Identifying as in, out, or sexually inexperienced: Perception of sex-related personal disclosures

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Abstract
The current research explored perceptions of disclosing the information of “I am gay”, “I am heterosexual”, and “I am a virgin” to a variety of audiences. Participants were 842 undergraduate students who evaluated the valence of each disclosure, listed the associated feelings, and rated the comfort of disclosing such information to various audiences (e.g., a family member, online community). Participants rated the statement consistent with their own sexual orientation as being significantly more positive. No significant difference was found between gay and heterosexual participants’ ratings about disclosing virginity, and disclosure of virginity status was ranked as the most uncomfortable of the three disclosures. Both heterosexual and gay respondents indicated it would be more comfortable to disclose a heterosexual orientation than a gay one, despite gay participants rating a gay orientation as more positive. The audience ranked most to least comfortable to disclose varied with sexual orientation and disclosure content. Perceived closeness of audience was correlated with comfort of disclosure for known (family, partner, friend, colleague) audiences, but not professional (counsellor) or unknown (stranger, online) audiences. These findings are discussed with reference to the literature on “coming out”, addressing important differences in the perceptions of in-group and out-group disclosure of sexual orientation, and sex-related personal information.

Keywords: Self-disclosure, sexual orientation, gender, audience, closeness, coming out, virginity.

Introduction
The principal purpose of sharing personal, especially identity-relevant, information with another person is to facilitate the building of interpersonal intimacy, which allows us to form and maintain relationships across differing contexts (Aron, Melinat, Aron, Vallone, & Bator, 1997; Cozby, 1973; Derlega, Metts, Petronio, & Margulis, 1993). Research has demonstrated that even in the rather forced conditions of a laboratory study a simple exchange of increasingly personal disclosures can induce relationship-like closeness, liking, perceptions of similarity, and even self-serving biases among complete strangers (for a review, see Sedikides, Campbell, Reeder, & Elliot, 1999). Once a relationship is formed, disclosures continue to function as an act of intimacy, which helps maintain the relationship (Sprecher & Hendrick, 2004), and can also be used to seek support and assistance from relationship partners (Derlega, Winstead, Matthews, & Braithman, 2008). However, personal disclosure is not always easy, and does not always have such positive outcomes (e.g., Kowalski, 1999). For example, admitting to illegal, harmful, or unpopular actions can affect others’ perception and treatment of the one disclosing.

The majority of self-disclosure literature has focused on self-disclosure within relationships (Derlega et al., 2008; Jourard & Lasakow, 1958; Sprecher & Hendrick, 2004). Greene, Derlega, and Matthews’ (2006) Model of Disclosure Decision Making for a single disclosure episode provides a
comprehensive model of factors affecting the decision to disclose within relationships. For example, this model describes factors such as the discloser’s personality and culture, perception of disclosure context, content of the disclosure, perceived risks of disclosure from within the relationship and from the context, and finally, potential outcomes of the disclosure. Interestingly, each of these factors tacitly acknowledges that disclosure can be risky, with a potential for some personal disclosures to lead to negative relationship outcomes (e.g., relationship termination). A limitation of this model is that it is focussed on the decision to disclose, or not, rather than on the experience of the disclosure following the decision.

One disclosure that is particularly risky is revealing a concealable stigmatised identity (Chaudoir & Fisher, 2010). Concealable stigmatised identities are any self-defining minority attribute, role, or group membership that is not visible and is the subject of prejudice, discrimination, or victimisation (e.g., it may be possible to conceal one’s sexual orientation, but it is hard to conceal one’s skin colour; for further discussion, see Anderson, Kaufmann, & de la Piedad Garcia, 2015; Goffman, 2009). Examples of concealable stigmatised identities include minority sexual orientations, mental and physical illnesses, and many religious orientations. It may be surprising to read that disclosures of a gay sexual orientation and physical or mental illness have much in common. However, disclosures of concealable stigmatised identities share the important features of informativeness (the disclosure is highly informative about the discloser), truthfulness (the disclosure is truthful) and, most importantly, social norm deviation (the disclosure indicates a deviation from a sociocultural norm; Greene et al., 2006). Thus, the decision to conceal this information means forgoing potential intimacy and support, while disclosure risks stigmatisation or even victimisation for being a minority (Chaudoir & Fisher, 2010; Hatzenbuehler, 2009). For these reasons, very different concealable stigmatised identity disclosures can be described as belonging to the same class of phenomena, and the decision to disclose these are best understood using an adapted model of disclosure decision-making, which includes additional processes that mediate the decision to tell (e.g., empowerment, changing social values; see Chaudoir & Fisher, 2010 for a full description of this model). Moreover, this permits consideration of the consequence of the disclosure of a concealable stigmatised identity in terms of how both the discloser and the audience view this content in relation to social norms and values. However, the adapted model, like the original, is a model of decision-making. For this reason, this model informed the current research on the experience of the disclosure following the decision, but has not been used directly.

