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The mental health impact of Australian gay men's physical appearance concerns in the context of other life domains.

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ABSTRACT

Previous studies have identified gay men as a high-risk population for body image disturbances. However, little research has examined the mental health impact of gay men's physical appearance concerns in the context of other major life domains. The present study addresses this gap by investigating how mental health outcomes (satisfaction with life, selfesteem, positive wellbeing, and psychological distress) are associated with satisfaction with and importance of physical appearance, work, family relationships, friendships, health and fitness, and sex life among Australian gay men aged 18-39. The possible moderating role of intimate relationship status is also examined. Results from an online survey reveal that greater satisfaction with physical appearance, work, family, and friendships all bear similar positive associations with mental health. However, more importance placed on physical appearance is more consistently associated with *poorer* mental health compared with the subjective importance of other domains. Findings also indicate the associations between physical appearance satisfaction and life satisfaction, and between physical appearance importance and positive wellbeing, are weaker for those in relationships. Thus, physical appearance matters in gay men's lives, but is only one factor when considered in the broader context of other life areas that contribute to overall wellbeing. These findings suggest the need for a nuanced and contextualised understanding of how physical appearance concerns fit into gay men's lives.

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KEY WORDS: Gay men; body image; physical appearance; mental health

INTRODUCTION

Research on body image disturbances and their psychological and behavioural correlates has traditionally focused on women (Jones & Morgan, 2010). However, mounting evidence has identified gay men as another potentially high-risk population (e.g., Feldman & Meyer, 2007; Martins, Tiggemann, & Kirkbride, 2007; Russell & Keel, 2002). For instance, studies comparing gay and heterosexual men have found gay men experience and express more body image dissatisfaction (e.g., Morrison, Morrison, & Sager, 2004; Jankowski, Diedrichs, & Halliwell, 2014; Levesque & Vichesky, 2006), are more at risk of eating disordered symptomology (Boisvert & Harrell, 2009), and are more likely to meet the diagnostic criteria for an eating disorder (Russell & Keel, 2002). In addition, body image dissatisfaction negatively correlates with self-esteem and self-acceptance more strongly among gay males than among heterosexual males (Gil, 2007; Hunt, Gonsalkorale, & Nosek, 2012; Levesque & Vichesky, 2006; Tiggemann, Martins, & Kirkbride, 2007). Studies have also shown that within the male gay population, body image disturbances are strong predictors of eating disorders and restricted eating behaviour (Blashill, 2010; Boisvert & Harrell, 2009).

Some researchers have suggested that these phenomena may be a result of the idealised stereotype of a lean yet muscular body which is promoted in gay media and within the gay community more generally (Duncan, 2007; Jankowski, Fawkner, Slater, & Tiggemann, 2014; Yelland & Tiggemann, 2003). For instance, McArdle and Hill (2009) postulated that gay media presentation of the ideal male body type has a strong effect on gay male body image, as it promotes a certain body standard that is supposedly desirable but very difficult for most men to attain. This is consistent with recent research reporting more "appearance potent" content (i.e., more idealized, sexualized, and nude pictures) in gay men's magazines compared with heterosexual men's magazines in the UK (Jankowski, Fawkner et

al., 2014). Jankowski, Diedrichs et al. (2014) also found that gay men report more appearance-oriented conversations than heterosexual men do, and that this mediates the association between sexuality and body dissatisfaction. Martins et al. (2007) further explicate the role of "gay culture" in gay men's body issues using self-objectification theory. This theory suggests that people who live in objectifying, sexualized cultures take on the view of observers themselves, comparing their self-views with the ideals of the culture. Thus, gay men compare their bodies to the physical ideals promoted so visibly within "gay culture" and experience pressure and dissatisfaction if they believe they fall short of these ideals.

There is potentially an interpersonal aspect to gay men's body image issues too. Siever (1994) suggested that males in general tend to value the physical attractiveness of a partner more than women do, but that this is more pronounced among gay men, given they are men seeking other men as partners. Therefore, the pressure to look physically attractive to other men is heightened. This was confirmed in more recent research showing that single gay men reported higher drive for thinness than gay men in relationships (Brown & Keel, 2013).

In short, it seems clear that gay men, overall, constitute an at-risk population for heightened body image concerns. However, it is worth noting that some authors have been critical of the literature in this area. For instance, Kane (2010) argues, on both methodological and theoretical grounds, that body image and physical appearance concerns among gay men have been overstated in the literature, and cautions against characterising gay men as "universally fixated on their appearance and presenting an idealized body to other men" (p.311). Similarly, in a small qualitative study of Australian gay men aged between 22 and 50, Duncan (2007) argued that it is too simplistic to characterise all gay men as "vulnerable to a culturally induced narcissism" (p.344). Rather, he recommends a more nuanced understanding of how individual gay men make meaning of their bodies in the broader sociocultural context of being a gay man.

