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An Examination of the Tripartite Influence Model of Body Image:

Does Women’s Sexual Identity Make a Difference?

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Abstract

According to the tripartite influence model of body image, appearance pressures from family, friends, partners, and the media lead to body dissatisfaction and restrained eating behaviours. There is strong support for this model among young, White heterosexual women. Evidence suggests that women who identified as lesbian as bisexual (LB) may be protected from sociocultural pressures around thinness, but no known research has tested the tripartite model among LB women. The current research tests this model with 264 heterosexual and 208 LB adult women. Heterosexual women reported more thin-ideal internalization than LB women. For both groups of women, pressures from the media, male romantic partners, and family were most strongly associated with weight satisfaction and thin-ideal internalization. However, the impact of these pressures differed for the two groups; the heterosexual women’s model included significant pathways from these pressures to weight satisfaction and restrained eating, which were not significant for the LB women. Differences also emerged between our findings and previous research with younger women; pressure from friends was not related to body image in the model for either group. These findings suggest that further research is needed to explore how diverse groups of women experience sociocultural pressures around thinness.

Keywords: body image, heterosexual women, lesbianism, bisexuality, tripartite influence model, thin-ideal internalization, interpersonal relationships, objectification
An Examination of the Tripartite Influence Model of Body Image:

Does Women’s Sexual Identity Make a Difference?

It is well known that women within Western cultures experience considerable sociocultural pressures around their body size and appearance, with thinness being one of the main signifiers of a woman’s “beauty” (Grogan, 2008). Sociocultural models are the dominant explanatory models of how social and cultural influences affect women’s body image (Tiggemann, 2011). There is empirical support for these causal models among young, White, heterosexual women (Cafri, Yamamiya, Brannick & Thompson, 2005; Stice, Shaw, & Nemeroff, 1998), however, it is unclear whether these models are also applicable to lesbian, bisexual, queer, and other non-heterosexual women (LBN). There is evidence that lesbian women report different appearance pressures, less body dissatisfaction, and less restrained eating than heterosexual women (Polimeni, Austin, Kavanagh, 2009). It has also been suggested that lesbian women are less vulnerable to sociocultural pressures than are heterosexual women (Brown, 1987).

Therefore, it is important to examine sociocultural models of body dissatisfaction and restrained eating in diverse groups of women to enhance our understanding of risk for body image problems. To our knowledge, ours is the first study to test a sociocultural model with LBN women.

Tripartite Influence Model of Body Image

There are various versions of the sociocultural model which explain how dominant sociocultural appearance ideals lead to body dissatisfaction and restrained eating (Tiggemann, 2011). A dominant framework is the tripartite influence model (Thompson, Heinberg, Altabe, & Tantleff-Dunn, 1999) which proposes that perceived appearance pressures from family, friends, and the media (including direct comments about appearance and indirect messages through
praise and promotion of an “ideal” body shape) leads to body dissatisfaction. This relationship is theorised to be mediated by thin-ideal internalization and appearance comparisons with others. Body dissatisfaction then leads to restrained eating behaviours.

Evidence supports the tripartite influence model with heterosexual women and girls (Keery, van den Berg, & Thompson, 2004; van den Berg, Thompson, Obremski-Brandon & Coover, 2002; Yamamiya, Shroff, & Thompson, 2008). However, this body of research suggests a number of modifications to the basic model. Specifically, research indicates that thin-ideal internalization is directly linked to restrained eating (Thompson & Stice, 2001). In addition, research has supported direct pathways from both media pressure and interpersonal pressures to body satisfaction (Keery et al., 2004; Stice, Nemeroff, & Shaw, 1996; Stice & Shaw, 1994). There is evidence that romantic partners are an additional important source of sociocultural appearance pressure (Halliwell & Dittmar, 2006). Indeed, the basic model has been expanded to include an additional source of interpersonal pressure: perceived pressure from romantic partners (Tylka, 2011). This expanded model, which includes four sources of pressures (media, family, peers, and partners), has yet to be fully tested with heterosexual and LBN women (see Figure 1).

Researchers have begun to explore the model with groups of heterosexual men, supporting a revised model which focuses on internalization of a mesomorphic ideal (Tylka, 2011). Recently, the extended tripartite influence model was examined with gay men (Tylka & Andorka, 2012). The authors found that thin-ideal internalization mediated sociocultural influences on body image and body shaping behaviours. However, family, friend, and media pressures also directly predicted body dissatisfaction, and friend and partner pressures directly predicted body shaping behaviours (specifically restrained eating and masculinity enhancement behaviours). The authors conclude that it is important for researchers to separate different forms
of social influence to examine how they are connected to thin-ideal internalization, body dissatisfaction, and body shaping behaviours. To date, no known research has explored the tripartite influence model, or examined different sources of sociocultural pressures, with LBN women.