Another difficult and related topic of self-disclosure is sexual behaviour or experience. Sex-related content can be an issue of identity for some (e.g., “I am a virgin” versus “I am not a virgin”; Carpenter, 2001) and, like minority sexual orientations, sex tends to be a taboo topic. Consequently, sexual activity can be significantly under- or misreported (Meston, Heiman, Trapnall, & Paulhus, 1998), and used to stigmatise people, especially women (e.g., reverent slang is used to describe sexually experienced men whereas the terms for sexually experienced women tend to be derogatory; Crawford & Popp, 2003), which generates caution about to whom and how they self-disclose about sex. For example, Herold and Way (1988) found that participants reported limited sexual self-disclosures. Specifically, people self-disclosed only some topics (e.g., intercourse, contraception) to a limited audience (i.e., same-sex friend, romantic partner), and tended to make no sexual self-disclosure to parents. Sexual self-disclosure was also found to significantly correlate with perceptions of the audience’s attitudinal similarity and sexual comfortableness. People tend to disclose more freely and about more difficult topics to others closer to them (i.e., as a function of relationship closeness or intimacy; e.g., Pedersen & Breglio, 1968), to trusted and liked people (Collins & Miller, 1994), and to those who reciprocate in disclosures (Cozby, 1972; Sprecher, Treger, Wondra, Hilaire, & Wallpe, 2013). However, these general tendencies can be overridden by other considerations such as the relevance to the audience. We may, for example, be less eager to disclose to those who are directly affected by a disclosure (e.g., an admission of a gambling habit to one’s partner is more likely to elicit a negative response than the same disclosure to a counsellor). As a result, specific disclosures may be made to some audiences more readily than others, making the relationship between closeness and self-disclosure, especially sexual self-disclosures less than straightforward.

The prevalence of online self-disclosure is another development that further confuses the association between relationship closeness and disclosure. With the increased availability of, and access to, online communities, people engage in surprisingly high levels of self-disclosure (Barak & Gluck-Ofri, 2007; Ledbetter, Mazer, DeGroot, Meyer, Mao, & Swafford, 2011; Qian & Scott, 2005). Research suggests that a key feature of online communication leading to high levels of self-disclosure is the lack of visibility and salience of the audience during the disclosure (Joinson, 2001; Tufekci, 2008), and the reduced immediacy of the response, whether supportive or rebuke. In other ways, online disclosures resemble other
forms of written disclosure (e.g., email, letters), but with wider audiences (e.g., partners, family, friends, colleagues, strangers, etc.) and, with more issues relating to privacy (e.g., corporate interests, potential future employers, government security organisations; Andrejevic, 2011; Cohen, 2008).

As demonstrated, there is a substantial body of literature that clearly details the importance of disclosure, and the factors leading to the decision to disclose. However, one limitation of the literature is the dissociation between self-reported self-disclosure and actual disclosure behaviour (Cozby, 1973; Wheeless & Grotz, 1976), which has received little consideration since early research on this topic. For example, the Jourard Self-Disclosure Inventory (Jourard & Lasakow, 1958), which asks participants to indicate whether they have previously disclosed information from six target areas to parents and best friends of the same and opposite gender, has been found to be largely uncorrelated with disclosure behaviour and with peer rated disclosure (for reviews, see Cozby, 1973; Miller, Berg, & Archer, 1983). However, self-report measures that ask participants what they have or would self-disclose are still widely used (see review of on- and offline self-reported self-disclosure; Nguyen, Bin, & Campbell, 2012).

While the validity of self-reported self-disclosure as a proxy for actual disclosure may be poor, it is important to note that the self-reported disclosure or intentions to disclose have instructive relationships with other variables of interest. For example, these constructs are related to liking (i.e., both liking others and being liked by others; Collins & Miller, 1994), marital satisfaction (e.g., Hendrick, 1981) and intimacy (e.g., Laurenceau, Barrett, & Pietromonaco, 1998), and physical and psychological health (e.g., Pennebaker, 1995). Consequently, self-reported self-disclosure may not reveal much about self-disclosure behaviour, but clearly reveals interesting and potentially useful information which has meaningful outcomes for people’s affect, cognitions, and related behaviour. In this way, intentions to, or actual self-reported self-disclosure may be a proxy for perceptions of the social value or cost of the information. As such, this information can inform understandings of the kind of issues that affect intentions to seek support or formal treatment, or maintain stigma and prejudice.

The current research builds on the strengths of the disclosure literature to clarify perceptions of sex-related personal disclosures to a range of audiences for gay and heterosexual participants. Specifically, the current research was interested in perceptions of the disclosures of sexual orientation, including the disclosure of a concealable stigmatised identity (i.e., “I am gay”) by individuals for whom this is and is not self-descriptive (e.g., a gay person vs. a straight person), as well as the status of being sexually inexperienced (i.e., “I am a virgin”). In addition, participants’ perceptions of how difficult it would be to disclose this information to various audiences, including family, partner, friends, colleagues, strangers, and online communities were also explored.

It was predicted that, overall, the disclosure of non-self-descriptive sexual orientation would be less positively evaluated than disclosure of self-descriptive sexual orientations. That is, heterosexual participants would evaluate the disclosure “I am straight” more positively than “I am gay”, and the opposite would be true for gay participants. In addition, if disclosure evaluation reflects general attitudes, it is likely that heterosexual participants, especially heterosexual men, would evaluate the disclosure “I am gay” very negatively, consistent with previous findings (see Anderson et al., 2015 for review). In contrast, no significant difference in the evaluation of disclosure of sexual inexperience was predicted as a function of sexual orientation. We speculated that women may rate virginity more positively based on the sexual double standard (see Crawford & Popp, 2003 for a review). It was predicted that all sex-related self-disclosures would be rated as more comfortable to disclose to intimate partners, and to close friends than to family members, consistent with previous research (e.g., Herold & Way, 1988); however, for all other audiences, relationship closeness would be significantly correlated with perceptions of sex-related comfort of disclosure. The ranking and ratings of perceptions of sex-related comfort of disclosure for a range of audiences was explored for gay and heterosexual participants.

