WHAT IS THE FEMALE IMAGE PROJECTED BY SMOKING?

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This study examined how the image of females smoking was interpreted and whether that interpretation varied according to the smoking behaviour and the sex of the raters. Male and female smokers and non-smokers were shown poses of female models with or without a cigarette or just wearing glasses and rated them for attractiveness, intelligence and extent of being sexually interested. Models in the control pose (not smoking and no glasses) were considered most attractive and the least attractive when wearing glasses. On the 'sexually interested' ratings the smoking pose models were rated as the most sexually interested; whereas those wearing glasses were rated as the least sexually interested. Models wearing glasses were rated as the most intelligent and the smokers as the least intelligent. Smokers rated the smoker models as more attractive, but similar in intelligence to non-smokers. Non-smokers however, rated the smokers as less intelligent and less attractive than the non-smokers. No significant gender interactions were found indicating a consensus of agreement across the sexes. It was concluded that the crossed similarity-attraction effect influenced ratings on all dimensions in relation to the smoking pose.

Key words: smoking, glasses, attractiveness, sex differences

Part of the motivation to smoke could be the desire to project a particular image. Smoking might be believed to confer upon the participant attributions such as greater physical attractiveness and greater desirability to members of the opposite sex. This study concentrates on the image projected by females. One way to investigate the female image would be to present photographs of young women smoking and ask smoking versus non-smoking participants to rate them along various dimensions. This is an indirect method of finding attitudes towards the image of smokers by rating photographs, rather than explicitly soliciting views on smokers vis-à-vis non-smokers. A crossed similarity-attraction effect could be produced in that female smokers are rated to be more attractive to smokers and less attractive by non-smokers, and vice-versa for female non-smokers. This similarity attraction effect would be due to people finding people attractive who are similar to themselves. However, would the same interaction happen in terms of ratings of whether the models appear to be sexually interested?

The social context of this research is that smoking in countries such as the USA has been decreasing over recent years, but this decline is slower in women. Furthermore, women apparently find it more difficult to give up smoking (e.g.

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Sorenson, & Pechacek, 1986). One explanation why women take up smoking, particularly adolescent females, is that smoking is seen as a means to control weight. This is supported by female smokers showing greater concern for their bodies than non-smokers (Wiseman, Turco, Sunday, & Halmi, 1998). This indirectly suggests a concern about body image, that of being slim, rather than a concern about the image projected by the act of smoking *per se*. One perspective in the present study is to compare the perceptions of males and females of the female image, especially when comparing females smoking or not smoking. It might be the case that females have a stronger viewpoint about why a woman might project an image of being a smoker. Another perspective might be that the female is trying to judge how a male might judge the female. For instance, when rating women smokers for sexual attractiveness a woman might try to examine this from the perspective of the extent that men would find women to be more sexually attractive when they smoke. This would be interesting as it might provide an insight into why some women smoke: because they are inferring how men might react to this. On the other hand, there may be common agreement in ratings across the sexes.

Over forty years ago it was found that smoking behaviour may be related to the personality of the smoker. Eysenck (1965) reported the results of the survey of smoking and personality. A sample of 2,400 was drawn from light, heavy, medium, pipe smokers, ex-smokers and non-smokers. Subjects were given a 31-item personality questionnaire. A positive correlation was observed between smoking and extraversion. The score on this scale increased as the smoking became heavier, with pipe smoking scoring the lowest on this scale. However, the effect sizes were small.

There is much evidence that when we share similar attitudes with another this generates mutual attraction. The initial and classic study in this field is that of Newcomb (1961) who looked at the development of friendships in a group of men starting at university. Periodically he measured their attitude and assessed their attraction to others on a number of scales. Newcomb (1961) found that, given an adequate opportunity for the men to become familiar with each other, similarity in attitudes produced attraction. There was also agreement as to the ratings of other residents who they were not as close to.

A number of reasons have been put forward why similarity induces attraction. First, reinforcement theorists have demonstrated that attitude similarity is a potent transitional reinforcer and attitude similarity is a critical determinant of interpersonal attraction. Byrne and Nelson (1965) concluded that it is the proportion of attitude similarities that affect attraction not the sheer number of similarities. Byrne and Nelson (1965) have proposed that a general "law of attraction" is a positive linear function of the proportion of positive reinforcement associated with it. A second reason, from Festinger (1954), suggests that from early childhood we are programmed that it is crucial to hold correct views and perceptions. It is therefore a rewarding experience to interact with those who have adopted the same opinions as us; this facilitates attraction. A third reason is that others may engage in activities that we ourselves enjoy. The anticipation of many rewarding interactions leads to an

attraction towards this person. It is also believed that we are more likely to like people who are positive towards us. Individuals tend to assume that those who are similar to themselves will be more likely to like them in turn (e.g. Backman & Secord, 1959). The social psychology literature would predict that smokers should find other smokers more attractive because of the similarity-induces-attraction effect. Identification of the model as a smoker thus might elicit positive ratings from smoker participants, who see the model as being similar to themselves, and negative ratings from non-smokers who see the model as different from them.