The present study extends this notion of needing to examine body image concerns and mental health within the broader context of gay men's lives. Clearly there is more to life than how one looks, and a body of research has documented other life domains that are important to gay men, as well as to other LGB individuals. For example, Pachankis and Hatzenbuehler (2013) found that gay men derive their self-worth from achievement-related domains such as academic performance and competition, as well as appearance, more so than heterosexual men do. Pachankis and Hatzenbuehler suggested these domains are "safer" than more interpersonal domains such as family support and acceptance from others, as being in a sexual minority group is less relevant or visible in achievement-related domains. At the same time, placing more importance on such domains may be associated with costs in other life areas (Pachankis & Hatzenbuehler). Many studies, however, have indicated the importance of more social and interpersonal domains, such as social and family support, in gay men's mental health and wellbeing. For instance, Elizur and Ziv (2001) found that the extent of family support of gay individuals' sexual identity played a significant role in the psychological adjustment and self-esteem of gay Israeli men. Similarly, Goldfried and Goldfried (2001) reported the importance of parental support in the lives of LGB individuals. A more recent study by Ryan, Russell, Huebner, Diaz, and Sanchez (2010) similarly showed family acceptance predicted greater self-esteem and better general health in young LGB adults. Regarding social support, Beals, Peplau, and Gable (2009) reported perceived social support to be a consistent predictor of wellbeing among gay and lesbian men, and Detrie and Lease (2007) found perceived social support predicted psychological wellbeing among a sample of LGB youth aged 14-22.

Overall, it is apparent that physical appearance may be but one of several life domains that are important in gay men's lives. Thus, the primary aim of the present study is to build upon the literature on gay men's body image and the impact of other life domains on gay men's mental health and wellbeing; specifically, the domains of work, family relationships, friendships, health and fitness, and sex life as well as physical appearance. These life domains were chosen as they are the main domains that are likely to be relevant to many individuals, and because similar life domains have been examined in previous research, as described above. Our main objective in this study, given the heightened risk of body image disturbances among gay men, was to examine the mental health impact of satisfaction with and subjective importance of physical appearance while controlling for satisfaction with and importance of the other life domains. This may enable researchers and clinicians alike to take a more contextualised and nuanced view of what matters to gay men and influences their mental health, a view which could inform both therapeutic and educational interventions. As this study is largely exploratory and founded on a neutral standpoint, no specific hypotheses were formed regarding which life domain would exert the most impact on mental health outcomes. Nevertheless, we expected generally that greater satisfaction with each life domain would be associated with better mental health and wellbeing.

A further aim of this project was to investigate the role of intimate relationship status with regards to gay men's body image. As mentioned earlier, the anxiety some gay men feel about their appearance may be due to an awareness of it being evaluated by potential gay male partners (Siever, 1994). Accordingly, one may expect physical appearance concerns to be somewhat reduced, and their association with mental health to be weaker, for gay men in relationships, as the pressure to attract a partner should be lessened or absent for men who already have one. To our knowledge, the only recent study specifically to report the influence of relationship status in gay men's body image is that by Brown and Keel (2013); thus, the present study was designed to explore further the role of this factor. We predicted that single men would report less satisfaction with, and more importance of, their physical appearance compared with those in relationships, and that the associations between satisfaction with and

importance of physical appearance and mental health outcomes would be stronger for single men.

METHOD

Participants

The results reported in this paper come from a larger survey on the health and wellbeing of younger Australian gay men aged 18-39, which was conducted between July and September 2012 (see Lyons & Hosking, 2014, for further details). Of the 1,177 men who began this survey, 776 comprised the final sample for analysis after identifying as gay or homosexual and providing complete responses on all measures relevant to the present paper.

Measures

As part of the larger survey, participants completed measures of satisfaction with and importance of various life domains, as well as aspects of mental health and wellbeing, in the order in which they are described below. In addition, at the beginning of the survey, participants were asked demographic questions regarding their age, racial or ethnic background, highest attained level of education, employment status, annual income, residential location, and relationship status. Participants also reported their height and weight so that their body mass index (BMI) could be calculated and used as a control variable in analyses. Finally, participants were asked to report their HIV status (positive, negative, or unsure).

Life domain satisfaction and importance. Participants rated how important each of seven life domains were to their overall sense of self and how satisfied they were within each of those domains. The domains were work, family, friends, current relationship, physical appearance, health and fitness, and sex life. Both importance and satisfaction were rated on 5-point scales (1 = not at all important/satisfied; 5 = essential/completely satisfied). There was an additional "not applicable" response option. Participants who were not currently in a

relationship answered "not applicable" to the items regarding relationship satisfaction and importance; hence, the relationship domain was not examined in the present analyses.

Satisfaction with life. Participants completed four established and validated measures of mental health and wellbeing. In the Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985), participants indicated how much they agreed or disagreed with 5 statements (e.g., "The conditions of my life are excellent") using 7-point scales (1 = strongly disagree; 7 = strongly agree). Item ratings were summed to obtain total scores, which ranged from 5 to 35 (Cronbach's α = .87).

Self-esteem. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) consists of 10 statements (e.g., "I feel that I have a number of good qualities"). Participants indicated how much they agreed with each statement using 4-point scales (0 = strongly disagree; 3 = strongly agree). Half the items were reverse-scored prior to summing item ratings to obtain total scores, which ranged from 0 to 30 (Cronbach's $\alpha = .91$).

Positive wellbeing. Positive mental wellbeing was measured using the Warwick-Edinburgh Mental Well-Being Scale (Tennant et al., 2007). Participants rated the frequency of 14 positive emotional experiences during the past 2 weeks (e.g., "I've been feeling good about myself", "I've been interested in new things") using 5-point scales (1 = none of the time; 5 = all of the time). Item ratings were summed, with total scores ranging from 15 to 70 (Cronbach's α = .93).