**Method**

**Participants**

Participants were first year psychology students enrolled at an Australian university in face-to-face and online distance-mode programs. A total of 830 responses to the online survey were received, which was approximately 80% of the enrolled students. A further 12 gay participants were recruited by snowball sampling, making 842. The survey allowed participants to self-identify gender and sexual orientations (including an open-ended option). Fifty-nine participants (7.00%) declined to provide a gender or did not identify as male or female. Sixty-seven participants (7.96%) identified as bisexual, four (0.50%) as asexual, and 15 (1.78%) declined to disclose their sexual orientation. The composition of the sample in terms of gender and sexual orientation is given in Table 1. For this paper, only the responses of
A virgin."

meaningful: "I am gay", "I am straight", and "I am positive or negative, but are socially and personally sexuality-related items which are not inherently we focus only on the responses to three critical having internal (e.g., exam cheating) and external stealing) events; to sample social (e.g., cheating on positive (e.g., helping others) and negative (e.g.,

age of 30.92 years (SD = 11.00).

Table 1

<table>
<thead>
<tr>
<th>Gender</th>
<th>Heterosexual</th>
<th>Gay</th>
<th>Bisexual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>62.33%</td>
<td>2.92%</td>
<td>6.93%</td>
</tr>
<tr>
<td></td>
<td>(86.36)</td>
<td>(4.04)</td>
<td>(9.60)</td>
</tr>
<tr>
<td>Male</td>
<td>17.74%</td>
<td>3.04%</td>
<td>1.89%</td>
</tr>
<tr>
<td></td>
<td>(81.11)</td>
<td>(13.89)</td>
<td>(5.00)</td>
</tr>
</tbody>
</table>

Note. Numbers in brackets show % orientation within that gender. 5.95% of participants did not provide gender and/or sexual orientation and are not included in this tabulation.

heterosexual and gay men and women are analysed. This restriction left a total of 708 participants, comprising 171 men and 537 women with a mean age of 30.92 years (SD = 11.00).

Materials

Personal Disclosure Inventory (PDI; Authors) was developed by the researchers to explore and teach a range of issues surrounding personal disclosures. The authors initially developed a list of approximately 200 statements describing personal disclosures, and a final list of 27 items was selected by a combination of content mapping (described below) and a Delphic poll of the research team. The items were developed to cover a spectrum of positive (e.g., helping others) and negative (e.g., stealing) events; to sample social (e.g., cheating on a partner), physical (e.g., becoming ill) events having internal (e.g., exam cheating) and external locus of control (e.g., being robbed). For this paper, we focus only on the responses to three critical sexuality-related items which are not inherently positive or negative, but are socially and personally meaningful: "I am gay", "I am straight", and "I am a virgin."

The inventory had four sections in which each statement appeared. In the first section participants evaluated the positivity of each statement on a scale from 1 (very negative) to 7 (very positive) – we call these ratings evaluations. These are individual evaluations as distinct from an evaluation in the presence of an audience, and are obtained before the audience is introduced. In the second section participants were given the option to provide any emotions or thoughts associated with each statement. In the third section participants were asked who they would most likely make each disclosure to if it were true of them (e.g., parent, counsellor). In the fourth section participants were assigned a specific person (audience) to make an imagined disclosure to. There were eight possible disclosure audiences selected to reflect a range of different social relationships: parent, sibling, romantic partner, same-sex best friend, colleague, counsellor, online community, and stranger.

Participants were asked to rate how close they felt to the assigned audience on a four-point scale from 1 (very distant) to 4 (very close). Participants were then asked to imagine that each of the 27 statements were true of them and to rate how comfortable they would be disclosing this information to the particular audience assigned using a seven-point scale from 1 (very uncomfortable) to 7 (very comfortable). We refer to these as comfort ratings.

The Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1991). The BIDR is a 40-item inventory comprising two subscales: impression management, and self-deceptive enhancement. The former is designed to assess the extent to which a person deliberately modifies their behaviour to present themselves in a positive light, and the latter reflects the degree to which a person holds a positively biased but genuinely believed view of themselves. Participants rate how true each of 40 items is of them on a seven-point scale from 1 (not true) to 7 (very true). Items are short, self-descriptive statements such as "I never swear" (impression management) and "I never regret my decisions" (self-deceptive enhancement). The instrument can be scored by counting one point for each "6" or "7" response on an item or by summing the items (Paulhus, 1994). In this paper we used the latter procedure which yields slightly better psychometric properties (Stöber, Dette, & Musch, 2002). For this sample the self-deceptive enhancement subscale had a Cronbach alpha of .77 and a mean of 97.46 (SD = 17.20), while the impression management had a Cronbach alpha of .81 and a mean of 99.87 (SD = 20.29).

The Mini International Personality Item Pool (MINI IPIP: Donnellan, Oswald, Baird, & Lucas, 2006). The MINI IPIP is a short, freely available inventory for measuring the “Big Five” personality factors (Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness) and is derived from the longer IPIP (Goldberg, 1999). Each of the five factors is represented by four items. Items are short statements (e.g., “I am the life of the party”), and participants are asked to rate on a five-point scale from 1 (very inaccurate) to 5 (very accurate) how well each statement describes them. The short nature of these scales leads to lower reliabilities than the commonly used 10-item-per-factor version of this test.

