

Unbuttoned: The interaction between provocativeness of female work attire and occupational status

Running head: *Provocativeness of female work attire and occupational status*

Abstract

Gender-biased standards in United Kingdom (UK) workplaces continue to exist. Women experience gender discrimination in judgements of competence, even by other women. Clothing cues can subtly influence professional perceptions of women. The aim of this study was to investigate how minor manipulations to female office clothing affect the judgements of competence of them by other UK females and to examine whether such effects differ with occupational status. One group of female university students ($n = 54$) and one group of employed females ($n = 90$), all from London and the East of England, rated images of faceless female targets, on a global competence measure derived from six competence ratings (of intelligence, confidence, trustworthiness, responsibility, authority, and organisation). The dress style was conservative but varied slightly by skirt length and the number of buttons unfastened on a blouse. The female targets were ascribed different occupational roles, varying by status (high – senior manager, or low - receptionist). Participants viewed the images for a maximum of five seconds before rating them. Overall participants rated the senior manager less favourably when her clothing was more provocative, but more favourably when dressed more conservatively (longer skirt, buttoned up blouse). This interaction between clothing and status was not present for the receptionist. Employed participants also rated females lower than did student participants. We conclude that even subtle changes to clothing style can contribute towards negative impressions of the competence of women who hold higher status positions in a UK cultural context.

Keywords: Female workplace attire; occupational status; gender bias; female perceptions; UK gender beliefs; competence.

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Introduction

Despite increases in equality in the workplace UK females still face gender-based prejudice and are consistently under-represented at boardroom level (Villiers, 2010). Research comparing a sample of UK female executive directors with a matched sample of UK male directors showed that over a seven year span (1998-2004) in UK-listed companies female executive directors were paid less, received smaller bonuses and benefited less financially from increased performance (Kulich, Trojanowski, Ryan, Haslam, & Renneboog, 2011). Research from the UK, the United States (US), Holland, and Italy reveals that females seeking senior positions seem to face a number of related challenges. For example, research with mixed a gender sample of undergraduates from the Netherlands showed female employees face additional barriers to men when competing for leadership roles (Kawakami, Dovidio, & Van Kamp, 2005), were more likely to be judged on appearance by UK female recruitment managers and consultants (Caven, Lawley, & Baker, 2013), were under more pressure from US and UK interactive service employee managers to manage their appearance as part of their role (Warhurst & Nickson, 2009), and when they did they were often objectified and dehumanised in studies on US female undergraduates (Gurung & Chrouser, 2007) and mixed gender samples of Italian students (Vaes, Paladino, & Puvia, 2011). These stereotypical gender-based judgements are seen in mixed gender samples of UK students and employed participants (Howlett, Pine, Orakçioğlu, & Fletcher, 2013), US financial managers (Marlowe, Schneider, & Nelson, 1996), UK

recruitment managers and consultants (Caven et al., 2013), US attorneys (Biernat, Tocci, & Williams, 2012), mixed gender samples of retail marketers and managers, bank managers and vice presidents (Forsythe, 1990). Schein (2001), who proposed the “think manager-think male” view, suggests that the same gender role stereotyping barriers apply in many other industrialised societies including Germany, China, and Japan.

The current study pursues these issues from a different theoretical stance by examining clothing as a key influence. How, if at all, do the clothing choices of women affect the stereotyped views of them, especially in relation to work roles? Unlike altering one’s body shape, or facial features, clothing choice is a behaviour that can be changed easily and it is therefore important to better understand how clothing is viewed in an occupational context. In both the UK and US, there has been a great deal of research about explicitly provocative female clothing (e.g. Barnard, 2002). We provide a novel approach by examining how very minor changes in conservative work clothing choices might still affect global evaluations of women. We explore these evaluations by measuring a composite competence rating based on a number of variables chosen from previous research on stereotyping, workplace clothing judgements and female objectification which have been derived from studies using mixed gender samples of US undergraduates (Glick, Larsen, Johnson, & Branstiter, 2005; Heflick & Goldenberg, 2009) predominantly mixed gender UK students (Howlett et al., 2013), and US female undergraduate students (Johnson & Gurung, 2011).

