 2020; Steelman & Hertlein, 2016). Individuals who identify as demisexual may experience a need to be friends, or date for a significant amount of time to form an emotional connection, before noticing and experiencing sexual attraction for the other person (Brotto & Yule, 2017; Mollet, 2020; Steelman & Hertlein, 2016). The Asexual Community Census, which surveyed 9869 asexual people internationally from 2016, found the majority of participants in the census identified as asexual (65%), followed by gray-asexual (10.8%), questioning (10.7%), demisexual (8.6%) and the remaining 5.5% were non-asexual (Bauer et al., 2018).

Some asexual people seek relationships for companionship, as well as emotional and intellectual connection (Brotto et al., 2010; Bulmer & Izuma, 2018; Carrigan, 2011). Thus, the distinction of romantic orientation (as separate to sexual orientation) is made to identify one's preferences regarding feelings of affection or infatuation (Bogaert, 2006; Carrigan, 2011; Dawson et al., 2016; Deutsch, 2018; Scherrer, 2008; Zheng & Su, 2018). Asexual people can have any romantic orientation which follows the same labelling pattern (i.e. heteroromantic, homoromantic, biromantic, panromantic, demiromantic, aromantic) as sexual orientation (Carrigan, 2011; Mollet, 2020; Scherrer, 2008). Aromantic refers to the absence of romantic

attraction and can be experienced by people of any sexual orientation (Bogaert, Ashton, & Lee, 2018; Brotto et al., 2010; Dawson et al., 2016; Deutsch, 2018; Scherrer, 2008). The asexual community census queried about romantic orientation, allowing participants to check as many identities which applied to them (Bauer et al., 2018). The census found the highest proportion of respondents identified as aromantic (29.5%), followed by demi and grey romantic (28.3%), questioning (24.6%), panromantic (24.2%), biromantic (18.7%), heteroromantic (17.8%) and homoromantic (7.9%).

Asexual people can also distinguish themselves based on their ideologies towards sex and sexual activity for themselves (Carrigan, 2011; Dawson et al., 2016; Steelman & Hertlein, 2016). When describing sexual activity, terms such as sex-favourable (desire sex for oneself), sex-indifferent (no opinion of sex for oneself), sex-averse (no desire of sex for oneself) and sex-repulsed (repulsed at the thought of sex) are often used amongst asexual people (Carrigan, Gupta, & Morrison, 2013; Carrigan, 2011; Dawson et al., 2016). Terms such as sex-positive, sex-neutral and sex-negative are used to describe one's ideology regarding sexual activity (Bulmer & Izuma, 2018; Carrigan, 2011; Steelman & Hertlein, 2016). An asexual person can, for example, identify as sex-positive and also sex-averse, indicating a view that sex is a positive experience between consenting adults, without desiring sex for themselves (Carrigan et al., 2013; Carrigan, 2011; Steelman & Hertlein, 2016).

Regarding demographics, research has observed asexual people are more likely to be older, and female (Bogaert, 2004; Greaves, et al., 2017; Rothblum, Krueger, Kittle, & Meyer, 2020). Asexual people are also more likely to be single (lower rates of ever being in a long-term relationship), be of lower socioeconomic status, and have lower levels of education (Bogaert, 2004; Greaves, et al., 2017; Prause & Graham, 2007). There is also evidence of a relationship

between being asexual and being non-cisgender (Greaves, et al., 2017; MacNeela & Murphy, 2015; Rothblum et al., 2020; Yule, Brotto, & Gorzalka, 2015). These findings are echoed to a degree in the asexual community census, with respondent's ages ranging from 13 – 75, a mean of 23 and a median age of 21 (Bauer et al., 2018). The majority of participants identified as female (63%), followed by non-binary (26%) and male (10.9%). Furthermore, 14.8% of participants identified as transgender (Bauer et al., 2018). The association between non-cisgender identities and asexuality may be related to an absence of sexual attraction removing certain gender-related and social pressures, allowing asexual people greater freedom to explore their gender (Chasin, 2011).

As a burgeoning area of study, there has already been some investigation into anti-asexual prejudice among the general population and in a sample of college students. However, there remains a gap in the knowledge of anti-asexual prejudice amongst mental health professionals. This thesis explores attitudes towards asexual people among a sample of undergraduate psychology students, as future mental health practitioners. It seeks to explore how gender ideologies, religiosity, negative biases towards single people, and prior contact with asexuals influence one's attitudes and willingness to work with asexual people in the future.

2 Literature Review

2.1 Asexual people, wellbeing, community

Qualitative studies on asexuality have identified themes of denial and social invisibility due to the negative societal attitudes towards asexuality (Carrigan, 2011; Robbins et al., 2016; Rothblum et al., 2020). Social invisibility, in this context, refers to the lack of knowledge and acceptance of asexuality (Gupta, 2017a; MacNeela & Murphy, 2015; Robbins et al., 2016). In particular, research has indicated that the disclosure of an asexual identity is often met with denial, which serves to dismiss or explain asexuality in ways that fit heteronormative and sex-normative assumptions. Asexuality is often labelled a sexual desire disorder (pathologising), a female gender stereotype (women as generally disinterested in sex), immaturity (a phase, attention-seeking), or an amendable state (Gupta, 2017a; MacNeela & Murphy, 2015; Robbins et al., 2016).

Deutsch (2018) investigated asexual people's experiences of microaggressions and found additional themes of disappointment from family members and friends, infantilisation, dehumanisation, ignorance, and assault/corrective rape to change an asexual orientation. The source of these denial narratives and microaggressions came primarily from friends, romantic partners, and family members (Deutsch, 2018; MacNeela & Murphy, 2015; Robbins et al., 2016). However, microaggressions were also experienced within school settings, religious institutions, in the media, among other sexual orientations in the LGBTQIAP+ (Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, Intersex, Asexual, Pansexual, and other gender and sexually diverse people) community, and with medical professionals (Deutsch, 2018).

Studies of mental wellbeing among other sexual minorities have clearly established the link between discrimination and mental health (Borgogna, McDermott, Aita & Kridel, 2019;

Scherrer, 2008; Yule, Brotto, & Gorzalka, 2013). The continued denial of asexuality and experiences of microaggressions over time contribute to minority stress, placing asexual people at greater risk of mental health concerns (Borgogna et al., 2019; Deutsch, 2018; Yule et al., 2013). In their study of mental health in self-identified asexual people, Yule, Brotto and Gorzalka (2013) found higher rates of anxiety, depression and suicidality amongst asexual people when compared to people of other sexual orientations. These findings were echoed in research by Borgogna, McDermott, Aita, and Kridel (2019), who studied anxiety and depression across gender and sexual minorities. Their findings indicated demisexual and pansexual people had the highest levels of anxiety and depression, followed by asexual people, then bisexual people, followed by lesbians and gay men. As MacNeela and Murphy (2015) aptly stated; "self identifcation [as asexual] places the individual in a threatening position that has to be managed" (p.800). Management involves both the navigation and resistance of threats to their identity. Navigating threats such as denial narratives and microaggressions, for an asexual person, often involve highly restricted disclosure even among close friends and immediate family (MacNeela & Murphy, 2015; Robbins et al., 2016). Further to this, Rothblum et al. (2020) highlighted that compared to non-asexual men, fewer asexual people were out to their healthcare providers. This may be due to a fear of pathologisation of their asexual identity (Deutsch, 2018; Flanagan & Peters, 2020; Foster & Scherrer, 2014), or alternatively, asexual people may refrain from disclosing their asexuality in the view that it is non-pathological (Gupta, 2017a; 2017b).