Extraversion .74 (M = 12.46, SD = 3.61); Neuroticism .62 (M = 11.98, SD = 3.24); Agreeableness .63 (M = 16.03, SD = 2.83); Openness .63 (M = 15.15, SD = 2.98), and; Conscientiousness .56 (M = 13.87, M = 3.03).

Rosenberg Self-Esteem Scale (RSES; Rosenberg, 1965). The RSES is a global measure of self-esteem consisting of 10 simple statements...
describing how a person might feel about themselves (e.g., “I feel I have a number of good qualities”). Participants indicate their agreement with each statement on a four-point scale from 1 (strongly agree) to 4 (strongly disagree). Cronbach’s alpha for this sample was .71, the scale mean was 25.32 (SD = 4.36) which is a “moderate” score on the scale.

Procedure

The protocol was approved by the institution’s Human Research Ethics Committee. Participants were invited to take part in the study by a message sent via the learning management system for the subjects in which they were enrolled. The invitation included a link to an online survey, which was administered using the Inquisit Web program version 4 (Millisecond Software, 2013). Participants initially provided some demographic information (i.e., age, gender, sexual orientation, religious affiliation, political orientation, and income). They then completed all sections of the PDI, filling in the fourth section (the comfort ratings) twice – once for two of the eight target audiences. We initially planned to have participants rate all 27 for each of the eight audiences, but reduced the number to two to limit the comparison of audiences and prevent multiple ratings being overly contaminated by consistency bias or anchoring effects and reduce participant attrition due to a long battery of items. Participants then completed the BIDR, RSES, and mini IPIP, and were given a short debriefing statement that included open-ended questions about their subjective experience of being a participant.

Pairs of target audiences were sampled in a Latin-square design. This also allowed us to compare whether there were anchoring or contrast effects by seeing whether participants who rated disclosure for a particular target first gave the same ratings as participants who rated disclosures to the same target second. For example, if a participant rated a particular item “moderately” comfortable for disclosing to a colleague they might feel compelled to give a higher comfort rating when subsequently asked about making the same disclosure to a close friend and vice versa.

Statistical Considerations

Due to the potentially sensitive nature of this project, participants were able to skip items they did not want to answer. Skipped items were deleted “pairwise” rather than “listwise” to retain the maximum number of responses for each question.

ANOVA is not robust to heavily unbalanced or small group sizes. Unfortunately there were insufficient numbers of gay men and women to conduct an ANOVA to test for a gender x sexuality interactions in ratings from the PDI. T-tests to compare pairs of means suffer similar problems. Rather than give no significance tests at all, we elected to perform Mann-Whitney U tests on relevant pairs of means – this non-parametric test works with small samples and is robust to unbalanced group sizes.

Results

Evaluations of Disclosure Content

The mean (SD) positivity ratings (i.e., personal evaluation) grouped by gender and sexual orientation are given for each disclosure in Table 2. The mean ratings for most of these disclosures generally clustered around the midpoint of the scale (4) corresponding to the neutral evaluation “neither negative or positive”. Gay participants rated the disclosure “I am gay” slightly positively and the disclosure “I am straight” slightly negatively, while heterosexual participants demonstrated the reverse pattern. These differences were statistically significant, and quite large at around one scale point. That is, respondents viewed their own sexual orientation as significantly more positive than another. Men and women did not differ significantly on their rating of “I am straight” but

<table>
<thead>
<tr>
<th>Disclosure</th>
<th>Participants’ Sexual Orientation</th>
<th>Gender</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Heterosexual</td>
<td>Gay</td>
<td></td>
</tr>
<tr>
<td>&quot;I am straight&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4.72 (1.32)</td>
<td>3.80 (1.08)</td>
<td>4.58 (1.33)</td>
</tr>
<tr>
<td>Female</td>
<td>4.99 (1.33)</td>
<td>3.95 (1.19)</td>
<td>4.95 (1.34)</td>
</tr>
<tr>
<td>Overall</td>
<td>4.93 (1.33)</td>
<td>3.87 (1.12)</td>
<td></td>
</tr>
<tr>
<td>&quot;I am gay&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.57 (1.36)</td>
<td>5.28 (1.49)</td>
<td>3.84 (1.51)</td>
</tr>
<tr>
<td>Female</td>
<td>3.70 (1.66)</td>
<td>4.90 (1.62)</td>
<td>3.75 (1.67)</td>
</tr>
<tr>
<td>Overall</td>
<td>3.67 (1.60)</td>
<td>5.11 (1.53)</td>
<td></td>
</tr>
<tr>
<td>&quot;I am a virgin&quot;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3.34 (1.34)</td>
<td>2.76 (1.49)</td>
<td>3.26 (1.36)</td>
</tr>
<tr>
<td>Female</td>
<td>3.76 (1.59)</td>
<td>3.75 (1.33)</td>
<td>3.76 (1.58)</td>
</tr>
<tr>
<td>Overall</td>
<td>3.67 (1.55)</td>
<td>3.20 (1.44)</td>
<td></td>
</tr>
</tbody>
</table>
men were slightly more positive than women about the disclosure “I am gay”, an effect attributable to a very positive evaluation by gay men.

The disclosure “I am a virgin” was rated very slightly negatively by all groups. Men rated disclosing virgin status as slightly but significantly more negative than women, but positivity of this disclosure did not differ across heterosexual and gay respondents.