Past research from the UK suggests that the gender-biased attitudes of observers are more likely to affect females who aspire to, or already hold,

leadership positions (Rake & Lewis, 2009). We wish to determine if clothing manipulations play a role in influencing these evaluations. We examine how observers rate target females wearing their clothing in slightly different ways (more or less provocatively) and how the ratings depend upon the status of the employee position being evaluated - either a receptionist position (low status) or a senior manager (high status). Gray, Knobe, Sheskin, Bloom, and Barrett (2011) asked samples of mixed gender student participants from a variety of countries (US, France, Saudi Arabia, Philippines, and Pakistan) to rate pictures of others on an array of variables, such as competence and intelligence. They varied the degree to which clothing focused on the body and, in a series of experiments, confirmed that the greater the focus on the body, the lower the ratings of competence. We hypothesise that such ratings may be influenced by the very subtle variations in clothing we manipulate, and will also be affected by the employee's status under consideration

A further design feature in our study is that the images of target females were only present for a small amount of time providing a realistic proxy for first impressions. An important contribution of this study is to gauge female judgments of other working females so both employees and students are included as participants. In this study we consider how UK gender beliefs may be reflected in a global competence rating derived from a range of evaluations of people performing different work roles. Since we manipulate only small changes in how clothing is worn, any findings will have clear implications for working women about how their appearance is perceived by other women. The findings may also be relevant to

those who believe they make objective judgements about women on the basis of their actual competence (e.g. in job selection, appraisals, or promotion decisions).

UK-specific gender beliefs and work

In the UK female participation in the labour market has changed dramatically over the past 30 years since the first British Social Attitudes (BSA) survey measured gender roles. In the 1980s nearly 50% of the public agreed that “a man’s job is to earn money; a woman’s job is to look after the home and family” compared to just 13% agreement in 2012 (Park, Bryson, Clery, Curtice, & Phillips, 2013). Although the traditional gender division of labour is changing there has been no ‘gender role revolution’ (Esping-Andersen, 2009) and the majority of men and women from middle to senior management in the UK still identify stereotyping as a major hurdle to equality in the workplace (Rake & Lewis, 2009). Although the BSA appears to show a shift in attitudes away from gender stereotyping, this is not reflected in behaviours. For example, over the last 20 years there has been virtually no shift in the percentage of couple households who split domestic duties along traditional gender lines and females doing paid work report increasing conflict between work and home life (Park et al., 2013). This leaves open the question of whether the apparent shift in attitudes will influence what people actually do and what deeper cognitions may be guiding the personal and work choices made.

There is some indication that younger cohorts (18-25 years old) in the BSA are less likely to support the traditional gender role stereotype – although there were no differences in the views of males and females (Park et al., 2013). Younger people participating in UK work apprenticeship schemes also show a gender balance overall, although this hides the traditional occupationally-specific gender

imbalances (Williams, Foley, & Newton, 2013). Although females are still underrepresented in UK boardrooms (Villiers, 2010), the proportions in management apprenticeships are reasonably balanced (Williams et al., 2013), which may point to some erosion of gender stereotypes in the future. However, it is a moot point as to whether these shifts manifest in changes in workplace practice. Previous psychological research in other occupational contexts, using UK professional participants (doctors, qualified nurses, therapists and healthcare assistants), casts significant doubt on this (Jenner, Fletcher, Watson, Jones, Millar, & Scott, 2006).

Gender bias and stereotypes

The underlying factors responsible for gender biases are clearly complex and multifaceted, involving evaluation biases, subtle social and psychological influences about expectations of roles, and how women manage and lead (Carli & Eagly, 2001). For example, in the United States, female traits are perceived to be incompatible with positions of leadership (Eagly & Karau, 2002). Success can be perceived negatively, especially in traditional male domains by male and female US undergraduates and this can have adverse effects on evaluation and compensation even when using real male and female employees of a US financial services company (Heilman, Wallen, Fuchs, & Tamkins, 2004). Males are judged as more competent and higher in task performance ability than females by undergraduate male and female students in the US (e.g. Bakewell & Berger, 1996; Smith & Midlarsky, 1985). There are also 'shifting standards' in the perceptions of male and female competence, with females more likely to be subjected to lower initial criteria but higher eventual norms than men using male and female US student participants

(Biernat & Fuegen, 2001). When hiring, this manifests as a greater likelihood of women being invited for an initial interview but a lower likelihood of appointment, especially when being assessed by other females (Biernat & Fuegen, 2001). In a recent study Biernat et al. (2012) also showed that, compared to males, junior female US attorneys were penalised in performance evaluations for perceived lack of 'feminine qualities' such as interpersonal warmth and for the presence of 'masculine qualities' such as technical competence by senior male attorney evaluators. Women's competencies and behaviours appear to be more harshly judged than men's, even by other women, and their appearance is also scrutinised by both genders. Moreover, female undergraduates from the US, are just as likely as males to incorporate stereotyped status differences in judgements (Ridgeway, Backor, Li, Tinkler, & Erickson, 2009) and may even be harsher in evaluating self-promoting behaviours in other women than men (Rudman & Glick, 2001).