One factor which may buffer against mental health issues is connection with a community and social support. The asexual community predominantly exists online and is seen as a valuable and supportive resource for exploration and validation of their identity (Carrigan, 2011; Gupta, 2017a; MacNeela & Murphy, 2015; Robbins et al., 2016; Rothblum et al., 2020;

Yule et al., 2013). Research has found asexual and non-asexual participants to not differ significantly in the availability of social support, belongingness, and social well-being (Greaves, et al., 2017; Rothblum et al., 2020). These findings suggest that despite their experiences of social invisibility, asexual people are not necessarily socially isolated or lonely (Rothblum et al., 2020). Asexual individuals have also challenged and resisted the social norms around relationships and sexuality which contribute to their marginalisation (Gupta, 2017a). Many of the participants in Gupta's (2017b) study came to experience asexuality as a non-pathological and alternative way of being. Gupta (2017b) noted that approximately a third of their participants sought medical advice but refused treatment for low sexual desire in favour of 'making peace' with their experiences. The remaining two-thirds did not seek medical advice as they viewed asexuality as non-pathological. Instead, asexuality was viewed as healthy, with several positive aspects such as avoiding unwanted pregnancies, avoiding sexually transmitted infections, and experiencing more freedom to explore alternative relationships (Foster & Scherrer, 2014; Gupta, 2017b). Conceptualising asexuality in this way directly challenges sexual norms and rejects the attribution of pathology (Gupta, 2017a). Other ways that asexual people challenge sex-normative ideals include contesting the centrality of sexuality in their lives (desexualisation), negotiating meaningful alternative relationships, and engagement in asexual communities (Brotto et al., 2010; Brotto & Yule, 2011; Carrigan et al., 2013; Dawson et al., 2016; Gupta, 2017a; Robbins et al., 2016).

2.2 Experiences with clinical care

In consideration of the elevated rates of mental health concerns in asexual people and the tendency to pathologise asexuality as an abnormal experience, it is important to consider how practitioners can best work with asexual people in clinical settings. Regarding potential

pathologisation, there are currently two categories of low sexual desire in the Diagnostic and Statistical Manual of Mental Disorders which greatly overlap with asexual experiences (5th Ed; DSM-5; American Psychiatric Association, 2013; Bogaert, 2004; 2015; Brotto & Yule, 2011; 2017; Carrigan et al., 2013; Hinderliter, 2013; Steelman & Hertlein, 2016). These are the male hypoactive sexual desire disorder (HSDD), and the female sexual interest/arousal disorder (FSIAD; American Psychiatric Association, 2013; Brotto et al., 2010; Gupta, 2017b; Hinderliter 2013; Steelman & Hertlein, 2016; Van Houdenhove et al., 2017). The current DSM-5 details an exclusion criterion for HSDD and FSIAD which states that "if a lack of sexual desire is better explained by one's self-identification as asexual, then a diagnosis of FSIAD [or] Male HSDD would not be made" (American Psychiatric Association, 2013; Van Houdenhove et al., 2017).

However, this criterion of self-identification as asexual may be problematic for individuals who are unaware of, or have not fully explored asexuality as a possible identity. There is a current ongoing debate within the academic community on how to distinguish asexuality from HSDD and FSAID, without utilising self-identification. Some researchers cite a lack of "distress" associated with an asexual identity as opposed to individuals with a sexual desire disorder (Brotto & Yule, 2017; Gupta, 2017b; Van Houdenhove et al., 2017). However, this may also be problematic for both clients and health practitioners, as the source of distress may not come from a lack of sexual attraction, but rather asexual people may be distressed due to microaggressions and the denial of legitimacy which has been documented in the literature Brotto & Yule, 2017; Gupta, 2017b; Van Houdenhove et al., 2017). Interestingly, the participants in Gupta's (2017b) study indicated that individuals may pass back and forth between HSDD/FSIAD and asexuality as there was no clear-cut line to distinguish the two. Although participants indicated a positive preference for not engaging in sexual activity, many were also

supportive of the inclusion of HSDD/FSIAD in the DSM-5 as it remains useful for health practitioners and for some people (including asexual people) who may feel distressed about, and wish to remedy their low sexual desire (Gupta, 2017b; Hinderliter, 2013).

In addition to potentially misdiagnosing asexuality as a sexual desire disorder (in clients who may be unaware of asexuality), preliminary evidence in the UK National LGBT survey indicated that asexual people are more likely to be referred to services offering conversion therapies to change their sexual orientation (UK Government Equalities Office, 2018). Further to this, the survey also identified that faith organisations were the most likely group to have conducted conversion therapy (51%), followed by healthcare and medical professionals (19%), family members (16%), a person within their community (9%), and other avenues (14%). 11% of respondents preferred not to identify the source of conversion therapy (UK Government Equalities Office, 2018). Conversion therapies are considered to be a harmful practice which can lead to increased levels of depression, low self-esteem, and suicidal ideation and intention (Horner, 2012). The preliminary evidence on the practice of conversion therapy by medical and healthcare professionals is concerning considering the negative impacts it may have on mental health.

Research on asexual people's experiences with clinical care has found that although their interactions with practitioners were not entirely negative, practitioners were also not fully affirming of their identities (Foster & Scherrer, 2014; Jones, Hayter, & Jomeen, 2017). The participants in Foster and Scherrer's (2014) study were concerned over issues of pathologisation and anticipated a lack of knowledge and awareness about their asexuality amongst healthcare practitioners (Foster & Scherrer, 2014; Jones et al., 2017). These factors contributed to an overall distrust of healthcare providers, which is a barrier to treatment (Foster & Scherrer, 2014). Further

to this, research findings have also indicated that these factors account for a large proportion of asexual clients avoiding the disclosure of their identity in an effort to avoid negative experiences (Flanagan & Peters, 2020; Foster & Scherrer, 2014). However, Flanagan and Peters (2020), noted that asexual people are more likely to disclose their identity to a mental health (as opposed to a medical) practitioner. One explanation for this may be that asexual people perceive the disclosure of their identity as being more relevant in the context of mental health (Flanagan & Peters, 2020).

Across these studies, the recommendations strongly encouraged healthcare professionals to improve their knowledge of asexuality and gain awareness of the critical factors which impact asexual people (Foster & Scherrer, 2014; Flanagan & Peters, 2020; Gupta, 2017b; Jones et al., 2017). Healthcare practitioners must also evaluate their own biases, in particular, challenging their assumptions about desire, attraction, the role of sex in people's lives, and whether certain relationships are preferred over others (e.g. whether sexual relationships are preferred over platonic and romantic ones). Doing so can help to shift the focus on pathology to a more healthy view of asexuality, aligned with the experiences of asexual people (Carrigan et al., 2013; Foster & Scherrer, 2014; Flanagan & Peters, 2020; Gressgard, 2013; Gupta, 2017b; Jones et al., 2017). It is also recommended for practitioners to consider practical ways of signalling their acceptance of asexual identities (Foster & Scherrer, 2014). Foster and Scherrer (2014) provide a few examples such as inclusive intake forms, sexual diversity and asexual resources in the waiting room, and using gender-neutral language.

