

Global Poverty, Aid Advertisements, and Cognition: Do Media Images of the Developing World Lead to Positive or Negative Responses in Viewers

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When viewing aid advertising portraying people living in poverty it is easy to automatically activate stereotypes. This can be uncomfortable and people may consciously attempt to avoid using those stereotypes. However, it has been shown that suppressing such stereotypes can rebound and lead to greater subsequent negative stereotypic behaviour. Recent research suggests rebound responses differ according to stereotype content (Kennedy & Hill, 2009). The current experiment compared behaviour in those who suppressed use of stereotypes of two dissimilar social outgroups: people living in poverty and people living in wealth. Effects differed; suppressors tended to be more negatively stereotypical when writing about the wealthy and less negatively stereotypical when writing about those in poverty. Behavioural measures (seating) also tended to diverge. Suppression appears to exaggerate later behavior and raises the possibility that viewers of aid advertising who avoid thinking stereotypically may find that their subsequent behaviour is more strongly driven by their stereotypes of people living in poverty than they may have wished, which in some cases can lead to greater negativity and a reduction of support.

Images of people in the developing (or majority) world often feature in aid advertisements that aim to raise funds to alleviate global poverty. In particular, African people living in poverty have been, and in some cases still are, portrayed as helpless and destitute. This framing no doubt contributes to the construction of stereotypes of the developing world poor as uneducated, incapable of freeing themselves from poverty, lacking in competence, and miserable (Clark, 2004; Glasgow University Media Group, 2000; Opoku-Owusu, 2003; van der Gaag & Nash, 1985). Although most modern aid organisations make an effort to portray the people in their advertising as self-reliant and active the fact that the focus of such advertising is usually on need means that the images that result often incorporate an array of negative traits (Dogra, 2007).

Thus, many have argued that the ongoing legacy of earlier 'starving children' imagery combined with the focus on need in current advertising encourages the construction of partly negative stereotypes of the majority world poor in the minds of many people in the minority (or Western) world. Surprisingly, however, little mainstream psychological research has examined the attitudes of Westerners to people living in poverty in their own nations let alone the impoverished of the developing world (Cozzarelli, Wilkinson, & Tagler, 2001).

Less still is known about the content of Westerners' stereotypes of the majority world poor but several avenues of research suggest that they contain significant negative elements despite the fact that many in the 'developed West' are aware that media representations of people in the developing world are

inaccurate or incomplete. For instance, a 2001 poll of 1,018 members of the general public in the United Kingdom (Voluntary Service Overseas, 2002) found that 81% of the sample endorsed the statement "It is human nature to stereotype people from other cultures, but it is also dangerous" and 55% wanted a more complete picture of the everyday lives, yet 40% agreed with the statement "Third world countries often bring poverty, famine and crises on themselves" and 74% agreed that "Developing countries depend on the money and knowledge of the West to progress." The main causes of poverty chosen by respondents were internal factors: war/conflict (69%), bad government (66%), and corruption (44%). Nine percent believed that lack of motivation/laziness was responsible for poverty in developing nations. (By contrast the external factors of debt and exploitation by the West were endorsed by 36% and 20% respectively).

The authors of the VSO report note that "80% of the British public strongly associate the developing world with doom-laden images of famine, disaster and Western aid. Sixteen years on from Live Aid, these images are still top of the mind and maintain a powerful grip on the British psyche" and that "[s]tereotypes of deprivation and poverty, together with images of Western aid, can lead to an impression that people in the developing world are helpless victims." (p. 3).

A series of studies by Carr and colleagues has also shown that citizens of

the minority world (Australians and New Zealanders) are more likely than South East Africans (Malaŵians) to believe that internal, dispositional factors, such as laziness and low intelligence, contribute to developing world poverty – although it should be pointed out that ‘blaming the poor for poverty’ was often rated as less significant than external factors (such as conflict, the workings of third world governments, and international exploitation) by Westerners as well as Africans (Bolitho, Carr, & Fletcher, 2007; Campbell, Carr, & MacLachlan, 2001; McWha & Carr, 2009). It seems not unreasonable to suggest that this research implies that the general stereotype held in the minority world is less positive about the competence of the impoverished of the majority world than those stereotypes held by the people of developing economies themselves.

Of particular relevance to the current research is the fact that the viewing of aid advertising is likely to automatically activate these stereotypes and prime stereotype-driven behaviour (Bargh, Chen, & Burrows, 1996; Chen & Bargh, 1999; Duckworth, Bargh, Garcia, & Chaiken, 2002). For many viewers these stereotypes are likely to be unwanted and consequently actively suppressed (e.g., because of the difficulty of reconciling a desire to act in a morally appropriate fashion when confronted with distressing images with the mixed, often negative, emotions that are generated by the content of the automatically activated stereotype. See Wyer, Sherman, & Stroessner, 1998). That is, in order to ‘do the right thing’ viewers often need to resist thinking about the developing world poor in ways that portray them as pitiful and disagreeable and consequently encourage avoidance and neglect. Unfortunately according to suppression theory (Wegner, Schneider, Carter, & White, 1987), unwanted stereotypes that are suppressed may later *rebound* so that stereotypical thinking and behaviour unexpectedly become *more*, rather than less, prevalent, even when perceivers explicitly try to avoid acting in a prejudiced manner (Macrae, Bodenhausen, Milne, & Wheeler, 1996).