**LB Women’s Body Image**

Two authors offer conflicting theories as to how mainstream cultural appearance ideals shape LBN women’s body image. (These authors theorised about lesbian women specifically, but their ideas are applicable to bisexual, queer, and other non-heterosexual women, therefore we refer to “LBN” women in our discussion.) Brown (1987) argued that LBN women are less vulnerable to mainstream pressures to be thin, and they feel happier with their bodies than heterosexual women, because LBN communities reject mainstream body ideals as being heteronormative (i.e., seen as ideal for women because they are desirable to men). Women within LBN communities traditionally have specific appearance norms that are distinct from mainstream culture. These have been described as butch and androgynous (Rothblum, 1994) or, more recently, “boyish” (Huxley, Clarke, & Halliwell, 2014) and toned/athletic (Leavy & Hastings, 2010). In contrast, Dworkin (1988) argued that, like heterosexual women, LBN women are raised and live in mainstream society which emphasises thinness. Consequently, all women experience the same pressures to be thin and are subsequently vulnerable to being dissatisfied with their bodies.

A small body of literature has explored differences in the extent to which heterosexual and LBN women report sociocultural pressures, body dissatisfaction, and restrained eating. This research tends to focus on comparing lesbian and heterosexual women (where bisexual are also included, we use the term “LB” when reporting research findings). Problematically, participants
are often not equivalent on demographic characteristics. LB women (recruited from community samples) are often heavier and older than the heterosexual women recruited from undergraduate samples, and these weight and age discrepancies are not always controlled in analysis (Morrison, Morrison, & Sager, 2004). Very few studies have explored relationships proposed by the tripartite model. Strong, Williamson, Netemeyer, and Geer (2000) found that body dissatisfaction, but not media pressure, was a significant predictor for restrained eating for their lesbian participants. To date, however, the whole model is not known to be have been tested with LB women, although there is evidence to suggest that the model may differ for them, as well as share some commonalities.

There is evidence that media promotion of the thin ideal is directed more strongly at heterosexual women than LB women. For example, advertisements featuring extremely thin women are more frequently found in magazines aimed at heterosexual women than lesbian women (Milillo, 2008). However, there were no differences between levels of appearance pressure from the media reported by lesbian and heterosexual women (Bergeron & Senn, 1998; Share & Mintz, 2002).

Some research has found that women identifying as lesbian reported less thin-ideal internalization than heterosexual women (Austin et al., 2004; Bergeron & Senn, 1998; Share & Mintz, 2002), but more recent studies have found no differences in thin-ideal internalization between these groups (Koff, Lucas, Migliorini, & Grossmith, 2010; Legenbauer et al., 2009). This could be an indication that preferences within LB communities for “toned” bodies (Leavy & Hastings, 2010) are merging with mainstream ideals for thinness. Alternatively, this change could suggest that the mainstream belief that thinness equates to “beauty” is becoming pervasive within different subcultures (Grogan, 2008).
Some studies found that LB women reported less body dissatisfaction than heterosexual women (Austin et al., 2004; Bergeron & Senn, 1998; Polimeni et al., 2009; Strong et al., 2000), whereas other studies found no differences (Beren, Hayden, Wilfley, & Grilo, 1996; Koff et al., 2010; LaTorre & Wendenburg, 1983; Legenbauer et al., 2009; Share & Mintz, 2002). Morrison and colleagues’ (2004) meta-analysis found no differences between lesbian and heterosexual women’s body dissatisfaction. Similarly, there are conflicting findings in relation to restrained eating; some studies have found that LB women reported fewer restrained eating behaviours than heterosexual women (Polimeni et al., 2009; Strong et al., 2000), whereas others found no differences (Austin et al., 2004; Share & Mintz, 2002).

No known quantitative research has explicitly explored levels of interpersonal pressures, or the relationship between such pressures and body-related concerns, among LB women. This is an important gap in the literature because mainstream, heteronormative body and appearance ideals are often different from those valued within LBN communities (Rothblum, 1994). Qualitative evidence suggests that LB women may find themselves experiencing pressures from both heterosexual and LBN sources. For example, many LB women have heterosexual biological families (Mitchell, 2008) so that it is possible that they experience familial pressure to conform to heteronormative ideals. Within LB communities, there is often peer pressure to be physically fit, toned, and athletic (Leavy & Hastings, 2010), but women may simultaneously experience pressure to conform to the thin ideal from heterosexual friends (Grogan, 2008). Same-sex relationships can encourage women to question the validity of heteronormative ideals and foster positive feelings about their appearance, whereas bisexual women have reported experiencing pressure to conform to mainstream ideals when partnering with men (Huxley, Clarke, & Halliwell, 2011). This pattern suggests that there could be important differences in the
appearance norms communicated through heterosexual and LB women’s friends and romantic partners. Therefore in the current study, we expanded the tripartite model to incorporate more specific sources of interpersonal pressures that are likely to be important for LB women by distinguishing between heterosexual and LGB (lesbian, bisexual, and gay) friends and between male and female romantic partners.

**The Present Study**

Like previous research on the tripartite model (Tylka, 2011), we included partner pressure, and we chose to assess thin-ideal internalization but not social comparisons. Because we have already expanded the model to include additional interpersonal influence variables, we were concerned not to introduce too many paths into the analysis. Additionally, the scale we used to assess thin-ideal internalization includes items that tap into appearance comparisons and, therefore, we would have overlap between the constructs which could cause problems during analysis (Tylka, 2011).

The aims of the current study then are two-fold. First, we will compare levels of sociocultural pressures, body dissatisfaction, and restrained eating among heterosexual and LBN women. Based on previous research, we predict that there will be no differences between heterosexual and LBN women’s experiences of pressures, thin-ideal internalization, body dissatisfaction, and restrained eating behaviours. Second, we will explore the tripartite influence model between these groups and focus on specific sources of interpersonal pressures (see Figure 1).

