

Appearance concerns and smoking in young men and women: Going beyond weight control

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Abstract

Aim: This study was designed to investigate the link between appearance concerns and smoking in young men and women.

Methods: A total of 244, 17–34-year-olds completed the Multidimensional Body-Self Relations Questionnaire Appearance Sub-Scales (MBSRQ-AS).

Findings: Smokers scored significantly lower than non-smokers on appearance evaluation and appearance evaluation predicted smoking status in both men and women. Overweight preoccupation, self-classified weight and appearance orientation did not predict smoking status for either gender.

Conclusions: It is concluded that smoking cessation interventions need to target general concerns about appearance in addition to concerns over weight control, and that campaigns focused around appearance concerns need to be targeted towards men as well as women.

Keywords: Smoking, gender, appearance, weight concern, MBSRQ-AS

Introduction

Tobacco use is highest in young adults in the 18–30-year range in the United States (Centre for Disease Control and Prevention, 2004) and in Britain (Action on Smoking and Health (ASH), 2007). One of the many factors that may influence smoking in young people in this age group is the desire to look attractive. Young men (Grogan & Richards, 2002) and women (Stice & Shaw,

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2003) in this age group in Western cultures tend to place a high value on maintaining a socially acceptable slender body, and fear of gaining weight may be an important disincentive for stopping smoking, particularly for women (Potter, Pederson, Chan, Aubut, & Koval, 2004). There is evidence that young people believe that smoking initiation will help to reduce their weight by acting as an appetite suppressant (Stice & Shaw, 2003), and growing evidence from American studies that young people who smoke score significantly higher than non-smokers on importance of appearance, and significantly lower on concern about fitness and health (e.g. Clark et al., 2005). Agencies such as ASH in the UK have assumed that weight control after quitting is a key concern amongst smokers, producing leaflets specifically designed to reduce concerns about weight gain such as *Keeping Your Weight Under Control While Quitting The Habit* (ASH, 2008), and pharmaceutical companies have capitalized on fear of weight gain after quitting smoking by developing drugs marketed as curbing cravings for food as well as for nicotine, advertised with slogans such as 'Quit with *NiQuitin*: "I quit and kept my weight under control"' (GlaxoSmithKline, 2008).

Young women in Britain and the United States are more likely to be regular smokers than young men according to statistics from Britain (Department of Health, 2004) and the United States (Steptoe & Wardle, 2004), and various authors have suggested that young women find it more difficult to quit smoking than young men (Ellickson, Tucker, & Klein, 2001). In 2004, the gap in smoking prevalence in Britain between girls and boys in the 15-year-old age group reached an all time high with 26% girls and 16% of boys smoking (ASH, 2005). Various authors have suggested that girls may initiate and maintain smoking at higher levels than boys for appearance-related reasons relating to social pressure to be thin, which is generally greater on women than on men (Grogan, 2008), and previous work has shown that young women are more likely than young men to use smoking to try to control weight (Lowry, Guluska, & Fulton, 2002; Stice & Shaw, 2003). Although smoking has negative effects on appearance as it dries and ages the skin, focus groups have shown that smokers aged 17–24 tend not to have experienced these effects at first hand, and report that they believe that smoking makes them look 'cool', mature and sophisticated and helps with weight control (Grogan et al., in press b) suggesting that the 'slimming' effects of cigarettes may be a stronger incentive for young women.

In this study we investigated gender differences in the relationship between current smoking status and appearance, with the primary aim of understanding more fully the potential links between appearance and smoking and how this is gendered, to enable us to make suggestions for appearance-related smoking cessation interventions aimed at women and men. In particular, we wanted to go beyond weight preoccupation to look at appearance orientation and evaluation of appearance, and to see whether these differed between men and women smokers. Most previous work in this area has focused on US student samples. We wanted to focus on British participants with the aim of making suggestions for smoking cessation that would be appropriate for British young people. We administered a questionnaire on smoking and appearance to young men and women to assess

attitudes towards appearance (including orientation and evaluation dimensions, overweight preoccupation, and self-classified weight) in relation to smoking status. Based on previous work it was predicted that

- Women would score significantly lower than men on appearance evaluation, and higher on self-classified weight and overweight preoccupation (main effects of gender on all three variables).
- Overweight preoccupation would predict smoking status in women but not in men.
- Smokers would score higher on appearance orientation than non-smokers (and there would be no interaction between gender and smoking status on this variable).