Appearance and the workplace

Women face a complex choice when dressing for work, with competing demands that depend upon a host of contextual factors (Peluchette & Karl, 2007). A case study with female UK recruitment managers and consultants supports the view that employed women have to manage their dress and appearance in a sexualised and clearly gendered manner (Caven et al., 2013). It also appears that the sexualisation of labour is both sanctioned and subscribed to by US and UK management of interactive service employees (Warhurst & Nickson, 2009). Meta-analytic data shows that attractiveness appears to transcend cultural boundaries and perceptions are routinely affected by appearance in both adults and children (Langlois, Kalakanis, Rubenstein, Larson, Hallam, & Smoot, 2000).

For females in the workplace, choice of attire appears to have a marked impact on the impressions others have of them. Women have to work harder to create a good impression (Fredrickson & Roberts, 1997) and a study based on the perceptions of a mixed gender sample of Italians found women are more likely than men to be judged on appearance (Vaes et al., 2011). Attractiveness, which can be enhanced by clothing choices, has been widely shown to create positive impressions of adults and children across cultures (Langlois et al., 2000) and shown, using a mixed gender sample of supervisors and managers in financial institutions from the US, to influence hiring decisions (Marlowe et al., 1996). Previous research, based on a mixed gender sample of UK students and employees, has also shown that clothing choices of a very subtle or minor nature can strongly influence first impressions even for evaluations about the wearer's level of flexibility, confidence, success, and salary level (Howlett et al., 2013).

The greater array of clothing choices available to women compared to men, presents women with the challenge of balancing attractiveness and professionalism at work. Dress is therefore fundamental to managing appearance for women and research from US male and female postgraduates suggests they make more effort choosing occupational attire than men, particularly when in management or executive positions (Peluchette, Karl, & Rust, 2006). However, the media and academic research convey conflicting messages about suitable work attire. Media in the US, for example, is preoccupied with feminine beauty and portrays women as sexualised objects, even when dressing for work (Frith, Shaw, & Cheng, 2005). However, evidence from research tells a very different story about how women should manage their appearance in the workplace. For example, research

investigating the perceptions of male and female US banking and marketing employees indicates that adopting a more masculine style at an interview for a management position leads to more positive ratings of a female applicant's management potential and more favourable hiring recommendations (Forsythe, 1990). Spence and Helmreich (1972), although writing at a time when there were fewer women in managerial roles, nonetheless found that those who displayed masculinity and competence were rated more favourably by male and female US students. A woman in a high status role, it seems, is expected to be appropriately attired as well as being able to moderate the extent to which she displays her femininity, since the consequences of violating the prescribed code will harm her career.

Clothing, objectification and status

Sexualising appearance has long been a correlate of female objectification. More feminised clothing results in women (regardless of occupation) being judged more harshly, and evokes more sexualised judgments by mixed gender samples of students in the US (e.g. Abbey, Cozzarelli, McLaughlin, & Harnish, 1987; Cahoon & Edmonds, 1989). When Gurung and Chrouser (2007) presented images of female athletes in either sport-appropriate outfits or highly provocative clothing to a sample of female US undergraduates, they were judged to be more sexually experienced and attractive, but less intelligent, strong and capable, in the provocative outfits. Although, these judgements can be moderated by tangible displays of competence (Johnson & Gurung, 2011), US female undergraduates persist in objectifying other women who sexualise their appearance even to a modest extent. One potential

consequence of this is the dehumanising of women by other women (in this case Italian students), and distancing from those objectified (Vaes et al., 2011).

Conveying a sexualised message at work negatively affects the perception of competence-related attributes for women in a traditional masculine role, such as a manager amongst a US sample of male and female undergraduates (Deaux, Winton, Crowley, & Lewis, 1985). Furthermore the effect of provocative clothing on first impressions may be more detrimental for women in higher status roles. For example, male and female US students' perceptions of a manager wearing provocative clothing were more negative than their perceptions of a provocatively attired receptionist (Glick et al., 2005). A related study, based on a mixed gender sample of US students, confirmed that a provocatively dressed female Chief Executive Officer (CEO) was rated lower on competence than other females, including a professionally dressed CEO, a professionally dressed office assistant and a provocatively dressed office assistant (Wookey, Graves, & Butler, 2009). The higher status the female the harsher the judgements elicited by her clothing if it is perceived as provocative.