Psychological distress. Finally, the K10 Distress Scale (Kessler et al., 2002) was used to measure general psychological distress, incorporating elements of both anxiety and depression. Participants indicated how often they had experienced each of 10 negative feelings in the past 4 weeks (e.g., "About how often did you feel nervous?", "About how often did you feel hopeless?") using 5-point scales (1 = none of the time; 5 = all of the time).

Total scores were obtained by summing item ratings, and ranged from 10 to 50 (Cronbach's α = .93).

Procedure

Approval to conduct this research was obtained by the La Trobe University Human Ethics Committee. Participants were recruited via word of mouth among the investigators' social and professional networks, notifications sent to the Gay and Lesbian Health Victoria (GLHV) website, and advertisements on Facebook. An email was also sent to a national database of men living with HIV. All potential participants were invited to take part in a study of "gay men's health and wellbeing", and were provided with the URL to take them directly to the online survey. Upon accessing the survey, participants were given some background information about the research aims, and an idea of what kinds of topics were to be covered (e.g., physical, mental, and sexual health; body image; relationships; sexual behaviour; social support; and identity). They were informed that their participation was completely voluntary and that their responses were anonymous and confidential. No incentives were offered.

Upon commencing the survey, participants were asked to provide the initials of their first, middle (if applicable) and last names, as well as their date of birth. We used this information to create a unique ID code for each participant. These codes were used to detect any potential duplicate cases. Where any were detected, we compared the two cases on key demographic information (e.g., education level, employment status) to confirm they were most likely from the same person. The more recent of the two cases was then retained for analysis.

Data Analysis

Descriptive statistics were computed and both t-tests and repeated-measures ANOVAs were conducted to examine mean differences. Bivariate correlations were computed to examine preliminary evidence of associations between the life domain and mental health variables. Hierarchical multiple linear regression analyses were then conducted to examine the independent contribution of the satisfaction and importance ratings for each life domain towards predicting the mental health outcomes while simultaneously controlling for age, BMI, and the other life domain ratings. Regression analysis was also used to test the possible moderating role of relationship status. Following the recommendations of Aiken and West (1991) for testing moderation in multiple regression, all variables were standardised to have a mean of 0 and a standard deviation of 1 prior to entry in the regression models, which occurred in three steps: satisfaction ratings were entered in Step 1, importance ratings were entered in Step 2, relationship status (0 = single, 1 = in a relationship) was entered in Step 3, and its products with physical appearance satisfaction and importance were entered in the fourth and final step.

Auxiliary analyses also tested whether associations between satisfaction ratings and mental health were moderated by the relevant subjective importance ratings. As virtually no evidence of moderation was found, the results of these are not reported or discussed herein.

RESULTS

Sample Characteristics

The gay male participants were aged between 18 and 39 years (M = 27.03, SD = 6.29). Key demographic characteristics of the sample are shown in Table 1. The majority of participants were white, had completed tertiary education of some form, were employed on a full-time, part-time, or casual basis, had annual incomes at or below the national median, and lived in capital cities or inner suburban areas. Approximately half were in an ongoing romantic relationship, and the vast majority reported being HIV-negative or unsure of their HIV status.

Descriptive Summary

As shown in Table 2, on average participants reported moderately high satisfaction with life, self-esteem, and positive wellbeing, and relatively low psychological distress. Average satisfaction levels for each life domain were moderate, whereas average importance ratings were moderate to high. A repeated-measures ANOVA was conducted to test whether the mean satisfaction ratings differed significantly from each other, and the same was performed for the importance ratings. Both tests violated the assumption of sphericity, Maunchly's W(14) = .57 for satisfaction and .65 for importance, both ps < .001, so the results of corrected within-subjects tests were examined. The overall within-subjects tests for each group of variables yielded significant results: satisfaction, Huynh-Feldt F(4.26) = 185.27, p < 100.001; and importance, Huynh-Feldt F(4.23) = 87.81, p < .001. Pairwise comparisons were then made using a Bonferroni-adjusted alpha level of .003 to control the family-wise Type I error rate. These comparisons showed all mean satisfaction ratings differed significantly from each other, except for the following pairs: friendships and family, physical appearance and health and fitness, physical appearance and sex life, and health and fitness and sex life. Similarly, all mean importance ratings differed significantly from each other, except for the following pairs: physical appearance and health and fitness, and physical appearance and sex life.

Table 2 also shows the means and standard deviations of the key variables as a function of relationship status. Independent samples t-tests indicated that men in relationships were significantly more satisfied than single men with each life domain except for friendships: work, t(772.18) = 3.31, p = .001 (heterogeneous variance); family: t(774) = 2.48, p = .013; physical appearance: t(774) = 3.24, p = .001; health and fitness: t(774) = 2.49, p = .013; and sex life: t(774) = 12.75, p < .001. In contrast, single and partnered men only differed significantly in the importance of their friendships and their sex life, such that partnered men placed less importance on friendships, t(772.15) = -2.07, p = .036

(heterogeneous variance), but more importance on their sex life, t(755.61) = 5.38, p < .001. Finally, gay men in relationships reported significantly better wellbeing on all four measures: higher satisfaction with life, t(755.74) = 4.40, p < .001 (heterogeneous variance); higher selfesteem, t(765.80) = 3.39, p = .001 (heterogeneous variance); higher positive wellbeing, t(774)= 4.26, p < .001; and lower psychological distress, t(760.99) = -3.22, p = .001 (heterogeneous variance).