Further to this, Ginnicola and Ruggerio (2017) provided recommendations for working with asexual people in clinical mental health settings. Firstly, mental health practitioners must be able to formally assess the symptoms of low sexual desire as well as psychological distress, as

understanding the source of these factors are critical for differentiating between sexual orientation versus dysfunction. The practitioner should build a strong therapeutic relationship to provide the client with a safe space to explore and foster their identity development. When working with a client who is questioning, the practitioner should work collaboratively with the client to determine which labels (i.e. asexual or a sexual desire disorder) offer the best fit for the client's experiences. However, practitioners must be mindful of the client's reasons for accessing a particular service, and to remember that being asexual may not be the presenting issue the client is wanting to address. Providing psychoeducation and connecting the client with valuable resources and communities can also help to validate their identity and experiences.

Affirming practices are crucial in clinical work with asexual people, considering minority stress and experiences of marginalization (Foster & Scherrer, 2014; Flanagan & Peters, 2020; Jones et al., 2017; Ginnicola & Ruggiero, 2017). This involves acknowledging and validating the client's experiences of stigma and prejudice, which is both empowering and helpful for the client in developing skills for self-advocacy (Chasin, 2015; Foster & Scherrer, 2014; Ginnicola & Ruggiero, 2017). Following the above recommendations ensures the provision of culturally safe mental health care for asexual people. Cultural safety expands beyond the previous concept of cultural competency which highlighted the need for awareness of other cultures as well as one's own culture and biases, cultural sensitivity, and skills-based competencies to work with others (Curtis, et al., 2019). Cultural safety instead focuses on recognising the circumstances which have created power differences and inequalities between populations in clinical health care settings (Curtis et al., 2019). These circumstances may include social, political, historical, and economical aspects which have led to differences in power (Curtis et al., 2019). Instead of skill and knowledge-based competencies, cultural safety focuses on using a holistic and shared

approach for all individuals to feel safe and undertake learning together as they work towards shared outcomes (Curtis et al., 2019).

2.3 Attitudes towards asexual people

Attitudes towards asexual people and anti-asexual bias have been previously explored amongst the general population and in college students (MacInnis & Hodson, 2012). MacInnis and Hodson (2012) conducted two studies with heterosexual college students (n = 148), and heterosexual community members (n = 101) to assess anti-asexual bias. Participants in this study predominantly resided in Canada and the United States of America. Both studies demonstrated that asexual people were rated least favourably on a thermometer measure when compared against heterosexual, bisexual, and homosexual groups. They also found that asexual people were rated lower in uniquely human characteristics (e.g. humility, broadmindedness, optimism), suggesting that asexual people were seen as less than human (dehumanization). Further to this, heterosexual people in this study reported greater discomfort on measures of future contact intentions (e.g. renting to or hiring) with asexual people compared to other heterosexual people. Authoritarian ideologies such as Right-Wing Authoritarianism and Social Dominance Orientation were also associated with greater anti-asexual bias (MacInnis & Hodson, 2012).

In their community sample, MacInnis and Hodson (2012) included a less familiar sexual minority (i.e. sapiosexuals) which ended up being seen as more favourable than asexuality. MacInnis and Hodson (2012) concluded that anti-asexual bias was not solely driven by unfamiliarity and represents a subtype of sexual prejudice – a bias against non-heterosexual orientations. These initial findings were echoed in Hoffarth, Drolet, Hodson, & Hafer (2016), in their development of the Attitudes towards Asexuals (ATA) scale. The participants in this study (n = 339) were recruited from Mturk, a crowdsourcing website, with the majority of participants

residing in the United States of America. Hoffarth et al., (2016) also found anti-asexual bias was higher in men, and strongly correlated with an endorsement of traditional gender norms and sexism. However, Hoffarth et al. (2016) noted that education, awareness, and intergroup contact with asexual people was associated with decreased anti-asexual bias. As previously discussed, asexuality challenges not only heteronormativity but also the idea that sex and sexuality are an essential aspect of being human (Gupta, 2017b). MacInnis and Hodson (2012) touched on the idea that prejudice-prone individuals were perhaps more biased due to social deviance rather than the sexual behaviour of person who is a sexual minority. Gupta (2015) utilised the term 'compulsory sexuality' to describe these assumptions which marginalise various forms of non-sexuality. The denial narratives, microaggressions, and pathologisation experienced by asexual people are evidence of compulsory sexuality (Chasin, 2015; Hoffarth et al., 2016). Compulsory sexuality may be one explanation for the prevalence of anti-asexual bias in the absence of any moral opposition to sexuality which has been observed as part of homosexual prejudice (Hoffarth et al., 2016; Gupta, 2015).

2.4 Research Questions

Considering the recent research on asexuality, it is clear that asexual people experience significant marginalization and prejudice which may contribute to mental ill-health (Borgogna et al., 2019; Deutsch, 2018; Yule et al., 2013). In order to provide culturally safe care, it is recommended for healthcare practitioners to increase their knowledge of asexuality and challenge their existing beliefs which have contributed to the marginalisation of this group (Foster & Scherrer, 2014; Flanagan & Peters, 2020; Jones et al., 2017; Ginnicola & Ruggiero, 2017). Bias towards asexual people has been documented amongst heterosexual people in community and college samples (Hoffarth et al., 2016; MacInnis & Hodson, 2012). However,

there remains a gap in the literature on mental health practitioners' attitudes towards asexual people. Furthermore, there has been little investigation into how anti-asexual biases impact on a practitioner's willingness to work with asexual people in a clinical setting. Thus, this study will investigate undergraduate psychology students' attitudes towards asexual people, as future mental health professionals. Extending on previous research, this thesis seeks to investigate the following questions:

1. What demographic variables are related to increased levels of anti-asexual bias?
2. How are both gender-role ideologies and negative bias against singles (singlism) related to anti-asexual bias?
3. How does anti-asexual bias relate to future clinical contact with asexual people?
4. Do gender role ideologies and singlism affect the relationship between anti-asexual bias and future clinical contact intentions?

Based on previous findings, bias against asexual people is predicted to be higher among males, and those who report greater adherence to religion. Contact with asexual people is predicted to be associated with lower levels of anti-asexual bias. Anti-asexual bias is also predicted to be associated with bias against singles, and negatively associated with endorsement of egalitarian gender role ideology. Anti-asexual bias is expected to be negatively correlated with levels of comfort, confidence, and safety in future clinical work with asexual people.

3 Method

3.1 Participants

The inclusion criteria were that participants were aged 18 years or older and currently enrolled in undergraduate psychology courses in Australia. The survey was open for 10 weeks (April – June 2020) and received a total of 273 responses. However, 42 responses were removed, leaving 231 responses in the final sample reported in this thesis. Of the 42 removed responses, 11 only provided consent, 6 answered the demographic questions without continuing further, and 26 were removed due to missing data. Of the 231 participants, majority were aged between 18 and 24 years old (n = 192). In terms of gender, 169 participants identified as female, 60 identified as male, and 2 participants were non-binary. Two participants also identified as transgender. Table 1 provides a summary of the participant demographic information.

3.2 Procedure

Ethics approval was granted by the University of Adelaide Human Research Ethics Committee. The data were collected via an online survey. The survey was hosted on a research participant system for first year psychology students to obtain course credit. The survey was also posted to psychology student groups on social media for voluntary participation. Participants were provided with information about the study and indicated their consent before proceeding to the questionnaire.

3.3. Measures

Participants answered a collection of demographic questions (See table 1), and then proceeded to complete the following scales.