Overview of the empirical investigation

Most of the empirical work cited compares styles of dress that are markedly different (e.g. smart vs casual, sexualised vs conservative). The results are, perhaps, therefore predictable in the context of gender stereotypes at work. However, in reality women's clothing choices are both broader and more nuanced, such as whether to wear a skirt just below or just above the knee and how high to button a blouse. This study empirically examines how minor changes to skirt length and the number of fastened blouse buttons affects how other women evaluate the

competence of the wearer. The extent to which women can subtly reveal their femininity (with a shorter skirt or décolletage) without invoking gender role stereotyping by other females has not previously been examined.

Gray et al. (2011) have shown that variables measuring competence are affected by clothing manipulations that draw attention to the body of the wearer in samples of predominantly mixed gender student samples from a variety of countries (US, France, Saudi Arabia, Philippines, and Pakistan). Also, research using US male and female postgraduates indicates that the clothing a person wears influences their perceptions of their own trustworthiness, authority, competence, and performance (Peluchette & Karl, 2007). Clothing also influences perceptions of intelligence in an educational context using mixed gender US high school student and teacher samples (Behling & Williams, 1991), in a sporting context using female US undergraduates (Gurung & Chrouser, 2007) and ratings of authority in a medical context using male and female UK students (Brase & Richmond, 2004).

We measured female participant's evaluations of target females in occupational attire on six different ratings related to measures of personal and professional competence that were relevant to perceptions of female and/or occupational competence (e.g. Glick et al., 2005; Heflick & Goldenberg, 2009; Howlett et al., 2013; Johnson & Gurung, 2011; Wookey et al., 2009). In addition, we include an additional measure – confidence - that may be less open to objective scrutiny by others. It is known that clothes affect the confidence levels of the wearer (Pine, 2014), but does it also affect the impressions of confidence others' attribute?

The six ratings were combined to create a composite competence score. Previous research has suggested that manipulations in exterior physical

characteristics or body alterations can produce a halo effect - the propensity for an impression created in one area to influence ratings in another area (e.g. Ruetzler, Taylor, Reynolds, Baker, & Killen, 2012). The halo effect has been shown to influence multiple perceptions of competence in the context of physical attractiveness (particularly social competence) in a meta-analysis of predominantly undergraduate mixed samples from America and Canada (Eagly, Ashmore, Makhijani, & Longo, 1991) and facial make-up with male and female participants of different ethnicities (Etoff, Stock, Haley, Vickery, & House, 2011) in a positive way (better ratings), and with tattoos in a negative way using mixed gender samples of US high school and university students (Degelman & Price, 2002). Although we are not explicitly testing this theory, we expect similar underlying processes may result in the generalisation of perceptions on the different dimensions of competence being rated resulting in overall competence being affected by the minor clothing manipulations.

Female observers were asked to judge the competence of other females dressed in ordinary office clothing. There was no objective information given to observers about the actual competence of females in the images and so we hypothesised that any effects of the clothing manipulations reflected other social or psychological factors at work.

In the study we manipulated the status of target females by comparing two types of role – receptionist (low status) or senior manager (high status). As far as we are aware, ours is the first study to employ this manipulation while also using time-limited image exposure of faceless images. Images of target females were presented with their faces blurred, to control for any effects of facial attractiveness

or expression. This has rarely been done in previous research (Howlett et al., 2013) and allows for greater confidence that any differences in participant judgments can be attributed to the clothing manipulations.

We know from previous research using US undergraduate student samples that evaluations based on clothing choices are very quick - just a few seconds is certainly enough to activate judgments that are stereotypical (Todorov & Uleman, 2003) and having as little as 100 milliseconds does not alter judgments of attractiveness, likeability, trustworthiness, competence, and aggressiveness compared to having no time constraints (Willis & Todorov, 2006). Impressions form quickly and strongly and this informs the design of the current study.

A further manipulation in our study is to compare the judgements made by two different groups of female participants; students and those in paid employment. It was expected that these groups may differ on key indicators that can affect perceptions of competence, such as age, employment experience and experience within work settings where formal clothing is commonplace. Previous research has shown that people who earn higher salaries can be more negative in their judgements of others based on their clothing using male and female UK undergraduates and employees (Howlett et al., 2013). Those that have greater familiarity with work environments where smart clothing is the norm also tend to rate their self-perceptions as more positive when wearing formal clothing, according to research from the US using male and female postgraduates (Peluchette & Karl, 2007). Furthermore, research from the US using mixed gender samples of managers and employees, shows that rater age (in this case managers) can affect evaluations of employee competence (Shore, Cleveland, & Goldberg, 2003). We

considered it important, therefore, to differentiate between the judgements of employed and student participant females in case the age, salary and occupational experiences of the observers affected their evaluations.