BMI scores ranged vastly from 14.79 to 65.97. The mean BMI was 25.41 (SD = 5.64), which is just above the cut-off score for being considered "overweight" (Australian Bureau of Statistics, 2014). However, this may be indicative of a more muscular rather than overweight sample of men, given that BMI does not distinguish between fat levels and muscle mass.

Bivariate Analyses

All of the satisfaction ratings were significantly and positively correlated with each other, but were only weak to moderate in magnitude. The only one that exceeded .50 was that between satisfaction with physical appearance and with health and fitness, r(797) = .70, p < .01. Correlations between the importance ratings were also significant and positive, but were generally weaker than those between the satisfaction ratings. Significant positive correlations were also found between self-esteem and satisfaction with life, r(776) = .66, p < .01, self-esteem and positive wellbeing, r(776) = .74, p < .01, and satisfaction with life and positive wellbeing, r(776) = .65, p < .01. Finally, psychological distress was significantly and negatively correlated with self-esteem, r(776) = -.70, p < .01, satisfaction with life, r(776) = .61, p < .01, and positive wellbeing, r(776) = -.74, p < .01.

More importantly, bivariate analyses revealed several associations between the life domain variables and the mental health outcomes, as shown in Table 3. As expected, all satisfaction ratings were significantly correlated with every mental health outcome, such that greater satisfaction with each life domain was associated with higher satisfaction with life, higher self-esteem, higher positive wellbeing, and lower distress. Moreover, these correlations were all of a similar magnitude. The pattern of correlations between importance ratings and mental health outcomes was somewhat less consistent, particularly with respect to the physical appearance, health and fitness, and sex life domains. More importance placed on work, family relationships, and friendships was consistently associated with better mental health across all indices, with the exception of the non-significant correlation between work importance and psychological distress. More importance placed on health and fitness was associated with higher self-esteem and positive wellbeing only, whereas importance of sex life was not associated with any of the outcomes. Perhaps of most interest is the finding that more importance placed on physical appearance was associated with *less* satisfaction with life and *more* psychological distress. It should be noted, however, that all correlations involving importance ratings were quite weak in magnitude.

Regression Analyses

The unstandardized regression coefficients for the regression analyses are given in Table 4. For brevity and ease of interpretation, only the results from the final four-step regression models are reported in this table. Exploration of the data demonstrated no violations of the assumptions of sample size, normality, linearity, multicollinearity, and homoscedasticity of residuals; therefore, it was deemed appropriate to proceed with linear regression analysis.

Firstly, in Step 1, the control variables of age and BMI were essentially unrelated to the outcomes measured. The only exception was the significant negative association between age and psychological distress. Satisfaction with work was a significant positive predictor of satisfaction with life, self-esteem, and positive wellbeing, and a significant negative predictor of psychological distress. The same pattern of prediction was found for satisfaction with family relationships, with friendships, and with physical appearance. Satisfaction with health and fitness was a significant positive predictor of satisfaction with life only, and satisfaction with sex life was a significant positive predictor of positive wellbeing and a negative predictor of psychological distress. Together, the satisfaction ratings and control variables explained a significant proportion of the variance in each outcome: satisfaction with life, R^2 = .367, F(8,767) = 55.62, p < .001; self-esteem, $R^2 = .259$, F(8,767) = 33.52, p < .001; positive wellbeing, $R^2 = .320$, F(8,767) = 45.04, p < .001; and psychological distress, $R^2 = .224$, F(8,767) = 27.75, p < .001. Overall, the absolute magnitudes of the significant coefficients for satisfaction ratings were somewhat small, ranging from .09 to .28.

The inclusion of importance ratings as predictors in Step 2 of the model left the predictive power of the satisfaction ratings effectively unchanged from Step 1, and only accounted for a small, though significant, amount of additional variance in each outcome: satisfaction with life, $\Delta R^2 = .015$, $F_{change}(6,761) = 2.98$, p = .007; self-esteem, $\Delta R^2 = .016$, $F_{change}(6,761) = 2.88$, p = .009; positive wellbeing, $\Delta R^2 = .025$, $F_{change}(6,761) = 4.86$, p < .001; and psychological distress, $\Delta R^2 = .026$, $F_{change}(6,761) = 4.38$, p < .001. Step 2 revealed that importance of physical appearance was a significant negative predictor of satisfaction with life, self-esteem, and positive wellbeing, and a significant positive predictor of psychological distress. Importance of work was a significant positive predictor of self-esteem and positive wellbeing, and negative predictor of psychological distress. Finally, importance of sex as a significant positive predictor of self-esteem and positive predictor of psychological distress. Finally, importance of sex life was a significant positive predictor of psychological distress. Finally, importance of sex life was a significant positive predictor of psychological distress. Finally, importance of sex life was a significant positive predictor of psychological distress. Generally speaking, the significant regression coefficients for the importance ratings were somewhat smaller in absolute magnitude than those for the satisfaction ratings, ranging from .07 to .19. This is consistent with the smaller magnitudes of the bivariate correlations for importance ratings.

Entering relationship status into the model in Step 3 accounted for virtually no additional variance in any outcome, all $\Delta R^2 < .004$, all $F_{\text{change}}(1,766) < 3.13$, all $p_s > .05$.

