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SOCIAL PSYCHOLOGY | RESEARCH ARTICLE

Chubby but cheerful? Investigating the compensatory judgments of high, medium, and low status weight groups in Malaysia

Chuma Kevin Owuamalam^{1*}, Kang Xin Wong¹ and Mark Rubin²

Abstract: We examined two strategies that people use in their social judgements—indifference and compensation. Given the *average* position of members of intermediate-status groups, we reasoned that an indifference strategy would characterise perceivers' competence vs. warmth judgements of these people because they do not possess features that deviate from normality. In contrast, high- and low-status groups deviate from normality, and we reasoned that attention to the negative aspects of their competence vs. warmth should enlist a complementary desire to compensate such groups on the opposite dimension, in line with societal norms of politeness. We tested these ideas in relation to people who were underweight (intermediate-status group), overweight (low-status group) and ideal weight (high-status group). Results from Study 1 showed that compensation was used for underweight faces and ideal weight faces, while an indifference strategy was used in the judgements of overweight faces, which we reasoned may be tied to cultural and individual differences. When these *noise* variables were removed in Studies 2a and 2b, we showed that, consistent with our assumptions, the indifference strategy was used in the evaluations of underweight people, and compensation was used for the ideal and overweight categories. Finally, Study 2b showed that norms of politeness predicted the use of compensation, but only for the overweight category.

ABOUT THE AUTHORS

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PUBLIC INTEREST STATEMENT

We come across all manner of people in our daily lives. Often in these encounters, we try to work out who is likely to “play ball” and therefore unable to harm us, or simply who has the capacity to solve problems and thus able to help us when we face difficulties. But, are people really able to make these judgements simply by seeing or imagining others? If so, what strategies enable these judgements and, why do people use them? Some have suggested that we pigeonhole people into one of the two dimensions of social judgement (i.e. either friendly but incompetent, or competent but cold) depending on the perceived social status of the target. The reason for this “pigeonholing” is not clear. Some speculate that it could be due to (a) polite courtesy and/or (b) an epistemic motivation to recognise peoples' relative strengths and weakness. We only found evidence for politeness explanation.

Subjects: Behavioral Sciences; Communication Studies; Social Sciences

Keywords: weight-based status; stereotype content model; social judgements; Malaysia

1. Introduction

The issue of how people perceive others and how such perceptions in turn impact people's treatment of others are central topics in the social and behavioural sciences. Within the behavioural sciences in particular, there has been a long tradition of attempts to infer the personality traits of people that we come into contact with (e.g. Alfred Adler's, 1923, "individual psychology"), and although a number of these classic personality theories have emphasised the innate underpinnings of *personality types*, more recent theorising have shifted the emphasis to socio-structural factors that influence the ways that people perceive others.

For example, research on the stereotype content model (SCM) has proposed that people make judgements about other people on two basic dimensions (Fiske, 2012; Fiske, Cuddy, Glick, & Xu, 2002): (1) the warmth dimension, which reflects the presumed capacity to be friendly, moral and empathic to others' concerns, and (2) the competence dimension, which reflects the presumed capacity to overcome difficulties. However, the strategies that people use when making evaluations on these dimensions in relation to social groups that are either high or low in status are not well understood. When do perceivers utilise a carefree approach in their warmth and competence judgements of others and when do they invest greater resources to calibrate their evaluations to be sure that they get it right?

It is important to address these questions because misjudging others can lead to a range of micro-level difficulties between individuals (e.g. contempt and envy, Fiske et al., 2002; social isolation, Kaiser & Miller, 2001) that could catalyse macro-level challenges (e.g. discrimination, Pingitore, Dugoni, Tindale, & Spring, 1994). Following Fiske (2012), we propose that people use two broad strategies in their evaluation of others depending on whether the others occupy a high, low or intermediate social status. These two strategies are *indifference* and *compensation*. By indifference, we mean judgements that are less biased (even neutral) and calibrated so as to avoid evaluating a target person as either particularly warm or particularly competent. In contrast, compensation refers to an evaluative strategy that undervalues a target on one dimension of social judgement (i.e. either warmth or competence) while compensating them on the other. So, for example, one might recognise the socially undesirable characteristics of an overweight individual by evaluating this person to be quite *chubby* and *fat*, but then compensate for this evaluation by also rating this target to be quite *cheerful* and *nice*.

We predicted that an indifference strategy is likely to be used for individuals (or members of groups) that occupy an intermediate social status—that is, for targets that are not seen as being clearly high or low in social status. On the other hand, a compensation strategy should be most apparent when people are making judgements of targets that belong to clearly high- or low-status groups. We tested these predictions in the context of judgements of weight-based groups, reasoning that in this context, targets could be seen as either of ideal weight (high status), overweight (low status) or underweight (intermediate status). Below, we explain the rationale for our predictions.

1.1. The compensation strategy

The SCM proposes that people make asymmetric attributions of competence and warmth to high- and low-status groups as a form of compensation that is enacted in order to maintain prevailing status systems. In other words, people deny low-status groups competence but compensate them with warmth, and they deny high-status groups warmth, but compensate them with competence. For example, within the linguistic hierarchy that places native French speakers as higher in status compared to non-native Belgian speakers of French, Yzerbyt, Provost, and Corneille (2005) found that their participants rated the native speakers to be significantly more competent but less warm, whereas the non-native speakers were perceived to be more warm than competent. Although

Yzerbyt et al. found evidence for the use of a compensatory strategy in social judgements, they did not examine *why* people use these heuristics in the first place. That is, why do people compensate others with a positive evaluation on one dimension when they have unfavourably evaluated them on another? SCM advances two reasons for this compensation in social judgement: system justification and adherence to politeness norms.

1.1.1. System justification

Firstly, SCM assumes that compensation bias results from the presumed need to justify and imbue societal systems with legitimacy (including hierarchical assortment of individuals and groups into high and low status). According to this system justification perspective (Jost & Banaji, 1994), this system justification is motivated by the desire to fulfil basic “epistemic, existential, and relational needs, including needs to reduce uncertainty” (Jost, Sterling, & Langer, 2015, p. 1289). In other words, the motivation to legitimise existing status arrangements where everyone is viewed not only in terms of their deficits, but also in terms of what their advantages are is one reason why people utilise compensatory strategies in their social judgements. Using this framework, Kay and Jost (2003) predicted and found that exposing people to complementary stereotypes of other social groups (e.g. the “poor but happy” and “rich but miserable” stereotypes) led to an increase in system justification. Note, however, that Kay and Jost (2003) tested a causal direction in which exposure to the complementary stereotypes is the cause, and system justification is the effect, while the statements of SCM suggest the reverse causality: a need to justify the system causes compensatory stereotyping (See also Kervyn, Yzerbyt, & Judd, 2010). Thus, a valid test of SCM’s proposition needs to show that system justification explains compensation bias rather than vice versa.

1.1.2. Adherence to politeness norms

A second reason why people compensate in their social judgements relates to normative pressures to adhere to societal norms of politeness. Norms of politeness are likely drivers of compensation because people expect others to reciprocate polite (and rude) gestures (Gouldner, 1960). That is, perceivers often consider how they would feel if they were on the receiving end of negative social evaluations (cf. Owuamalam, Tarrant, Farrow, & Zagefka, 2013). Acknowledging their own strengths and weaknesses in this context, perceivers may attempt to soften or “sugar coat” their negative evaluations of others (Hornsey & Imani, 2004). Consequently, we reasoned that societal norms of politeness should predict the use of compensation strategy in the attributions of warmth and competence: The stronger one adheres to societal norms of politeness, the more likely they should compensate in their social judgements.