Closeness to Target Audience

The closeness ratings from start of section four of the PDI for each disclosure target audience are given in Table 3a grouped by participant sexual orientation (there are too few responses to break these down by gender as well as sexual orientation). Heterosexual participants tended to report slightly higher levels of closeness than gay participants. Gay participants rated closeness with their romantic partner the highest, followed by a same-sex best friend. Interestingly, the reverse was true for heterosexual participants. Both gay and heterosexual participants rated family (i.e., parents and siblings) as closest, although the former reported greater closeness with siblings, whereas the latter reported greater closeness with parents. Heterosexual participants rated closeness to counsellors slightly above the midpoint of the scale, and gay participants rated them slightly below the midpoint of the scale. Interestingly, closeness to strangers was almost exactly half that of closeness to counsellors.

Effect of Sexual Orientation and Target Audience on Comfort of Disclosure

The comfort ratings, aggregated by sexual orientation, disclosure content, and target audience are shown in Table 3a. We note that asking people to indicate their comfort in making sex-related disclosures to a romantic partner is problematic, as it is likely such disclosures are made redundant by behaviour. Consequently, those ratings are difficult to interpret and are included mainly for completeness.

Heterosexual respondents indicated that it would be more comfortable to disclose being heterosexual than gay to all audiences. Interestingly, with the exception of the aforementioned romantic partner, gay respondents also indicated that disclosing a heterosexual orientation would be more comfortable than disclosing their actual orientation (gay). Both heterosexual and gay respondents indicated that disclosing they were a virgin would be less comfortable than disclosing their sexual orientation, and gay respondents rated this disclosure even less comfortable, but not significantly so, than heterosexual respondents.

Omitting romantic partner, the order of audiences from highest comfort rating to lowest differed slightly for each disclosure, and was similar for heterosexual and gay participants, with a few exceptions. Participants rated disclosing to a counsellor relatively highly comfortable, ranking disclosures to this audience within the top three places regardless of disclosure content. Similarly, disclosures to a stranger were typically rated as relatively uncomfortable and this disclosure was typically ranked as least comfortable. Interestingly, both heterosexual and gay participants were very comfortable making the disclosure “I am straight” and “I am gay” to a same-sex best friend, but only heterosexual participants were similarly comfortable disclosing “I am a virgin”. Gay participants revealed they would be very comfortable disclosing straightness to an online audience (i.e., ranked second highest), which heterosexual participants were not (i.e., ranked second lowest). Heterosexual participants ranked coming out to a counsellor as the most comfortable. Despite relatively high levels of closeness, participants ranked comfort of disclosure of sexual orientation to parents and siblings relatively low (i.e., ranked third and sixth respectively for heterosexual participants, and fourth and sixth for gay participants). Heterosexual participants ranked disclosure of virginity to family (parents and siblings) slightly uncomfortable, whereas gay participants rated the same disclosure as quite uncomfortable, but ranked family amongst the highest. Both heterosexual and gay persons rated disclosing their actual sexual orientation as more comfortable than disclosing a different orientation.

Standard significance tests could not be conducted due to violations of test assumptions resulting from the combination of small and extremely uneven group sizes (e.g., comparing the comfort of disclosing to parents ratings given by 10

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1 We anticipated that estimating the comfort of making a specific disclosure to different target audience could depend on the order in which participants made those ratings. We compared the mean ratings for each pair of disclosures and found order of audience did not significantly affect the ratings for 21 of the 24 pairings in our design (Mann-Whitney test). Disclosing “I am gay” to parents was rated as less comfortable when this item was rated second rather than first. The disclosure “I am a virgin” to a sibling was rated as more comfortable when this rating was given second, and the disclosure “I am gay” to a partner was rated as more comfortable when made second. Given the infrequent and non-systematic nature of order effects it was decided to collapse all the ratings for a given target regardless of presentation order.

2 In the context of the larger study this question was included so that all forms of the PDI were identical, i.e., stranger, friend, etc.
Table 3a
Mean (SD) Relationship Closeness, and Comfort Ratings for Each Disclosure as a Function of Participant Sexual Orientation and Target Audience

<table>
<thead>
<tr>
<th>Target audience</th>
<th>Heterosexual Participants</th>
<th></th>
<th></th>
<th>Gay Participants</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Closeness</td>
<td>Disclosure</td>
<td></td>
<td>Closeness</td>
<td>Disclosure</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I am straight”</td>
<td>“I am gay”</td>
<td>“I am a virgin”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romantic Partner</td>
<td>3.39 (0.97)*</td>
<td>5.61 (1.63)*</td>
<td>3.19 (2.31)</td>
<td>3.75 (2.01)</td>
<td>128</td>
<td>4.00 (0.00)*</td>
</tr>
<tr>
<td>Parent</td>
<td>3.06 (1.09)</td>
<td>5.62 (1.72)</td>
<td>3.35 (2.21)</td>
<td>3.04 (2.20)</td>
<td>123</td>
<td>2.50 (1.27)</td>
</tr>
<tr>
<td>Sibling</td>
<td>2.99 (1.06)</td>
<td>5.57 (1.65)</td>
<td>4.35 (2.25)</td>
<td>3.40 (2.27)</td>
<td>147</td>
<td>2.93 (0.96)</td>
</tr>
<tr>
<td>Same-sex best friend</td>
<td>3.58 (0.75)</td>
<td>5.95 (1.46)</td>
<td>4.85 (1.98)</td>
<td>4.59 (1.95)</td>
<td>133</td>
<td>3.69 (0.60)</td>
</tr>
<tr>
<td>Colleague</td>
<td>2.49 (0.87)</td>
<td>4.97 (1.78)</td>
<td>3.63 (2.07)</td>
<td>2.49 (1.80)</td>
<td>146</td>
<td>2.08 (0.95)</td>
</tr>
<tr>
<td>Counsellor</td>
<td>2.70 (0.97)</td>
<td>5.85 (1.56)</td>
<td>5.05 (1.91)</td>
<td>4.59 (2.09)</td>
<td>128</td>
<td>2.43 (1.40)</td>
</tr>
<tr>
<td>Online</td>
<td>2.32 (0.91)</td>
<td>4.54 (1.85)</td>
<td>3.37 (2.00)</td>
<td>1.83 (1.41)</td>
<td>126</td>
<td>2.40 (1.17)</td>
</tr>
<tr>
<td>Stranger</td>
<td>1.35 (0.55)</td>
<td>4.07 (2.06)</td>
<td>3.03 (2.03)</td>
<td>1.85 (1.43)</td>
<td>131</td>
<td>1.25 (0.46)</td>
</tr>
<tr>
<td>OVERALL†</td>
<td>2.64 (0.82)</td>
<td>5.23 (1.62)</td>
<td>3.96 (1.93)</td>
<td>3.11 (1.74)</td>
<td>131</td>
<td>2.56 (0.84)</td>
</tr>
</tbody>
</table>