Finally, inclusion of the interaction terms in the fourth and final step of the model only accounted for a significant, though small, additional proportion of the variance in satisfaction with life, $\Delta R^2 = .007$, $F_{change}(2,758) = 4.41$, p = .012, and in positive wellbeing, $\Delta R^2 = .007$, $F_{change}(2,758) = 4.14$, p = .016. Further, only two of the interaction terms were significant predictors, such that relationship status moderated the associations between satisfaction with physical appearance and satisfaction with life, and between importance of physical appearance and positive wellbeing. To examine the nature of these significant moderating effects, both were plotted according to the procedures described by Aiken and West (1991), and are shown in Figures 1 and 2. In short, and as predicted, greater satisfaction with physical appearance was associated with greater overall satisfaction with life, but this association was stronger for single men. Similarly, more importance placed on physical appearance was associated with lower positive wellbeing, but the association was stronger for single men.

DISCUSSION

Studies over the past two decades have reported that gay men are more vulnerable to body image dissatisfaction and related issues than heterosexual men. However, little research to date has directly examined the mental health impact of gay men's physical appearance concerns in the context of their other life domains, such as work and friendships. The present study was designed to obtain a more contextualised view of the role of physical appearance concerns in young Australian gay men's lives more broadly. This study also aimed to examine whether associations between physical appearance concerns and mental health are moderated by relationship status. Our findings indicated that, across all mental health indices, higher physical appearance satisfaction was associated with better mental health, whereas higher physical appearance importance was associated with poorer mental health. However, physical appearance appeared to be only one of several key life domains impacting on gay men's mental health. Furthermore, although being in a relationship somewhat reduced the strength of association between physical appearance concerns and mental health, the effect was small, suggesting physical appearance still plays a role in the wellbeing of partnered gay men. Specific findings are discussed below, followed by recommendations for practice and further research.

Life domain satisfaction and importance

Findings revealed that gay men in our sample were significantly less satisfied with their physical appearance than they were with other domains of their lives, including work, friendships, and family relationships. More importantly, though, higher satisfaction with physical appearance was consistently associated with more favourable mental health outcomes, including more satisfaction with life overall, higher self-esteem, greater positive wellbeing, and less psychological distress. This finding is consistent with a body of literature generally showing better mental health among gay men who are more satisfied with how they look (e.g., Gil, 2007; Hunt et al., 2012; Levesque & Vichesky, 2006; Tiggemann et al., 2007). However, the same pattern of prediction was found for satisfaction with work and career, family relationships, and friendships. This supports our general hypothesis that satisfaction with specific life domains would predict better mental health overall, and is consistent with previous studies. That work satisfaction was a predictor of overall life satisfaction mirrors similar findings among the general population (Bowling, Eschleman, & Wang, 2010; Judge & Watanabe, 1993), and bears conceptual similarity to Pachankis and Hatzenbuehler's (2013) finding that gay men derive self-esteem from success in achievement-related domains. The fact that satisfaction in more interpersonal domains, namely family and friendships, also predicted better mental health among our sample is consistent with other studies demonstrating the important roles of family and social support in the lives of gay men and other LGB individuals (e.g., Detrie & Lease, 2007; Elizur & Ziv, 2001; Levesque & Vichesky, 2006; Lyons, Pitts, & Grierson, 2013; Ryan et al., 2010).

The remaining two life domains we examined, sex life and health and fitness, played a somewhat weaker role in predicting mental health and wellbeing. Satisfaction with sex life was a predictor of higher positive wellbeing and lower psychological distress, but was not associated with the other two mental health outcomes, while higher satisfaction with health and fitness was associated only with higher satisfaction with life. Nonetheless, that sex life satisfaction played some role in gay men's wellbeing is consistent with past studies (Biss & Horne, 2005; Martins et al., 2007). This is not surprising, not only because the gay male community is highly "sexualized" in media representations (Jankowski, Fawkner et al., 2014), but also because gay men are typically more sexually active than other groups (Biss & Horne, 2005; Gil, 2007). It warrants mentioning, however, that sex life satisfaction is associated with better wellbeing among heterosexual men and women as well (Smith et al., 2011), so this finding is not limited to gay men.

Perhaps the most interesting finding of this study pertains to the importance of, rather than satisfaction with, physical appearance. In short, although physical appearance was rated as significantly less important than other domains such as work, family, and friendships, greater importance placed on physical appearance was consistently associated with *poorer* mental health. In contrast, with a few isolated exceptions, the importance of other life domains was largely unrelated to mental health once controlling for satisfaction with those domains. Past studies have similarly found a negative association between the importance of physical appearance and mental health among gay men (Gil, 2007; Peplau et al., 2009; Siever, 1994). It could be, as others have suggested (Levesque & Vichesky, 2006; Morrison et al., 2004; Siever, 1994), that seeing physical appearance as important creates pressure to conform to an unrealistic ideal, pressure which can be detrimental to an individual's wellbeing. This may be particularly the case in sexually objectifying cultures or communities, such as the gay male community (Levesque & Vichesky, 2006; Meyer, 2003; McArdle & Hill, 2009). Perhaps giving appearance high importance is a marker for other traits that are associated with greater anxiety, such as neuroticism or perfectionism, whereby the desire to look good is part of a broader need to appear perfect to the outside world or to satisfy perceived external demands. Further research is required to investigate this possibility.

Taken together, the present findings suggest that physical appearance is one of several life domains that matter to gay men, but that satisfaction with and importance of this domain play somewhat differing roles. Greater satisfaction with physical appearance is associated with better mental health and wellbeing in much the same way as satisfaction with other domains, but placing more *importance* on physical appearance seems to be largely on its own in being potentially detrimental to gay men's wellbeing, even though the actual effect sizes are somewhat modest.

