Gender, Sexuality, Body Image and Eating Behaviours

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Abstract
One hundred and twenty one participants reported sexual orientation, body mass index, body shape concerns, eating motives and eating styles. Measures of body dissatisfaction were greater in heterosexual women and homosexual men (ps <.05), while heterosexual women had smaller (ps <.001) ideal body shapes. Eating weight control motive was lower in heterosexual men compared to women (ps <.05). Restrained eating was lower in heterosexual men compared to heterosexual women or homosexual men (ps <.001). The findings support the role of socially prescribed body shapes on body shape concerns, eating motivations, and eating styles in men and women and suggest impacts are greater for heterosexual women and homosexual men.

Keywords
body image, body satisfaction, dieting, eating style, food choice motivation, gender differences, sexual orientation differences

COMPETING INTERESTS: None declared.

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Previous research has highlighted differences between men and women and between heterosexual and homosexual groups in body image and indicators of eating disorders (e.g. Beren, Hayden, Wilfley, & Grilo, 1996; Grogan, 2000; Siever, 1994). The present research sought to extend these findings by further examining the impacts of gender and sexual orientation on eating motives and eating styles in addition to body image. We first briefly review the literature examining gender and sexual orientation differences in body image. We then review the literature on differences in eating motives and eating styles and derive a number of study hypotheses.

Body image

Body image describes a complex relationship that may include identity, esteem, sexuality, cultural mores and health issues (Asher & Asher, 1999). Grogan defines the concept of body image as, ‘a person’s perceptions, thoughts and feelings about his or her body’ (1999, p. 1). A variety of self-report measures have been employed to assess perceived body image and satisfaction with perceived body image. These include the Body Esteem Scale (Franzoi & Herzog, 1987), the Body Shape Questionnaire (Cooper, Taylor, Cooper, & Fairburn, 1987), the Eating Attitudes Test (Garner & Garfinkel, 1979) and Body Size Drawings (BSD; Stunkard, Sorensen, & Schulsinger, 1983). Studies using these different measures are fairly consistent in demonstrating demographic differences in body image and body satisfaction (Beren et al., 1996).

Research in the body image literature has reliably found that women are generally less satisfied with their appearance than men (Grogan, 1999). Fallon and Rozin (1985) found women consistently to perceive their current figures as heavier than their ideal, and a common finding in such studies is that a majority of women wish to be thinner (85 per cent in Drewnowski & Yee, 1987). In contrast, Leon, Carroll, Chernyk and Finn (1985) have described males as relatively satisfied with their current body weight.

More recently several researchers have also noted that these gender differences in body image and body satisfaction are moderated by sexual orientation. In general, homosexual compared to heterosexual men score significantly higher on body dissatisfaction ratings, whereas homosexual compared to heterosexual women typically score significantly lower (e.g. Beren et al., 1996; French, Story, Remafedi, Resnick, & Blum, 1996; Lakki, Ricciardelli, & Williams, 1999; Schneider, O’Leary, & Jenkins, 1995; Siever, 1994; Wagenbach, 1999). However, the links between sexuality and body dissatisfaction tend to be less clear in women compared to men. Some studies have noted outcomes that deviate from this trend, implying that homosexual and heterosexual women experience equivalent body concerns (e.g. Brand, Rothblum & Soloman, 1992) suggesting that gender is a better predictor of body satisfaction than sexual orientation.

Research has also explored the underlying roots of these differences. In many western societies certain body shapes are particularly valued. For women, this is a slim and shapely body shape, while for men it is a slender but moderately muscular body shape (Grogan, 1999). Non-conformity to these body shapes holds negative social consequences (Bordo, 1993; Tiggemann & Rothblum, 1988). Film and print media have been criticized for promoting positive associations of slimness and the negative associations of overweight (Major, Testa, & Bysma, 1991; Myers & Biocca, 1992). In relation to gender differences in body image, it has been suggested that media imagery particularly emphasizes the importance of slimness in women and accentuates female’s body/appearance consciousness. Groesz, Levine and Murnen (2002) have recently supported the suggestion that mass media promulgate the female thin beauty ideal that elicits heightened body dissatisfaction in women. Fallon and Rozin (1985) attributed the pursuit of thinness in women partially to a desire to attract men. Although there also appears to be a widely agreed cultural ideal of masculinity that includes sliness, men have often been thought largely resistant to the pressures that may elicit body dissatisfaction (Cohane & Pope, 2001).