Numerous experimental studies have

shown that suppressing stereotypical thinking can lead to an increase in the production of stereotypical judgments, greater social distancing, better memory for stereotypical behaviour, faster responding to stereotypical terms, and less accurate recall for target’s self description (e.g., Forster & Liberman, 2001; Galinsky & Moskowitz, 2000, 2007; Gordijn, Hindriks, Dijksterhuis, & van Knippenberg, 2004; Koole & van Knippenberg, 2007; Macrae, Bodenhausen, Milne, & Jetten, 1994; Macrae et al., 1996; Sherman, Stroessner, Loftus, & Deguzman, 1997; for a review see Kennedy, 2009). Although these effects have been observed for a number of outgroups (e.g., skinheads, the elderly, Asian women, African Americans, bodybuilders, gay men, and foreign workers) the strength of these effects have been shown to be moderated by personality factors such as existing levels of prejudice (e.g., Monteith, Sherman, & Devine, 1998), the social acceptability of stereotyping the target group (e.g., Wyer, Sherman, & Stroessner, 2000), and cultural differences (Zhang & Hunt, 2008). Some people seem to stereotype less than others, some situations make it easier to avoid stereotyping than others, and, because it is more socially-inappropriate to stereotype some outgroups than others, the specific target group can also ensure that inhibition of stereotyping becomes habitual (at least in public). In situations where suppression or other forms of inhibition are common-place stereotype rebound will not occur.

Nonetheless one might expect then that attempting to avoid thinking of the developing world poor in a stereotypical fashion could potentially backfire and encourage increased avoidance and ultimately a reduction in support such as donations, at least for a significant proportion of citizens of wealthy nations. Indeed it was this prediction that motivated the current programme of research (Kennedy, 2009; Kennedy & Hill, 2009). Happily, however, in an earlier study we found people who suppressed their stereotypes of the poor demonstrated increased *approach* rather than increased avoidance behaviour; something we termed a ‘positive’ or ‘reverse’ rebound effect (Kennedy & Hill, 2009). This unexpected finding

differs from previous research (Macrae et al., 1994; Mooney, Cohn, & Swift, 1992), and suggests that underlying differences in stereotype content for different target groups may determine not only *whether* rebound follows stereotype suppression but also *how* rebound effects are expressed.

Since rebound effects can be conceptualised as heightened levels of stereotypical thinking, a more in-depth examination of the ways in which stereotype content varies for different target groups should shed some light on inconsistent rebound findings. The primary emphasis in research to date has been on social stereotypes that are harmful, negative, and associated with biased judgments that underlie prejudice and discrimination. However, consensual stereotypes of many social outgroups are seldom wholly negative, but instead contain a mixture of attributes that can be either positive or negative (Glick & Fiske, 2001). Indeed, Fiske (2004) claims that *most* stereotypes are ambivalent, containing a complex mixture of both hostile and favourable beliefs about others. Mixed content stereotypes may lead to different kinds of prejudice and discrimination than those stereotypes that are purely negative. Thus, this content difference may affect the way rebound is expressed.

Core Dimensions of Stereotypes: Warmth and Competence

Susan Fiske and her colleagues (Fiske, Cuddy, Glick, & Xu, 2002; see also Cuddy, Fiske, & Glick, 2007, 2008; Fiske, Cuddy, & Glick, 2007) have developed a detailed, empirically-based framework for understanding (1) the ways in which stereotypes vary and (2) the emotional and behavioural consequences this variation has for intergroup relationships. They note that not all stereotypes of outgroups are alike, with different groups eliciting different types of responses from perceivers. Their Stereotype Content Model (SCM, and its extension into the behavioural realm in the Behaviour from Intergroup Affect and Stereotypes, or BIAS, framework) proposes this variation is determined by the position a stereotype occupies in two dimensional space defined by a *warmth*

dimension and a *competence* dimension. The former dimension encompasses traits such as morality, trustworthiness, sincerity, kindness, and friendliness, while the latter relates to qualities of efficacy, skill, creativity, confidence, and intelligence. Fiske et al. have gathered a substantial amount of empirical cross-cultural evidence supporting this two-dimensional model of stereotype content (see Cuddy et al., 2008 for a comprehensive recent review).

They argue that differences in the positioning of stereotypes in this space are determined by differences in important social structural relationships. The warmth dimension provides a measure of the competitive threat of the target group with groups perceived as warm being viewed as less of a threat than groups perceived as low in warmth. Competence on the other hand, derives from the status of the target with low competence implying lower status. Thus, in a social setting warmth provides an indication of an outgroup member's intent towards oneself (as hostile or friendly) whereas competence provides an indication of their ability to enact that intent (capable or incapable).