Based on the findings from the literature outlined, this study therefore, investigates a number of specific hypotheses:

The first hypothesis considers the overall effect of clothing on ratings of competence:

1. Minor manipulations in target female clothing, will influence female participant first impressions of competence. Target females in non-provocative clothing will be perceived as being more competent than those in provocative clothing.

The second and third hypotheses examine how ratings of competence are affected by occupational factors:

2. We examine whether the competence ratings of females will be influenced by the status level raters are primed with by the job titles given with the images. We predict that higher status target females will be rated as more competent overall than lower status target females.
3. The third hypothesis considers the occupational experience of the raters. We predict that those in the employment group, with a broader range of occupational experience, will give lower ratings than those given by the student group.

The fourth hypothesis examines the role of status and how this might interact with the clothing manipulations.

4. We suggest that there will be an interaction between clothing and status, such that the higher status target females will be rated less favourably when dressed more provocatively than the lower status target females.

Method

Participants

A total of 144 female participants were recruited in two groups. The first group consisted of employed females and were recruited via social media from networking sites including Facebook and LinkedIn. The second group were female students from the University of Hertfordshire who participated in exchange for course credit. In both cases potential participants were told the researchers were undertaking a study on first impressions in the workplace, that they would be asked to view images carefully and would be asked to rate each picture on a number of items, based on their first impression. The demographics for each group are shown in Table 1. The employed group had a higher mean age and were more likely to earn a higher salary.

Insert Table 1 about here

Design

In a repeated measures design all participants viewed and rated the same images, presented online and in a randomised order (with the same target female not appearing consecutively). Participants saw 12 images, eight of which were included as distracters, and portrayed two females with minor alterations to the

provocativeness levels of their attire, but with no mention of occupation. The two target females varied by clothing (*provocative* or *non-provocative*) and status (*low status* – receptionist, or *high status* – senior manager). In all images the females stood still facing the camera. The four target images were:

- female 1, wearing more provocative clothing, primed with low status.
- female 2, wearing more provocative clothing, primed with higher status.
- female 1, wearing less provocative clothing, primed with lower status.
- female 2, wearing less provocative clothing, primed with higher status.

All photographs were taken so that the female was centred and the same distance from the camera each time. Faces of the females were pixelated.

Materials

The images used were specifically photographed for the study in an attempt to minimise differences. All photographs were taken in the same filming laboratory with a plain grey curtained background. All four females were shown in office wear, consisting of a black mid-length skirt, black jacket, white blouse and black flat shoes. All four females were less than 26 years old and of Caucasian origin. The two target females had the same colour hair either cut to shoulder length and one a little longer, and were of a similar height and slim build. All the images showed females head-to-toe with the same amount of background above their head and below their feet. In the provocative clothing condition the two target females wore a shorter skirt (just above knee length) and lower buttoned blouse (two buttons undone). In the non-provocative clothing condition the two target females wore a

longer skirt (just below knee length) and a higher buttoned blouse (one button undone). The status of the two target females was conveyed by a statement presented on a blank screen before the target images: high status - 'The person in the following image is a senior manager'; low status - 'The person in the following image is a receptionist'.

The study was created in Adobe Dreamweaver CS3 and hosted on an Apache 2 web server. The experimental set up contained an information page, a definitions page explaining each rating, 12 images (four of which had a preceding screen stating the target female's occupation), 12 ratings pages and a debrief page. The six ratings (intelligence, responsibility, confidence, trustworthiness, authority, and organisation) used competence based classifications from previous research (e.g. Glick et al., 2005; Heflick & Goldenberg, 2009; Howlett et al., 2013; Johnson & Gurung, 2011). An example item was, 'The person in the image is intelligent'. Each item was accompanied by a scale from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*), with point 4 representing *neither agree nor disagree*.

The overall competence score was explored statistically to examine whether it represented a single underlying factor based on the six ratings from which it was composed. The factor structure for the six different competence ratings was determined using principal components analysis with direct oblimin rotation, for each of the four target images. The factor solution for each image contained only one factor, accounting for 72% (provocative-high status), 60% (provocative-low status), 72% (non-provocative-high status) and 64% (non-provocative-low status) of the variance respectively. Factor loadings ranged from .58 to .92, with only two items (out of 24) with loadings below .73. Second, we examined the Cronbach's

alphas for the overall competence score for the different types of image used. The results confirmed high reliabilities - provocative-high status ($\alpha = .92$), provocative-low status ($\alpha = .86$), non-provocative-high status ($\alpha = .92$), and non-provocative-low status ($\alpha = .88$).