Relationship Status

It has been suggested that one of the reasons why gay men are more at risk of body image disturbance than are heterosexual men is because they value physical attractiveness in partners, and accordingly may perceive that their own attractiveness is being evaluated by other potential gay male partners (Siever, 1994). Thus, it could be argued that once gay men find a partner, the pressure to remain attractive to others is somewhat alleviated. In turn, appearance concerns may exert less influence on wellbeing among partnered gay men than among single gay men. We tested and found only partial support for this possibility in our study. Preliminary analyses indicated that men in relationships were significantly more satisfied with their appearance overall than single men were (indeed, partnered men reported being more satisfied with every life domain, except for friendships, than single men did), but relationship status moderated the positive association between appearance satisfaction and overall life satisfaction only. Furthermore, single and partnered gay men did *not* differ in how much importance they placed on their physical appearance, and relationship status moderated the negative association between physical appearance importance and positive wellbeing only. The magnitudes of these moderating effects were also not very large, each explaining less than 1% of the variance in the outcomes. Finally, it is worth noting that although gay men in relationships scored significantly higher on all mental health outcomes, these differences did not emerge in the regression analyses after satisfaction and importance ratings were accounted for.

Thus, it appears that although being in a relationship may play a small role in ameliorating physical appearance concerns among gay men, it does not seem to help very much. There are at least two main implications of this. First, it is likely that physical appearance concerns predate being in a relationship and are somewhat habitual. If this is the case, these concerns may be so deep-seated and resistant to change that the love and acceptance of a partner may not be sufficient to relieve the pressure some gay men feel to remain attractive (not only to others in general but also specifically to their present partner). Second, the desire to appeal to attractive partners through being attractive oneself is only one of the several possible reasons why gay men are at increased risk of body image concerns. Being in a relationship may do little to mitigate against the relentless presentation of unrealistic, idealised male body forms in the gay media and community, or pressures arising from internal factors such as anxiety or perfectionism. Indeed, as Pachankis and Hatzenbuehler (2013) reported, appearance is one of several achievement-related domains from which gay men derive their self-worth; the "achievement" of being physically attractive requires maintenance and does not end with finding a relationship partner, hence the limited protective role that being in a relationship seems to play in the context of physical appearance concerns.

Limitations and Future Directions

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A number of limitations to the present study warrant mentioning. First, our sample was limited to younger Australian gay men between the ages of 18 and 39. Although previous studies suggest younger gay men are at greater risk of body image disturbances than older gay men (Drummond, 2005), future research would benefit from examining the role of physical appearance concerns relative to other life domains among an older age group. With greater maturity and life experience, some older gay men may find satisfaction and purpose in more subjectively "meaningful" domains of life, such as career and interpersonal relationships, so physical appearance could play an increasingly peripheral role. However, others may become *more* concerned about their physical appearance as a result of the natural aging process. Further research with a wider age range of gay men is required to investigate this. Longitudinal research would also be of benefit to assess how the role of physical appearance may change across the lifespan of gay men.

A second limitation of this study is that the sample consisted predominantly of white, well-educated Australian gay men. This makes it difficult to generalize the findings beyond these socio-demographic boundaries. Future research could examine whether physical appearance plays a different role in mental wellbeing among gay men of other cultural and educational backgrounds. Similarly, we did not have a heterosexual male comparison group in this study; clearly, given many previous studies on gay men's body image have made comparisons with heterosexual males, it is important for future researchers to consider how satisfaction with and importance of various life domains, including physical appearance, may differentially influence the mental health of gay and heterosexual men.

A further limitation of this study is that we used unvalidated single-item measures to assess satisfaction with and importance of life domains, rather than more extensive multiitem measures. This is largely because these items were embedded in a very long survey covering a broad range of topics, and we wished to minimise time demands on participants. We acknowledge this may cause concerns about the validity of these constructs; however, we note that these items have good face validity, and the fact we generally found the associations we expected demonstrates a degree of construct validity to these items. Nevertheless, future research in this area could use more established measures to assess further the impact of life domain satisfaction and importance on mental health and wellbeing.

To our knowledge, ours is the first study to examine the physical appearance domain together with both achievement-oriented domains, such as work, and interpersonal or social domains, such as friendships. Even so, we did not examine an exhaustive list of life domains in this study. There may be additional domains or aspects of life that some gay men find important, such as community involvement, political activism, parenthood, participation in sport, and so on. Future research could examine such domains. However, we note that taking a more idiopathic approach would make it difficult to examine the combined impact of key life domains across an entire sample for which certain domains may not be relevant. Indeed, we already had to exclude satisfaction with and importance of a current intimate relationship from the present analyses, as half the men in our sample were currently single.

A potentially fruitful avenue for future research could be to examine relationship characteristics that may play a role in gay men's body image concerns. The present study found that relationship status itself only played a limited role, but other aspects of relationships such as intimacy, commitment, and duration may further influence body image issues and mental health among gay men in ongoing relationships. In particular, it would be worthwhile to examine any differences between men in monogamous versus nonmonogamous or "open" relationships. As men in open relationships are able to pursue sexual encounters with other men outside their primary relationship (e.g., Hosking, 2013), they may feel more pressure than men in monogamous relationships to maintain a high level of attractiveness, which in turn may contribute to heightened anxiety and poorer wellbeing.