In relation to sexual orientation differences in body image arguments have generally emphasized the role of differences between homosexual female and male cultures. Lesbian culture appears to de-emphasize the slim beauty ideal for women (i.e. as slim), while gay male culture tends to emphasize the dominant
cultural value of beauty for men as slim and muscular. It is generally accepted that the thin ideal in women is a heterosexually based definition of attractiveness (Kilbourne, 1994). A few studies have illustrated that elimination of male-induced pressure can result in fewer body image disturbances (Dworkin, 1988). Herzog, Newman, Yeh and Warshaw (1992) found the lesbians in their sample to be significantly heavier, to desire a significantly heavier ideal weight, to be less concerned with weight and appearance and to have a lower drive for thinness than heterosexual females. Bergeron and Senn (1998) suggest an immunization from the damaging effects of society’s pressure to be thin as a result of differential internalization of sociocultural norms. Thus one might expect body dissatisfaction to be lower in homosexual compared to heterosexual women.

In contrast, male gay culture appears to emphasize the importance of particular body shapes for men. Mishkind, Rodin, Silberstein and Striegel-Moore (1986), and more recently, Pope (2000) proposed that the muscular mesomorphic shape is the form thought most stereotypically masculine within present day society. Kirkpatrick and Sanders (1978) report that men of this shape are generally assumed to possess positive personality traits (i.e. strong, happy, brave). Despite this widely agreed cultural ideal of masculinility, heterosexual men tend to be largely resistant to developing body dissatisfaction in response to pressure to be slim (Cohane & Pope, 2001). Recently, however, psychology has recognized a shift in the way men, and gay men in particular view their bodies. There exists a relatively recent trend towards increased pressure on men to be slim to be considered physically attractive (Grogan, 1999; Grogan & Richards, 2002) and it has been suggested that male gay sub-culture is particularly associated with greater appearance emphasis (Williamson, 1999). Thus body dissatisfaction may be greater in homosexual compared to heterosexual males because the pressure to attain an attractive (i.e. slim and muscular) body shape is greater among gay males. Innala and Ernulf (1994) point to a ‘gay-pretty-boy’ stereotype, imposed upon gay males as needing to have a slim body shape in order to be considered attractive and desirable in the gay-male sub-culture (Carlat & Camargo, 1991).

Together the above findings are usefully summarized in Siever’s (1994) ‘perils of sexual objectification’ hypothesis, which suggests that body image dissatisfaction arises as a response to the desire to conform to the sexual preferences of men for a slim sexual partner. Thus dissatisfaction is lowest among heterosexual men and homosexual women who are less exposed to such pressures. It was predicted that similar differences in body shape dissatisfaction would be observed here.

**Eating motives and eating styles**

While differences in body image and body shape dissatisfaction between men and women and between heterosexual and homosexual groups are reported in a number of studies, relatively few studies have also looked for related differences in normal eating behaviours. This was a particular focus of the current research. Dissatisfaction with the body has been clearly linked to restriction of food intake. A restrained eating style, characterized by restricting food intake because of concerns about body shape, has been noted as a key characteristic of eating behaviours in western societies (Conner & Armitage, 2002; van Strien, Frijters, Bergers, & Defares, 1986). Such restrictions may be important because they are implicated in the development of unhealthy eating patterns.