Importantly, these kinds of assessments drive the kind of emotional and behavioural responses perceivers make to targets. Fiske and company claim that warmth is the primary dimension for determining emotional and behavioural responses and is associated with active responses while the competence is related to passive responding. A group judged as high in warmth and high in competence (typically an ingroup) will likely be admired and inspire pride which will encourage active and passive facilitative, helping behaviours. A person judged as low on both dimensions will elicit contempt and disgust and this will encourage both active harm (e.g., harassment) and passive harm (e.g., avoidance, neglect). However, according to the SCM theorists, these low-low and high-high stereotypes are relatively uncommon. That is, whereas their research suggests that Americans view welfare recipients, feminists, and the local US poor in this 'standard' low-low manner, many outgroups are viewed as high in competence and low in warmth (e.g., British, Jewish, and Asian people) and many others are viewed as

having a high warmth-low competence profile (e.g., the elderly, the disabled). These content differences are associated with unique emotional responses and behavioural tendencies; members of low warmth-high competence groups tend to be envied and consequently passively cooperated with when it is convenient, but harassed or even harmed when it is not. High warmth-low competence groups such as the elderly, the disabled, and, importantly for our purposes, the developing world poor, are passively harmed (often avoided, neglected) but actively aided ('overhelped') on particular occasions such as well publicized fundraising events. Fiske and colleagues describe this combination of bursts of active helping and periods of passive neglect as patronizing and paternalistic. It might seem as if these mixed or ambivalent stereotypes should promote somewhat better intergroup relationships and attitudes than wholly negative ones. However, Cuddy et al. (2008) suggest that this is not the case and that "[i]mportantly, subjectively positive stereotypes on one dimension typically do not contradict prejudice or reduce discrimination but reinforce unflattering stereotypes on the other dimension and justify unequal treatment" (p. 68).

To summarise, if we follow the stereotype content model it seems reasonable to assume that the Western stereotype of the developing world poor (unlike that of the 'local poor') is of high(ish) warmth but low competence. High warmth is associated with *active facilitation* which includes behaviors such as helping, assisting, or defending others; prosocial behaviours that are focused upon meeting the needs of the poor in assistance programmes and charitable giving. On the other hand judgments of low competence are associated with *passive harm*, a set of behaviours that exclude other groups socially by diminishing their social worth and ignoring and neglecting their needs. In society, passive harm may be seen in the withdrawal of social support and the limiting of an outgroup's access to resources and aid. For example, Lott (2002) found that people's stereotypes of the (USA) poor lead to social distancing behaviours (e.g., separation, excluding, and devaluing others), a common response to poor

people in the United States by those who are not poor. Lott also described the poor as frequently "invisible", often ignored and deemed responsible for their own plight, an example of passive harm. Thus, if stereotype rebound were to occur for a high-warmth, low-competence stereotype one would predict an increase in both active facilitation *and* passive harm following suppression. Because the warmth dimension is the primary dimension associated with judgments about the approachability and friendliness of the target group one would expect the level of warmth of the stereotype will be a good predictor of how a perceiver will gravitate toward a member of the target group in an interpersonal situation. Indeed, Fiske et al. (2002) claim that warmth judgments are made before competence judgments and that warmth determines approach-avoidance responses and reliably predicts the valence of subsequent judgments (i.e., whether positive or negative). Thus, although an ambivalent high-warmth, low-competence stereotype is not a sign of an even mildly positive overall impression of a target group, it may be the case that situations or processes that increase the intensity of stereotype-driven behaviour actually bring about an increase in active helping interpersonal behaviours (as well as an increase in passive harming behaviours).

The Current Experiment

To explore this possibility that different rebound effects might occur for different target groups, two social outgroups representing opposite ends of the economic spectrum in a developing country were chosen as stereotype condition groups for this experiment: the poor and the wealthy. Consistent with predictions from the stereotype content model, it was expected that stereotypes of the two stereotype condition groups, the developing-world poor and the African wealthy, would have different content (low warmth/high competence for the African wealthy stereotype and high warmth/low competence for the African poor stereotype) and that such differences would determine the particular form of the stereotype rebound that followed suppression.

More specifically three hypotheses were tested in this experiment. First, in line with results from earlier experiments (Kennedy & Hill, 2009) it was predicted that participants who suppressed stereotypes of either stereotype condition group, poor or wealthy males from the developing world, would experience increased cognitive accessibility of their stereotypes; a stereotype rebound effect. Participants were expected to show rebound effects in two ways: as increased levels of stereotypical phrasing in day-in-the-life stories about members of the stereotype condition group and as a tendency to increase or decrease social distance from a poster of a target group member. Story writing was regarded as an explicit measure of rebound (i.e., a controlled cognitive process), while seating positions were considered to be largely implicit measures of rebound (i.e., unconsciously determined behaviour).

Second, as described in the stereotype content model, it was predicted that rebound effects in seating positions for the poor condition, might reflect approach rather than avoidance behaviour. In line with results from an earlier experiment, participants whose suppressed stereotypes of the developing-world poor appear to contain elements of warmth, a primary driver of behaviour, were expected to choose seats closer to the poster of a stereotype condition group member than those chosen by the control group. Conversely, it was expected that rebound effects in seating positions for the wealthy condition, might reflect avoidance rather than approach behaviour, suppressors seating themselves further away from the poster of a wealthy person.

Third, it was predicted that because it may be less acceptable to stereotype the aid-related poor, participants would constrain the expression of these stereotypes, whereas they would be more willing to express their stereotypes of the wealthy stereotype condition group. Specifically, participants were expected to write more stereotypical phrases when writing about the wealthy than the poor.