Consistent with this second proposition, Bergsieker, Leslie, Constantine and Fiske (2012) found that people compensated groups with complementary stereotypes due to politeness. Note, however, that Bergsieker et al. (2012) did not examine this process in the context of weight groups, and there are questions about whether or not the trends they report will be generalisable to the weight context, particularly amongst the overweight, who may be perceived as being responsible for their devalued social status. This is important because past evidence has shown that people do not tend to hold back on their negative judgements of people that are perceived to be largely responsible for their devaluation (such as the overweight—see Crocker, 1999 for a review). Thus, more convincing support for SCM’s politeness explanation of compensation bias should show a strong adherence to societal norms of politeness also explains the use of compensatory social judgements, particularly in relation to overweight targets.

1.2. The indifference strategy

In addition to SCM’s compensation strategy, we were interested in the use of an *indifference* strategy in which people avoid pigeonholing others as either particularly warm or particularly competent. We reasoned that this latter strategy would characterise the judgements of groups that occupy an intermediate status within a given social hierarchy because, by definition, such intermediate groups do not elicit strong positive or negative evaluations. Consistent with this prediction, Fiske et al. (2002)

found that some social groups (e.g. “Blacks”) clustered around the mid-section of the competence–warmth space, and they suggested that an *indifference* strategy characterised the social judgements of perceivers in this context. However, more recently, Bergsieker et al. (2012) showed that perceivers used the *compensation* strategy with reference to “African Americans.” In other words, African-Americans were rated highly on warmth and less so on competence. This inconsistency in results makes it difficult to accept the indifference strategy as a robust phenomenon. It is possible that this inconsistency arose because the perceived status of Blacks in Fiske et al.’s (2002) study was more intermediate relative to the other social groups being considered than of African-Americans in Bergsieker et al. (2012) study. In other words, changes in the social groups that were being compared with blacks/African-Americans may have affected the perceived status of this group. In the present research, we aimed to provide a more definitive test of the indifference strategy by considering status *within the same social category system* rather than between different social categories. This approach allowed us to present a clearer status hierarchy to participants and, consequently, to conduct a clearer test of the indifference strategy. If indifference is a robust strategy that perceivers use in their judgements of intermediate-status groups, then it should also be visible within an intra-category status context.

1.3. Previous research

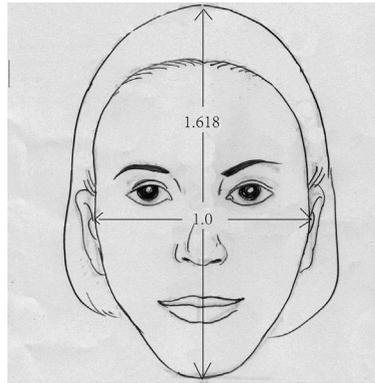
Past research within SCM tradition has typically focused on a macro-level examination of competence–warmth judgements of different societal groups (Fiske, Cuddy, & Glick, 2007) or the use of compensation strategies in the judgements of in-groups and out-groups (Hack, Goodwin, & Fiske, 2013), particularly in the context of intergroup conflict (e.g. Cambon, Yzerbyt, & Yakimova, 2015). Very little research in comparison has focused on micro-level exploration of competence vs. warmth judgements, especially in an inter-status context where there is an intermediate-status group. The few studies that have done so show patterns that generally corroborate our assumptions. For example, Durante, Fasolo, Mari, and Mazzola (2014) found that Italian children compensated thin targets with competence when they evaluated these targets negatively on warmth, whereas the overweight targets were positively evaluated on warmth when they were also denied competence. These results are unsurprising, given the cultural preference for thinness in the West and therefore the elevated social position of thin targets relative to overweight targets (Yam, 2013). Importantly, consistent with the use of an indifference strategy, Durante et al. (2014) also showed that participants attributed similar levels of competence and warmth to “average” weight exemplars.

Although Durante et al.’s (2014) research provides initial support for the use of compensation and indifference strategies for high-, low- and intermediate-status groups, the evidence for the indifference strategy is problematic. Recent evidence has shown that exposure to Asian (compared to Western) culture elicits greater preference for chubbier figures (rather than thin figures) amongst Asian Americans (Yam, 2013) and, consequently, the use of indifference vs. compensation strategy may be culturally sensitive. Hence, it is important to demonstrate that Durante et al.’s results generalise from Western (Italian) cultures to non-Western (e.g. Asian) cultures. Such cross-cultural validation would provide more compelling support for SCM’s propositions. Thus, the current research aimed to conceptually replicate the initial evidence for indifference vs. compensation reported by Durante et al. (2014) in the context of weight groups but in an Asian culture (Malaysia).

1.4. Summary of hypotheses and overview of studies

We hypothesised that Malaysian perceivers would adopt a compensation strategy in their judgements of weight groups that are clearly high (ideal weight people) or low (overweight people) in social status, but indifference in their judgements of groups that occupy an intermediate-status position (e.g. underweight). To be conceptually closer to the design used by Durante et al. (2014), we used images of faces of varying levels of facial adiposity across the two gender groups. We focused on face stimuli rather than the whole body, given cultural and religious sensitivities relating to exposure to “indecent” human form in the Islamic State of Malaysia.

Figure 1. External golden ratio, face length 1.618: face width 1.0.



Study 1 used facial stimuli that were validated in a pilot study and focused on the competence vs. warmth judgements made by Asian adults. Study 2a built on the evidence in Study 1 to examine peoples' judgements of their own conjectures of three weight groups (underweight, ideal weight and overweight) in an imagined judgement paradigm. Finally, Study 2b tested a system justifying account of the compensation strategy and compared this to a politeness norm explanation.

2. Pilot study

The purpose of this study was to ensure that our stimuli conveyed the intended body weights to participants. To enhance the ecological validity of our stimuli, we used pictures of real individuals that were then morphed into the three target weight groups. We also assessed the attractiveness of the faces and used this as a proxy for social status because attractiveness is a socially desired attribute—people who are attractive are generally more positively evaluated than less attractive individuals (Lucker, Beane, & Guire, 1981; Nisbett & Wilson, 1977). We reasoned that if the face stimuli that we generated differentiated the three weight groups in terms of status, then perceived attractiveness of the target faces should place the ideal weight faces in the high-status category; the underweight in the intermediate-status range; and the overweight in the low-status category. That is, ideal weight targets should be perceived as the most attractive, followed by the underweight, with the overweight coming last.

2.1. Method

2.1.1. Ethics statement

Our studies were closely guided by the ethical requirements for conducting research with human subjects set forth by the British Psychological Society, and all experimental protocols (including consent forms) received ethics approval from the Faculty of Science Ethics Committee, University of Nottingham Malaysia Campus. In all cases, participants provided informed written consent either on paper or digitally via Qualtrics.

2.1.2. Participants

Fifty-one adults were recruited from the University of Nottingham's Malaysia campus. Participants comprised roughly equal numbers of men and women (26 males, 25 females; mean age = 21.57, $SD = 4.85$, range 18–54) who were able to read and understand the English language.