In the present research we focused on examining differences in eating motives and eating styles. Eating motives refer to general factors underlying the motivation for eating, which may drive specific food choices and help us to understand eating behaviours. Steptoe, Pollard and Wardle (1995) developed a Food Choice Questionnaire (FCQ) designed to tap the motives underlying food choices. The FCQ taps nine motives underlying food choice (health, mood, convenience, sensory appeal,
natural content, price, weight control, familiarity, ethical concern). Steptoe et al. (1995) note ‘particularly prominent’ sex differences in the health and weight control motives for food choice with women reporting higher levels of these motives than males. Mood factors (i.e. stress and negative emotions) have also been noted as important determinants of food consumed (McCann, Warnick, & Knopp, 1990), and Steptoe et al. (1995) report significant gender differences in this motive also (again women report a stronger impact than men). The present research sought to replicate these gender differences and also examine the impact of sexual orientation on the health, weight control and mood motives for eating. Given the previous findings for body dissatisfaction it was predicted that the weight control motive would be particularly high in those groups where the pressure to be slim was greatest (i.e. heterosexual women and homosexual men). Previous work by Siever (1994) has suggested that gay men and heterosexual women may be most vulnerable to eating disorders (relating directly to body dissatisfaction), but did not address motives for eating in gay and heterosexual men and women. This study addresses these issues directly.

An individual’s eating behaviour is highly specialized to his/her personal needs and consumption can be determined by a large number of factors such as stress, food-related cues and other factors. In addition, various aspects of eating behaviour have important consequences for health (see Conner & Armitage, 2002 for a recent review). Van Strien et al. (1986) have postulated that a person’s overall eating behaviour is constructed by the extent to which they display the three eating styles; restrained, emotional and external eating. Restrained eating, as defined by Tuschi is, ‘the tendency to cognitively restrict food intake in order to maintain body weight or promote weight loss’ (1990, p. 105). Dietary restraint is the label that has been used to differentiate psychometrically between dieters and non-dieters (Herman & Polivy, 1980). While restrained eaters are continually assessing food intake, unrestrained eaters give little conscious attention to the amount that they eat (Herman, Polivy, Pliner, & Threhold, 1978). Restrained eaters are seen to restrict their food intake through self-control processes, however this strict cognitive resolve is known to cause failures of regulation and episodes of excessive eating, usually initiated by stress (i.e. disinhibition; Herman & Polivy, 1980) that can have important consequences for body weight and health. Wardle, Marsland, Sheik, Quinn, Fedoroff and Ogden (1992) describe the concept of restraint as a critical individual difference variable in experimental studies of eating behaviour and note significantly higher levels in women compared to men. Again based on differences in pressures to be slim, we anticipated that these gender differences would be moderated by sexual orientation such that restraint would be highest in heterosexual women and homosexual men.

Emotional eating describes the tendency to consume more in response to emotional cues such as anxiety or high arousal. High external eaters tend to eat in response to food-related stimuli, regardless of the internal states of satiety and hunger, whereas internal eaters consume food more in response to their internal hunger needs. Heatherton and Baumeister (1991) have suggested that stress increases the likelihood of employing this eating style (see Conner, Fitter, & Fletcher, 1999). Gender differences have been reported for both, although the link to issues of weight control and body image are less clear. As such we do not have clear predictions about gender and sexual orientation differences for emotional or external eating.

**Focus of the present study**

The current research examined the impact of gender and sexual orientation on body shape satisfaction, motives for eating and eating styles. The existing research in this area would suggest clear differences in body satisfaction by gender and sexual orientation; such that heterosexual women and homosexual men would be expected to show the greatest dissatisfaction. However, little research has also examined the impacts of gender and sexual orientation on eating motives and eating styles. Given the existing clear differences on body satisfaction and their link to weight control and dieting (restraint) issues we would expect similar differences between genders and sexual orientations.
on the motive of weight control and the eating
style of dietary restraint. However, in relation to
health and mood motives for eating or external
and emotional eating styles we do not have clear
predictions for gender or sexual orientation
differences.

Method
Participants and procedure
The participants in this study were a conven-
ience sample of 121 men and women. The total
sample included 33 heterosexual women (Age:
M = 21.4, SD = 2.00); 30 heterosexual men (Age:
M = 23.1, SD = 3.27); 30 homosexual women
(Age: M = 23.2, SD = 2.88); and 28 homosexual
men (Age: M = 23.9, SD = 4.41). The partici-
pants were recruited through personal contacts
in the bars in Leeds and participated by
completing an anonymous self-report question-
naire. The total response rate was approxi-
mately 75.6 per cent (121 out of 160 distributed
questionnaires) and was not noticeably different
in any of the sub-populations examined.