Hines, Fretz, and Nollen (1998) have examined attitudes towards smokers in college students. They found that both smokers and non-smokers agreed that smokers were less desirable to date and were less attractive while smoking. In addition, non-smokers felt that smokers were less sexy, less feminine and less mature. The similarity-attraction hypothesis is partially supported in this study, except that the smokers agreed with the non-smokers that smokers were less desirable. The problem with the approach of Hines et al. (1998) is that there may be a difference between this expressed opinion and actual attitude when looking at a picture of someone who is smoking.

The present study primarily aims to examine the perception of raters evaluating photographs of smokers along the dimensions of physical attraction, sexual interestedness and intelligence. As a control condition for the present study a comparison between the effects of glasses wearing versus the effects of smoking was also investigated. Much research has been conducted into the stereotyping of glasses wearers. Experiments have revealed that glasses wearing influences the extent to which a person is perceived as attractive and intelligent. When asked to draw an intelligent person, children predominantly draw a person wearing glasses (Sandow, 1997). In one study raters judged the intelligence and attractiveness of a head and shoulders picture. Using a computer, the researchers were able to manipulate the apparent weight of the model as well as put on glasses, or remove them. In support of previous findings, glasses decrease rated attractiveness. However, ratings of intelligence were not affected by glasses or weight (Lundberg & Sheehan 1994).

METHOD

Subjects:

Eighty volunteers participated in the study (41 male, 39 female) ranging in age from 19 years to 24 years ($M=21.4$ years, $SD=0.89$). Participants above the age of 24 were turned away from the study, as age was considered a confounding variable in a test of similarity and attraction. Of the male sample, eighteen were smokers ($M=14.8$ cigarettes per day, $SD=2.94$) and 23 were non-smokers. Thirteen of the female participants were smokers ($M=12.2$ cigarettes per day, $SD=2.31$) and the remaining 26 were non-smokers. Subjects were classified as smokers or non-smokers after the experimental session, so that the subject was unable to discern the purpose of the study.

Design and procedure:

Eight female models were used of approximate student age and appearance in casual poses. Each model was photographed three times in identical poses, seated in an armchair, except that in one pose the

model held a cigarette, while in the second the model wore glasses. The third pose acted as a control, with the model neither holding a cigarette nor wearing glasses. The subjects rated the models on three 10-point scales: 'attractive', 'intelligent' and 'sexually interested'.

Subjects were given the questionnaire and a copy of the photographs bound in a photo album. They were asked to look at the images and rate the different women on the scales of attractive, intelligent, and sexually interested. The scales represented 'not at all' for 0 through to 'extremely' for 10. They took up to 30 seconds to look at each photograph and up to a further 30 seconds to respond to the scales provided. A repeated measures design was used in which all subjects rated the 8 females in all three conditions; thus each participant looked at 24 photographs. Each model was presented in the same sequence for each of three blocks of trials. The first model was in the control condition, the second wore glasses and the third was shown smoking, and so on. The repeated measures design allowed control of individual differences and the use of 8 models provided a long enough gap to prevent the memory of how the subjects scored a model in the earlier condition from being recalled in the subsequent conditions. The 3 separate response sheets prevented participants from looking back at earlier ratings of the same models. Afterwards they were asked a series of questions about themselves concerning their age, gender, smoking habits and whether they were long or short sighted or had normal uncorrected vision. Additionally, subjects were asked if they had recognized any of the models. If this was the case then their responses were not processed.

RESULTS

Three-way ANOVAs were computed for each rating dimension with one within factor (pose) and two between subject factors, sex of the rater and whether they smoked. Ratings of attractiveness were significantly higher by female raters, $F(1,76)=8.49$, $p<.01$. There was also a significant main effect for pose, $F(2,152)=7.81$, $p<.01$. The nature of this is illustrated in Fig. 1, which also shows the significant 2-way interaction between whether raters smoked and pose, $F(2,152)=7.28$, $p<.01$. This shows how smokers consider the models in the smoking pose to be the most attractive, while the non-smokers consider them to be the least attractive, compared with the other two poses.

Ratings of intelligence were significantly higher for female raters, $F(1,76)=4.30$, $p<.05$. There was a significant main effect for pose, $F(2,152)=41.6$, and there was a significant 2-way interaction between pose and whether the rater smoked,

Fig. 1. Ratings of attractiveness: interaction between pose type and whether the rater smokes.