2.1.3. Design, stimuli and materials

To manipulate the weight status of faces, photos of three real individuals were uploaded into FaceGen Modeller. Using this software, we manipulated the weight of the faces while maintaining the stability of the other facial elements. Each face was morphed into a set of faces comprising a male and a female face of ideal weight, defined as the external golden proportions with a length-to-width ratio of 1.618:1 (Saraf & Saraf, 2013; see Figure 1). To create overweight faces, we morphed two of these faces (male and female) to deviate from the golden proportions by + 20%, and to create

the underweight faces, we morphed two faces (male and female) to deviate from the golden ratio by -20% . To mask the identities of the target faces, each image was given a computer-generated hairstyle that was also similar within each gender group. The sets of faces generated in this exercise are presented in Figure 2.

2.1.4. Procedure

Participants were approached randomly in the computer labs at University of Nottingham Malaysia and asked whether they would be willing to take part in the study. Participants were exposed to all 18 morphed faces in a random sequence via an online survey system called Qualtrics. Participants rated the extent to which they thought the person in each picture was attractive on a 10-point scale (1 = *not at all attractive*, 10 = *very attractive*). Participants also indicated the extent to which they thought the people in the images were of ideal weight, underweight or overweight. Specifically, they were asked: "To what extent do you think the person in this picture is underweight?" This question was then repeated for ideal weight and overweight groups. Responses were collected on a 10-point scale (1 = *not at all underweight [ideal/overweight]*, 10 = *extremely underweight [ideal/overweight]*) and were collected separately for the male and female faces. At the end of the study, participants read a full debrief of the aims of the study and were thanked for taking part.

2.2. Results and discussion

2.2.1. Perceived status (attractiveness) of target faces

Although the interest was on how attractive the three weight categories were perceived to be, we also wanted to establish whether or not there were within-weight category variations in the attractiveness ratings for both male and female targets. For this reason, we performed a 3 (weight group: ideal weight vs. underweight vs. overweight) \times 3 (face set: set 1 vs. set 2 vs. set 3) repeated measures ANOVA separately for male and female faces. Results revealed a main effect of weight group for both male faces, $F(2, 102) = 44.87, p < .0001$, and female faces: $F(1.72, 102) = 63.02, p < .0001$ (Greenhouse–Geisser corrected). Overall, the ideal weight faces were perceived as significantly more attractive ($M_{\text{male}} = 3.97, SE = .22; M_{\text{female}} = 4.99, SE = .23$) compared to underweight faces ($M_{\text{male}} = 2.98, SE = .19; M_{\text{female}} = 3.35, SE = .23$) and overweight faces ($M_{\text{male}} = 2.50, SE = .18; M_{\text{female}} = 2.84, SE = .19$), $ps < .001$. Importantly, the perceived attractiveness of the intermediate-status underweight category was significantly higher than those for the overweight group ($ps < .01$). There was also a main effect of face type for both male faces, $F(2, 102) = 8.77, p < .0001$, and female faces, $F(2, 102) = 8.77, p < .0001$, that was qualified by a significant weight group by face set interaction for men, $F(4, 204) = 5.13, p < .0001$, and women, $F(3.31, 204) = 8.68, p < .0001$ (Greenhouse–Geiser corrected). Although there were largely no significant differences between the perceived attractiveness of the faces in the overweight category for both male and female targets (see Figure 3), this two-way interaction seemed to have occurred due to different levels of perceived attractiveness of faces within the underweight and ideal weight categories. Set 2 faces tended to be perceived as generally less attractive than Set 1 and 3 male and female faces in the underweight category, while the same Set 2 faces were perceived as relatively more attractive than Set 1 and 3 in the ideal weight category (see Figure 3).

The current study established that the faces we operationalised as ideal weight were perceived as such relative to the two other face groups, while the faces designated as underweight and overweight were also perceived as such relative to the other face weight groups. However, because Set 2 faces systematically differed from Sets 1 and 3 faces across the different weight categories, this stimulus was dropped from the subsequent study to reduce within-category variation as much as possible.

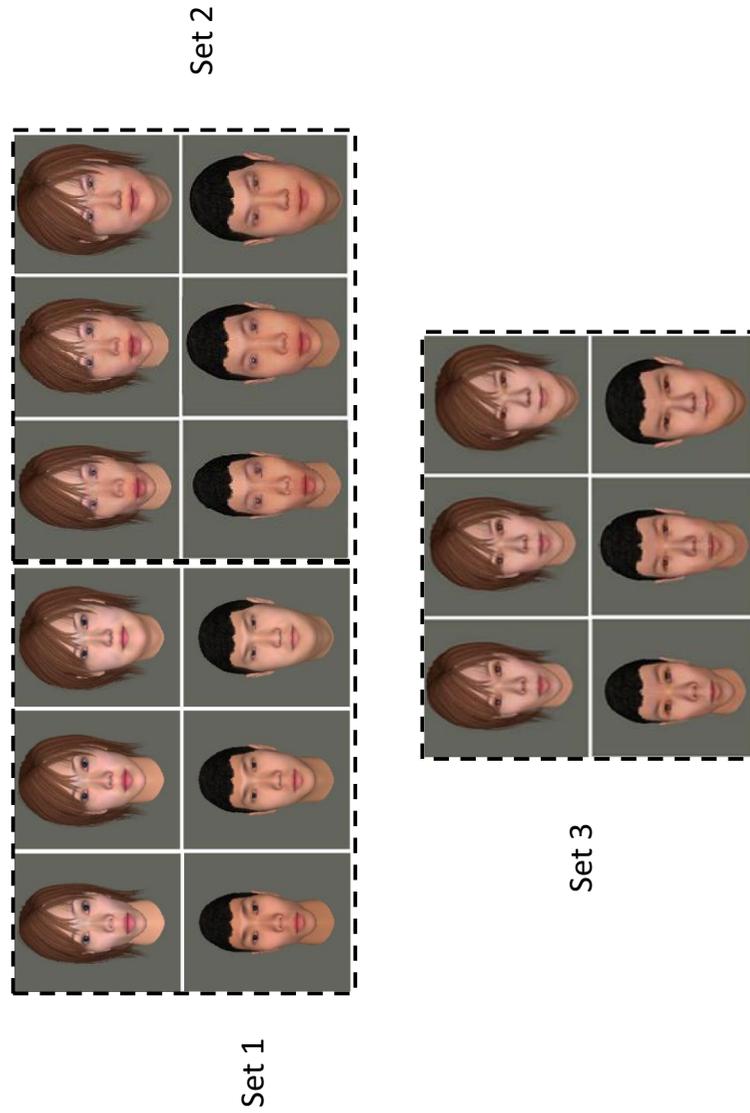
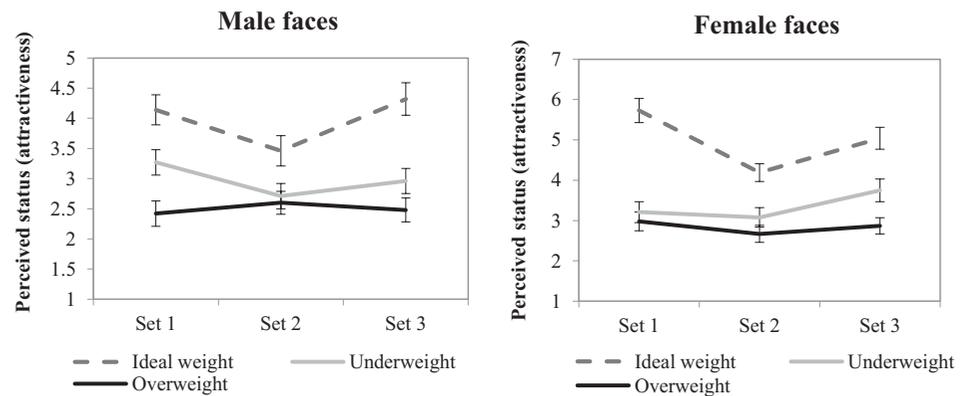


Figure 2. Images from left to right and for each set represent the underweight, the ideal weight and the overweight categories.