Measures
A range of measures were taken along with
those reported here.

Demographic variables Age, gender, sexual
orientation and height and weight were
assessed. Height and weight data were used to
compute body mass index (BMI; kg/m²).

Body shape measures Satisfaction with six
body areas (legs, bottom, chest, arms, face,
stomach) was assessed on four-point response
format (rated from ‘Not at all satisfied’ to ‘Very
satisfied’; alpha = 0.79). Body shape perceptions
(Stunkard et al., 1983) were assessed by present-
ing nine drawings from the BSD of a male or
female figure (dependent upon participant’s
sex), with each drawing gradually increasing in
size from extremely thin to extremely obese
(score 1 to 9) and requiring respondents to indi-
cate the drawing that best represented their
current shape and most preferred (ideal) shape.
A current-ideal body shape difference score was
also computed as the difference between
current and ideal shape (positive scores indicate
a smaller preferred than current shape).

Food motives Three motives for eating from
the Food Choice Questionnaire (FCQ: Steptoe
et al., 1995) were assessed. These comprised
weight control (e.g. ‘It is important to me that
the food I eat on a typical day is low in calories’;
3 items; alpha = 0.92); health (e.g. ‘It is import-
ant to me that the food I eat on a typical day
keeps me healthy’; 6 items; alpha = 0.91); and
mood (e.g. ‘It is important to me that the food I
eat on a typical day helps me relax’; 6 items;
alpha = 0.84) motives. All responses were
assessed on 4-point response formats that
ranged from ‘Not at all important’ to ‘Very
important’.

Eating styles These were assessed by the
Dutch Eating Behaviour Questionnaire
(DEBQ; van Strien et al., 1986; Wardle, 1987).
This assesses restrained (e.g. ‘Do you watch
exactly what you eat?’; 10 items; alpha = 0.95);
emotional (e.g. ‘If you see others eating, do you
also have the desire to eat?’; 13 items; alpha =
0.95); and external (e.g. ‘Do you have a desire
to eat when you are restless or bored?’; 10 items;
alpha = 0.85) eating styles. Finally we also
assessed self-reported current dieting.

Analyses
A key focus of the research was to examine
differences between genders and sexual orien-
tations in the measured variables. Therefore we
analysed the data using 2 (gender) × 2 (sexu-
ality) MANOVA with age, BMI, body satis-
faction, current body shape, ideal body shape,
current-ideal body shape difference, weight
control motive, health motive, mood motive,
restrained eating, emotional eating and external
eating as dependent variables. In order to
control for examining multiple dependent vari-
ables we only examined univariate effects where
the multivariate effect was significant. For
significant univariate main effects direction of
differences was determined by examination of
means (i.e. two-tailed tests). For significant
univariate interactions, the significance of
differences between pairs of means was deter-
mined by post-hoc tests (i.e. two-tailed tests).
We employed a conservative post-hoc test
(Scheffe) in order to minimize the chance of
type II errors.
Results

Summary information on the study variables is presented in Table 1. It is clear from these data that the sample generally consisted of young adults with BMIs within the ‘normal’ range (i.e. 20–25; Table 1). In addition, there was no evidence of skew in any of the key dependent variables.

MANOVA with age, BMI, body satisfaction, current body shape, ideal body shape, current-ideal body shape difference, weight control motive, health motive, mood motive, restrained eating, emotional eating and external eating as dependent variables revealed significant multivariate main effects for gender ($F_{(10,95)} = 7.76$, $p < 0.001$) and sexuality ($F_{(10,95)} = 3.25$, $p < 0.001$), and a significant gender by sexuality interaction ($F_{(10,95)} = 5.59$, $p < 0.001$). Therefore subsequent analyses examined the two main effects and interactions in univariate analyses for each dependent variable (Table 1).