Table 1. Participant Demographics	(*n* = 231)
Age Category, *n* (%)	
18-24	192 (83.12)
25-29	13 (5.63)
30-34	9 (3.90)
35-39	3 (1.30)
40-44	6 (2.60)
45-49	3 (1.30)
50-54	5 (2.16)
Gender, *n* (%)	
Male	60 (25.97)
Female	169 (73.16)
Non-binary	2 (0.87)
Transgender, *n* (%)	2 (0.87)
Sexual Orientation, *n* (%)	
Heterosexual	182 (78.79)
Homosexual	9 (3.90)
Bisexual	23 (9.96)
Pansexual	8 (3.46)
Asexual	3 (1.30)
Prefer not to say	3 (1.30)
Another sexuality	3 (1.30)
Ethnicity, *n* (%)	

Caucasian	168 (72.73)
Asian	46 (19.91)
Middle Eastern	3 (1.30)
Mixed Ethnicity	7 (3.03)
Other	7 (3.03)
Religious background, *n* (%)	
Non-religious	116 (50.22)
Roman Catholic	23 (9.96)
Anglican	4 (1.73)
Other Christian	24 (10.93)
Muslim	9 (3.90)
Buddhist	10 (4.33)
Hinduism	6 (2.60)
Agnostic	13 (5.63)
Atheist	10 (4.33)
Preferred not to say	5 (2.16)
Another religion	11 (4.76)
Religiosity, *n* (%)	
Not at all	21 (9.09)
Somewhat	51(22.08)
Quite a bit	17 (7.36)
A lot	9 (3.90)
Not Applicable	133 (57.58)

Prior Contact with Asexual People, *n* (%)	
Yes	55 (23.81)
No	176 (76.19)
Pursuing a Career in Mental Health, *n* (%)	
Yes	94 (40.69)
No	51 (22.08)
Unsure	86 (37.23)

Attitudes towards gender roles scale.

Participants completed the Attitudes Towards Gender Roles Scale (ATGR; Andrade, 2016), which is a 23-item measure consisting of two subscales; encompassing traditional (e.g. "the man should have the main responsibility for the family's economic support"), and egalitarian (e.g. "Crying in front of other people is equally acceptable for men and women") division of gender roles. Items were rated on a 5-point likert scale (1 = strongly agree – 5 = strongly disagree). Items representing egalitarian division of gender roles are reverse coded. The items are summed to obtain an overall score (range: 23 – 115) with a higher global score indicating greater positive attitudes toward gender role equality. Cronbach's alphas indicate adequate internal consistency for each subscale: traditional division of gender roles ($\alpha = 0.79$), and egalitarian division of gender roles ($\alpha = 0.68$).

Negative stereotyping of singles measure.

Participants completed a 30-item measure of negative beliefs against singles (e.g. "People who do not marry can never truly be fulfilled") on a 5-point likert scale (1 = strongly disagree to 5 = strongly agree). Items 2 and 9 are reverse scored. The items are summed to obtain an overall score (range: 30 – 150) with higher scores indicating greater negative biases against singles.

Cronbach's alpha value ($\alpha = 0.95$) indicates significant internal consistency (Pignotti & Abell, 2009).

Attitudes towards asexuals scale.

Participants were provided with the definition of asexuality ("a person who experiences very little or no sexual attraction") and were asked to complete the attitudes towards asexuals (ATA) scale. The ATA scale consists of 16-items assessing anti-asexual bias (e.g. "Asexuality is probably just a phase") on a 5-point likert scale (1 = strongly disagree to 5 = strongly agree). Items 10, 14, and 16 are reverse scored. The items were summed to obtain an overall score (range: 16 – 80) with higher scores reflecting greater anti-asexual bias (Hoffarth et al., 2016). Cronbach's alpha value ($\alpha = 0.94$) indicates significant internal consistency.

Future clinical contact with Asexual people.

Participants were then asked a series of questions regarding future clinical work with asexual people. Future clinical contact was measured using three subscales: comfort, confidence, and safety. Participants were asked whether they were personally acquainted with a self-identified asexual person. Participants then rated their comfort (e.g. "I would feel comfortable providing mental health services to someone who identified as asexual"), confidence (e.g. "I would feel confident in providing a mental health service to asexual adults in the future"), and safety (e.g. "I consider myself to be a safe person for others to talk about their asexual identity") for future clinical work with asexual people. These items were rated on a 5-point likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. The scores for each subscale were summed, with higher scores indicated higher levels of comfort (range: 4 - 20), confidence (range: 4 – 20), and safety (range: 6 – 30) towards future clinical contact with asexual people. A global

future clinical contact score was also calculated (range: 14 – 70). Finally, they were asked if they hoped to pursue a career in mental health after completing their studies.

3.4 Analytic Approach

Upon closure of the survey, all data were exported into SPSS 26.0 and prepared for statistical analysis in the following ways. Firstly, religious background was coded as either religious, non-religious, other, and prefer not to say. The religious category encompassed all participants who indicated a specific religious background, and the non-religious category included all non-religious, atheist, and agnostic participants. Secondly, all negatively scored items on the ATA, singlism, and ATGR scales were reverse scored, and composite scores were generated for each, along with the future clinical contact intention scales. Statistical tests were run to determine any differences between completers and non-completers. In terms of demographics, there were no statistically significant differences between completers and non-completers. Incomplete responses were then removed from the data set. To assess research question one, descriptive statistics were generated, and either t-tests or ANOVAs were conducted. Bivariate correlations were run to assess research questions two and three, followed by a stepwise regression to evaluate research question four. Only statistically significant differences are reported below.

4 Results

Research question 1: Demographic predictors of anti-asexual bias

On average, participants reported low levels of anti-asexual bias ($M = 27.92$, $SD = 11.11$) as measured by the ATA scale. In relation to anti-asexual bias, differences in age and gender were not found to be statistically significant. However, anti-asexual bias was related to several other demographic variables. A one-way ANOVA yielded significant differences between religious

background F (3, 227) = 3.44, $p < 0.05$. A post-hoc Tukey test showed significantly higher levels of anti-asexual bias among participants who adhered to a religion as opposed to participants who were non-religious, atheist, or agnostic ($p < 0.05$). There were also significant differences in the degree of religious adherence F (4, 226) = 4.19, $p < 0.01$. A post-hoc Tukey test demonstrated significantly higher levels of anti-asexual bias among people who were somewhat religious when compared to those who were indicated being not at all religious ($p < 0.05$), and where religiosity was not applicable ($p < 0.05$).

Significant differences in relation to career direction were also found for anti-asexual bias, F (2, 228) = 2.99, $p = 0.52$. Tukey post-hoc analyses indicated significantly lower levels of anti-asexual bias in those who were looking to pursue a career in mental health than those who were not wanting to work in mental health ($p <0.05$). Regarding sexuality, significant differences were also found for anti-asexual bias F (4, 226) = 3.81, $p < 0.001$. Tuckey post-hoc analyses indicated heterosexual participants exhibited greater levels of anti-asexual bias than bisexual participants ($p < 0.01$). Significant differences in ethnicity in relation to anti-asexual bias were also found F (4, 226) = 7.80, $p <0.001$. Tukey post-hoc analyses indicated that participants from an Asian background exhibited higher levels of anti-asexual bias than Caucasian participants ($p < 0.001$), and participants in the ‘other’ category ($p < 0.05$).

A t-test was run to determine differences in anti-asexual bias in relation to prior contact with an asexual person. Significant differences were found in participants who personally knew an asexual person (M = 24.56, SD = 8.89) compared to participants who did not personally know an asexual person (M = 28.97, SD = 11.54); t (229) = -2.597, p < 0.01.