Figure 3. Perceived attractiveness of the three weight groups.



3. Study 1

Study 1 provided an initial examination of competence and warmth judgements of underweight, ideal weight and overweight people using the images generated from the pilot study.

3.1. Method

3.1.1. Participants

One hundred and nineteen Chinese adults were opportunistically recruited from the University of Nottingham, Malaysia campus. Participants comprised roughly equal numbers of men and women (60 males, 59 females mean age = 20.93, *SD* = 1.35, range = 18–24) who were able to read and understand the English language.

3.1.2. Design

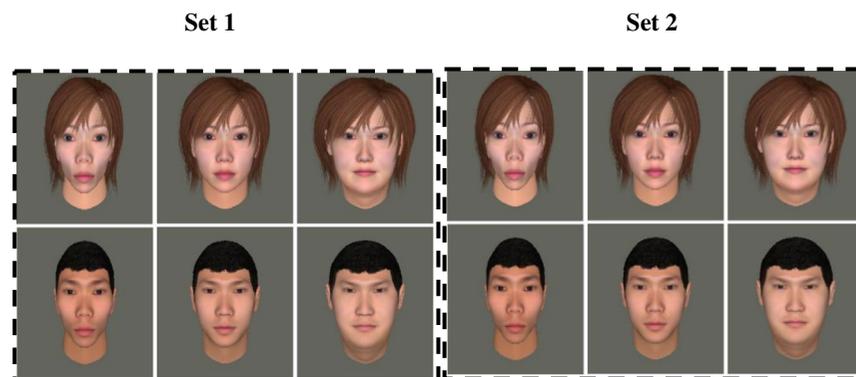
A 3 (perceived face weight: overweight vs. ideal weight vs. underweight) × 2 (gender of face: male vs. female) × 2 (domain: physical competence vs. warmth) mixed design was used, in which the two latter factors were within-subjects. Dependent measures included were *inter alia*: perceived physical competence (e.g. “the person in the picture is able to walk briskly for 15 min of more”) and perceived warmth (e.g. “the person in the picture is generous”).

3.1.3. Stimuli and materials

We used the validated images from the pilot study as stimuli in the current study. Each weight group consisted of two female target faces and two male target faces (see Figure 4).

3.1.3.1. Competence vs. warmth judgements. To tap perceived physical competence, we adapted five items from Harter’s (1982) Physical Competence Subscale for Children (PPCSC), comprising three positive items (e.g. “The person in the picture can ride a bike for more than 30 min

Figure 4. Morphed target faces used in Study 1.



without getting tired and having to stop for a break”) and two negative items (e.g. “The person in the picture cannot exercise” reverse scored, Cronbach’s $\alpha = .62$). Perceived positive warmth was measured using an adaptation of Van Leeuwen and Tauber’s (2012) warmth scale (e.g. “The person in the picture is generous to his/her friends;” “The person in the picture is a sincere person;” “The person in the picture cannot pay attention to a conversation,” reverse scored, Cronbach’s $\alpha = .83$).

3.1.4. Procedure

Participants were approached randomly, and asked if they were willing to take part in the study. Participants were exposed to one of the 12 treatment cells and were afterwards required to rate the competence and warmth of each target face that they saw on-screen via Qualtrics. At the end of the study, participants were debriefed and thanked for taking part.

3.2. Results and discussion

Recall that the SCM predicts the use of a compensation strategy for the judgements of high- and low-status targets in relation to competence and warmth. If this is true, then overweight targets (low status) should be evaluated poorly on physical competence relative to warmth. We expected the reverse of these patterns for their higher status counterparts (ideal weight group). People who are underweight are not stigmatised to the same degree as people who are overweight. Thus, although they are low in status compared to people with ideal weight, they are less stigmatised than their overweight counterparts. For this reason, we expected that perceivers would utilise an indifference strategy in their judgements of the underweight: that is, the underweight should be seen as neither competent like the ideal weight group nor as warm as the overweight group.

To test these assumptions, we first conducted a 3 (perceived weight group: overweight vs. ideal weight vs. underweight) \times 2 (domain: competence vs. warmth) \times 2 (target face gender: male target face vs. female target face) repeated measures ANOVA. The results showed two significant main effects. First, there was a domain main effect, $F(1, 117) = 17.23, p < .001$, indicating that targets were generally perceived to be more physically competent ($M = 3.71, SD = .06$) than they were warm ($M = 3.48, SD = .03$). Second, a target face gender main effect emerged, $F(1, 117) = 15.93, p < .001$: male target faces were generally more positively evaluated ($M = 3.70, SD = .04$) than female target faces ($M = 3.492, SD = .04$) in line with the elevated social status accorded to men in Malaysian society. A main effect of target face weight also emerged, $F(1, 117) = 3.266, p < .030$, showing that although ideal weight targets received the most positive evaluations overall ($M = 3.71, SE = .06$) compared to overweight ($M = 3.50, SE = .06, p = .009$), participant evaluations of the ideal weight group did not differ significantly from the underweight ($M = 3.57, SE = .06; p = .085$). Also, the evaluations of the underweight were no different to those of the overweight group ($p = .342$) overall.

These main effects were qualified by domain \times target face weight interaction, $F(2, 117) = 4.97, p = .008$, which was not further qualified by target face gender, $F(2, 117) = 2.96, p = .056$. We therefore decomposed the domain \times target face weight interaction by computing the simple effect of domain for each face weight group. Results from this simple effect analysis revealed, as expected, that participants used a compensation strategy in their judgements of the ideal weight faces. That is, they attributed significantly greater competence ($M = 3.93, SE = .10$) than warmth ($M = 3.50, SE = .05$) to ideal weight faces ($p < .0001$). The judgements of underweight faces also followed a compensatory pattern, with significantly greater competence attributions ($M = 3.72, SE = .09$) than warmth ($M = 3.43, SE = .05, p = .004$). However, in line with expectations, this compensatory strategy was attenuated for the underweight faces compared to the ideal weight faces with effect size in the latter group being twice ($\eta_p^2 = .14$) as high as the comparable effect for the underweight ($\eta_p^2 = .07$).

Interestingly, participants in the current study did not discriminate between competence ($M = 3.72, SE = .09$) and warmth ($M = 3.72, SE = .09$) in their judgements of the overweight category ($p = .941$). This lack of a clear compensatory strategy for the overweight could be due to the Asian cultural bias in favour of “chubbiness”—at least compared to the West (Yam, 2013). That is, although the images

in the overweight category may be seen as *relatively* “weightier” than the images for the under and ideal weight categories, it is entirely possible that the level of chubbiness represented in the overweight category may have been overly conservative in a society where a “bit of flesh” is not as poorly regarded as in Western cultures. Similarly, images for the underweight category in the current study may have been overly generous in that a typical mental representation of a “deprived” and therefore underweight individual in a society with wide income disparity may be that of extreme thinness.