Demographic differences

The groups did not significantly differ with respect to age ($F_{(3,96)} < 1.2$). However, for BMI there were significant main effects for gender ($F_{(1,104)} = 19.5$, $p < 0.001$) but not sexual orientation ($F_{(1,104)} = 0.15$). In addition, the significant main effect for gender was qualified by a significant gender by sexual orientation interaction ($F_{(1,104)} = 13.5$, $p < 0.001$). Examination of the differences in mean scores with Scheffe post-hoc tests (Table 1) revealed that the heterosexual men were significantly heavier than the other three groups ($ps < 0.01$) who did not significantly differ from one another.

Body shape differences

As predicted there were a number of differences apparent for the different body shape measures. Our prediction that body shape satisfaction would be significantly higher in heterosexual men and homosexual women was partially supported. For overall body shape satisfaction there was a significant interaction ($F_{(1,104)} = 15.4$, $p < 0.001$), but no main effects of gender ($F_{(1,104)} = 1.25$) or sexual orientation ($F_{(1,104)} = 0.07$). Post-hoc Scheffe tests indicated satisfaction to be significantly higher in the group of heterosexual men compared to the groups of heterosexual women or homosexual men ($ps < 0.001$). Satisfaction scores for homosexual women lay between these two extremes but did not significantly differ from either.

A further prediction for body shape was that although the groups would not differ in perceived current body shape, heterosexual women would have a smaller ideal body shape than the other three groups. These predictions were largely borne out. For perceived current body shape, no significant differences were apparent for gender ($F_{(1,104)} = 0.26$), sexual orientation ($F_{(1,104)} = 1.43$) or the interaction ($F_{(1,104)} = 2.48$). In contrast, for ideal body shape there were significant main effects of gender ($F_{(1,104)} = 34.7$, $p < 0.001$) and sexual orientation ($F_{(1,104)} = 12.1$, $p < 0.001$), but these were qualified by a significant interaction ($F_{(1,104)} = 11.5$, $p < 0.001$). Heterosexual women had a significantly slimmer preferred own body shape than any of the other three groups ($ps < 0.001$) who did not significantly differ from one another. Finally, in relation to differences between current and ideal own body shapes there were significant gender differences ($F_{(1,104)} = 16.0$, $p < 0.001$), but no significant sexual orientation ($F_{(1,104)} = 2.22$) or interaction ($F_{(1,104)} = 1.12$) effects. Examination of the means (Table 1) indicated all groups to have positive means (i.e. to desire to be smaller than their current shape, but these discrepancies were significantly larger in women ($M = 1.00$, SD = 0.95) compared to men ($M = 0.27$, SD = 1.11) indicating greater dissatisfaction in women compared to men.

Eating motive differences

Examination of differences for the eating motives measures revealed a number of significant differences. For the eating motive of weight control, there were significant differences for gender ($F_{(1,104)} = 6.19$, $p < 0.05$) and the gender by sexual orientation interaction ($F_{(1,104)} = 5.12$, $p < 0.05$), but not for sexual orientation ($F_{(1,104)} = 1.62$). Post-hoc tests indicated the eating motive of weight control to be significantly lower in the group of heterosexual men compared to either group of women ($ps < 0.05$). Homosexual women and men and heterosexual women did not significantly differ from one another.