$F(2,152)=4.02$, $p<.05$, as shown in Fig. 2. Finally, for ratings for sexually interested, there were the same significant main effects and the one interaction. Thus, the females rated the models as more sexually interested than the males, $F(1,76)=6.36$, $p<.05$, and there was a main effect for pose, $F(2,152)=43.3$, $p<.001$ and a significant interaction between pose and whether the rater smoked, $F(2,152)=4.26$, $p<.05$, shown in Fig. 3.

Nine t -tests were computed on the differences between smokers and non-smokers on the three rating dimensions by three types of pose. One of these tests was significant at alpha level 0.5. This was the difference between smokers and non-smokers rating the smoking and non-smoking poses for being sexually interested, $t(78)=2.077$, $p<.05$. Two further tests were marginally significant at $p<.10$, for the same pose, but for ratings of attractiveness and intelligence, $t(78)=1.688$ and 1.748 , respectively. As nine comparisons were made a Bonferroni correction of the alpha level to 0.0057 rendered these tests non-significant; nevertheless the effect size

Fig. 2. Ratings of intelligence: interaction between pose type and whether the rater smokes.

Fig. 3. Ratings of being sexually interested: interaction between pose type and whether the rater smokes.

of 0.467 for this difference between the smoker and non-smokers' ratings of sexually interested, which is in the small to medium range, is worthy of note lest we should be making a Type 2 error by applying this correction.

DISCUSSION

The purpose of the present study was to investigate if smoking or glasses wearing differentially influences male and female smokers and non-smokers. The results support the hypothesis that the similarity of the rater to the model, in terms of smoking, influences how attractive, intelligent and sexually interested the model is perceived to be. The study also supports previous research that indicates that people who wear glasses are perceived as more intelligent (Lundberg & Sheehan, 1994; Sandow, 1997). The social psychological literature concerning the effects of similarity on attraction was demonstrated in the present study. Smokers rated other smokers higher on the positive end of all three scales compared with non-smokers' ratings of smokers. The present study finds little support for this influence being gender specific, as the interaction between gender, smoking and pose was not significant. This suggests therefore that young men are equally vulnerable to the image of smoking.

Festinger (1954) claimed that we believe it to be very important that we hold views and opinions that are correct. It is therefore a rewarding experience to interact with others who share our beliefs. This phenomenon may become amplified when the belief or action concerns something as fundamental as a serious health risk, as smoking is. An important finding concerns why smokers do not rate non-smokers as significantly less attractive, than the non-smokers did. It seems that smokers may not make discriminations that are so strong between smokers and non-smokers. This could be related to the way that smokers may perceive the models. The non-smokers clearly see smokers as different from themselves and this influences their assessment. However, for the smokers the non-smoking model may be perceived as smokers who simply were not smoking when the picture was taken and thus also similar to the subjects who were smokers, who rate them high (though not as high as the smoking models).

A main effect was found upon the sex of the subject. Women tended to rate the models significantly higher, or more positively, on all three variables (attractive, intelligence, sexually interested). While conducting the study, two women said that they felt harsh rating the appearance of other women. A form of cognitive dissonance (Festinger, 1957) may have led them to rate the models higher, in order to obtain a equilibrium with their moral dilemma.

The present research implies that gender differences in the attitudes and perceptions of smoking are not as fundamental as proposed. Irrespective of gender, smokers and non-smokers have a shared group belief as to what constitutes the psychological make up of a smoker and a non-smoker. The image that smokers are sexually interested needs to be challenged by health professionals by demonstrating

how smoking does not make one sexually attractive but is an activity that is potentially fatal.

In conclusion, the present study has demonstrated that the similarity-attraction effect influences smokers' and non-smokers' perceptions of other people. Smokers tended to see smoking models as more attractive and sexually interested than non-smoking models. Non-smokers rated smokers as significantly less attractive and intelligent but still rated the smokers as more sexually interested. The models in the glasses condition were rated as significantly more intelligent than in the other conditions. Female subjects generally rated the models in all three conditions higher on each of the variables. No gender differences were evident however, within the smoking and non-smoking groups. The implications of this are that perceptions of smokers are not gender specific and that anti-smoking campaigns require the same approach to both sexes. Current approaches attempt to focus on females, but the present research suggests that beliefs and perceptions of smoking by females are shared by both genders. However, this needs to be examined further within the context of the judgements on male models. Another aspect to these results is that these views could also be the summation of experiences rather than the product of socially generated perceptions. It may be the case that in peoples' experiences, people with glasses tend to be more intelligent and that women who smoke do tend to be more sexually interested.

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