**Method**

**Procedure and Participants**
Our study employs a cross-sectional, between-subjects survey design. Measures assessing the different variables were presented in an online survey, based on recommendations that the internet is an effective method for reaching a wide range of LBN women (who can be hard to reach) through different LBN email lists, organizations, and forums (Harding & Peel, 2007). In order to target as many women as possible, participants were recruited through purposive sampling, snowball sampling, and outcropping sampling (where advertising and recruitment takes place at locations frequented by the target population). The first author’s personal contacts were targeted through a popular social networking website where a group providing details about the research and a link to the online survey was set up and all female contacts of the author invited to join. They were then encouraged to invite their female friends to join, and the survey was snowballed in this manner. The survey was also advertised in three magazines published in the South-West of England, providing brief details about the research and the website address for the survey. Flyers containing the same information were also handed out at the annual Pride London march. Additionally, several participants snowballed the survey information to local and national LBN groups or networks. Potential participants were informed that the survey explored how heterosexual and LBN women feel about their body and what factors may influence their feelings. They were also told that the survey would take about 20 minutes to complete and that they would have the chance to take part in a drawing to win a £50 prize. The survey was available online for 6 months.

Through these recruitment methods, a total of 534 women completed the survey. Of the total sample, 33 did not indicate their sexual identity, one reported being male-to-female transgendered, one self-identified as both male and female, and three identified their age as under 18 years-old. These 38 participants were not included in our analysis, leaving a total sample of
472 participants in which 119 (25.58%) identified as lesbian; 89 (19.08%), as bisexual; 24 (5.08%), as non-heterosexual; and 264 (55.35%), as heterosexual.

The overall age range of participants was 18 to 67 years-old ($M = 32.78$, $SD = 9.80$), and Body Mass Index (BMI) range was 15.74 to 54.44 ($M = 24.91$, $SD = 5.03$). BMI was calculated using self-reported weight and height. Analysis of self-reported demographic information shows that over 86% ($n = 406$) of participants described themselves as “White,” and 93% ($n = 439$) were able-bodied. Although only British women were targeted during recruitment, 12 women from North America, Europe, Asia, and Oceania also took part. Participants were predominantly middle-class ($n = 324, 68.64%$), employed ($n = 305, 64.62%$), educated to bachelor’s degree or higher ($n = 342, 72.46%$), and lived in urban areas ($n = 346, 73.31%$). Fully 69% ($n = 327$) were in a partner relationship with one or more partners (respondents indicated the sex, but not the number, of their current partners). Self-identified heterosexual women predominantly had male partners ($n = 182, 69%$), or were single ($n = 75, 28.4%$) whereas 2% ($n = 4$) had male and female partners and three women (1%) currently had female partners. In contrast, the self-identified lesbian women predominantly had female partners ($n = 78, 66%$), and 33% ($n = 38$) were single, whereas one woman currently had a male partner(s), and one described her partner(s) as “other” (this option was provided to include trans and intersexed people). The self-identified bisexual women were more mixed; 34 (38%) had male partners, 10 (11%) had female partners, and 13 (15%) had both male and female partners. Only seven of the non-heterosexual women reported partnerships; four (17%) had male partners, two (8%) had female partners, and 1 (4%) described her partner as “other.”

Examination of the non-heterosexual women’s free-text data on terms they use to describe their sexual identity suggests notable differences. Some women described themselves as
“gay,” “fluid” or “queer,” whereas others stated that they were “asexual.” The diverse identities expressed by this group are not consistent with the experiences underpinning the theories proposed by Dworkin (1988) or Brown (1987). Therefore, the category “non-heterosexual” was removed from analyses, leaving a final sample of 448 women. For analysis, the lesbian and bisexual women’s data were combined to produce one “LB” group \( n = 208 \) of comparable size to the heterosexual group.

**Measures**

The front page of the survey website provided information about the research including: descriptions of the researcher and the purpose of the research; what topics respondents would be asked questions about, what would happen to the information they provided, and how they could withdraw from the study if desired. Those wishing to take part in the research completed a consent form. All participants then answered demographic questions about their sexual identity, height, weight, age, gender, ethnicity, socioeconomic status, occupation, education, romantic/sexual relationships and whether they considered themselves to be physically disabled.

Sexual identity was assessed by one categorical question where participants were asked to select the term that best described themselves from four options provided: “lesbian,” “bisexual,” “non-heterosexual,” and “heterosexual” (the term “non-heterosexual” was offered because some women prefer a degree of ambiguity in how they describe themselves). Participants were also given a free-text option of saying more about their sexual identity if they wished. The surveys were then sequentially presented to participants in the order in which they are described below. Once completed, participants were directed to a thank you page.

**Body satisfaction.** The weight satisfaction subscale (eight items) of the Body Esteem Scale (BES; Mendelson, Mendelson, & White, 2001) was used. Participants were required to
indicate how often they agreed with each item on a 5-point Likert scale from 0 (never) to 4 (always). An example item is “I am satisfied with my weight.” The mean was computed with higher scores indicating more positive feelings about weight and body size. Versions of this scale have been used in previous research with LB women (Heffernan, 1996; Share & Mintz, 2002). In the current research, the subscale had sound reliability ($\alpha = .80$).