Implications and Conclusion

For more than a decade, body image concerns among gay men have gained increasing attention in the empirical literature. The current study lends new insight into the role of body image within gay men's lives by examining these concerns in the context of other major life domains. Results confirmed previous findings that gay men's concerns regarding their physical appearance have an impact on their mental health and wellbeing, but also demonstrated that other life domains play an important role, at least with regard to satisfaction levels. Specifically, more satisfaction with physical appearance was associated with better mental health to a similar extent as satisfaction with work, friendships, and family. This suggests that feeling happy and content in multiple life areas, including but not limited to physical appearance, has positive mental health benefits for gay men. In contrast, greater subjective importance of physical appearance emerged as the only consistent predictor of *poorer* mental health, while importance placed on other life domains did not consistently or strongly predict the outcomes measured. These findings point towards adopting a nuanced and contextualised understanding of how physical appearance concerns fit into gay men's lives, which may have clinical and therapeutic implications. Practitioners with gay male clients experiencing body image issues and associated mental health problems, such as psychological distress, may first try to identify whether body dissatisfaction or too much importance placed on this domain is a key underlying issue. Following the principles of self-affirmation theory (Steele, 1988), clients with body dissatisfaction may be encouraged to shift their focus to other life domains in which they enjoy relatively more success, such as at work or with their friends. Where too much importance placed on physical appearance is a fundamental issue for a client, clinicians could design interventions to challenge and address their client's beliefs about the value of being physical attractive, and why it matters to them so much. Cognitive-behavioral approaches may be particularly useful in this regard. For

instance, Nye and Cash (2006) found that in a clinical sample of women with eating disorder diagnoses, cognitive-behavioral body image therapy assisted women in developing both greater satisfaction with their bodies and less investment in their appearance. Thus, a similar approach addressing gay men's thoughts, beliefs and feelings about their bodies and appearance could prove effective.

In conclusion, it is evident that physical appearance concerns have an important influence on gay men's mental health and wellbeing. However, it is also imperative to consider what physical appearance *means* to any individual gay man, and how he enacts and owns physical appearance in the broader context of his life.

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Demographic Characteri	$\frac{stics of the Sample (N = 776)}{No.}$	%	
Age	110.	/0	
18-24	325	41.9	
25-29	187	24.1	
30-34	129	16.6	
35-39	135	17.4	
Racial/ethnic background	155	1/.4	
White	593	76.4	
Asian	25	3.2	
Indian/South Asian	1	0.1	
Middle Eastern		0.1	
	5		
African	1	0.1	
Pacific Islander	1	0.1	
Latino/Hispanic	5	0.6	
Indigenous Australian	13	1.7	
Mixed race	55	7.1	
Other	17	2.2	
Education			
Secondary or below	290	37.4	
Non-university tertiary	192	24.7	
University undergraduate	208	26.8	
University postgraduate	85	11.0	
Employment status			
Full-time	401	51.7	
Part-time or casual	151	19.5	
Not working	219	28.2	
Income (Australian dollars) ^b			
\$0-19,999	187	24.1	
\$20,000-49,999	226	29.1	
\$50,000-99,999	255	32.9	
\$100,000+	63	8.1	
Residential location			
Capital city or inner suburbs	447	56.7	
Outer suburban	204	26.3	
Regional town or city	91	11.7	
Rural	28	3.6	
Relationship status			
Single	383	49.4	
In an ongoing relationship	393	50.6	
HIV status		• •	
Positive	27	3.5	
Negative	42	69.8	
Unsure	207	26.7	

Table 1 Demographic Characteristics of the Sample $(N = 776)^{a}$

^aThe numbers of participants do not add up to the total *N* of 776 for all variables, as some participants did not answer all demographic questions. ^bAnnual pre-tax income. Around the time of this survey, the median income for all employed Australians was AUD\$46,800.

	Single		In a relationship		Total	
	М	SD	М	SD	М	SD
Life domains: Satisfaction						
Work/career	2.70	1.09	2.95	1.05	2.83	1.08
Family relationships	3.34	1.12	3.53	1.04	3.43	1.09
Friendships	3.44	1.05	3.59	0.99	3.52	1.02
Physical appearance	2.48	0.98	2.71	1.03	2.59	1.00
Health and fitness	2.44	1.00	2.62	1.02	2.54	1.01
Sex life	2.15	1.08	3.14	1.13	2.66	1.22
Life domains: Importance						
Work/career	3.84	1.01	3.89	0.94	3.86	0.97
Family relationships	3.97	1.05	4.04	1.01	4.00	1.03
Friendships	4.26	0.80	4.16	0.78	4.21	0.79
Physical appearance	3.57	0.96	3.55	0.89	3.56	0.93
Health and fitness	3.62	0.95	3.66	0.86	3.64	0.90
Sex life	3.29	1.08	3.68	0.96	3.48	1.04
Mental health and wellbeing						
Satisfaction with life	20.44	6.39	22.61	7.28	21.54	6.92
Self-esteem	18.53	6.21	19.99	5.74	19.26	6.01
Positive wellbeing	48.91	10.72	52.09	10.06	50.52	10.51
Psychological distress	22.66	8.67	20.76	7.80	21.70	8.29

Table 2Means and Standard Deviations of Key Variables as a Function of Relationship Status^a

^aMeans and standard deviations are computed from unstandardized scores.