Research question 2: Relationships between gender ideology, singlism, and anti-asexual bias

On average, participants reported greater levels of egalitarian gender role ideology (M = 98.03, SD = 11.57) as measured by the ATGR scale, and low levels of negative bias against singles (M = 63.87, SD = 20.56). Anti-asexual bias was found to have a strong negative correlation with the endorsement of egalitarian gender role ideologies ($r = -0.760$, $p < 0.001$). A moderate positive correlation was found between anti-asexual bias and negative bias against singles ($r = 0.677$, $p < 0.001$). Egalitarian gender role beliefs and negative bias against singles was also found to have a moderate negative relationship ($r = -0.610$, $p < 0.001$).

Research question 3: Relationships between anti-asexual bias and future clinical contact intentions

On average, participants reported moderate to high levels of comfort (M = 17.92, SD = 2.33), confidence (M = 16.74, SD = 3.64), and safety (M = 20.35, SD = 3.53) regarding future clinical contact with asexual people. Overall future clinical contact intentions (M = 55.00, SD = 7.55) was found to have a moderate negative correlation with anti-asexual bias ($r = -0.434$, $p < 0.001$). Regarding each subscale, anti-asexual bias was found to have a moderate negative correlation with comfort in the context of future clinical contact with asexual people ($r = -0.480$, $p < 0.001$). A weak negative relationship was found between anti-asexual bias and confidence in the context of future clinical contact with asexual people ($r = -0.268$, $p < 0.001$). A weak negative relationship was also found between anti-asexual bias and safety in the context of future clinical contact with asexual people ($r = -0.334$, $p < 0.001$).

Research question 4: The role of gender ideology and singlism in mediating the relationship between anti-asexual bias and future clinical contact intentions.

Table 2. Stepwise regression predicting future clinical contact intentions (N = 231)

Variable	*B*	*SE B*	*β*
ATA	-0.295	0.040	-0.434
R2	0.189		
F	53.203*		

*p < 0.001

To test the hypothesis that gender ideology and singlism plays a mediating role in terms of the impact of anti-asexual bias on future contact intentions, a stepwise regression was conducted. Table 2 displays the results. Levels of F to enter and F to remove were set to correspond to p levels of 0.05 and 0.100, respectively. Tests of multicollinearity indicated that a low level of multicollinearity (tolerance = 0.96) was present for both anti-asexual bias and future clinical contact intentions. Non-significant partial correlations were found for both egalitarian gender ideology and singlism (partial correlations equal 0.025, and -0.034, respectively). These variables were both excluded from the model of best fit. Thus, the results of the stepwise regression analysis did not support the hypothesis that gender ideology and singlism play a mediating role on the effect of anti-asexual bias and future contact intentions ($R = 0.43$, $R^2 = 0.19$). The overall F for the = model was 53.20, df = 1, 229, $p < 0.001$. Standardised beta weight for ATA was –0.43, indicating that for every unit increase of future contact intention, anti-asexual bias decreased by -0.43 units.

5 Discussion

Previous research on attitudes towards asexual people have thus far documented evidence of anti-asexual bias among samples of heterosexual participants. This thesis explored anti-asexual bias among undergraduate psychology students, so as to assess the attitudes of future mental health professionals. The main aims were to determine demographic differences and relationships between anti-asexual bias with other predictor variables and how this may affect future contact intentions with asexual people in a clinical setting.

Addressing research question one, in terms of age and gender, there were no significant differences found in anti-asexual bias, as measured by the ATA scale. Although Hoffarth and colleagues (2016), found greater levels of anti-asexual bias among males, this finding was not supported within this study. However, prior intergroup contact with an asexual person was found to be associated with lower levels of anti-asexual bias, in line with the findings of Hoffarth and colleagues (2016). Interestingly, a higher percentage of participants in this study reported knowing an asexual person (23.8% vs. 12%) than what was reported by Hoffarth and colleagues (2016). This study also found religion and degree of religiosity were related to greater anti-asexual bias. In addition, participants in this study who identified as a sexual minority demonstrated lower levels of anti-asexual bias, suggesting that asexual people are potentially viewed more favourably within the LGBTQIA+ community. Furthermore, participants who reported intentions to pursue a future career in mental health also rated lower in anti-asexual bias. These findings add to the literature, which had not previously explored these factors as predictors of anti-asexual bias.

Regarding research questions two and three, anti-asexual bias was found to be positively associated with bias against singles and negatively with the endorsement of egalitarian gender

role beliefs. These findings align with the results of Hoffarth and colleagues (2016), who also reported positive relationships between anti-asexual bias with singlism, the endorsement of traditional gender norms, and sexism. Furthermore, anti-asexual bias was negatively associated with future clinical contact intentions. In their sample of heterosexual people, McInnis and Hodson (2012) reported that participants indicated greater discomfort regarding future contact intentions with asexual people, as compared to other heterosexual and homosexual people. Furthermore, Hoffarth and colleagues (2016) also reported that anti-asexual bias was associated with lower contact intentions to interact with asexual people. Thus, these findings support the hypotheses that anti-asexual bias would be positively associated with singlism, and negatively associated with egalitarian gender roles and future clinical contact intentions.

Addressing research question four, the results indicated that egalitarian gender ideology and bias against singles did not mediate the relationship between anti-asexual bias and future clinical contact intentions. Anti-asexual bias alone, explains 18.9% of the variance in future clinical contact intentions. Overall, the findings reported in this thesis indicate that anti-asexual bias is the main predictor of future clinical contact intentions with asexual people. The results also support previously documented findings in the literature regarding relationships between anti-asexual bias with singlism and gender role ideologies. In terms of the demographic predictors of anti-asexual bias, it is possible that these differences may be attributed to gender ideology. Demographic factors such as ethnicity and religious background may indicate greater levels of anti-asexual bias due to cultural or religious beliefs which endorse traditional gender roles. Endorsement of traditional gender norms may be linked to beliefs about heteronormativity and compulsory sexuality, which are possible explanations for the prevalence of anti-asexual bias (Hoffarth et al., 2016; Gupta, 2015).

5.1 Implications

The results of this study indicate that students aiming for a mental health career (vs. those who were not, or unsure) exhibit lower levels of anti-asexual bias and this is the greatest predictor of how comfortable, confident, and safe the students perceive themselves to be for working with an asexual person. This may potentially indicate that these students may be more open minded to learning about asexuality and working with asexual people in a clinical setting. They may also be more open to shifting away from the view of asexuality as a pathology, and seeing it in a positive light, aligned with the experiences of asexual people. Most students rated quite high in levels of confidence and comfort for future clinical work with asexual people.

However, the safety measure fell a little short, as majority of students indicated that they did not often discuss asexuality with their peers and were unsure of where to find resources about asexuality. Therefore, the provision of additional educational materials and establishing an awareness of asexuality with students undertaking mental health study programs may be beneficial for the provision of mental health services for asexual people. Further to this, participants who had prior contact with an asexual person also exhibited lower levels of anti-asexual bias than those who had not. Intergroup contact is a potential area in which the acceptance of asexual people can be promoted. However, this may be difficult due the pattern of passing (as heterosexual) and highly restrictive disclosure among asexual people given their experiences of microaggressions, denial, and erasure. As such, the promotion of awareness and education will allow for greater visibility of asexual people and asexuality as a sexual orientation, providing more opportunities for intergroup contact.

At the organizational level, workplace engagement in further education and training would be beneficial to prepare for working with asexual people and the potential factors which impact

them on a daily basis. Due to their experiences of erasure and denial, some asexual people may even sometimes be under-represented in LGBTQIA+ pride and community awareness days or events. Workplaces may wish to explicitly mention asexuality within current LGBTQIA+ workplace events, to increase awareness, and perhaps inspire their colleagues or employees to further explore asexuality.