**Sociocultural pressure.** The Perceived Sociocultural Pressure Scale (PSP; Stice et al., 1996) was adapted for the current study. The scale originally had eight items with four subscales assessing perceived pressures to be thin from family, friends, romantic partners, and the media (two items each). We added four items to this scale to distinguish between heterosexual and LGB friends and between male and female romantic partners, creating two new subscales that enabled comparisons between different sources of interpersonal pressures. Respondents indicated the frequency with which they have experienced the pressure described in each item, on a 5-point Likert scale from 1 (never) to 5 (always). Because the items we added may not be applicable to all participants, we provided a “not applicable” option. Mean scores were computed wherein higher scores indicated higher levels of perceived pressures. Example items include “I’ve felt pressure from my straight friends to lose weight” and “I’ve noticed a strong message from men I have dated to have a thin body.” This measure has been used in previous research with LB women (Huxley, 2010) and has been used in research testing the tripartite model (Keery et al., 2004; van den Berg et al., 2002).

Because women’s attractions and sexual identity are fluid and change over time (Diamond, 2000), all women were given the option of responding to questions about male and female partners. Over 90% of bisexual women ($n = 82$) and heterosexual women ($n = 254$) completed the male partner subscale, and 56% ($n = 67$) of women identifying as lesbian also
completed this subscale. Within a combined LB group, 72% ($n = 149$) gave responses about a male partner. Nearly 90% of the bisexual women ($n = 80$) and 92% of the lesbian women ($n = 110$) completed the female partner subscale. Therefore, both the male partner and the female partner scales were included in the analysis for lesbian and bisexual women. There was a large amount of missing data in heterosexual women’s responses on the female partner scale; fewer than 24% ($n = 63$) answered the questions about female partners. Therefore, in the model testing, only the male partner subscale was used for heterosexual women. Again, all women were given the option of responding to questions about heterosexual friends and LGB friends; valid responses to each subscale were provided by over 80% of women in each group, therefore both subscales were used in analysis for each group of women.

In the current study, there were significant positive correlations (all $ps < .001$) between the two items for each subscale: heterosexual friends ($r = .63$), LGB friends ($r = .68$), family ($r = .78$), male partners ($r = .69$), female partners ($r = .75$), and the media ($r = .55$). We conducted a principal component analysis, with oblique rotation (direct oblimin) and loadings smaller than 0.4 suppressed (Field, 2005), to assess whether the adapted items were tapping into related constructs (see Table 1). This analysis revealed three components within the pressures items. Component 1 contained items from the LGB friends subscale (PSP items three and four), and from the female partner subscale, seeming to represent specifically LBN interpersonal pressures. Component 2 contained items from the friends subscale relating to heterosexual friends (PSP items one and two), the family subscale of the PSP (PSP items five and six), and the media subscale (PSP items eleven and twelve). This component seems to represent general, or possibly heteronormative, interpersonal pressures. Component 3 contained only the items from the partner subscale that related to male partners (PSP seven and eight), and so appears to represent male
partner pressure. There was only one cross-loading between factors. This was the first item on
the heterosexual friends pressure scale “I’ve felt pressure from my straight friends to lose
weight” which loaded on the LBN interpersonal pressures and, more strongly, on the
heteronormative interpersonal pressures scale. It is likely that this is explained by a relationship
between the pressures experienced from friends generally, regardless of sexual identity.
However, the other item on the heterosexual friends pressures scale showed a unique factor
loading and overall a clean pattern of loadings emerged. Therefore, this analysis suggests that the
adapted scale is tapping into meaningful constructs.

**Thin-ideal internalization.** The internalization-general subscale of the Sociocultural
Attitudes Towards Appearance Questionnaire-3 (SATAQ; Thompson, van den Berg, Roehrig,
Guarda, & Heinberg, 2004) was used. This subscale focuses on the thin ideal, and is
subsequently referred to as “thin-ideal internalization.” An example item is “I would like my
body to look like the models who appear in magazines.” This subscale comprises nine items with
which participants indicate their agreement on a 5-point Likert scale from 1 (*definitely disagree*)
to 5 (*definitely agree*). Mean scores were calculated with higher scores indicating higher thin-
ideal internalization. Versions of this scale have previously been used in research into sexuality
and body image (Bergeron & Senn, 1998; Share & Mintz, 2002), as well as in research testing
the tripartite model (Tylka & Andorka, 2012; Yamamiya et al., 2008). In the current study the
subscale had strong internal consistency reliability (α = .93).

**Eating behaviours.** The 10-item restrained eating subscale of the Dutch Eating
Behaviour Questionnaire (DEBQ; Van Strien, Frijters, Bergers, & Defares, 1986) was used.
Participants indicate the frequency with which they engaged in the described behaviours on a 5-
point Likert scale from 1 (*never*) to 5 (*very often*). An example item is “Do you deliberately eat
foods that are slimming?” The mean was calculated, with higher scores indicating more frequent engagement with restrained eating behaviours. This scale has been used in research with LB women (Conner, Johnson, Grogan, 2004; Polimeni et al., 2009). Van Strien and colleagues (1986) reported that this subscale had strong internal consistency reliability (α = .95) similar to the level (α = .92) found in the present study.