Note. † - Overall mean (SD) is the weighted mean (SD) across all disclosure partners except romantic partner. ** Mann-Whitney U (non-parametric) test indicates that gay and heterosexual participants’ scores on this item differ significantly at p < .05. Heterosexual and gay participants’ ratings of all other items do not differ significantly.

Table 3b
Mean (SD) Relationship Closeness, and Comfort Ratings for Each Disclosure as a Function of Participant Gender and Target Audience

<table>
<thead>
<tr>
<th>Target audience</th>
<th>Women</th>
<th></th>
<th></th>
<th>Men</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Closeness</td>
<td>Disclosure</td>
<td></td>
<td>Closeness</td>
<td>Disclosure</td>
<td>n</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“I am straight”</td>
<td>“I am gay”</td>
<td>“I am a virgin”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romantic Partner</td>
<td>3.44 (0.96)</td>
<td>5.58 (1.73)</td>
<td>3.84 (2.42)**</td>
<td>3.92 (2.05)*</td>
<td>118</td>
<td>3.63 (0.72)</td>
</tr>
<tr>
<td>Parent</td>
<td>2.98 (1.15)</td>
<td>5.49 (1.72)</td>
<td>3.62 (2.28)</td>
<td>3.21 (2.26)</td>
<td>112</td>
<td>3.21 (0.95)</td>
</tr>
<tr>
<td>Sibling</td>
<td>3.02 (1.07)</td>
<td>5.49 (1.69)</td>
<td>4.38 (2.26)</td>
<td>3.56 (2.80)</td>
<td>128</td>
<td>3.15 (0.88)</td>
</tr>
<tr>
<td>Same-sex best friend</td>
<td>3.64 (0.70)</td>
<td>5.87 (1.49)</td>
<td>3.06 (1.94)</td>
<td>4.76 (1.91)*</td>
<td>127</td>
<td>3.56 (0.61)</td>
</tr>
<tr>
<td>Colleague</td>
<td>2.38 (0.92)</td>
<td>4.78 (1.84)</td>
<td>3.77 (2.05)</td>
<td>2.42 (1.81)</td>
<td>132</td>
<td>2.49 (0.85)</td>
</tr>
<tr>
<td>Counsellor</td>
<td>2.72 (0.92)</td>
<td>5.82 (1.56)</td>
<td>5.11 (1.95)</td>
<td>4.59 (2.09)</td>
<td>123</td>
<td>2.80 (1.05)</td>
</tr>
<tr>
<td>Online</td>
<td>2.37 (0.92)</td>
<td>4.59 (1.91)</td>
<td>3.59 (2.05)</td>
<td>1.92 (1.81)</td>
<td>124</td>
<td>2.38 (1.02)</td>
</tr>
<tr>
<td>Stranger</td>
<td>1.35 (0.54)</td>
<td>3.98 (2.06)</td>
<td>3.13 (2.05)</td>
<td>1.76 (1.41)*</td>
<td>120</td>
<td>1.34 (0.61)</td>
</tr>
<tr>
<td>OVERALL†</td>
<td>2.64 (0.91)</td>
<td>5.15 (1.77)</td>
<td>4.11 (2.09)</td>
<td>3.18 (2.03)</td>
<td>130</td>
<td>2.76 (0.88)</td>
</tr>
</tbody>
</table>

Note. † - Overall mean (SD) is the weighted mean (SD) across all disclosure partners except romantic partner. * Mann-Whitney U (non-parametric) test indicates that women’s and men’s scores on this item differ significantly at p < .05. Women’s and men’s participants’ ratings of all other items do not differ significantly.
gay participants to the 128 heterosexual participants). Thus, statistical comparison of heterosexual to gay ratings is done pair-by-pair using non-parametric tests (i.e., Mann-Whitney test for independent groups). Despite some large differences in ratings between heterosexual and gay persons on some items, heterosexual and gay participants only differed significantly on the items relating to disclosing their sexual orientation to their parents. No other differences were significant. This is likely due to small numbers of participants in some cells.