The topic of anti-asexual bias among health and mental health practitioners has received little attention in research and academia. This study provides further insight into this area, and the findings of this study have clear implications for clinical practice with asexual people. The provision of appropriate care for asexual people is particularly important considering previous findings, indicating elevated rates of mental health and other clinical issues related to asexuality (Bogaert, 2004; 2015; Brotto & Yule, 2011; 2017; Carrigan et al., 2013; Hinderliter, 2013; Steelman & Hertlein, 2016). In particular, providing culturally safe and affirmative care for asexual people plays an important role in unpacking and understanding asexuality, as well as navigation of internal and external factors which may impact on their wellbeing (Carrigan et al., 2013; Foster & Scherrer, 2014; Flanagan & Peters, 2020; Gressgard, 2013; Gupta, 2017b; Jones et al., 2017). Culturally safe care requires the practitioner to engage in continuous reflective practice to introspect and evaluate their own assumptions, attitudes, feelings, and behaviour when working with an asexual client (Carrigan et al., 2013; Foster & Scherrer, 2014; Flanagan & Peters, 2020; Gressgard, 2013; Gupta, 2017b; Jones et al., 2017).

Although there has been indication that asexual people are more likely to disclose their sexual orientation to a mental health professional, it is still important to address any barriers to seeking support or for disclosure. As described by Foster and Scherrer (2014), it may be helpful to signal asexual friendliness through symbols, flags, or other items on a professional website or

within the reception and waiting area. Furthermore, practitioners can also actively provide more positive clinical experiences for asexual people by working within a culturally safe and affirmative framework as highlighted by Foster and Scherrer (2014), Ginnicola and Ruggerio (2017), and Jones and colleagues (2017). In addition to the aforementioned strategies for working with asexual people, it is recommended for practitioners to be aware of their own biases regarding sex, sexuality, and relationships. Practitioners may also consider evaluating the power dynamics between themselves and the client, especially around the decisions made by the practitioner. For example, how the diagnosis and treatment of a sexual desire disorder, or potential referrals to conversion therapy may affect the client's overall wellbeing. In addition, it is important to work within the client's frame of reference as the literature has described the asexual community as a heterogenous group with the common experience of lacking sexual attraction. As mentioned earlier, there are many terms used within the asexual community to explicitly describe one's own attitudes, preferences, and behaviour. Therefore, a practitioner may come to expect many differences between each client who identifies as asexual.

It may also be useful for practitioners to be prepared to work with ambiguity and contradictory client experiences, due to the diversity within asexuality. Although many asexual people view their identity with pride and positivity, some experience negativity, which may be linked to compulsory sexuality and heteronormativity, and so contradictions and uncertainty may arise in this context. Practitioners may want to encourage the client to question their assumptions and thought processes about contradictory experiences. However, it is important to assess how this is helpful for the client, as it would not be beneficial if this process is used to steer or undermine the client's identity. Validating and affirming the client's identity may instead help

them to build confidence in themselves to make sense of their own internal and/or external experiences.

Further to this, practitioners should also be mindful of where, and how they direct a client to resources as there are potential contentions between groups within both the asexual, and LGBTQIA+ communities. Although the resources created by communities are invaluable, some spaces such as community forums may contain common community problems such as heated debates which may be triggering, discrimination, and bullying behaviour. It may be helpful for the practitioner to ask the client what their experiences with asexual and LGBTQIA+ communities have been like before suggesting a particular group, website, or forum. Alternatively, practitioners may print out information sheets to hand to the client themselves, rather than directing the client to a website.

5.2 Limitations

Regarding limitations of this research, one area which was not assessed was whether the participants were aware of asexuality or not prior to taking the survey. This would have allowed for the assessment of whether prior knowledge had any effect on attitudes towards asexual people. This may have provided richer data on the differences among participants who were aware (vs. not aware) of asexuality and those who personally knew (vs. did not know) an asexual person. As such, this would allow for observing the potential effects of both having both prior knowledge and intergroup contact on attitudes toward asexual people. Furthermore, behavioural discrimination against asexual people was not assessed in this study and may have potentially been a good measure of external validity for the ATA scale. Assessing how attitudes may translate into behavioural discrimination may have also provided further insight into how the students, as future mental health professionals, might interact with an asexual person, and their

ability to provide a culturally safe model of care which is appropriate for the client's needs. In addition, asking the participants how willing they might be to attend a workplace training or educational lecture about asexuality may have also been helpful for assessing potential behaviours which indicate a positive approach to working with asexual people in the future.

There are also limitations regarding the sample, as this research was conducted with a sample of university students, which may not reflect the attitudes of mental health professionals currently in the field who are working with asexual people. Utilising a university student sample may present additional areas of bias. As mentioned by MacInnis and Hodson (2012), university students are often at the point of emerging into adulthood, where sexual activity and sexuality are highly valued by university students. Given that a majority of participants in this study were aged between 18 and 24 years old, this may be where attitudes toward asexual people may differ between university students and established mental health professionals. On the other hand, university students may also be more liberal (MacInnis & Hodson, 2012), and therefore could potentially view sexual minorities more favourably than people in the community or within the field of healthcare. Furthermore, it is most likely that many of the participants in this study grew up with access to technology and the ability to browse the web. Indeed, asexuality as a sexual orientation also gained widespread attention due to having an online presence. Hence it may also be the case that current students are much more aware of asexuality than previous generations. The survey was also disseminated through social media websites and an online participation system for first year students, thus a sample which demonstrates a good level of computer literacy. Essentially, assessing the attitudes of current mental health professionals is a crucial step in expanding our understanding of this topic.

5.3 Future Research

It is generally accepted within the current academic community that asexuality is still a relatively ill-defined concept which is based primarily on a common experience of lacking sexual attraction. As such, it is important to keep asexuality on the research agenda. Regarding future research on anti-asexual bias, it may be useful to investigate anti-asexual bias amongst other demographic variables such as sexual orientation. At present, anti-asexual bias has only been investigated in heterosexual people, and not people of other sexual minorities. This thesis provides some preliminary evidence that anti-asexual bias may be lower amongst groups of sexual orientations other than heterosexual. However, further research will provide greater insight. Investigating anti-asexual bias among different health professions, students, and non-health professions may also provided interesting insights. Assessing anti-asexual bias provides greater insight into intergroup behaviours and issues such as dominance and negativity (MacInnis & Hodson, 2012). Understanding these biases and intergroup relations will allow for the implementation of strategies to not only reduce anti-asexual bias in the community; but also for asexual people to safely navigate the promotion of their social visibility.

In terms of clinical services, it will be helpful to expand on the current topic of anti-asexual bias amongst health and mental health professionals. As mentioned earlier, assessing the attitudes of established mental health professionals will provide a clearer picture of potential barriers in current services. This may assist in determining what, and where, the needs for professional training and development are; including the specific content areas which are needed to help mental health professionals work with asexual people in clinical settings. Further to this, researchers may also want to look at the link between attitudes and behavioural discrimination against asexual people to determine how anti-asexual biases may or may not account for the

microaggressions and discrimination asexual people face. This may also serve as a measure of external validity for the attitudes towards asexual people scale. In addition, researchers may also conduct qualitative interviews with health and mental health practitioners who have and have not worked with asexual clients. This may possibly yield some further insights into how professionals are currently working with asexual people.