In order to provide a clearer test of the compensation and indifference strategies in Study 2, we sought to eliminate the confounding effect of individual differences in the ways that perceivers interpret the physical sizes of the three weight groups. We did this by asking participants to imagine a typical person belonging to those categories and to then evaluate these prototypes in terms of competence and warmth. This more abstract approach ensured that perceivers would be considering what *they believed* to be underweight, ideal weight and overweight people, rather than what *we as researchers assumed* would be the case in the context of a specific sociocultural setting based on a pilot study that was conducted on a different set of individuals.

4. Study 2a

We examined the use of compensation and indifference strategies in judgements of the different weight groups in a context in which participants could create their own images of underweight, ideal weight and overweight people. Arguably, the activation and applications of stereotypes should be most visible in situations when people have access to only minimal information about the object/subject of evaluation. Hence, the predictions derived from SCM regarding the use of an indifference strategy for the underweight group and compensatory strategies for the ideal and overweight groups should be especially pronounced in such context. If, however, we are unable to demonstrate the predicted effects in this context, and instead reveal patterns identical to those reported for the overweight group in Study 1, then we can be surer that Study 1’s effects were not mere artefacts of the stimuli that were used in that investigation.

4.1. Method

4.1.1. Participants and design

We randomly recruited a modest sample of 40 Asian adults from the University of Nottingham’s Malaysia campus to take part in this preliminary test of our abstract (imagined) judgement paradigm. Participants comprised equal numbers of men and women (20 males, 20 females mean age = 20.20, $SD = 1.44$, range = 18–23) who were able to read and understand the English language.

We used a 3 (weight group: underweight vs. ideal weight vs. overweight) within-subjects design in this study. Participants provided repeated ratings of competence and warmth, in relation to underweight, ideal weight and overweight individuals.

4.1.2. Materials

Participants were asked to evaluate the three weight groups using trait adjectives that we derived from Anderson’s (1968) 555 Personality Trait inventory. Four of these tapped physical competence. To reduce acquiescence bias, we included two positive traits (“active” and “energetic;” overweight $r = .47$, $p = .002$; ideal weight $r = .31$, $p = .050$; underweight $r = .56$, $p < .001$) and two negative traits (“clumsy” and “physically weak;” overweight $r = .46$, $p = .003$; ideal weight $r = .51$, $p = .001$; underweight $r = .43$, $p = .006$). A further four items tapped warmth: two positive traits (“sincere” and “warm;” overweight $r = .62$, $p < .001$; ideal weight $r = .46$, $p = .003$; underweight $r = .380$, $p = .015$) and two negative traits (“selfish” and “mean;” overweight $r = .28$, $p = .076$; ideal weight $r = .66$, $p < .001$; underweight $r = .69$, $p < .001$). Participants then indicated on a scale from 0% to 100% the proportion of members of each of the three weight groups that could be described by each trait.

4.1.3. Procedure

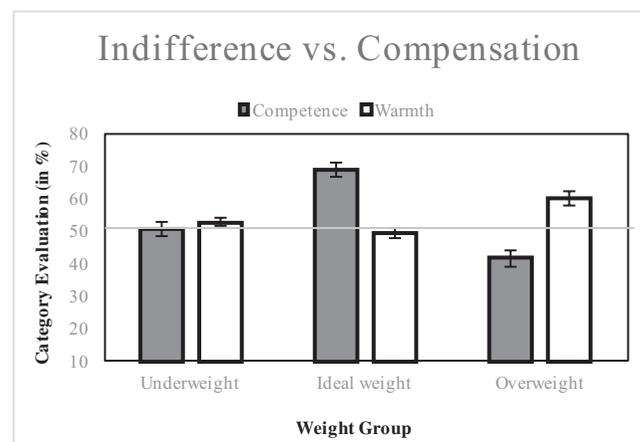
Participants were approached randomly in a computer lab and asked whether they would be willing to take part in the study. Participants were asked to imagine people who were either underweight, of ideal weight or overweight and to then evaluate them on items that we adapted from the Personality Trait Inventory. Specifically, for each target group, participants were instructed to indicate the extent to which each trait was characteristic of people who were of ideal weight [underweight/overweight] according to their knowledge of the stereotypes that exists in their society. Participants' responses were provided on a 0–100% scale, with higher scores indicating greater agreement that a relevant trait is applicable to the target group. At the end of the study, participants were fully debriefed and thanked for taking part.

4.2. Results and discussion

We first reversed scored the negatively worded items. We then averaged the scores on negative items with those on positive items separately for competence and warmth and for each weight category. To test our assumptions concerning the strategy that participants used in their judgement of the three weight groups, we computed a 3 (weight group: overweight vs. ideal weight vs. underweight) \times 2 (domain: physical competence vs. warmth) repeated measures ANOVA. Results from this analysis revealed a non-significant main effect of domain, $F(1, 39) = 0.06, p = .813, \eta_p^2 = .001$. However, there was a significant main effect of weight group, $F(2, 78) = 10.75, p < .001, \eta_p^2 = .22$. Participants' evaluations of ideal weight individuals were more favourable ($M = 59.30, SE = 1.50$) compared to their evaluations of overweight individuals ($M = 50.85, SE = 1.88, p < .0001$) and underweight individuals ($M = 51.93, SE = 1.37, p < .0001$). Hence, as in Study 1, the underweight targets were evaluated no more positively compared to their overweight counterparts ($p = .652$), although the overall pattern of means placed the underweight targets in the intermediate-status category. Consistent with Study 1, these main effects were qualified by a significant interaction between domain and weight group, $F(2, 78) = 43.23, p < .0001, \eta_p^2 = .53$. To investigate this interaction, we examined the simple main effect of domain within each weight group.

In line with SCM's compensation hypothesis, the overweight category elicited ratings of greater warmth ($M = 60.11, SE = 2.34$) than ratings of physical competence ($M = 41.79, SE = 2.49$), $p < .001$. Also in line with SCM's compensation hypothesis, the ideal weight category elicited ratings of greater physical competence ($M = 68.96, SE = 2.27$) than warmth ($M = 49.63, SE = 1.59$), $p < .001$. Finally, and supporting the use of an indifference strategy in judgements of an intermediate-status groups, participants rated underweight people as being no higher in competence ($M = 50.86, SE = 2.41$) than in warmth ($M = 52.99, SE = 1.47$), $p = .466$. That is, participants perceived underweight targets to be fairly competent and warm (see Figure 5).

Figure 5. The use of indifference vs. compensation strategies in judgements of different weight groups as a function of perceived social status.



However, to be sure if participants calibrated their judgements using the indifference strategy, we needed to show two things. Firstly, that the warmth ratings of the underweight were significantly lower than comparable judgements of the overweight on this dimension and, secondly, that the competence ratings of the underweight were significantly lower than those for the ideal weight category. Both of these assumptions were met. The underweight category was evaluated less positively on the warmth dimension compared to the overweight category ($p = .022$), but also did not necessarily deny them this attribute as they did for the ideal weight category—with slightly higher (but non-significant) warmth ratings compared to the ideal weight ($p = .126$). Again, consistent with our theorising, although the underweight were seen as less competent than the ideal weight category ($p < .001$, see Figure 5), they were nonetheless perceived as being more competent than the overweight ($p = .005$). Taken jointly, then, this evidence suggests that participants largely did not dispute the competence or warmth of the underweight category.