Method

Participants

Questionnaires were mailed to 547 non-student participants in Leeds who had taken part in a previous study on smoking, and 80 were administered to groups of University students at Staffordshire University through requests in lectures. A total of 283 questionnaires were returned; 203 from Leeds (a return rate of 37%) and 80 from Staffordshire (a return rate of 100%). In addition to the 203 completed returns from Leeds, we received 20 back ‘undeliverable’. The high return rate from the Staffordshire University students resulted because the researcher collected questionnaires from participants directly following completion. In the Staffordshire University sample there were 7 male smokers, 36 male non-smokers, 5 female smokers and 32 female non-smokers. The Leeds sample comprised 8 male smokers, 49 male non-smokers, 43 female smokers and 103 female non-smokers.

Of the 283 questionnaires returned, there were 244 complete data sets which formed the sample for the analyses reported below (see Table I for number of participants in each group). All questionnaires completed by Staffordshire University students were used in the analysis. Of the Leeds sample, 5 male smokers, 35 male non-smokers, 32 female smokers, and 92 female non-smokers were included. Means on each appearance measure were compared between the

Table I. Means for MBSRQ scores by gender and smoking status.

MBSRQ-AS Sub-scale	Males						Females					
	Smokers			Non-smokers			Smokers			Non-smokers		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
Appearance evaluation	3.38	0.68	12	3.68	0.68	71	2.96	0.75	37	3.31	0.83	124
Appearance orientation	3.44	0.71	12	3.24	0.64	71	3.57	0.77	37	3.52	0.62	124
Overweight preoccupation	1.71	0.52	12	1.80	0.67	71	2.79	1.08	37	2.57	1.04	124
Self-Classified weight	2.88	0.61	12	2.99	0.44	71	3.34	0.64	37	3.23	0.60	124

Staffordshire University and the Leeds samples to check whether pre-testing the Leeds participants (or other factors) may have resulted in differences in scores between the two groups of participants. No significant differences were found on any measure ($F_{(4,233)} = 1.52$; NS). Age range was 18–34 years and mean age was 19 years.

Materials

The questionnaire contained closed- and open-ended questions, including two open-ended questions for smokers: ‘In your own words please tell us about the reasons why you smoke’ and ‘In your own words please tell us about what might make you stop smoking’, and for non-smokers ‘In your own words please tell us about the reasons why you don’t smoke’ and ‘In your own words please tell us about what might make you start smoking’ which are part of another study and are not presented here. Closed-ended items included:

- (1) Demographic items: gender, age, school attended.
- (2) Current smoking status: ‘Do you smoke at all these days?’ Yes/No.
- (3) Multidimensional Body-Self Relations Questionnaire Appearance Scale (Cash, 2000): The scale measures *appearance evaluation* (7 items, e.g. ‘I like my looks just the way they are’, and ‘Most people would consider me good looking’), *appearance orientation* (12 items, e.g. ‘Before going out in public, I always notice how I look’ and ‘I am always trying to improve my physical appearance’), *overweight preoccupation* (4 items, e.g. ‘I constantly worry about being or becoming fat’ and ‘I am conscious of even small changes in my weight’) and *self-classified weight* (2 items, e.g. ‘I think I am very underweight — very overweight’ and ‘From looking at me, most other people would think I am very underweight — very overweight’) all scored on a five-point Likert scale. This questionnaire has been reported to be internally reliable (alphas for sub-scales range between 0.70 and 0.94; Cash, 2000) has been well-validated on male and female samples in a variety of Western populations, and has been used extensively in body image research (Cash, 2000). In the present study, alphas for appearance scales were all satisfactory (appearance evaluation = 0.88, appearance orientation = 0.85, overweight preoccupation = 0.81, self-classified weight = 0.81). Alphas were also calculated separately for men and women and were also satisfactory for both groups (males: appearance evaluation = 0.85, appearance orientation = 0.82, overweight preoccupation = 0.54, self-classified weight = 0.80; females: appearance evaluation = 0.89, appearance orientation = 0.85, overweight preoccupation = 0.82, self-classified weight = 0.80).