Disclosing that “I am a virgin” was rated as “uncomfortable” to “very uncomfortable” by both heterosexual and gay people for every disclosure target, with the exception of heterosexual persons making this disclosure to a close friend or counsellor, who rated it as “slightly comfortable”. Overall, gay participants rated this as a more uncomfortable disclosure than heterosexual participants.

Effect of Gender and Target Audience on Comfort of Disclosure

The closeness ratings from start of section four of the PDI for each disclosure target audience are given in Table 3 by participant gender (there are too few responses to break these down by gender as well as sexual orientation). In aggregate, women gave all three disclosures higher comfort ratings than men. Both men and women rated disclosing being heterosexual as the most comfortable (“slightly comfortable”) of the three disclosures and disclosing being a virgin the least (“slightly uncomfortable”) with disclosing a gay orientation in between ("neither comfortable for uncomfortable"). The ratings of which audience was the most comfortable to makes each disclosure to, closely followed the ranking of the closeness ratings: same sex best friend, partner, sibling, parent, counsellor, colleague, online, stranger. Men and women rated disclosing a heterosexual orientation as “comfortable” (best friend) to neutral (stranger); being gay as “somewhat comfortable” (counsellor and friend) to “somewhat uncomfortable” (stranger), and; being a virgin as “slightly comfortable” (best friend) to "uncomfortable” (online, stranger). Men gave lower comfort ratings than women for the disclosure “I am gay” for all audiences except parents. Only four ratings differed significantly between men and women: compared to women, men rated disclosing virginity or being gay to a romantic partner as less comfortable than women. Compared to women, men rated disclosing being

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Correlation of Comfort Ratings with Closeness and All Individual Difference Measures‡</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation (positive/negative)</td>
<td>“I am straight”</td>
</tr>
<tr>
<td>Disclosure</td>
<td></td>
</tr>
<tr>
<td>Partner</td>
<td>O - .33** Closeness .16*</td>
</tr>
<tr>
<td>Parent</td>
<td>Closeness .24** O .18*</td>
</tr>
<tr>
<td>Sibling</td>
<td>Closeness .37** Closeness .27** Closeness .28**</td>
</tr>
<tr>
<td>Best friend</td>
<td>E .21** E .24** E .33**</td>
</tr>
<tr>
<td>Colleague</td>
<td>Closeness .29** Closeness .28** Closeness .27</td>
</tr>
<tr>
<td>Counsellor</td>
<td>A - .22** RSES - .28**</td>
</tr>
<tr>
<td>Online</td>
<td></td>
</tr>
<tr>
<td>Stranger</td>
<td>E .16* N -.16*</td>
</tr>
</tbody>
</table>

Note: ‡ every individual different measure was correlated with the comfort ratings – only correlations significant at p < .05 (uncorrected) are shown to minimise clutter. r significant at * p < .05, ** p < .01. RSES = Rosenberg Self-Esteem Scale; N = IPIP Neuroticism; O = IPIP Openness; E = IPIP Extraversion; A = IPIP Agreeableness; C = IPI Conscientiousness; BIDR SDE = Balanced Inventory of Desirable Responding Self-Deceptive Enhancement; BIDR IM = Balanced Inventory of Desirable Responding Self-Impression Management.
virgin to a best friend less comfortable. Women rated disclosing virginity as less comfortable than men when the audience was a stranger.

**Correlations with Individual Difference Measures**

Correlations between each of the 3 content x 8 audience = 24 comfort ratings and BIDR, RSES, FFM, audience closeness ratings, and evaluation were computed. Very few of these correlations reached significance, thus for brevity and clarity of findings, only the significant correlations are reported in Table 4.

Closeness was typically positively related to the comfort ratings of most sex-related disclosures within established relationships (e.g., family, friend, colleague). It is interesting to note that this was not typically the case for targets with whom participants were not in personal relationships (i.e., counsellor, online, strangers), in which case disclosure was related to individual difference factors (e.g., personality, self-esteem).

Participants rating counsellors as the most comfortable audience to disclose “I am gay”, whereas gay participants rated the disclosure “I am straight” to an online audience only a little less comfortable than to a same-sex best friend. There was, however, a general trend for heterosexual participants to feel more comfortable disclosing to siblings and parents than gay participants, a finding consistent with previous research (e.g., Herold & Way, 1988). There was also a consistent and relatively high level of comfort in sexual disclosure to counsellors, which would seemingly serve the basic aim of counselling (i.e., facilitating disclosure within an open and non-judgmental therapeutic relationship).

When comparing the PDI comfort ratings aggregated by gender, the fact that disclosing being heterosexual was the most comfortable of the three disclosures is somewhat unsurprising as the means were heavily weighted by the high proportion of heterosexual respondents who, as previously remarked, rated their own orientation most positively and easiest to disclose. Disclosing a gay orientation was “neither comfortable nor uncomfortable”. What was somewhat surprising, was to again find that disclosing being a virgin was perceived as being more difficult than disclosing having a potentially stigmatised sexual orientation, and indeed “slightly uncomfortable.”. Although the difference was only significant for disclosures to partners, best friends, and strangers, women rated disclosing virginity to a person in their intimate social circle (parent, friend, sibling, romantic partner) as more comfortable than men. The ordering of comfort ratings closely followed the ordering of closeness ratings. Based on current data it is unclear whether this is attributable to closeness indicating a disclosure-relevant construct like trust, closeness is being used as a heuristic judge to comfort, or both.