Method

Participants and Design

Participants were 40 undergraduate students (33 female) from Massey University, Albany campus in Auckland, 26 of who were aged under 25. Since the psychology students who took part in Kennedy and Hill (2009) did not appear to make extensive use of stereotypes when writing essays, students from the business school were also sought; business students have been found to use stereotypes more readily than students from the social sciences (Guimond & Palmer, 1996). Participants were reimbursed \$15 for their time and travel expenses.

Of the 40 participants who took part in the two experiments, only 35 provided a complete set of data. Two participants attended only one session, the poor, a further two did not choose a seat for either the poor or wealthy condition, and one chose a seat for the poor condition but not for the wealthy.

Stimuli

This experiment was based upon the methodology used by Macrae et al. (1994). In the poor condition students viewed pictures of poor African men featured in an impoverished environment, while in the wealthy condition wealthy African men were featured in an African market. In order to ensure that facial features did not confound matters, the images were manipulated so that the same face was used in both the poor and wealthy conditions. A computer programme guided students through the experiment, allocated participants to groups, displayed images, timed the essays and automatically recorded these into numbered files.

For the seating measure (see below), a large poster (45cm x 60cm) featuring either a poor or wealthy person in an African context was placed at the end of the row of eight chairs. This subtle manipulation was used rather than telling participants they would be meeting a poor or wealthy African (the manipulation used in Kennedy & Hill, 2009 and Macrae et al., 1994) to avoid arousing suspicion - it would be unlikely that the standard manipulation would be effective on the second visit. However, as results show, there was a real risk that a poster was a less effective mechanism for producing stereotype rebound than

a potential meeting with a target group member.

Procedure

Each participant was required to attend the laboratory for two 25-minute sessions; a 'poor' condition and a 'wealthy' condition conducted approximately three or four weeks apart. The order of the tasks was counter-balanced across participants. Students visited the psychology laboratory individually, were briefed on arrival, signed consent forms, and randomly assigned to either an experimental (i.e., suppression) or control group. They remained in the assigned group on the subsequent visit.

In both conditions the suppress group was instructed, via the computer, to refrain from using stereotypes when writing their first essay. As in Macrae et al.'s (1994) study, the suppress group was informed, "Previous psychological research has established that our impressions and evaluations of others are consistently biased by stereotypic preconceptions. Therefore, in this task, you should actively avoid thinking about the target person in such a manner". The control group received no such instruction before writing their second essay.

Participants in both suppression and control groups viewed a picture of a poor or wealthy African person (depending on the condition) on the computer and were given five minutes to write a story about a typical day in the life of this person. After completing this first essay all participants viewed a second image of another African person of the same socioeconomic status as for the first essay and wrote another 5-minute essay describing a typical day in the life of the person portrayed. When the two essays were completed, instructions on the computer directed each participant to go through to the waiting room where there was a row of eight adjacent chairs, to take a seat, and fill out a checklist while waiting for the experimenter.

A poster placed on the end wall adjacent to the seats featured an African person in an African setting whose socioeconomic status matched the condition of the session (i.e., a poor

person for the poor condition and wealthy person for the wealthy condition). The position of the chosen seat relative to the poster provided a measure of social distancing. The experimenter noted the seat chosen, debriefed the participant, and the experiment ended.

Results

Scoring of Essays

Essays were rated for their stereotypical content using a 9-point rating scale: 1 (not at all stereotypic) and 9 (very stereotypic) by two independent raters who were blind to the experimental conditions. The rating scale was the same as that used by Macrae et al. (1994) and was explained to the lead author by Macrae (personal communication, September 16, 2005). Raters were told "Stereotypical content refers to the observer's beliefs and expectations about poor/wealthy African people - it can be defined as any phrase, term or sentence that is associated with this group". An example of how to rate stereotypical writing was also provided to raters. The level of agreement for the two essays in the poor condition was $r(39) = .68, p < .01$ (two-tailed) and in the wealthy condition was $r(37) = .56, p < .01$ (two-tailed). Scores were averaged across the two raters to create a single measure of stereotypical phrasing for each essay.

Analysis

We assessed stereotype rebound using two dependent measures: levels of stereotypical phrasing in participants' second essays and chosen seating positions. To assess stereotype rebound effects in suppressors' writing, we used a 2 (task instruction: suppress, control) x 2 (stereotype condition: poor, wealthy) mixed factorial ANOVA with repeated measures on the last factor. We assessed stereotype rebound effects in behaviour by conducting a 2 (task instruction: suppress, control) x 2 (stereotype condition: poor, wealthy) mixed factorial ANOVA with repeated measures on the last factor, on the seating measures.