Procedure

Ethical clearance for the study was gained from Leeds and Staffordshire University ethics committees. In Leeds, young people who had taken part in a longitudinal study of their smoking behaviours, beliefs, attitudes and

behavioural intentions since the age of 11 years (Grogan et al., in press a) and who had agreed to complete this final questionnaire were each sent the Smoking Questionnaire to their home addresses. A FREEPOST envelope was included to encourage participants to return the questionnaire. Two further mailings were used to try to maximize participation rates. In Staffordshire, students were approached in lectures by the second author and were asked to take part in the study as part of the second author's MSc Health Psychology dissertation work. All participants were assured of anonymity of data.

Analysis

Participants were each coded for current smoking status (1 = smoker, 2 = non-smoker). We wanted to know whether participants ever smoked (to access people who were occasional smokers and who may not identify as regular smokers) so coded smoking status based on the answer to the question 'Do you smoke at all these days?' Body image items were coded and sub-scale scores were calculated for appearance evaluation, overweight preoccupation and self-classified weight. Descriptive statistics and alphas were calculated for each sub-scale, and data were checked for skew and kurtosis. Since data were approximately normally distributed on all sub-scales, two factor ANOVAs (gender \times smoking status) were calculated for each subscale. Binary logistic regression was then used to regress body image variables on to smoking status for men and women.

Results

To assess the association of appearance variables with gender and smoking status, scores were compared between groups by two factor MANOVA (gender \times smoking status), followed by Univariate ANOVA. Results revealed significant effects of gender ($F_{4,237} = 7.90$; $p < 0.001$, eta squared = 0.10) and smoking status ($F_{4,161} = 2.39$; $p < 0.05$, eta squared = 0.03) and no significant interaction between gender and smoking status ($F_{4,237} = 0.71$). Univariate analysis revealed significant effects of gender on appearance evaluation ($F_{1,240} = 4.80$; $p < 0.005$, eta squared = 0.03), overweight preoccupation ($F_{1,240} = 29.91$; $p < 0.0001$, eta squared = 0.11), and self-classified weight ($F_{1,240} = 3.77$; $p < 0.001$, eta squared = 0.05), with young women scoring significantly lower on appearance evaluation, higher on overweight preoccupation and higher on self-classified weight than young men. There was no significant gender difference on appearance orientation ($F_{1,240} = 2.78$). Smoking status only exerted a significant effect on appearance evaluation, where smokers scored significantly lower than non-smokers ($F_{1,240} = 5.48$; $p < 0.02$, eta squared = 0.02). There was no significant effect of smoking status on appearance orientation ($F_{1,240} = 0.14$), overweight preoccupation ($F_{1,240} = 0.14$) or self-classified weight ($F_{1,240} = 0.01$). There were no significant interactions between gender and smoking status.

Logistic Regression was run to investigate whether appearance variables predicted smoking status in males and females. For males, appearance evaluation

was a marginally significant predictor (appearance evaluation $B=0.98$; $SE=0.54$; $Wald=3.37$; $p<0.07$) and none of the other appearance variables predicted smoking status (appearance orientation $B=-0.88$; $SE=0.58$; $Wald=2.29$; overweight preoccupation $B=0.62$; $SE=0.60$; $Wald=1.06$; self-classified weight $B=0.19$; $SE=0.76$; $Wald=0.06$). For women, low appearance evaluation predicted smoking ($B=0.64$; $SE=0.32$; $Wald=4.02$; $p<0.05$) and none of the other appearance variables were significant predictors (appearance orientation $B=-0.11$; $SE=0.34$; $Wald=0.10$; overweight preoccupation $B=0.04$; $SE=0.25$; $Wald=0.025$; self-classified weight $B=0.20$; $SE=0.39$; $Wald=0.26$).