Procedure

The link to the experiment was posted on the social networking sites (employed group) or uploaded to a university credit course page (student group) asking for females to participate in a study about first impressions and occupation. The link directed participants to information about the study and instructions for completion. Confidentiality was assured and the ethical approval protocol number for the study provided. All responses were checked for authenticity.

Participants who agreed to proceed read brief definitions of the six ratings to be assigned to each female and were informed that they would see 12 images for 5 seconds each and would rate each female on these criteria. The exact descriptions provided for the individual ratings were: Intelligent – knowledgeable, showing sound judgment and rationality; responsible – personal accountability or ability to act without guidance; confident – having strong belief or self-assurance; trustworthy - dependable, reliable, honest; authoritative – the power to influence or command thought, opinion, or behaviour; organised – efficient, methodical, orderly.

When the participants pressed the 'begin' button the first female appeared on screen. The four target females were preceded by a screen which said 'The person in the following image is a senior manager/receptionist'. Five seconds later the image appeared on the screen. The exposure time for the image presentation was set at 5 seconds. After viewing each image participants rated the target

females on the six dimensions defined earlier. After participants had rated all images they completed a set of demographic questions (age, gender, earnings), were thanked for their time and exited the experiment.

Results

Target females were rated on overall competence composed of six dimensions (intelligence, responsibility, confidence, trustworthiness, authority, and organisation), using a scale from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*). Point 4 on the scale represented *neither agreeing nor disagreeing* with the statement. The low status job title was 'receptionist' and the high status job title was 'senior manager'. The images depicted target females dressed in conventional office attire that differed only slightly in terms of provocativeness.

The four hypotheses were tested by examining the effects of the experimental manipulations on the mean competence scores. The mean overall competence scores are presented in Table 2 by status (low and high), clothing (provocative and non-provocative) and group (employed and student).

Insert Table 2 about here

The ratings were analysed using a mixed design MANOVA with clothing (provocative and non-provocative) and status (low and high) as the two repeated measures factors, and group (employed and student) as the between subjects factor.

The MANOVA results show that there was a significant main effect of clothing, as predicted by hypothesis two. The minor variations in clothing produced statistically lower overall ratings of competence when the females wore more

provocative clothing (provocative, $M = 4.55$, $SD = 0.90$) than not (non-provocative, $M = 4.66$, $SD = 0.90$), $F(6, 125) = 4.18$, $p = .001$, $\eta^2 = .17$.

There was also a significant main effect of status but this was in the opposite direction to hypothesis three. Females rated the low status target female ($M = 4.73$, $SD = 1.09$) as being more competent than the high status target female ($M = 4.54$, $SD = 0.91$), $F(6, 125) = 15.38$, $p < .001$, $\eta^2 = .43$.

Hypothesis four was that the group of female raters would significantly affect how they viewed the images. In line with this, the main effect of group was significant, with the employed group ($M = 4.46$, $SD = 0.83$) giving lower ratings than the student group ($M = 4.75$, $SD = 0.84$), $F(6, 125) = 2.84$, $p = .013$, $\eta^2 = .12$.

The MANOVA interactions show that the effects of the clothing manipulations were influenced by status, as predicted by hypothesis five. The two-way interaction between clothing and status was significant, $F(6, 125) = 5.16$, $p < .001$, $\eta^2 = .20$. The high status target female was rated as lower in competence when they were dressed marginally more provocatively (provocative, $M = 4.43$, $SD = 1.27$ vs. non-provocative, $M = 4.65$, $SD = 1.14$), $t(132) = -2.74$, $p = .007$, $r = .23$, while there was no statistically significant difference for the low status target female (provocative, $M = 4.59$, $SD = 0.95$ vs. non-provocative, $M = 4.66$, $SD = 1.00$), $t(132) = -.45$, $p = .654$, $r = .04$. The clothing manipulations only affected ratings of competence for the high status target female (senior manager).

The two-way interaction between status and group did not reach significance, $F(6, 125) = 1.95$, $p = .077$, $\eta^2 = .09$. The two-way interaction between group and clothing was not significant, $F(6, 125) = 1.29$, $p = .268$, $\eta^2 = .06$, nor was

the three-way interaction between clothing, status and group, $F(6, 125) = .63$, $p = .709$, $\eta^2 = .03$.

Although the overall competence score shows good reliability and a single factor structure we did explore the six individual measures on which it was based in more detail to see if there were any systematic residual differences that might influence ratings. Previous research has shown that the strong effects of generalisation in impression ratings do vary with the context and kind of inferences people are asked to make (Eagly et al., 1991; Kaplan, 1978) and that different kinds of analyses can result in quite different interpretations of the same ratings (Fox, Bizman, & Herrman, 1983). We therefore looked at each component rating separately to see if the same pattern of effects were present for each of the six individual competence dimensions. Table 3 shows the results of the six different univariate effects using the same factors as in the MANOVA reported above.