Manipulation Check

Table 1. Means Ratings of Passage Stereotypicality and Seating Positions for Poor and Wealthy Essays as a Function of Task Instruction

	Poor Stereotype condition		Wealthy Stereotype condition	
	Suppress Instructions	Standard Instructions	Suppress Instructions	Standard Instructions
Manipulation - Essay 1	5.92 (1.71)*	6.26 (1.46)	4.97 (1.40)	4.84 (1.34)
DV - Essay 2	5.84 (0.94)	6.34 (0.87)	5.18 (1.59)	4.32 (1.45)
DV - Seating	4.80 (1.21)*	5.47 (1.02)	5.80 (0.86)	5.42 (1.17)

* Standard deviations are in brackets

DV - dependent variable

A preliminary analysis was run to ensure that participants in the suppress group had, as instructed, complied with instructions and suppressed stereotypical thoughts. A 2 (task instruction: suppress, control) x 2 (stereotype condition: poor, wealthy) mixed factorial ANOVA conducted on the levels of stereotypical phrasing written in the first essays, did not show a main effect of task instruction or an interaction of stereotype condition and task instruction ($F_s < 1$). Simple effects analyses showed that there was also no difference for either the poor or wealthy stereotype condition groups when analysed separately (both $F_s < 1$). However, in the poor condition, an examination of the descriptive statistics (see Table 1) showed that, as instructed, the suppress group produced less stereotypical material in their writing than the control group ($M = 5.92, SD = 1.71$ vs. $M = 6.26, SD = 1.46$). Unexpectedly, in the wealthy condition, the suppress group wrote slightly higher levels of stereotypical phrasing in their first essays than the control group ($M = 4.97, SD = 1.40$ vs. $M = 4.84, SD = 1.34$). A main effect of stereotype condition was found ($F(1, 36) = 8.72, p < .006, \eta_p^2$ (partial eta squared) = .20, OP (observed power) = .82): essays about the poor contained more stereotypical material than those about the wealthy.

Effects of Suppression of Stereotyping on Second Essays

Results from the mixed factorial ANOVA conducted on participants' second essays for both poor and wealthy conditions revealed a main effect of stereotype condition ($F(1, 36) = 25.33, p < .001, \eta_p^2 = .41, OP = 1.00$) - the essays of the poor contained more stereotypical material than those about

the wealthy ($M_s = 6.09$ vs. $4.75, SD_s = .93$ vs. 1.56). This main effect was qualified by a significant stereotype condition x instruction interaction ($F(1, 36) = 6.58, p = .015, \eta_p^2 = .16, OP = .70$). Simple effects analyses revealed opposing non-significant trends for the two stereotype conditions; when writing about the poor, suppressors wrote less stereotypical essays than the controls ($F(1, 36) = 2.89, p = .098, \eta_p^2 = .07, OP = .38$) while the opposite was the case for wealthy ($F(1, 36) = 3.10, p = .08, \eta_p^2 = .08, OP = .40$). Thus, the essay data suggest that increased stereotypic behaviour (i.e., rebound) may have occurred for both stereotype condition groups although the nature of the rebound differed for the two groups. Whereas the wealthy stereotype condition may have elicited standard rebound, with greater stereotyping by suppressors than controls, the poor stereotype condition may have elicited lower levels of stereotyping in suppressors (see Table 1).

Effects of Suppression on Seating Behaviour

Dependent measures were suppressors' second essays and/or seating positions chosen by suppressors when responding to either poor or wealthy stereotype condition people. It is possible that suppressors may have continued to suppress their stereotypes in their second essays, and if so, rebound effects might emerge in the seating positions. A second mixed factorial ANOVA was therefore conducted using participants' seating positions. The analysis revealed a main effect of stereotype condition ($F(1, 32) = 5.88, p = .021, \eta_p^2 = .16, OP = .65$): overall, participants sat closer to the poster of the

poor target than the wealthy target ($M_s = 5.18$ vs. 5.59 , $SD_s = 1.14$ vs. 1.05). This main effect was qualified by a stereotype condition x instruction interaction ($F(1, 32) = 7.26$, $p = .011$, $\eta_p^2 = .19$, $OP = .74$). Simple effects analyses revealed a non-significant trend for suppressors of the poor stereotype to sit closer to the target poster than the controls ($F(1, 36) = 3.11$, $p = .087$, $\eta_p^2 = .09$, $OP = .40$) (see Table 1). While the descriptive statistics showed that suppressors of the wealthy stereotype sat farther away from the poster than controls ($M_s = 5.80$ vs. 5.42 , $SD_s = .86$ vs. 1.17) this pattern did not reach significance ($F(1, 36) = 1.10$, $p = .302$, $\eta_p^2 = .03$, $OP = .17$). Thus, the seating data suggest that reverse rebound occurred for the poor stereotype condition while no rebound occurred for wealthy stereotype condition.

Post hoc Content Analysis of Warmth and Competence of Second Essays

A post-hoc content analysis was conducted on second essays for the poor and wealthy African stereotype conditions. Each essay was scored between -5 and 5 for each of two dimensions, warmth and competence. Scoring was based on matching essay content to a set of 20 descriptive criteria agreed on by the authors (see Appendix); points were allocated for each description that appeared in the essay - +1 point for description associated with high warmth or competence and -1 point for descriptions associated with low warmth or competence. Two 2 (task instruction: suppress, control) x 2 (stereotype condition: poor, wealthy) mixed factorial ANOVAs, with repeated measures on the last factor, were conducted on warmth and competence ratings for participants' second essays.