For the health motive for eating there was a
<table>
<thead>
<tr>
<th></th>
<th>Whole sample</th>
<th>Homosexual</th>
<th>Heterosexual</th>
<th>Homosexual</th>
<th>Heterosexual</th>
<th>Significant effects&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>121</td>
<td>30</td>
<td>33</td>
<td>28</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td><strong>Demographics</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Age</td>
<td>22.9 (3.28)</td>
<td>23.2 (2.88)</td>
<td>21.4 (1.99)</td>
<td>23.9 (4.41)</td>
<td>23.1 (3.27)</td>
<td></td>
</tr>
<tr>
<td>BMI</td>
<td>22.6 (2.64)</td>
<td>22.4&lt;sup&gt;a&lt;/sup&gt; (1.81)</td>
<td>21.0&lt;sup&gt;a&lt;/sup&gt; (2.39)</td>
<td>22.5&lt;sup&gt;b&lt;/sup&gt; (2.77)</td>
<td>24.6&lt;sup&gt;b&lt;/sup&gt; (2.28)</td>
<td>G, GxSO</td>
</tr>
<tr>
<td><strong>Body shape measures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body satisfaction</td>
<td>2.59 (0.62)</td>
<td>2.71&lt;sup&gt;b&lt;/sup&gt; (0.57)</td>
<td>2.32&lt;sup&gt;b&lt;/sup&gt; (0.62)</td>
<td>2.40&lt;sup&gt;b&lt;/sup&gt; (0.55)</td>
<td>2.93&lt;sup&gt;b&lt;/sup&gt; (0.55)</td>
<td>GxSO</td>
</tr>
<tr>
<td>Current body shape</td>
<td>4.04 (1.02)</td>
<td>4.26 (1.00)</td>
<td>3.72 (0.85)</td>
<td>4.12 (1.34)</td>
<td>4.10 (0.86)</td>
<td></td>
</tr>
<tr>
<td>Ideal body shape</td>
<td>3.38 (0.96)</td>
<td>3.52&lt;sup&gt;b&lt;/sup&gt; (0.96)</td>
<td>2.47&lt;sup&gt;ab&lt;/sup&gt; (0.67)</td>
<td>3.85&lt;sup&gt;b&lt;/sup&gt; (0.73)</td>
<td>3.83&lt;sup&gt;b&lt;/sup&gt; (0.71)</td>
<td>G, SO, GxSO</td>
</tr>
<tr>
<td>Current-ideal body shape</td>
<td>0.66 (1.09)</td>
<td>0.74 (1.03)</td>
<td>1.25 (0.80)</td>
<td>0.27 (1.22)</td>
<td>0.28 (1.03)</td>
<td>G</td>
</tr>
<tr>
<td><strong>Eating motives</strong></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Weight control</td>
<td>2.57 (0.87)</td>
<td>2.68&lt;sup&gt;b&lt;/sup&gt; (0.76)</td>
<td>2.89&lt;sup&gt;b&lt;/sup&gt; (0.86)</td>
<td>2.57&lt;sup&gt;b&lt;/sup&gt; (0.92)</td>
<td>2.13&lt;sup&gt;b&lt;/sup&gt; (0.78)</td>
<td>G, GxSO</td>
</tr>
<tr>
<td>Health</td>
<td>2.72 (0.72)</td>
<td>2.95 (0.57)</td>
<td>2.99 (0.69)</td>
<td>2.62 (0.72)</td>
<td>2.28 (0.70)</td>
<td>G</td>
</tr>
<tr>
<td>Mood</td>
<td>2.45 (0.73)</td>
<td>2.83 (0.57)</td>
<td>2.45 (0.73)</td>
<td>2.35 (0.69)</td>
<td>2.16 (0.77)</td>
<td>G, SO</td>
</tr>
<tr>
<td><strong>Eating styles</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restrained eating</td>
<td>2.70 (0.94)</td>
<td>2.57&lt;sup&gt;b&lt;/sup&gt; (0.70)</td>
<td>3.17 (0.95)</td>
<td>3.05&lt;sup&gt;b&lt;/sup&gt; (0.87)</td>
<td>2.01&lt;sup&gt;b&lt;/sup&gt; (0.79)</td>
<td>GxSO</td>
</tr>
<tr>
<td>Emotional eating</td>
<td>2.69 (0.89)</td>
<td>2.98 (0.79)</td>
<td>2.89 (0.75)</td>
<td>2.72 (0.92)</td>
<td>2.13 (0.90)</td>
<td>G, SO</td>
</tr>
<tr>
<td>External eating</td>
<td>3.36 (0.54)</td>
<td>3.54 (0.57)</td>
<td>3.19 (0.48)</td>
<td>3.45 (0.52)</td>
<td>3.30 (0.52)</td>
<td>SO</td>
</tr>
</tbody>
</table>

<sup>a</sup> Significant interaction terms were decomposed by post-hoc Scheffe tests. Means in a row not sharing a suffix (i.e., letters a, b or c) were significantly (p < 0.05) different from one-another (two-tailed tests).