Discussion

Women in general evaluated their appearance significantly less positively than men, as suggested in previous work (Boles & Johnson, 2001; Clark et al., 2005), were more preoccupied with their weight, and were more likely to rate themselves as overweight than were men, supporting our first hypothesis. These findings support previous work suggesting that women are more motivated than men to be slender, and are generally less satisfied with appearance than are men (Clark et al., 2005; Grogan, 2008).

We expected that overweight preoccupation would predict current smoking status in women but not in men. In fact, no significant relationship was found for either gender. We also predicted that smokers would score higher on appearance orientation than non-smokers. However, appearance orientation did not predict smoking status for either gender indicating that smokers did not place more importance on their appearance than non-smokers, contrary to Clark et al.'s, 2005 data from American college students.

The only variable that differed significantly between smokers and non-smokers was appearance evaluation, where smokers were significantly less positive about their appearance than non-smokers. There was no significant interaction with gender on this variable, so this was true for both men and women smokers. This was unrelated to weight concern. The items on the appearance evaluation subscale assess more general appearance concerns (e.g. 'I like my looks just the way they are', 'Most people would consider me good looking') rather than concerns about overweight such as are found in the overweight preoccupation subscale (e.g. 'I constantly worry about being or becoming fat', 'I am conscious of even very small changes in my weight'). These results run counter to suggestions from previous authors that smokers are more preoccupied with their weight than non-smokers (Russ et al., 2001; Clark et al., 2005), and suggest that general appearance evaluation, but not weight concern, differs between smokers and non-smokers. Logistic regression also showed that lower appearance evaluation predicted smoking status in women, and was a marginally significant predictor in men.

These results suggest that smoking cessation interventions need to target general concerns about appearance as well as about weight gain, and that they need to target appearance concerns in both men and women smokers. If smokers

of both genders evaluate their appearance less positively than the rest of the population then this may be a useful focus for smoking cessation interventions which could educate young people about the appearance-improving advantages of giving up smoking (such as improvements in skin elasticity and tone). Pomerleau, Zucker, & Stewart's (2001) US work suggests that a focus on the favourable aspects of quitting, such as looking healthy, and having good skin and teeth are likely to be effective when helping young women to quit smoking. Our data suggest that this argument also applies to British men. The *Give Up To Save Face* campaign in Britain (Department of Health, 2007) focuses on negative impacts of smoking on appearance as a motivation for quitting, but focuses exclusively on women (a parallel campaign aimed at men focuses on negative impact of smoking on sexual performance). Future campaigns need to focus on men as well as on women, using male as well as female models to increase perceived relevance to male smokers.

This study benefited from accessing non-students as well as students, and in focusing on British young people rather than American samples. We found male smokers particularly difficult to recruit for this study, and the study was also limited in not assessing previous smoking status (so we were not able to compare people who had quit smoking with those who had never smoked). In future work with larger sample sizes, the impact of different kinds of smoking history on appearance concerns in men and women smokers and non-smokers could usefully be examined. Further work could also examine other factors that might link low appearance evaluation with smoking, such as low self esteem which has been linked with body dissatisfaction in young women (Tiggemann, 2005) and men (Tykla, Bergeron, & Schwartz, 2005) and also to smoking status (Pfau & Van Bockern, 1994); and psychological distress, which has also been linked to both variables (Brandon, Wetter, & Baker, 1996; King, Matacin, White, & Marcus, 2005). In the meantime, these findings suggest that psychologists need to consider the importance of appearance in general (for both men and women), rather than focusing only on weight concerns when incorporating appearance-related factors into anti-smoking interventions.

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