Finally, a general trend was found for significant correlations between relationship closeness and perceptions of sex-related disclosure comfort for established relationship partners (i.e., from partners, and family to colleagues) but not for unknown others (e.g., counsellors, online, strangers). It is interesting to note that participants reported greater closeness to a same-sex best friend...
than to family, which mirrored comfort of sexual disclosure ratings. This finding, together with those of previous research (e.g., Aron et al., 1997; Sedikides et al., 1999) suggests a reinforcing cycle of disclosure increasing closeness and closeness leading to disclosure. It also suggests that, as we begin to gain independence from family, choosing identities or behaviours we may feel uncomfortable discussing with our families, we are also likely to lose closeness within these relationships.

One final finding of note is that the percentage of gay and bisexual participants in our sample was relatively high, even before oversampling gay persons. Estimates of the percentage of gay persons in the general population range from a fraction of a percent to around 15%, compared with results of the largest Australian study with a rigorous methodology falling at the lower end of this range (Smith, Rissel, Richters, Grulich, & de Visser, 2003), which reported the percentage of men and women identifying as gay at 1.6% and 0.8%. This finding may be taken as evidence of a high level of access for members of this concealable stigmatised minority group. However, as many of the participants were recruited via online courses, it is possible that gay and bisexual participants are accessing alternative routes to higher education, which may be considered only a partial attainment of equity. Further research examining the proportion of gay students in online and equivalent campus-based cohorts would clarify this, as well as informing understandings of the influence of belonging to this minority group on access to tertiary education and consequent advantages.

The current study builds on previous research by integrating several previously disparate issues. Specifically, we examined the perceptions of sex-related disclosures including a concealable stigmatised identity (Chaudoir & Fisher, 2010) among heterosexual and gay participants. This allowed us to explore evaluations of these disclosures, and also perceptions of the comfort (or discomfort) in making these self-relevant or non-relevant disclosures to a range of audiences. The findings are largely consistent with previous research on sexual self-disclosure. Namely, that people would prefer to disclose sexual content to a partner or friend rather than family. However, the current study also found higher levels of closeness with partners and friends compared to parents and siblings, consistent with previous research on the role of closeness in disclosure. Thus, this finding provides a simple explanation of the original finding that people show a strong preference not to make sexual self-disclosure to parents (Herold & Way, 1988).

Given the untargeted recruitment procedure, it is unsurprising that the sample of gay participants was substantially smaller than that of heterosexual participants. In fact, as already noted, the number of gay and bisexual participants exceeded expected numbers based on previous research (Smith et al., 2003). However, the substantially unequal samples, and small numbers (i.e., especially after dividing the sample by participant gender), meant that few statistical tests could be applied to compare groups. Future research into specific disclosure processes may wish to use targeted recruiting to overcome this limitation, although that approach yields unrepresentative samples that complicate the interpretation of research regarding norms.

The current research, of which the result reported here comprises only a small part, was developed to explore perceptions of personal disclosures. It is important to note that this differs from self-reported self-disclosure or actual disclosure in several important ways. First, we did not ask participants whether they have, would, or intended to disclose to various audiences, only what they thought about those hypothetical disclosures. The strength of this approach is that it enabled us to ask heterosexual participants about their perceptions of disclosing that they were gay (i.e., a concealable stigmatised identity). In doing so, we were able to explore heterosexual participants’ evaluation of this disclosure, and compare it to related disclosures (e.g., another sexual orientation, a general sexual disclosure), as well as to the gay participant’s evaluations of the same disclosures. Moreover, the findings of this research suggest that heterosexual and gay participants have very similar relationships in terms of closeness to family, friends, and even strangers, but tend to feel differently comfortable about the disclosures. This provides an interesting piece of new information about the role of audience in “coming out”, and may prove useful to researchers examining the reception of this disclosure as well. Similarly, the pervasive discomfort of disclosing that “I am a virgin”, especially among gay participants, warrants further study. For instance, it could be argued that gay men feel less comfortable disclosing they are a virgin as sex is highly valued within this minority group (Hosking, 2013). For example, sexual experience contributes to gay identity (more so than straight or lesbian identities), and is consistently reinforced through social media, gay events, and popular culture. Admitting that you’re gay but don’t have any actual sexual experience (i.e., a virgin) could be perceived as a threat to being accepted and belonging into the in-group gay community.

The current study provides a new approach and further insight into issues of sexual disclosure, and reveals no real evidence for any of the speculated biases. For example, there was no majority privilege (e.g., a pervasive trend for easier disclosure of majority sexual identity), minority stigma, or gender bias (e.g., significantly more positive evaluation of the “I am a virgin” disclosure
among women). There was evidence that gay and heterosexual participants anticipate different levels of comfort in making sex-related disclosures, but observation that participants tended to feel at ease disclosing to a friend provides some reassurance that the young adults represented by this sample would have access to emotional support for difficult disclosures. It remains to be seen whether this egalitarian display matches behaviour, and whether such a mismatch actually exacerbates the negative outcome that some disclosures elicit. Finally, this study contributes to the understanding of this important aspect of adult identity which remains largely under researched (e.g., Herold & Way, 1988), even in the literature of personal disclosure.

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Research Profile

Dr. Leah Kaufmann a lecturer and early career researcher at the Australian Catholic University with interests in explicit and implicit prejudice. Dr. Ben Williams is an Academic Director (Learning Innovation & Quality) and senior lecturer at Swinburne University. Dr. Warwick Hosking is a senior lecturer at Victoria University specialising in research on gay men’s relationships, issues, and health. Joel Anderson and David Pedder were PhD candidates at the Australian Catholic University while this research was being completed.