**Results**

The tripartite influence model was tested through Structural Equation Modelling using AMOS version 21. Based on well-known guidelines (Hu & Bentler, 1999), model fit was determined by the Comparative Fit Index (CFI) and the root mean square error of approximation (RMSEA). CFI values >.95 and RMSEA values <.06 indicate the model is a good fit for the data. The number of participants in the heterosexual group and the LB group exceeded the criterion (n > 200) specified for complex models which have internally consistent and interrelated indicators (Weston & Gore, 2006). When testing differences between the groups, effect sizes are reported using Cohen’s d. Cohen (1988) defined effect sizes less than d = .2 as "small”, between d = .2 and d = .5 as "medium” and greater than d = .8 as "large.”

There were no differences between LB women with heterosexual women in terms of their ethnicity, $\chi^2(3) = 6.37, p = .09$, level of education, $\chi^2(6) = 7.46, p = .28$, occupation, $\chi^2(4) = 0.44, p = .98$, or current relationship status, $\chi^2(2) = 1.33, p = .52$. There were, however, significant differences between the groups’ mean age and BMI (see Table 2); there was a trend for LB women to be older and larger than heterosexual women. Despite the small effect sizes, this trend was significant, warranting inclusion of age and BMI as covariates in further analysis.

**Group and Individual Differences**
ANCOVAs controlling for both age and BMI were run in order to test for differences between the variables by sexual identity (see Table 2). Heterosexual women reported significantly less pressure from female partners and significantly more pressure from male partners and thin-ideal internalization than LB women. No significant differences were found between the groups for any other pressures and body images variables.

Additional tests were run in order to identify any individual differences in the pressures perceived from male partners compared to female partners, and from heterosexual friends compared to LGB friends, across all participants. Overall perceived pressure from male partners \((M = 1.81, SD = .96)\) was significantly higher than perceived pressure from female partners \((M = 1.47, SD = .74)\), \(t(207) = 5.87, p < .001, d = .40\). This overall pattern held within each group: LB women, \(t(188) = 6.17, p < .001, d = .31\), and heterosexual women, \(t(62) = 5.34, p < .001, d = 1.10\). Overall perceived pressure from heterosexual friends \((M = 1.81, SD = .95)\) was significantly higher than perceived pressure from LGB friends \((M = 1.47, SD = .74)\), \(t(402) = 9.25, p < .001, d = .40\). Again, this finding held within each group: LB women, \(t(144) = 3.75, p < .001, d = .42\), and heterosexual women, \(t(213) = 6.95, p < .001, d = .43\).

**Testing the Tripartite Influence Model**

First, correlations were run among BMI, the pressures variables, and the outcome variables of internalization, weight satisfaction, and restrained eating separately for both groups of women (see Table 3). There were no significant relationships between BMI and any other variables for both groups. For heterosexual women, all variables were significantly related except for the relationship between pressure from LGB friends and weight satisfaction. For LB women, all relationships were significant except for the relationships between pressure from
male partners and weight satisfaction, pressure from heterosexual friends and thin-ideal internalization, and pressure from heterosexual friends and restrained eating.

The extended tripartite model was tested using only pathways that were significantly correlated. This model was a good fit for LB women, $\chi^2(8) = 13.43, p = .10, \text{CFI} = .99, \text{RMSEA} = .06$; however, the model fit less well for heterosexual women, $\chi^2(6) = 23.99, p < .001, \text{CFI} = .97, \text{RMSEA} = .11)$. We examined the modification indices (MIs) to identify whether the addition of any further pathways would improve the fit of the second model (Kline, 2005). The largest MIs were seen for pathways between family pressure and restrained eating (MI = 1.77) and between male partner pressure and restrained eating (MI = 1.45). The addition of these pathways made theoretical sense so we added both to the model for heterosexual women. This revised model was a good fit, $\chi^2(4) = 5.53, p = .24, \text{CFI} = .99, \text{RMSEA} = .04)$. Table 4 shows the pathway loadings for the models for both LB women and heterosexual women.

To obtain a more parsimonious model, non-significant pathways were trimmed from the model for LB women and the second model for heterosexual women. These models were then re-examined to assess the fit. The trimmed model for LB women did not result in decreased model fit, $\chi^2(16) = 19.41, p = .25, \text{CFI} = .99, \text{RMSEA} = .03$, and was therefore retained (see Figure 2a). All non-significant pathways were also removed from the second model for heterosexual women. The trimmed model for heterosexual women did not result in decreased model fit, $\chi^2(10) = 13.87, p = .18, \text{CFI} = .99, \text{RMSEA} = .04$, therefore this trimmed model was also retained (see Figure 2b). The models for both groups of women include pathways from male partner pressure and media pressure to thin internalization, from family pressure to weight satisfaction, and from thin internalization and weight satisfaction to restrained eating. The heterosexual women’s model also includes pathways from male partner pressure and media
pressure to weight satisfaction, and from family pressure and male partner pressure to restrained eating.