As predicted, the ANOVA conducted on ratings of warmth showed a significant main effect of stereotype condition ($F(1, 36) = 4.35$, $p < .044$, $\eta_p^2 = .11$, $OP = .53$); warmth ratings were higher for the poor African than the wealthy African stereotype condition group ($M = .66$, $SD = .85$ vs. $M = .26$, $SD = .86$). Although the stereotype condition x instruction interaction was not significant ($F(1, 36) = 1.57$, $p < .219$, $\eta_p^2 = .04$, $OP = .23$), descriptive statistics showed that, when writing about the African poor,

the experimental group wrote more warmth-related phrases in their second essay than the control group ($M = .74$, $SD = .81$ vs. $M = .58$, $SD = .90$). In contrast, when writing about the African wealthy, the experimental group wrote fewer warmth-related phrases in their second essay than the control group ($M = .11$, $SD = .99$ vs. $M = .42$, $SD = .69$) (see Table 1).

An ANOVA conducted on ratings of competence also revealed a significant main effect of stereotype condition ($F(1, 36) = 34.21$, $p < .001$, $\eta_p^2 = .49$, $OP = 1.00$); there were more competence-related phrases in essays about the African wealthy than there were in essays about the African poor stereotype condition group ($M = 1.53$, $SD = 1.29$ vs. $M = -.39$, $SD = 1.73$). Again the interaction between stereotype condition and instruction was not significant ($F < 1$). However, when writing their second essays about the African poor, the experimental group wrote slightly fewer competence-related phrases than the control group ($M = -.58$, $SD = 1.68$ vs. $M = -.21$, $SD = 1.81$). Second essays about the African wealthy showed a different pattern of results; the experimental group wrote more competence-based phrases than the control group ($M = 1.63$, $SD = 1.50$ vs. $M = 1.42$, $SD = 1.07$) (see Table 2).

Discussion

The aim of the current study was to examine stereotype rebound effects for two different target groups. An important goal was to clarify findings of an earlier experiment (Kennedy & Hill, 2009) where rebound effects were observed for perceivers in an unexpected direction, a reverse rebound effect. In the current experiment, participants were asked to interact on two occasions with members

of target groups at opposite ends of the economic scale, poor and wealthy African people. In general, stereotype rebound is tested for target groups that perceivers may view negatively, and rebound behaviours reflect this (e.g., Macrae et al., 1994).

Findings from the current experiment suggest that, as predicted, stereotype rebound effects may vary for different target groups. The current experiment found that although suppress and control groups did not differ significantly in terms of stereotypic content used in their first essays for the two different target groups, they wrote different levels of stereotypic material in their second essays and exhibited different patterns of social distancing behaviour. Contrary to expectations, participants stereotyped wealthy targets less than poor targets.

Stereotypicality of First Essays

Suppressors who viewed pictures of the poor used fewer stereotypical descriptors than the control group in their first essays, as instructed, but the difference was small (less than half a point on a 9-point scale) and not statistically significant. In contrast, suppressors who viewed pictures of wealthy African targets produced higher levels of stereotypical information in their essays than the control group; again this effect was very small and was not statistically significant. One possible reason for the unexpected finding for the wealthy condition might be that there does not exist an easily accessible, detailed, widely shared, stereotype of wealthy African people and, instead, suppression participants were required to actively 'construct' a stereotype when asked to avoid using one (Hastie & Park, 1986). The African wealthy target group, unlike the aid-related poor target group,

Table 2. Mean Ratings of Warmth and Competence in Second Essays about the African Poor and African Wealthy

	Warmth		Competence	
	African Poor	African Wealthy	African Poor	African Wealthy
Control	.58 (.90)*	.42 (0.69)	-.21 (1.81)	1.42 (1.07)
Suppress	.74 (.81)	.11 (.99)	-.58 (1.68)	1.63 (1.50)

* Standard deviations are in brackets.

Higher scores indicate higher levels of warmth/ competence in essays

may not be seen as high in entitativity (i.e., perceived 'groupiness'); if so, perceivers may see the African wealthy stereotype condition group as less homogenous (Dasgupta, Banaji, & Abelson, 1999), and be less likely to develop a consistent impression of this target group (Welbourne, 1999).

Thus, the majority of control participants, unprompted about the existence of a wealthy African stereotype, would have been much less likely to have been thinking stereotypically about the wealthy target than the suppressors. Suppressors, on the other hand, may have explicitly and with effort worked out ways in which the wealthy target could be thought of stereotypically before 'toning down' that thinking as instructed. However even with 'toning down' they wrote slightly more stereotypical essays than controls (although not significantly so). This would account for suppressors producing (very slightly) more stereotypical first essays than controls.

Contrary to predictions, stereotyping was lower overall when participants wrote about the wealthy than about the African poor. One explanation for this, as noted above, could be that wealthy African people do not fit into a clearly defined cognitive category. Stereotypes of different social outgroups may consist of stronger and weaker associations between traits and category representations (Monteith & Voils, 2001). For example, stereotypes of African Americans or women may be more strongly entrenched in perceivers' memory and thus more accessible than stereotypes of social groups such as lawyers or priests. Because category accessibility is enhanced by recent and frequent activation (e.g., Higgins, Bargh, & Lombardi, 1985; Srull & Wyer, 1979), stereotypes of the aid-related poor may be more easily activated than stereotypes of the African wealthy. Therefore, even though participants may have been prepared to freely express their stereotypes of the wealthy stereotype condition group (because the group was less socially sensitive than the poor African group) a lack of an accessible, strong stereotype may have made such expression rather difficult.