Mental Health Outcomes						
Satisfaction with life	Self-esteem	Positive wellbeing	Psychological distress			
.43**	.32**	.33**	31**			
.39**	.34**	.34**	31**			
.42**	.31**	$.40^{**}$	31**			
.37**	.37**	.39**	30**			
.37**	.34**	.37**	29**			
.32**	.26**	.37**	27**			
.11**	.14**	.16**	05			
.21**	.18**	.16**	12**			
.12**	.15**	.18**	07*			
08*	04	05	.12**			
.05	.12**	.13**	06			
.01	<.01	.02	.03			
	Satisfaction with life .43** .39** .42** .37** .37** .32** .11** .21** .12** .08* .05	Satisfaction with lifeSelf-esteem.43** $.32^{**}$.39** $.34^{**}$.42** $.31^{**}$.37** $.37^{**}$.37** $.34^{**}$.32** $.26^{**}$.11** $.14^{**}$.12** $.15^{**}$.08* 04 .05 $.12^{**}$	Satisfaction with lifeSelf-esteem wellbeingPositive wellbeing $.43^{**}$ $.32^{**}$ $.33^{**}$ $.39^{**}$ $.34^{**}$ $.34^{**}$ $.42^{**}$ $.31^{**}$ $.40^{**}$ $.37^{**}$ $.37^{**}$ $.39^{**}$ $.37^{**}$ $.37^{**}$ $.39^{**}$ $.37^{**}$ $.34^{**}$ $.37^{**}$ $.32^{**}$ $.26^{**}$ $.37^{**}$ $.11^{**}$ $.14^{**}$ $.16^{**}$ $.12^{**}$ $.15^{**}$ $.18^{**}$ $.08^{*}$ 04 05 $.05$ $.12^{**}$ $.13^{**}$			

 Table 3

 Bivariate Correlations Between Satisfaction With and Importance of Life Domains and

 Mental Health Outcomes

* *p* <.05, ***p* <.01

Predictor	Outcomes Mental health outcome				
	Satisfaction with life	Self-esteem	Positive wellbeing	Psychological distress	
Control variables					
Age	01	.05	04	10**	
BMI	<.01	.01	02	<.01	
Satisfaction					
Work/career	.28***	.16***	.14***	19***	
Family relationships	14^{***}	.18***	13**	15***	
Friendships	.20***	$.08^{*}$.17***	13**	
Physical appearance	.23***	.28***	.13*	20**	
Health and fitness	.11*	.05	.05	02	
Sex life	.05	.03	.15***	09*	
ΔR^2 (Step 1)	.367***	.259***	.320***	$.224^{***}$	
Importance					
Work/career	<.01	.06	.07*	.01	
Family relationships	.05	02	04	.04	
Friendships	04	.04	.05	<.01	
Physical appearance	10*	- .11 [*]	19***	.16**	
Health and fitness	.03	.10*	.13**	10*	
Sex life	05	07	06	$.08^{*}$	
ΔR^2 (Step 2)	.015**	.016**	.025***	$.026^{***}$	
Relationship status	.12	.08	.08	01	
ΔR^2 (Step 3)	.003	.001	.001	<.001	
Interactions ^a					
R'ship × SatPA ^b	17**	11	.05	.09	
R'ship × ImpPA ^b	<.01	.03	.16**	05	
ΔR^2 (Step 4)	$.007^{*}$.003	$.007^{*}$.002	
Total R ²	.391***	$.280^{***}$.353***	.252***	

Table 4 Unstandardized Coefficients from the Final Regression Model Predicting Mental Health

^aInteractions are the products of relationship status and both satisfaction with and importance of physical appearance.

 b R'ship = relationship status; SatPA = satisfaction with physical appearance; ImpPA = importance of physical appearance. * p < .05, **p < .01, ***p < .01

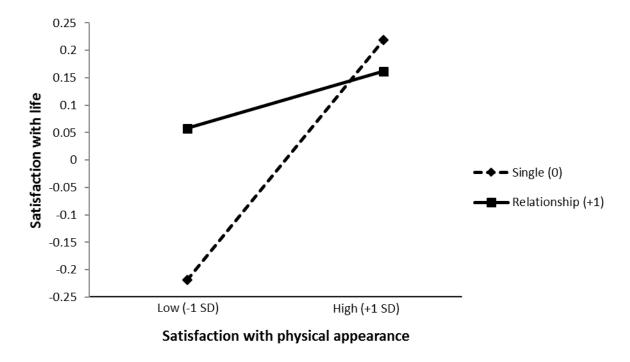


Figure 1. Moderating effect of relationship status on association between satisfaction with physical appearance and satisfaction with life.

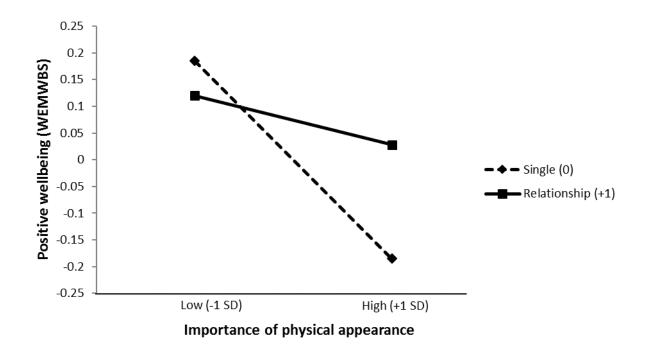


Figure 2. Moderating effect of relationship status on association between importance of physical appearance and positive wellbeing.