<sup>b</sup> Results of ANOVA: G = significant (p < 0.05) gender effect; SO = significant (p < 0.05) sexual orientation effect; GxSO = significant (p < 0.05) gender by sexual orientation interaction effect.
significant gender effect \(F(1,104) = 16.0, p < 0.001\), but no effects for sexual orientation \(F(1,104) = 1.88\) or the interaction \(F(1,104) = 3.23\). Examination of the mean scores indicated that health motive was significantly higher in women \((M = 2.97, SD = 0.63)\) compared to men \((M = 2.44, SD = 0.72)\). Finally, for the eating motive of mood, there were significant gender \(F(1,104) = 9.46, p < 0.001\) and sexual orientation main effects \(F(1,104) = 4.36, p < 0.05\), but no interaction \(F(1,104) = 0.32\). The mood motive of eating was significantly higher in women \((M = 2.64, SD = 0.68)\) compared to men \((M = 2.25, SD = 0.74)\) and homosexual \((M = 2.61, SD = 0.67)\) compared to heterosexual \((M = 2.31, SD = 0.76)\) groups.

**Eating style differences**

A number of differences were also evident in the three eating styles tapped by the DEBQ. We had predicted that restrained eating would be significantly lower in heterosexual men compared to the other groups and that emotional eating would be higher in women compared to men. For restraint, there were no significant gender \(F(1,104) = 3.31\) or sexual orientation \(F(1,104) = 1.47\) main effects, however, there was a significant interaction \(F(1,104) = 22.2, p < 0.001\). Post-hoc tests (Table 1) revealed that heterosexual men reported significantly lower restraint than heterosexual women \((p < 0.001)\) or homosexual men \((p < 0.001)\). Homosexual women reported levels of restraint between these two extremes, being significantly different from heterosexual women \((p < 0.05)\), but not being significantly different from either homosexual men or heterosexual men.

For emotional eating, there were significant main effects of gender \(F(1,104) = 7.11, p < 0.01\) and sexual orientation \(F(1,104) = 4.98, p < 0.05\), but no significant interaction \(F(1,104) = 2.30\). Examination of the means indicated significantly higher levels of emotional eating in women \((M = 2.93, SD = 0.67)\) compared to men \((M = 2.41, SD = 0.95)\), while there were significantly higher levels of emotional eating in homosexual \((M = 2.86, SD = 0.86)\) compared to heterosexual \((M = 2.53, SD = 0.90)\) groups.

For external eating there were significant differences for sexual orientation \(F(1,104) = 6.57, p < 0.01\), but not for gender \(F(1,104) = 0.40\) or the interaction \(F(1,104) = 0.86\). Examination of the means revealed that there were significantly higher levels of external eating in homosexual \((M = 3.50, SD = 0.55)\) compared to heterosexual \((M = 3.24, SD = 0.50)\) groups.

Current dieting behaviour also showed differences between gender and sexual orientation groups. Dieting was least common among heterosexual men and homosexual women (both 20%), but most common among homosexual men (31%), with heterosexual women (26%) falling between the two.

**Discussion**

The present research has demonstrated a number of differences in body shape dissatisfaction, eating motives and eating styles among groups of female and male heterosexuals and homosexuals. These usefully extend previous findings showing differences between these groups in various body shape measures.

A first finding of note was the partial replication of differences between groups in measures of body shape. Contrary to the suggestions of some authors (Cohane & Pope, 2001) that body image concern has pervaded the male population, our findings indicated significantly greater differences between current and ideal body shapes in women compared to men. However, there were differences by both gender and sexual orientation in body satisfaction and ideal body shape. Previous research by authors such as Lakkis et al. (1999) and Siever (1994) has suggested the following sequence of subgroups possess body image concerns from greatest to least intensity: heterosexual women, homosexual men, homosexual women and heterosexual men. This pattern was only partially supported in the present data. Body dissatisfaction was higher in heterosexual women and homosexual men compared to heterosexual men. Ideal body shape was also significantly smaller in heterosexual women compared to the other three groups. Fallon and Rozin (1985) found women consistently to perceive their current figures as heavier than their ideal. Subsequent research has uncovered a recent trend for men to express discontent towards their body. An approximately even split was found by Drewnowski and Yee (1987)
between those men who wished to lose weight, and those who wished to gain weight. The present data offer a rather complex picture of the impact of gender and sexuality on measure of body shape. It would appear that the lower body satisfaction of heterosexual women is predominantly attributable to their having a larger current body shape than their ideal. In contrast, the lower body satisfaction in homosexual men appears not to be simply attributable to being larger than they would ideally like. In this regard it is interesting to note that homosexual men rated themselves as having a very similar current body shape to that reported by heterosexual men despite having a significantly lower BMI. This raises the possibility that the homosexual men tended to overestimate their current body size. Overestimation of body size has been frequently reported in studies of adult women, particularly of salient elements of the body such as hips and thighs, but has not been found in previous studies of men where sexuality has not been taken into account (Grogan, 1999, 2000). Future work could determine whether this result is reliable.