Rebound Effects in Second Essays

In their second essays suppressors in both wealthy and poor conditions showed different patterns of stereotyping compared to control participants – clear evidence of rebound effects. In the poor condition, suppressors writing their second essays tended to stereotype *less*, instead of more, than the control group and appeared to be less stereotypical than in their first essay. This rather surprising finding may have occurred because suppressors continued suppressing their stereotypes throughout the experiment (see also Liberman & Forster, 2000). Kennedy and Hill (2009) found that suppressors and controls did not differ in terms of the stereotypicality of their second essays (descriptive statistics showed that that suppressors in the study wrote less stereotypical second essays but the difference did not approach statistical significance). Importantly this kind of 'no difference' result is also consistent with the idea that suppressors maintained some inhibitory control over their writing during the second essays.

By contrast, suppressors in the wealthy condition in the current experiment, tended to produce *more* stereotypic material than controls did in their second essays - the kind of standard rebound effect that has been observed many times before. As noted earlier, it is possible that stereotypic information for the wealthy African stereotype condition group is constructed on-line in response to experimental demands and this may explain, in part, why suppressors wrote more stereotypic second essays; that is, if the wealthy stereotype was only assembled because of the prompt to avoid stereotyping while writing the first essay, only the suppressors would have access to a stereotype to influence their writing (in both essays). On this reading most controls would be blithely unaware that there was a stereotype at all and thus their writing could not be influenced by it. Given that rebound is usually defined as a higher level of stereotyping in second essays by suppressors relative to controls (rather than relative to suppressors' own first essays) it is thus possible that the effect found was due, not to suppression per se, but rather to the fact that only suppressors had ready access to a wealthy African stereotype. However, this explanation does not account for

the apparent increase in stereotyping exhibited in suppressors' second essays relative to their first essays. Although the difference was small it was in the opposite direction to that exhibited by controls so it is unlikely that the change was due to differences in the images used for the two tasks or some kind of practice effect. It is thus unclear why suppressors of the wealthy stereotype exhibited increased stereotyping but the results are at least consistent with the rebound explanations offered by Macrae et al. (1994) for rebound effects found with other target groups.

In sum, as predicted, suppressors in both conditions tended to write different levels of stereotypic phrasing in their second essays; in the wealthy condition suppressors were more likely to be more stereotypical in their writing than controls, possibly a standard rebound effect, while in the poor condition, suppressors were less stereotypical. It seems likely that suppressors continue to control the expression of their stereotypes throughout both essays in response to normative constraints and thus, rebound effects may be difficult to capture using explicit measures (e.g., Hall & Crisp, 2003; Galinsky & Moskowitz, 2000, Experiment 1).

Rebound Effects in Seating Position

Stereotype rebound effects were also assessed in the current study by observing where participants sat in relation to the posters of target group members. The expected interaction between instruction and stereotype condition group was found, with suppressors sitting closer than the control group to the poster of the poor person but not the poster of the wealthy person.

This finding implies that suppression exaggerates stereotype-driven behaviour, but the form of that behaviour is dependent upon the content of the stereotype activated. Specifically, the increased post-suppression influence of the warmer poor stereotype appears to encourage approach-type behaviours while the influence of the 'less-warm' wealthy stereotype discourages approach and may even foster avoidance. Systematic differences in perceivers'

stereotypes may shed light upon some of the inconsistent rebound findings in the literature and explain why rebound effects are not always evident following stereotype suppression.

The post-hoc analysis of essays of warmth and competence provides further support for the idea that stereotype content may influence behaviour. Not only did essays vary predictably in warmth judgments (with higher levels of warmth found in essays about the poor) but there is some suggestion that the process of suppression itself has a small effect upon judgments of warmth and competence. Although none of the analyses reached statistical significance, all of the descriptive statistical patterns fell in line with the idea that post-suppression descriptions are more stereotypical. Thus, post-suppression descriptions of the poor were warmer and less competent than descriptions by controls, while post-suppression descriptions of the wealthy were colder and more competent. While it is heartening that all of the descriptive statistics are consistent with the prediction that suppression affects levels of stereotypic phrasing in essays the lack of statistically significant differences indicates that no hard and fast conclusions can be drawn. Nevertheless, these results suggest that it is worth exploring these ideas with future studies with greater statistical power, perhaps employing more sensitive measures of stereotypical phrasing and larger sample sizes.

Limitations

Although these experiments have demonstrated some effect of suppressed stereotypical thoughts upon behaviour, some theoretical and methodological issues may have compromised results. First, the experimental manipulation in the essay-writing exercise did not result in significant differences between suppress and control groups in the essay-writing task raising the question of whether the manipulation had been successful. Hall and Crisp (2003), whose essay-writing manipulation tasks also produced non-significant differences, subsequently included the suppression condition in their analyses; they reasoned that because participants had already been exposed to different

experimental conditions, it was still a legitimate move to see if suppression instructions led to subsequent increased stereotyping as predicted or had no effect whatsoever. It is possible that essay measures are often influenced rather strongly by social desirability and thus not reliable ways of measuring stereotypical thought (see the following limitation for more discussion). In light of these issues we decided to follow Hall and Crisp's lead and include the suppression condition in subsequent analyses.