Insert Table 3 about here

The results across the six different impressions show a degree of variability. There was a statistically significant main effect of clothing and of group for the same four of the six competence ratings (Intelligence, responsibility, trustworthiness, and organisation). However, the main effect of status were significant for a different set of four (authority, confidence, trustworthiness, and organisation) and the clothing x status interaction significant for only trustworthiness and organisation. This suggests that hypothesis one is only partially supported by the results, since this more specific level of analysis suggests more subtle influences may be operating in the ratings being made.

In summary the results showed that the minor manipulations we made to clothing significantly affected competence ratings, with target females in provocative clothing being rated more negatively. Status and group also influenced ratings of competence. The clothing effect depended on the status of the target female, with the higher status target female being judged more harshly in the more provocative clothing.

Finally, the pattern of results suggests that, in this context, overall impression ratings did show a generalisation effect, but more detailed analysis of the components of the overall competence score suggests additional factors are also at play.

Discussion

This study investigated how minor manipulations in women's work clothing affect how they are judged, on a range of competence related ratings, by UK female students and by employed females. It examined whether these judgements vary according to job status of the female being rated and the employment status of the rater. The differences between the styles of dress were very subtle; nonetheless target females wearing the more 'provocative' clothing were judged more negatively overall. This effect was largely due to the high status target female (senior manager) being rated significantly more negatively in provocative clothing than in less provocative clothing. The ratings for the low status target female (receptionist) were similar for both types of clothing. The analyses indicated that dressing provocatively is most detrimental for females in a higher status position, but affects judgements less of females in a lower status position. The employed group - comprised of female participants who were older, had full-time jobs and higher

salaries - also judged target females more negatively than students regardless of clothing or status.

The results suggest that the minor clothing manipulations were sufficient to generate certain stereotypical reactions of professional competence in a working context. This endorses findings from previous studies with male and female US undergraduate students showing that provocative clothing and objectification elicit lower ratings for high status women (Glick et al., 2005; Johnson & Gurung, 2011). As expected, employed participants also gave lower ratings overall reflecting the propensity for higher-salaried individuals to give more negative competence-related ratings even when the wearer is dressed formally (Howlett et al., 2013). Peluchette and Karl (2007) previously found that for employees familiar with a formal working environment, wearing formal business clothing positively affected self-perceptions but this study appears to show that the same mechanisms may not operate when judging others.

Findings from the individual competence ratings, however, were less consistent. For example, there was no interaction between status and clothing for the ratings of intelligence. Previous studies with male and female US undergraduate students have found that provocative clothing is related to lower ratings of intelligence although the clothing used in their studies was more overtly provocative than that in this study (Glick et al., 2005; Johnson & Gurung, 2011).

Previous studies have also shown that even in the absence of facial information, rapid judgements are made about individuals based on their clothing by UK mixed gender students and employees (Howlett et al., 2013). Gray et al. (2011) also found that wearing clothing that focuses on the body reduces perceptions of

the competence of female workers in samples of predominantly mixed gender student participants from a variety of countries (US, France, Saudi Arabia, Philippines, and Pakistan). These findings suggest that even minor portrayals of female sexuality in clothing can have a negative impact on the judgements made by females of a female senior manager. As the seniority of an occupational role increases, it may be that the pressure on females to conform to an appropriate, non-sexualised style of dress increases.

Howlett et al. (2013) state that the importance of attire should not be underestimated, as a minor manipulation in clothing can have a significant impact on first impressions. These findings support that contention. This study employed more rigorous methodology than previous studies and, despite these highly controlled conditions, the effects were comparable to other studies comparing vastly different dress styles. This study has demonstrated that even minor manipulations in clothing can affect female impressions particularly of high status females who, it seems, are judged negatively when adopting a more sexualised mode of dress.

Gender stereotyping frequently leads to women being evaluated as less capable of fulfilling high status positions, and to their effective behaviour being judged more negatively than that of their male counterparts (Eagly & Karau, 2002). In cases where women are effective in prototypically male dominated roles they are viewed more harshly than equally achieving men by mixed gender US students and financial services employees, and their career progression is compromised (Heilman et al., 2004). In the UK managers perceive that beliefs about gender stereotypes remain a barrier for the progression of ambitious females (Rake &

Lewis, 2009). This is believed to be one of the main causes of the lack of female representation at the highest occupational echelons in the UK (Villiers, 2010). Even when they are able to achieve this level, UK female executive directors face worse financial compensation for their efforts (Kulich et al., 2011). It is clear that women face additional social obstacles regarding career progression into higher status occupations in the UK and many other countries. What has not been clear up to this point is that if an ambitious woman aims to manage her impression at work by enhancing her appearance, even in a subtle way, she is in danger of reaffirming initial negative social judgements in the eyes of female perceivers. The question remaining is why does this happen and what can be done to change perceptions?