**Discussion**

Our research uniquely contributes to the literature by exploring the tripartite influence model with heterosexual women and LB women. Findings suggest that some aspects of the model are supported for both these groups of women. However, heterosexual women and LB women differed in the extent and impact of sociocultural pressures around appearance. In the final models for both groups, perceived pressures from the media and from male partners were most strongly associated with thin-ideal internalization. For heterosexual women, media and family pressures were associated with weight dissatisfaction and perceived pressures from male partners and from family were directly associated with restrained eating. For LB women, family pressure was associated with weight dissatisfaction. These findings are consistent with existing evidence of the significance of male partners on heterosexual women’s body image (Halliwell & Dittmar, 2006), as well as the relationship between family pressure and internalisation of thin ideals, body dissatisfaction, and dieting behaviours (Levine, Smolak, & Hayden, 1994). They are also consistent with the substantial body of evidence demonstrating the negative impact of the media on body image concerns and eating behaviour of women at all ages (Bedford & Johnson, 2006; Grabe, Ward, & Hyde, 2008).

It is striking that, for both LB and heterosexual adult women, dominant sociocultural appearance ideals of thinness are transmitted powerfully through romantic relationships with men. Over half of the lesbian women in this study report pressure about their appearance from male romantic partners. This influence of male romantic partners is shown in our final SEM models and also in the analysis indicating that both groups of women reported higher levels of
perceived pressures from male than female partners (this difference had a medium effect size for LB women, and a large effect size for heterosexual women). Regardless of sexual identity, perceived appearance pressure from a male partner is associated with negative outcomes. The salience of these pressures could be explained by objectification theory (Fredrickson & Roberts, 1997). Objectification theory states that in Western cultures women are continually evaluated through the male gaze for their conformity to mainstream (heteronormative) social “beauty” ideals. Under this scrutiny, women internalize the (heterosexual male) observers’ perspective and self-objectify, which is associated with body and appearance dissatisfaction (Fredrickson & Roberts, 1997). Not surprisingly, pressure from male partners was more influential for heterosexual women. For LB women, the only direct relationships for both pressures from male partners and the media were with internalization. Therefore, the impact of these pressures is transmitted through women’s internalization of the thin-ideal. In contrast, for heterosexual women, pressure from the media is also directly associated with weight satisfaction, and pressure from male partners is directly linked to eating behaviour. The lack of significant associations with perceived pressure from same-sex romantic partners for LB women was, however, surprising. This finding could be exaggerated as a result of combining the respondents identifying as lesbian and bisexual into one group. The majority of lesbian-identified respondents did complete the items on male partners, which justified including this measure in the analysis. However, a substantial subset of lesbian women were excluded from this analysis. Therefore, among the LB women who responded to this subscale, male partners had a significant influence on their body image concerns. These results suggest that among women who have romantic relationships with women as well as men, male partner pressure is most influential in terms of body image concerns.
There were significant associations between pressure from the family and weight satisfaction for both groups of women. For heterosexual women, this pressure was also associated with restrained eating. As previously noted, LB women often have heterosexual biological families (Mitchell, 2008) so these women, like heterosexual women, may experience familial pressure to conform to heteronormative ideals.

Interestingly, pressures from friends were not significantly associated with thin-ideal internalization, weight satisfaction or restrained eating for either group of women. This is at odds with previous research findings for heterosexual women (van den Berg et al., 2002). However, previous research examining the tripartite model has typically used undergraduate women. In the current study, a snowball sample of women with a mean age over 30 years-old was recruited, representing an older population than typically has been studied. It may be that pressures from friends plays a smaller role in shaping the body image concerns of adult women; friends could be seen as role models rather than as targets of social comparison or sources of direct pressure (Grogan, 2008). Alternatively, it may be that the measure of perceived pressures from friends used in the current research fails to tap into important influences that friends have on weight concerns. Indeed, other studies have included multiple measures of peer influence (e.g., van den Berg et al., 2002). Further research should explore how heterosexual and LGB friends shape heterosexual and LBN women’s body image into adulthood.

Significantly more pressure was perceived to originate from heterosexual friends than LGB friends. These findings support Brown’s (1987) assertion that LBN communities are less pressuring than the heterosexual mainstream, encouraging acceptance of diversity in appearance. Also consistent with Brown’s (1987) theory, LB women reported lower levels of thin-ideal internalization—one of the major causal factors for body dissatisfaction and eating disturbance
(Thompson & Stice, 2001)—than heterosexual women. However, there were no differences in reported weight satisfaction or restrained eating between the groups. This suggests that there are other constructs not measured in our research that produce equivalent levels of body dissatisfaction and dietary restraint for LB women. These could include experiences of discrimination (Huxley, 2013), sense of belonging to LBN community (Hanley & McLaren, 2014), or feminist identification (Peterson, Tantleff-Dunn, & Bedwell, 2006). Future research could explore how these different constructs affect the ability of the tripartite model to account for LBN and heterosexual women’s body image.

**Practice Implications**

Our findings suggest that therapists, counsellors, and clinicians should be aware that many LB women are affected by male partner pressure, and that this may be related to restrained eating behaviours. There are social expectations for sexual attractions and behaviour to be completely congruent with sexual identity (Golden, 1987), and as such, it may be anticipated that lesbian women in particular are not influenced by male partners. Diamond (2000) argued that there is fluidity in many people’s attractions and behaviours, and this was demonstrated by the self-identified lesbian women’s response rate to questions about male partners which was, perhaps, unexpectedly high. Practitioners should therefore not assume that male partners are unimportant to LB women.