Practitioners may be able to identify other aspects of service delivery and systemic issues that they perceive as barriers in mental health care for asexual people and provide more recommendations for working with this group. Researchers may also wish to explore specific areas of health and mental health with asexual people, and the practitioners providing these services. For example, asexual people's experiences of abuse and trauma, sexual health, relationships and family, and their experiences of counselling or psychotherapy in these areas. Exploring intersections of identity among asexual people are also crucial to understanding how different aspects of one's identity may interact with asexuality. Engaging practitioners on their experiences of working with asexual people in these areas is also important to continue assessing the quality of healthcare services for this population. Research on asexuality must stay on the agenda and be explored from differing perspectives such as relationships, attraction, and sexual behaviour. Furthermore, subgroups of asexual people can also be explored further to understand the differences which exist in the asexual community. Therefore, we also echo the call for researchers, asexual community members, and healthcare providers to engage in the development of a framework for understanding asexuality as well as how to work with asexual people. Developing a shared definition of asexuality and an understanding of the critical factors which impact on asexual people will essentially lead to better provision of healthcare services and research being conducted for asexual people.

To conclude, the findings presented in this research study suggest that anti-asexual bias is the greatest predictor of comfort, confidence, and safety regarding future clinical contact with asexual people. Participants aiming to pursue a mental health career after the completion of their studies exhibited the lowest scores on anti-asexual bias when compared to their peers who were either unsure or were not taking this career path. Furthermore, participants with intergroup contact with asexual people scored low on anti-asexual bias. At present, it appears the key to reducing anti-asexual bias is through further education and training for awareness, and intergroup contact with asexual people. However, it may be difficult at present to engage with asexual people in the community, given their experiences of discrimination and social invisibility. Therefore, providing healthcare practitioners with the knowledge and training necessary for working with asexual people in their services will be essential. Doing so, will also feed back into the experiences of asexual people. If asexual people experience greater levels of comfort, and safety from mental health practitioners, clinical experiences may be seen more positively. Asexual people, may therefore, be more likely to disclose their identity, and further discuss their experiences with a practitioner. In addition, engagement with asexual community or explicit inclusion of asexuality in other LGBTQIA+ events will also raise awareness of this invisible sexual orientation.

As this study focused on students looking for a future career in mental health, the results are promising in that future practitioners will perhaps be more willing to engage clinically with asexual people. However, it is also important to now assess the current status of anti-asexual bias in mental health care, so that the current barriers and negative experiences of healthcare can be mitigated for asexual people. The wellbeing of asexual people in the community can also be promoted through this process of minimizing the current barriers in healthcare services. It may

also be beneficial to shed light on anti-asexual bias and discrimination behaviours as well as positive pro-social behaviours of mental health practitioners with asexual people and the community. Therefore, providing insight into the larger picture, so as to understand intergroup contact and discrimination against asexual people, and also how this can be minimized, especially within the context of clinical health and mental health care.

References

Aicken, C., Mercer, C. H., & Cassell, J. A. (2013). Who reports absence of sexual attraction in Britain? Evidence from national probability surveys. *Journal of Psychology & Human Sexuality, 4*(2), 121-135. http://dx.doi.org/10.1080/19419899.2013.774161

American Psychiatric Association. (2013). *Diagonstic and statistical manual of mental disorders (5th Ed.).* Washington, DC: American Psychiatric Association Publishing.

Andrade, C. (2016). Adaptation and factorial validation of the attitudes towards gender roles scale. *Paidéia (Ribeirão Preto), 26*(63), 7-14. https://dx.doi.org/10.1590/1982-43272663201602

Bauer, C., Miller, T., Ginzoa, M., Guo, Y., Youngblom, K., Baba, A., . . . Adroit, M. (2018). *The 2016 Asexual communiy survey summary report.* Retrieved from https://asexualcensus.files.wordpress.com/2018/11/2016_ace_community_survey_report.pdf.: The Asexual Community Survey Team.

Bogaert, A. F. (2004). Asexuality: Prevalence and associated factors in a national probability sample. *The Journal of Sex Research, 41*(3), 279-287. doi: 10.1080/00224490409552235.

Bogaert, A. F. (2006). Toward a conceptual understanding of asexuality. *Review of General Psychology, 10* (3), 241-250. https://dx.doi.org/10.1037/1089-2680.10.3.241

Bogaert, A. F. (2012). *Understanding asexuality.* Plymouth, UK: Rowman and Littlefield.

Bogaert, A. F. (2015). Asexuality: What it is and why it matters. *Journal of Sex Research, 52*(4), 362-379. https://dx.doi.org/10.1080/00224499.2015.1015713

Bogaert, A. F., Ashton, M. C., & Lee, K. (2018). Personality and sexual orientation: Extension to asexuality and the HEXACO model. *Journal of Sex Research, 55*(8), 951-961. https://dx.doi.org/10.1080/00224499.2017.1287844

Borgogna, N. C., McDermott, R. C., Aita, S. L., & Kridel, M. M. (2019). Anxiety and depression across gender and sexual minorities: Implications for transgender, gender nonconforming, pansexual, demisexual, asexual, queer, and questioning individuals. *Psychology of Sexual Orientation and Gender Diversity 6*(1), 54-63. doi: https://dx.doi.org/10.1037/sgd0000306

Brotto, L. A., & Yule, M. A. (2011). Physiological and subjective sexual arousal in self-identified asexual women. *Archives of Sexual Behaviour, 40*, 699-712. https://dx.doi.org/10.1007/s10508-010-9671-7

Brotto, L. A., & Yule, M. A. (2017). Asexuality: Sexual orientation, paraphilia, sexual dysfunction or none of the above? *Archives of Sexual Behaviour, 46*, 619-627. https://dx.doi.org/10.1007/s10508-016-0802-7

Brotto, L. A., Knudson, G., Inskip, J., Rhodes, K., & Erskine, Y. (2010). Asexuality: A mixed-methods approach. *Archives of Sexual Behaviour, 39*, 599-618. https://dx.doi.org/10.1007/s10508-008-9434-x

Bulmer, M., & Izuma, K. (2018). Implicit and explicit attitudes toward sex and romance in asexuals. *The Journal of Sex Research, 55*(8), 962-974. https://dx.doi.org/10.1080/00224499.2017.1303438

Carrigan, M. (2011). There's more to life than sex? Difference and commonality within the asexual community. *Sexualities 14*(4), 462-478. https://dx.doi.org/10.1177/1363460711406462

Carrigan, M., Gupta, K., & Morrison, T. G. (2013). Asexuality special theme issue editorial. *Psychology & Sexuality, 4*(2), 111-120. https://dx.doi.org/10.1080/19419899.2013.774160

Chasin, C. D. (2011). Theoretical issues in the study of asexuality. *Archives of Sexual Behaviour, 40*(4), 713–723. https://dx.doi.org/10.1007/s10508-011-9757-x

Chasin, C. D. (2015). Making sense in and of the asexual community: Navigating relationships and identities in a context of resistance. *Journal of Community and Applied Social Psychology, 25*, 167-180. https://dx.doi.org/10.1002/casp.2203

Curtis, E., Jones, R., Tipene-Leach, D. *et al.* Why cultural safety rather than cultural competency is required to achieve health equity: A literature review and recommended definition. *Int J Equity Health 18*, 174 (2019). https://doi.org/10.1186/s12939-019-1082-3

Dawson, M., McDonnell, L., & Scott, S. (2016). Negotiating the boundaries of intimacy: The personal lives of asexual people. *The Sociological Review, 64*, 349-365. https://dx.doi.org/10.1111/1467-954X.12362

Deutsch, T. (2018). Asexual people's experience with microaggressions. *John Jay College of Criminal Justice: Student Theses*, Retrieved from: https://academicworks.cuny.edu/cgi/viewcontent.cgi?article=1050&context=jj_etds .