From an early age young middle-class predominantly White girls and boys (aged 3-10) from the US are acutely aware of gender stereotypes, especially those related to female appearance in the US such as being pretty, wearing dresses and using make-up (Miller, Lurye, Zosuls, & Ruble, 2009). As girls mature they become more aware of the contradiction inherent in this stereotype, particularly in an occupational context. Appearance may be important in the right context but studies with both male and female US students have found it may not be related to perceptions of competence (Chiao, Bowman, & Gill, 2008) or only beneficial when seeking a low status position (Heilman & Saruwatari, 1979). Focusing on appearance and the body can lead female undergraduates in the US to judge other women as less competent and less human (Gray et al., 2011; Heflick & Goldenberg, 2009), and without indicators of competence to be judged harshly on a range of personal and professional attributes (Johnson & Gurung, 2011). Women are aware of the way they are perceived when they emphasise appearance over

more competence-based qualities and this provokes behaviours such as distancing themselves from other sexualised women that portray themselves in this light, based on the ratings of a sample of mixed gender Italian students (Vaes et al., 2011). Although, impressions and hiring decisions are affected by gender-biased thinking there is some evidence to suggest that interventions can be effective at reversing this prejudice.

A series of studies with undergraduate mixed gender student samples from the Netherlands have shown that under the right conditions stereotypical thinking associated with hiring decisions can be lessened or even eradicated (Kawakami et al., 2005; Kawakami, Dovidio, & Van Kamp, 2007). By providing participants with exercises promoting the connection between gender and non-stereotypical traits, Kawakami and colleagues showed that subsequent hiring decisions can be more balanced. A review of predominantly US-based interventions to prevent gender bias, using mixed gender samples of both students and employees, also found that including a minimum of 25% female applicants, and providing clear evidence of relevant ability and previous experience helped to eradicate gender bias (Isaac, Lee, & Carnes, 2009). This is an important step forward but still needs further exploration to highlight approaches that can remove the obstacles to female career advancement. The findings reported here suggest that gender stereotyping also arises from the impact of minor differences in clothing choices.

The pattern of results is equivocal about the processes responsible for forming the competence judgements. The reliable and strong single competence factor that was derived from the six separate measures does imply the potential presence of a general halo effect in the judgements. However, there were marked

differences in how the different judgements were affected by the experimental manipulations. This indicates that any generalisation effect may also be moderated by the nature of the dimension being considered. For instance, Etcoff et al. (2011) report that different exposure durations of images resulted in differential effects for ratings of competence and trustworthiness from male and female participants of different ethnicities.

Although the methodology applied in this study was stringent it is important to note some limitations. A repeated measures design ensured that the same person was being judged in marginally different clothing. The risk with this design is that the manipulation may have been detectable, although this was minimised by the inclusion of the more frequent filler images in the experiment, by the randomised presentation of the images, and pixelation of faces that obscured much individual detail. Care was also taken to match the target females. Future studies could seek to replicate these findings using more target females of different ages, ethnicities and body shapes, and raters from a cultural context other than the UK. It would also be of interest to explore the influence these judgements may have on hiring decisions, financial compensation, or promotion.

It is also important to note that we used only female raters judging images of females. It may be that the sex of both is an important variable, as found using US male and female undergraduates in research on the halo effect in attractiveness (Kaplan, 1978) and in recent objectification literature (Gervais, Holland, & Dodd, 2013). It may also be helpful to explore these effects with a wider range of occupational descriptors than the two we used. In this experiment we did not find

the expected overall difference in ratings between senior manager and receptionist images and a broader set of occupations would help to clarify why.

In summary, women who even subtly sexualise their work attire may be detrimentally affecting the way they are perceived by other females, especially if they are in a high status role. This study was the first to show the strength of this effect with minor changes in clothing that are more reflective of everyday options faced by women. It can be stated with confidence that minor clothing changes have a measurable impact on perceptions, to the detriment of women in high status roles. Women face a tougher road to senior management or leadership roles than men, due to shifting standards and gender-biased beliefs that still persist in management circles in the UK. Although it is important to monitor choice of work clothing, a shift in gender attitudes or hiring practices that take into account these processes will be the most significant step forward.

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