To summarise, the present results corroborate the assumptions derived from the SCM and show that: (a) people use two strategies in the judgements of social groups that vary in status: (1) compensation for clearly high- and low-status groups and (2) indifference for intermediate groups.

Although the compensation effect has typically been explained in terms of the tendency for people to justify and live with unequal social hierarchy (Fiske et al., 2002; Kay & Jost, 2003), there has been little systematic evidence for this system justification account. Consequently, other theoretical explanations for the use of compensation strategy in social judgements have been overlooked. In Study 2b, therefore, as well as examining the system justification account, we tested a politeness norm account. According to this politeness norm explanation, people use a compensation strategy because their harsh judgements in one domain run counter to established norms of politeness, and more positive judgements in a second domain allow them to be polite to the people that they are judging. In short, we reasoned that perceivers might express positive views of a given social category on an alternate domain in order to make their negative evaluations on another more tolerable (Hornsey & Imani, 2004).

5. Study 2b

We aimed to establish two things in the current study, namely: (a) to replicate the two strategies of compensation and indifference used in judgements of clearly low- and high-status, and intermediate groups, respectively, and (b) to test two propositions for the use of a compensation strategy—system justification and norms of politeness. Because Study 2a demonstrated the efficacy of the *imagined* judgement paradigm using a small sample, we capitalised on this initial evidence in Study 2b and aimed to provide a fuller test of our assumptions (including those relating to gender) in a much larger sample.

5.1. Method

5.1.1. Participants and design

One hundred and sixty-six adults were randomly recruited from the University of Nottingham's, Malaysia campus. Participants comprised 96 men and 70 women (mean age = 20.55, $SD = 2.41$, range 18–38) who were able to read and understand the English language.

We used a 3 (weight group: underweight vs. ideal weight vs. overweight) within-subjects design. Participants provided repeated ratings of competence and warmth, in relation to their own imagined idea of underweight, ideal weight and overweight individuals.

5.1.2. Materials

5.1.2.1. *Competence vs. warmth.* As in Study 2a, participants indicated the extent to which a number of traits that differed in terms of domain (i.e. competence and warmth) applied to each of the three weight groups. We used the same warmth ratings as in Study 2a. To be surer

about the robustness of the patterns that we showed in Study 2a, we used a more composite measure of competence that combined the physical competence measure used in Study 2a with an eight-item measure of generic competence (e.g. “efficient,” “productive,” “competent,” “confident,” “intelligent” and “indecisive” [reverse scored]), which we averaged to form an index of competence: overweight, $r = .35, p < .001$; ideal weight, $r = .43, p < .001$; and underweight, $r = .14, p = .072$). The warmth measure, consisted of two positive traits (“sincere” and “warm;” overweight $r = .54, p < .001$; ideal weight $r = .54, p < .001$; underweight $r = .56, p < .001$) and two negative traits (“selfish” and “mean;” overweight $r = .48, p < .001$; ideal weight $r = .60, p < .001$; underweight $r = .55, p < .001$). We reverse scored the negative items prior to averaging into a single index of warmth ratings for each weight group. In all cases, participants indicated the extent to which each attribute applied to each of the three weight groups from 0% to 100%.

5.1.2.2. Status awareness. In this study, we used a more direct measure of group status than those used in Studies 1 and 2a. Participants were asked to provide their judgements of the perceived status of each of the three weight groups on a continuum from 1 = *low status* to 9 = *high status*.

5.1.2.3. Predictor variables. We measured system justification using a nine-item adaptation of Kay and Jost’s (2003) system justification scale (e.g. “I feel that groups in society earn the reputation they get;” Cronbach’s $\alpha = .76$). We measured norms of politeness using a two-item scale (e.g. “Generally it is socially acceptable to be polite to other people” and “it is not socially acceptable to dislike anyone without reason;” $r = .16, p = .036$). Responses on these measures were provided on a seven-point scale (1 = *strongly disagree*, 7 = *strongly agree*).

5.1.3. Procedure

Participants were approached randomly in a computer lab and asked whether they would be willing to take part in the study. Participants were presented with the questionnaire on Qualtrics. To remove order effects, the presentation of system justification and politeness norm scales was counterbalanced with the competence and warmth ratings so that some participants completed these measures before the competence vs. warmth endorsements while others completed them afterwards. At the end of the study, participants read a full debrief of the aims of the current investigation and were thanked for taking part.

5.2. Results and discussion

5.2.1. Status awareness check

We included participants’ status awareness check measure in a repeated ANOVA. There was a main effect of weight group, $F(2, 332) = 27.80, p < .0001, \eta_p^2 = .14$. As expected, participants thought that ideal weight people were higher in status compared to underweight people ($M = 6.02, SE = .16, p < .0001$) and overweight people ($M = 5.55, SE = .20, p < .0001$). Participants also thought that underweight people were largely higher in social status compared to overweight people, $p = .055$.

5.2.2. Main analyses

5.2.2.1. Competence vs. warmth judgements. As in Study 2a, we performed a 3 (weight group: underweight vs. ideal weight vs. overweight) \times 2 (domain: competence vs. warmth) repeated measures ANOVA. As in Study 2, the main effect of domain was not significant, $F(1, 165) = 2.01, p = .159, \eta_p^2 = .01$. Similarly Study 2, there was a significant main effect of weight group, $F(2, 330) = 7.11, p = .001, \eta_p^2 = .04$: participants evaluated individuals who were of an ideal weight more positively compared to underweight people ($M = 53.89, SE = .72, p = .013$) and overweight people ($M = 52.64, SE = .82, p < .0001$). Again, the difference between the evaluations of underweight and overweight people was not significant ($p = .192$). The above main effects were qualified by a significant domain \times weight group interaction, $F(1.84, 330) = 173.67,$

$p < .0001$. $\eta_p^2 = .51$ (numerator df is Greenhouse–Geisser adjusted). To investigate this interaction, we examined the simple main effects of domain for each weight group.

Consistent with the SCM's compensation hypothesis, overweight targets were evaluated more positively in regard to warmth ($M = 60.89$, $SE = .95$) relative to competence ($M = 46.89$, $SE = .83$), $p < .0001$. Again, the results show that participants attributed greater competence ($M = 62.62$, $SE = .71$) than warmth ($M = 49.49$, $SE = .84$) to their conjectures of an ideal weight target, $p < .0001$. Corroborating the trends that we observed in Study 2a, participants evaluated underweight targets as no less competent ($M = 51.78$, $SE = .89$) than warm ($M = 53.50$, $SE = 1.03$, $p < .05$, see Figure 6). Following a similar approach as in Study 2a, we compared the competence evaluations of the underweight to those of their ideal weight counterparts and then also their warmth ratings with those of the overweight. Results corroborated the patterns in Study 2a, and showed that participants evaluated the underweight less favourably on competence compared to the ideal weight category ($p < .0001$), even though they acknowledged that the underweight people were not as poor in competence as they thought the overweight were ($p < .001$). Furthermore, although underweight people were seen as less warm than the overweight, ($p < .0001$) participants did not refute the warmth of the underweight as strongly as they did for the ideal weight category ($p = .001$, See Figure 6).

5.2.2.2. But why does the compensation strategy occur? We reasoned that a politeness-driven compensation strategy should be particularly apparent on a dimension of competence that is tied to status differences between the three weight groups, i.e. in relation to physique. To test this prediction, we created an index of compensation bias by computing a difference score between warmth and physical competence ratings separately for ideal and overweight groups. We then regressed each of the indices of compensation bias on to system justification and norms of politeness in a multiple regression model. If system justification explains the use of the compensation strategy, then our measure of system justification should predict our index of compensation bias for the clearly high- (ideal weight) and low (overweight)-status groups. Alternatively, if norms of politeness explain compensation bias, then our measure of politeness should predict the biases for high- and low-status groups.