Flanagan, S. K., & Peters, H. J. (2020). Asexual-identified adults: Interactions with health-care practitioners. *Archives of Sexual Behaviour,* https://dx.doi.org/10.1007/s10508-020-01670-6

Foster, A. B., & Scherrer, K. S. (2014). Asexual-identified clients in clinical settings: Implications for culturally competent practice. *Psychology of Sexual Orientation and Gender Diversity, 1*(4), 422-430. https://dx.doi.org/10.1037/sgd0000058

Ginnicola, M. M., & Ruggiero, A. (2017). Counseling Asexual Clients. In *Affirmative Counseling with LGBTQI+ People* (pp. 251-258).

Greaves, L. M., Barlow, F. K., Huang, Y., Stronge, S., Fraser, G., & Sibley, C. G. (2017). Asexual identity in a New Zealand national sample: Demographics, well-being and health. *Archives of Sexual Behaviour, 46*, 2417-2427. https://dx.doi.org/10.1007/s10508-017-0977-6

Gressgard, R. (2013). Asexuality: from pathology to identity and beyond. *Psychology and Sexuality, 4(*2), 179-192. https://dx.doi.org/10.1080/19419899.2013.774166

Gupta, K. (2015). Compulsory sexuality: Evaluating an emerging concept. *Signs: Journal of Women in Culture and Society, 41*(1), 131-154. https://dx.doi.org/10.1086/681774

Gupta, K. (2017a). "And now I'm just different, but there's nothing actually wrong with me": Asexual marginalisation and resistance. *Journal of Homosexuality, 64*(8), 991-1013, https://dx.doi.org/10.1080/00918369.2016.1236590

Gupta, K. (2017b). What does asexuality teach us about sexual disinterest? Recommendations for health professionals based on a qualitative study with asexually identified people. *Journal of Sex and Marital Therapy, 43*(1), 1-14. https://dx.doi.org/10.1080/0092623X.2015.1113593

Hinderliter, A. (2013). How is asexuality different from hypoactive sexual desire disorder? *Psychology & Sexuality, 4*(2), 167-178. https://dx.doi.org/10.1080/19419899.2013.774165

Hoffarth, M. R., Drolet, C. E., Hodson, G., & Hafer, C. L. (2016). Development and validationof the attitudes towards asexuals (ATA) scale. *Psychology & Sexuality, 7*(2), 88-100. https://dx.doi.org/10.1080/19419899.2015.1050446

Jones, C., Hayter, M., & Jomeen, J. (2017). Understanding asexual identity as a means to facilitate culturally competent care: A systematic literature review. *Journal of Clinical Nursing, 26* (23-24), 3811-3831. https://dx.doi.org/10.1111/jocn.13862

Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). *Sexual behaviour in the human male.* Philadelphia: PA: Saunders.

Kinsey, A. C., Pomeroy, W. B., Martin, C. E., & Gebbard, P. H. (1953). *Sexual behaviour in the human female.* Philadelphia: PA: Saunders.

MacInnis, C. C., & Hodson, G. (2012). Intergroup bias toward "group x": Evidence of prejudice, dehumanization, avoidance, and discrimination against asexuals. *Group Processes & Intergroup Relations, 15*(6), 725-743. https://dx.doi.org/10.1177/1368430212442419

MacNeela, P., & Murphy, A. (2015). Freedom, invisibility, and community: A qualitative study of self-identification with asexuality. *Archives of Sexual Behaviour, 44*, 799-812. https://dx.doi.org/10.1007/s10508-014-0458-0

Mollet, A. L. (2020). "I have a lot of feelings, just none in the genitalia region": A grounded theory of asexual college students' identity journeys. *Journal of College Student Development, 61*(2), 189 - 206. https://doi.org/10.1353/csd.2020.0017

Pignotti, M., & Abell, N. (2009). The negative stereotyping of single persons scale: Initial psychometric development. *Research on Social Work Practice, 19*, 639-651. https://dx.doi.org/10.1177/ 1049731508329402

Poston, D., & Baumle, A. (2010). Patterns of asexuality in the United States. *Demographic Research, 23*(18), 509-530. https://dx.doi.org/10.4054/DemRes.2010.23.18

Prause, N., & Graham, C. A. (2007). Asexuality: Classification and characterisation. *Archives of Sexual Behaviour, 36*, 341-356. https://dx.doi.org/10.1007/s10508-006-9142-3

Robbins, N. K., Low, K. G., & Query, A. N. (2016). A qualitative exploration of the "coming out" process for asexual individuals. *Archives of Sexual Behaviour, 45*, 751-760. https://dx.doi.org/10.1007/s10508-015-0561-x

Rothblum, E. D., Krueger, E. A., Kittle, K. R., & Meyer, I. H. (2020). Asexual and non-asexual respondents from a US population-based study of sexual minorities. *Archives of Sexual Behaviour, 49*(2), 757-767. https://dx.doi.org/10.1007/s10508-019-01485-0

Scherrer, K. S. (2008). Coming to an asexual identity: Negotiating identity, negotiating desire. *Sexualities 11*(5), 621-641. https://dx.doi.org/10.1177/1363460708094269

Steelman, S. M., & Hertlein, K. M. (2016). Unexplored identities: Attending to asexuality in therapeutic contexts. *Journal of Family Psychotherapy, 27*(2), 85-98. https://dx.doi.org/10.1080/08975353.2016.1169014

Storms, M. D. (1980). Theories of sexual orientation. Journal of Personality and Social Psychology, 38(5), 783-792. https://dx.doi.org/10.1037/0022-3514.38.5.783 .

The Asexual Visibility & Education Network. (2020). *Overview*. Retrieved from The Asexual Visibility and Education Network: https://www.asexuality.org/?q=overview.html

UK Government Equalities Office. (2018). *National LGBT survey: Research report.* Retrieved from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/721704/LGBT-survey-research-report.pdf

Van Houdenhove, E., Enzlin, P., & Gijs, L. (2017). A positive approach toward asexuality: Some first steps, but still a long way to go. *Archives of Sexual Behaviour, 46*, 647-651. https://dx.doi.org/10.1007/s10508-016-0921-1

Van Houdenhove, E., Gijs, L., T'Sjoen, G., & Enzlin, P. (2015). Stories about asexuality: A qualitative study on asexual women. *Journal of Sex & Marital Therapy, 41*(3), 262-281. https://dx.doi.org/10.1080/0092623X.2014.889053

Yule, M. A., Brotto, L. A., & Gorzalka, B. B. (2013). Mental health and interpersonal functioning in self-identified asexual men and women. *Psychology & Sexuality, 4*(2), 136-151. https://dx.doi.org/10.1080/19419899.2013.774162

Yule, M. A., Brotto, L. A., & Gorzalka, B. B. (2015). A validated measure of no sexual attraction: The asexuality identification scale. *Psychological Assessment, 27*(1), 148-160. https://dx.doi.org/10.1037/a0038196

Zheng, L., & Su, Y. (2018). Patterns of asexuality in China: Sexual activity, sexual and romantic attraction, and sexual desire. *Archives of Sexual Behaviour, 47*, 1256-1276. doi: https://dx.doi.org/10.1007/s10508-018-1158-y