Media pressure and pressure from family are most influential for both lesbian and bisexual women, and heterosexual women. This finding suggests that practitioners working with women experiencing body image dissatisfaction, restrained eating, and associated disorders, should take steps to identify and address any concerns linked to these two sources of pressure.

**Limitations**
Our study is limited by a reliance on cross-sectional data because causal relationships within the model cannot be tested. However, given the existing longitudinal evidence for the model (Cafri et al., 2005), there is strong support for the directional relationships proposed among heterosexual women. Although there are theoretical grounds for proposing that relationships within the model differ for LB women, there are no grounds to expect alternative directions of causality. Therefore, a cross-sectional investigation remains informative as a preliminary examination of the tripartite influence model in LB women.

Participants were mainly White, middle-class women. Although this limitation is not unusual within body image research, or research involving LB women (Morris & Rothblum, 1999), it does limit the extent to which findings can be generalised. Further research into this topic should attempt to recruit diverse (different ages, ethnicities, etc.) groups of women. Additionally, there were not enough LB women in our sample to conduct separate analyses of their data. Further research should explore for differences in the tripartite model between these groups because lesbian, bisexual, queer and other non-heterosexual women may experience different sociocultural appearance pressures (Huxley, 2010).

Conclusions

In summary, pressures from the media and from male romantic partners emerged as the strongest influences in this examination of the tripartite influence model of body image among adult heterosexual women and LB women. The emerging model differs from that supported with younger groups of heterosexual women; notably, pressures from friends were not significant in these older groups’ models. Pressure from female partners was also not significant in the models for either group. The models for LB women and heterosexual contained the same relationships between pressures from family, male partners, and media with thin internalization, weight
satisfaction, and restrained eating. There were additional pathways in the heterosexual women’s model, not evidenced in the LB women’s model, directly linking these pressures to weight satisfaction and restrained eating. Findings suggest that further research is needed to explore how sociocultural pressures influence weight satisfaction among diverse groups of women and what other factors shape their body image concerns.
References


Table 1

Oblique-Rotated Principal Component Matrix for Perceived Sociocultural Pressure Items

<table>
<thead>
<tr>
<th>PSP Item</th>
<th>PSP Subscale</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>I’ve felt pressure from my LGB friends to lose weight.</td>
<td>LGB Friends</td>
</tr>
<tr>
<td>4.</td>
<td>I’ve noticed a strong message from my LGB friends to have a thin body.</td>
<td>LGB Friends</td>
</tr>
<tr>
<td>9.</td>
<td>I’ve felt pressure from women I’ve dated to lose weight.</td>
<td>Female Partners</td>
</tr>
<tr>
<td>10.</td>
<td>I’ve noticed a strong message from women I have dated to have a thin body.</td>
<td>Female Partners</td>
</tr>
<tr>
<td>1.</td>
<td>I’ve felt pressure from my straight friends to lose weight.</td>
<td>Heterosexual Friends</td>
</tr>
<tr>
<td>2.</td>
<td>I’ve noticed a strong message from my straight friends to have a thin body.</td>
<td>Heterosexual Friends</td>
</tr>
<tr>
<td>5.</td>
<td>I’ve felt pressure from my family to lose weight.</td>
<td>Family</td>
</tr>
<tr>
<td>6.</td>
<td>I’ve noticed a strong message from my family to have a thin body.</td>
<td>Family</td>
</tr>
<tr>
<td>11.</td>
<td>I’ve felt pressure from the media (e.g. TV, magazines) to lose weight.</td>
<td>Media</td>
</tr>
<tr>
<td>12.</td>
<td>I’ve noticed a strong message from the media to have a thin body.</td>
<td>Media</td>
</tr>
<tr>
<td>7.</td>
<td>I’ve felt pressure from men I’ve dated to lose weight.</td>
<td>Male Partners</td>
</tr>
<tr>
<td>8.</td>
<td>I’ve noticed a strong message from men I have dated to have a thin body.</td>
<td>Male Partners</td>
</tr>
</tbody>
</table>
### Table 2

**LB and Heterosexual Group Means for All Variables**

<table>
<thead>
<tr>
<th>Measures</th>
<th>LB Women Mean (SD)</th>
<th>Heterosexual Women Mean (SD)</th>
<th>Significance Test</th>
<th>t(454) = 2.20, p = .028, d = .21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>33.93 (10.20)</td>
<td>31.85 (9.93)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMI</td>
<td>25.46 (5.70)</td>
<td>24.44 (5.42)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure from:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media (PSP)</td>
<td>3.66 (1.09)</td>
<td>3.77 (1.08)</td>
<td>F(1, 412) = 1.63, p = .203, d = .10</td>
<td></td>
</tr>
<tr>
<td>Male Partners (PSP)</td>
<td>1.88 (0.99)</td>
<td>2.04 (1.02)</td>
<td>F(1, 370) = 3.97, p = .047, d = .16</td>
<td></td>
</tr>
<tr>
<td>Female Partners (PSP)</td>
<td>1.60 (0.80)</td>
<td>1.12 (0.59)</td>
<td>F(1, 230) = 15.73, p &lt; .001, d = .68</td>
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</tr>
<tr>
<td>Family (PSP)</td>
<td>2.20 (1.19)</td>
<td>1.94 (1.11)</td>
<td>F(1, 411) = 3.14, p = .077, d = .23</td>
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<tr>
<td>Heterosexual Friends (PSP)</td>
<td>1.88 (0.97)</td>
<td>1.80 (0.96)</td>
<td>F(1, 395) = 0.00, p = .960, d = .08</td>
<td></td>
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<tr>
<td>LGB Friends (PSP)</td>
<td>1.52 (0.74)</td>
<td>1.43 (0.74)</td>
<td>F(1, 374) = 1.31, p = .253, d = .12</td>
<td></td>
</tr>
<tr>
<td>Thin-ideal internalization (SATAQ)</td>
<td>2.55 (0.98)</td>
<td>3.02 (1.01)</td>
<td>F(1, 404) = 20.19, p &lt; .001, d = .47</td>
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</tr>
<tr>
<td>Weight Satisfaction (BES)</td>
<td>2.39 (0.80)</td>
<td>2.43 (0.81)</td>
<td>F(1, 422) = 0.10, p = .750, d = .05</td>
<td></td>
</tr>
<tr>
<td>Restrained Eating (DEBQ)</td>
<td>2.69 (0.78)</td>
<td>2.67 (0.83)</td>
<td>F(1, 368) = 0.00, p = .994, d = .03</td>
<td></td>
</tr>
</tbody>
</table>