The results revealed two striking results. Firstly, and contrary to SCM's system justification explanation, the use of the compensation strategy was unrelated to system justification tendencies (see Table 1). Second, and consistent with a politeness norm explanation, there was a significant positive relation between our index of compensation bias and norms of politeness, but only for the overweight, and not for the ideal weight category (see Table 1). We also obtained a similar trend when the composite measure of competence that included both the physical and generic dimensions was

Figure 6. The use of indifference vs. compensation strategies in judgements of different weight groups as a function of perceived social status.

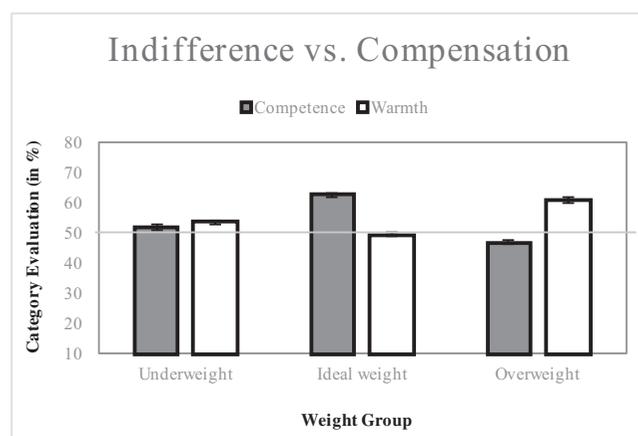


Table 1. The relationship between compensation bias and politeness norm vs. system justification

	Compensation bias	
	Ideal weight β (SE)	Overweight β (SE)
System justification	-.07 (1.54)	-.03 (1.66)
Norms of politeness	-.08 (1.53)	.19* (1.65)

* $p = .016$.

used: the link between system justification and compensation bias for the overweight ($\beta = -.06$, $SE = 1.29$, $p = .411$) and the ideal weight ($\beta = .09$, $SE = 1.29$, $p = .261$) groups was non-significant. However, norms of politeness marginally predicted this latter compensation index again for the overweight ($\beta = .14$, $SE = 1.29$, $p = .083$) but not for the ideal weight ($\beta = .09$, $SE = 1.28$, $p = .230$).

5.2.2.3. *Is the above analysis a fair treatment of the system justification account?* It is entirely possible that a system justification account of compensation did not emerge because the conditions set out for this to occur were not taken into account in our previous analysis. For example, Jost, Banaji, and Nosek (2004) proposed that a system justification effect should be particularly visible amongst those that are likely to be most disadvantaged by the weight stigma, namely: women. Also, we collapsed the scores of those that completed the predictors of compensation first, with those that completed the warmth vs. competence ratings first, and as Kay and Jost (2003) have demonstrated, the direction of causality matters: it is necessary to activate the stereotype first (e.g. the poor but happy) prior to system justification. For these reasons, we capitalised on our counterbalancing sequence in which some participants completed the system justification measure prior to the trait evaluation task (causal order 1) while the other group completed the trait ratings prior to system justification (causal order 2). If the system justification account of compensation is, then one should find (a) a positive relationship between system justification and our index of compensation bias for both the overweight and ideal weight groups, (b) that such a relationship is particularly strong amongst groups that are targeted by weight stigma (women) and (c) that the relationship is limited to causal order 2 condition but not causal order 1 condition. We explored these assumptions in a moderated regression without penalty for familywise error rates to provide a fairer chance for system justification account to manifest.

Results from the moderated regression analysis in which our index for compensation bias for the overweight was regressed on to system justification, gender and causal order as well as the two- and three-way interaction terms of these variables yielded a significant three-way interaction, $\beta = -.96$, $SE = .40$, $p = .016$. When we investigated this interaction by examining the interactive effects of system justification and causal order for men and women, we found that the system justification x causal order interaction was visible for women, $\beta = -.62$, $SE = .31$, $p = .045$, but not for men, $\beta = .34$, $SE = .25$, $p = .172$. However, what initially looked like support for a system justification account of compensation quickly changed when we probed the simple slopes for the relationship between system justification and compensation bias at each level of the two causal order conditions. Women in the causal order 2 group were less (not more) likely to use the compensation strategy with increasing levels of system justification, $\beta = -.47$, $SE = .19$, $p = .013$. Meanwhile, this relationship was absent amongst women in the causal order 1 group, $\beta = .15$, $SE = .24$, $p = .546$ (see Figure 7).

Put differently, women who were less likely to compensate low-status groups on an alternate dimension in which such groups are negatively stereotyped, generally seemed motivated to perceive such groups as deserving of their reputation. If this is the case, then one should also find a complementary positive relationship between norms of politeness and compensation bias, such that women (but not men) who are most mindful of politeness norms should be the ones more likely to use a compensation strategy.

Figure 7. The relationship between women’s system justification and compensation bias for the overweight. W = warmth, C = competence. Zero represents no difference between W and C.

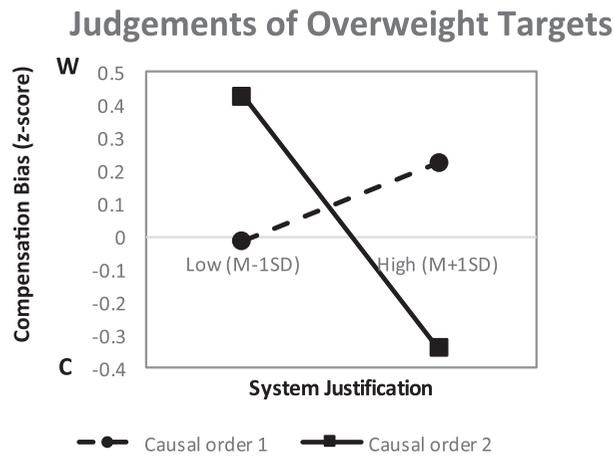
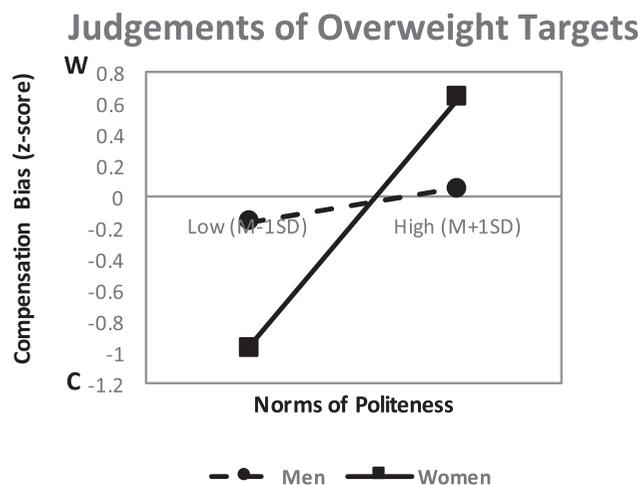


Figure 8. The relationship between norms of politeness and compensation bias for the overweight. W = warmth, C = competence. Zero represents no difference between W and C.