In relation to eating motives, a number of interesting findings were also found in the current research. For the weight control motive, a significant gender by sexual orientation interaction was apparent. Examination of the means indicated this motivation to be significantly higher in both groups of women compared to heterosexual men. Although the weight control motive was also higher in homosexual men it did not significantly differ from the mean for heterosexual men.

Like Steptoe et al. (1995) we also found gender differences for health motives and mood motives for eating, with women being significantly higher on both. Finally, for the mood motive for eating there were also significant sexual orientation differences, with the homosexual respondents reporting higher levels than the heterosexual respondents. It will be important to see if this latter finding is replicated in other studies.

The differences in body dissatisfaction observed between women and men and between those with different sexual orientations were also to some extent reflected in our measures of eating style. Gray (1977) has asserted that women tend to diet more frequently than men do. However, in the present study, current dieting was most frequently reported by homosexual men and least frequently by heterosexual men and homosexual women. Our eating style measure of dieting, restrained eating derived from the DEBQ (van Strien et al., 1986) produced similar findings. Examination of restrained eating scores indicated heterosexual men to show significantly lower restraint than either heterosexual women or homosexual men, while homosexual women between these two extremes but only significantly lower than heterosexual women. These findings parallel those reported for body dissatisfaction and suggest a strong relationship between body image concerns and restrained eating. To the extent that restrained eating can have negative consequences for weight control and disordered eating these effects may generalize to various health outcomes.

For emotional eating there were significant gender and sexual orientation differences with women and homosexual groups reporting significantly higher levels. This effect for gender has been reported by a number of other studies (e.g. Furnham & Greaves, 1994), while the effect for sexual orientation parallels that reported earlier for the mood motive for eating and deserves further study. There were also significant differences in external eating by sexual orientation with the homosexual group reporting higher levels than heterosexual group. Given the finding that high levels of external eating are associated with the consumption of more high fat snack foods when individuals are faced with stress (Conner, Fitter & Fletcher, 1999), this may result in high fat consumption in homosexual groups which may have important health consequences.

Across the different measures employed the findings would appear most consistent with Siever’s (1994) perils of sexual objectification hypothesis. Body dissatisfaction, weight control motivation for eating and restrained eating tend to be higher in those groups who experience higher levels of body objectification, and who are more likely to be exposed to pressures to be slim (i.e. heterosexual women and homosexual men). Nevertheless there are sufficient variations from this trend in other measures to form the basis for fruitful future study. For example,
the sexual orientation differences in mood motivation for eating, emotional eating and external eating appear worthy of future study.

Conclusions
These results implicate both gender and sexual orientation as instrumental in the formation of body image, food motivation and eating styles. In general, women tend to demonstrate more body dissatisfaction than do men. They also report higher levels of weight control, health and mood motives for eating and higher restrained and emotional eating styles. Sub-cultural pressures from homosexual sub-groups however seem to modify this pattern, apparently promoting body concern (body dissatisfaction, weight control motive and restrained eating style) in gay men, and protecting lesbians from such discontent. Homosexual groups also exhibited higher levels of mood as a motive for eating and higher emotional and restrained eating compared to heterosexual groups. The mental and physical health consequences of such effects are a largely unresearched issue (Williamson & Hartley, 1998), and future research should address these issues.

References
Grogan, S., & Richards, H. (2002). Body image: Focus...