*Note. LB women self-identified as lesbian or bisexual.*
### Table 3

**Correlations Among Study Variables for LB and Heterosexual Women**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
<th>8</th>
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<td>--</td>
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<td>-.05</td>
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<td>.10</td>
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<td></td>
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<td>.39***</td>
<td>.35***</td>
<td>.52***</td>
<td>-.31***</td>
<td>.37***</td>
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<td>3. Male Partners (PSP)</td>
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<td>--</td>
<td>--</td>
<td>.46***</td>
<td>.46***</td>
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<td>.42***</td>
<td>-.28***</td>
<td>.43***</td>
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<td>.32***</td>
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<td>--</td>
<td>--</td>
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<td>--</td>
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<td>.28***</td>
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<td>.53***</td>
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<td>-.29***</td>
<td>.35***</td>
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<td>6. Heterosexual Friends (PSP)</td>
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<td>.37***</td>
<td>.48***</td>
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<td>.69***</td>
<td>.37***</td>
<td>-.25***</td>
<td>.27***</td>
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<td>7. LGB Friends (PSP)</td>
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<td>.23**</td>
<td>.63***</td>
<td>.47***</td>
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<td>8. Thin-ideal internalization (SATAQ)</td>
<td>.04</td>
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<td>.28***</td>
<td>.16*</td>
<td>.21***</td>
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<td>.18**</td>
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<td>.39***</td>
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<td>-.07</td>
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<td>-.35***</td>
<td>-.19**</td>
<td>-.22**</td>
<td>-.18*</td>
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<td>-.47***</td>
</tr>
<tr>
<td>10. Restrained Eating (DEBQ)</td>
<td>-.14</td>
<td>.22**</td>
<td>.23**</td>
<td>.16*</td>
<td>.22**</td>
<td>.03</td>
<td>.16*</td>
<td>.36***</td>
<td>-.35***</td>
<td>--</td>
</tr>
</tbody>
</table>

*Note.* Correlations for women who identify as lesbian or bisexual (LB) are reported below the diagonal; for heterosexual women, above the diagonal.

*p < .05. ** p < .01. *p < .001.
### Table 4

Pathway Loadings for the Tripartite Models for LB and Heterosexual Women

<table>
<thead>
<tr>
<th>Model</th>
<th>Indicator</th>
<th>Outcome</th>
<th>LB Women Model 1</th>
<th>Heterosexual Women Model 1</th>
<th>LB Women Model 2</th>
<th>Heterosexual Women Model 2</th>
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</thead>
<tbody>
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<td>1</td>
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<td></td>
<td></td>
<td></td>
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<td>Media (PSP)</td>
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<td>-0.07</td>
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<td>0.06</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>LGB friends (PSP)</td>
<td>Thin-ideal Internalization</td>
<td>0.07</td>
<td>0.12</td>
<td>0.12</td>
<td>0.28</td>
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<td>Weight Satisfaction</td>
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<td>-0.14</td>
<td>-0.01</td>
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<td>-0.08</td>
<td>-0.08</td>
<td>-0.08</td>
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<td>Female Partners (PSP)</td>
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<td>-0.11</td>
<td>-0.11</td>
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<tr>
<td></td>
<td>LGB Friends (PSP)</td>
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</tr>
<tr>
<td></td>
<td>Thin-ideal Internalization (SATAQ)</td>
<td>Weight Satisfaction</td>
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<td>-0.05</td>
<td>-0.05</td>
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</tr>
<tr>
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<td>Thin-ideal Internalization (SATAQ)</td>
<td>Restrained Eating</td>
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<td>0.24</td>
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<td>0.17</td>
</tr>
<tr>
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<td>Weight Satisfaction (BES)</td>
<td>Restrained Eating</td>
<td>-0.31</td>
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<td><strong>Pressure from:</strong></td>
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<td>0.14</td>
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</table>

**Note.** LB women self-identified as lesbian or bisexual.
Figure 1. Expanded tripartite model, including partner pressure
Figure 2. Final tripartite model for (a) LB women who self-identified as lesbian or bisexual (top) and (b) heterosexual women (bottom).