Also, results from a moderated regression in which compensation bias was regressed on politeness norms and its interaction with gender revealed a significant interaction effect, $\beta = .40$, $SE = .19$, $p = .039$: Showing the expected positive relationship between norms of politeness and compensation bias for women, $\beta = .46$, $SE = .15$, $p = .002$ (see Figure 8), but not for men, $\beta = .06$, $SE = .12$, $p = .610$. Neither the system justification three-way interaction nor the politeness norm two-way interaction emerged as significant predictors of the compensation bias for the ideal weight group.

In sum, the current study provided a conceptual replication of the dual perceptual strategy in status-based judgements in the context of weight groups (cf. Durante et al., 2014). Notably, we showed that system justification did not explain the compensation strategy that was used for either the ideal weight group or the overweight group. Instead, norms of politeness largely accounted for the differential attributions of warmth and competence, but only in relation to judgements of the overweight and only amongst groups that are susceptible to the weight stigma. This finding is consistent with the view that societal norms of politeness generally function to protect members of low-status groups from harsh evaluation (Jeffries, Hornsey, Sutton, Douglas, & Bain, 2012), presumably because perceivers expect members of such groups to have less capacity to cope with frustrating events than their more capable higher status counterparts.

6. General discussion

We examined two strategies that perceivers use in their social judgements in the context of intra-category status hierarchies where group boundaries are clearly defined. We hypothesised that perceivers would adopt a compensation strategy in their judgements of groups that are clearly high or low in social status but an indifference strategy in their judgement of groups that occupy an intermediate social status. Unlike previous evidence that has largely been conducted amongst Western samples, we tested these assumptions in a relatively understudied Asian context (Malaysia). In addition, we also examined two prominent explanations of the compensation bias put forward by SCM—system justification and norms of politeness—and expected that both motives should predict the use of a compensation strategy in perceivers' warmth vs. competence judgements.

Consistent with the predictions that we derived from SCM, Study 1 revealed that perceivers used both a compensation and an indifference strategy in their competence and warmth judgements of the different weight groups. However, the use of a compensation strategy in Study 1 occurred for the intermediate-status weight group (underweight faces) and high-status weight group (ideal weight faces). Surprisingly, we observed the use of an indifference strategy for the presumed low-status group (overweight faces). We reasoned that these negative results could have resulted from individual- and cultural-level differences in perceivers' interpretations of the facial adiposity of the images they were shown. Consistent with this view, when we accounted for individual differences using an imagined judgement paradigm, the patterns predicted by SCM became apparent. Specifically, perceivers' competence vs. warmth judgements of high- and low-status groups were characterised by compensation, while those of the intermediate group were characterised by indifference (Studies 2a and 2b).

Importantly, we found that the use of compensation in social judgements was driven by a need to adhere to the societal norms of politeness. In this sense, our findings are similar to those of Bergsieker et al. (2012) who provided evidence that the need to present oneself in good light via adherence to societal norms of politeness determines whether or not people compensate in their social judgements. Hence, as well as complementing Bergsieker et al. (2012), the current findings extend the state of knowledge in this area in two important ways. Firstly, they show that a compensation strategy is applicable in the judgements of social groups that are perceived to be largely responsible for their devaluation (e.g. the overweight, see Studies 2a and 2b; cf. Lerner, 1980). In other words, strong societal norms of politeness may, at times, override a need to see the prevailing social order as just (Lerner, 1980). Second, we show that a politeness-driven compensation may be constrained by societal sanctions against overt negativity towards specific low-status groups. That is, a politeness norm may be particularly visible in the judgement of "protected" low-status ("David") groups but, perhaps, a less adequate explanation for unprotected high-status ("Goliath") groups (Jeffries et al., 2012). In particular, we demonstrated that perceivers from vulnerable groups are the ones likely to be the custodians of this protection motivation, presumably because they have the most to benefit from maintaining norms that eliminate (or at least reduce) potentially costly social judgements to their own social group (Angermeyer & Matschinger, 2004; Kaiser & Miller, 2001).

Furthermore, the current investigation tested a system justification account of compensation within an Asian context. While we did not find evidence for a system justifying account (cf. Janssens, Verkuyten, & Khan, 2015), it is important to note that a number of factors could explain these negative results. For example, we used a specific operationalisation of system justification that is not particularly tied to the inter-status context of weight groups (see Sengupta, Osborne, & Sibley, 2015). Thus, it is conceivable that an operationalisation of system justification that is tied to weight could have yielded an effect in the direction that one might expect from a system justifying perspective (Jost et al., 2004). That being said, it is important to note that specific operationalisations of system justification are often positively correlated. For example, the general and economic system justification scales tend to show strong positive correlations with one another (Feygina, Jost, & Goldsmith, 2010). Hence, if anything, it is the size rather than the direction of the effects that we found that may be influenced by a different operationalisation of system justification. Nonetheless, future

replication attempts could incorporate a diverse set of system justification measures in their design and/or manipulate a system justifying mind-set in order to provide a causal link between system justification and compensation. Such studies could also aim to address the outstanding issue of why the compensation strategy for high-status groups occurs.

Beyond the possibility that the null evidence for a system justification account of compensation is because norms of politeness overpowered system justification tendencies, it is important to note too that a number of the conditions that presumably enact a system justification orientation were not formally assessed here. For example, the inescapability of societal systems has been suggested to be a necessary condition under which people justify the system (Kay & Friesen, 2011). That is, a system justification account of compensatory stereotyping should be particularly visible when people felt that they are stuck with the prevailing social order. Nonetheless, the fact that we did not take into account the inescapability of status systems is unlikely to fully account for the null evidence in relation to a link between system justification and compensatory stereotyping because Kay and Jost (2003) did not account for this factor but were still able to detect this link. Also, it is possible to discard the current findings because it did not formally examine a further condition under which a system justifying account of compensation bias is likely to be strong—the requirement that personal interest is low in salience (Jost et al., 2004). Thus, although the current evidence is notable, future investigation should aim to incorporate system inescapability and directly assess personal interests in order to show that system justification explains compensation bias when the prevailing social order is inescapable, and when personal interest is weak.

6.1. Limitations

Finally, we examined two specific strategies that people use in their social judgements, that was put forward by SCM. Although we found the indifference and compensatory stereotyping to be largely robust strategies in social judgements, it is entirely possible that there may be other strategies that we have not explored in the current study. Examining other strategies that people use in their social judgements beyond the two proposed by SCM is outside the scope of the current investigation, and future studies could aim to identify other possible strategies and reasons for their use.

Likewise, although we found evidence for compensatory stereotyping in the current study, it is important to note that we did not examine the role that membership in either of the three weight groups might play in peoples' social judgements. As Cambon et al. (2015) have shown, group membership matters in compensatory judgements and although this was not theoretically relevant in the current investigation, future research could aim to untangle its effects from the processes we reported here.

6.2. Conclusion

We examined two strategies that people use in their social judgements—compensation and indifference. Taken together, results from three studies largely provided support that people tend to compensate groups that are clearly high and low in social status with an alternate dimension of warmth and competence when they have denied them a positive evaluation on the other. In the case of intermediate groups, however, there was a pattern of calibrating judgements along the two dimensions of social evaluation so that it matches their middle position—that is, intermediate groups are perceived to be equally warm and competent, although this pattern was less robust across the three studies compared to the compensation strategy. Finally, we also tested two key accounts of compensation bias and found evidence only for a politeness account (though in relation to a low-status weight group—overweight), but no evidence for a system justification account.

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