Second, in the current experiment, suppressors' second essays about the poor showed evidence of reduced, rather than increased, levels of stereotyping. It is possible that, because essay-writing exercises were used to measure rebound, participants were not under substantial cognitive load (e.g., time pressure, distraction) and may thus have had sufficient cognitive resources to initiate and maintain successful suppression during the writing of the second essays (Wyer, Sherman, & Stroessner, 2000). In fact, Wenzlaff and Wegner (2000) question the reliability of using self-reports in thought suppression research, suggesting that heightened self-consciousness and defence mechanisms in participants can make suppression-related effects hard to detect. They suggest that researchers use objective behavioural indices that more directly reflect stereotype condition-relevant thoughts, such as behavioural indices (such as our seating measure) and physiological states.

Third, in order to better investigate the relationship between stereotype content and rebound effects, it may have been more effective to use a 'stronger' stereotype condition group stereotype rather than the wealthy African target group stereotype (which did not appear to be strongly encoded in participants' memory). In an effort to control for possible confounds caused by the use of very dissimilar target groups (such as British skinheads and the African poor) we unfortunately opened ourselves up to the problem of comparing the effect of stereotypes which not only differed in content but also differed in terms of cohesiveness, familiarity, and thus accessibility. Future research will need to take account of these possible

confounding effects of these factors.

Fourth, our findings suggest that differences in the warmth component of stereotype content makes a difference to the way people write about and behave to toward members of a stereotyped group. However, Fiske et al. (2007) suggest that differences in perceived *competence* will also affect behaviour, particularly more subtle passive behaviours such as simple neglect and avoidance. The measures used in the current study probably do not tap into these competence-based responses; responses which are arguably as important as those driven by warmth-based judgements when it comes to making decisions about how one should respond to the plight of the poor. Future stereotype rebound research should thus investigate competence-related behaviours using measures which can distinguish between active and passive behavioural responses.

Finally, the question of whether these effects have any real world implications needs to be answered. It remains to be seen whether rebound effects have real or sizeable consequences in everyday life. Further, more ecologically valid, research is clearly called for, although it will be complex and difficult to conduct. At any rate, we now have enough intriguing laboratory-based evidence to warrant examining whether rebound effects (1) occur spontaneously in aid-related contexts and, if they do, (2) whether they affect the ways in which people respond to requests for support. Even small individual effects might have large collective consequences so it is worthwhile pursuing research which attempts to make sense of the ways in which stereotyping and attempts to thwart it by suppression might affect the way people of wealthy nations respond to calls to alleviate global poverty.

Conclusions

The current experiment provides further evidence that actively suppressing thinking about members of a social group in a stereotypical fashion can have the unanticipated and ironic effect of causing increased stereotypic behaviour after the suppression has ceased. However, importantly, we have also shown that the increased stereotypic behaviour is not always

negative but depends on the content of the suppressed stereotype. Specifically suppression of stereotypes that possess at least one warm component (Africans living in poverty in this study) appears to lead to less negative stereotyping and increased approach behaviour. By contrast suppression of a less warm stereotype (wealthy Africans) leads to increased negative stereotyping and no change in approach behaviour.

Although these findings come from a controlled laboratory-based experiment these findings are potentially relevant to development organisations seeking assistance and aid from people in the minority world. The fostering of ‘warm but low competence’ stereotypes of people living in poverty in the majority world *may* inadvertently increase *active* helping such as increases in donations, commitment to help, and support for development – at least for those people who resist the stereotypic portrayals in aid advertising. The effects may be small at the individual level but could be significant at the collective level. However, caution is clearly called for here, as it is unclear how perceptions of low *competence* might affect responses to the efforts of development organizations to fundraise and raise awareness.

Based on the findings here and in Kennedy and Hill (2009) we would predict that mixed stereotypic content (e.g., high warmth, low competence) should lead to mixed rebound effects, such as an increase in active helping but also in passive harm. This might be reflected in positive responses to well-publicised calls for aid but disinterest and neglect at other times. If this turns out to be the case the message is clear – the continued use of images of the majority world poor that encourage the construction of ‘low competence stereotypes’ could undermine efforts to raise genuine, long-lasting awareness and garner support for those living in poverty.

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See Appendix Overleaf

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Appendix

Descriptors for Warmth (High/Low) and Competence (High/Low) Ratings in Essays

The description of the target person includes:

High Warmth

1. The person is described as helping other people
2. The person is described as playing with or entertaining other people
3. The person feels sad about the plight of others or is concerned for others
4. The person is described as being happy
5. The person is described as liking or loving others

Low Warmth

6. The person is described as not helping (exploiting, using) other people
7. The person is described as uninterested in other people or cold.
8. The person is unemotional or unconcerned about the plight of others
9. The person is described as being grim, hard, cynical
10. The person is described as disliking or hating others

High Competence

11. The person is described as working, having a good job
12. The person is described as having responsibilities for others (employees, family) or a business
13. The person is described as having important skills (farming, writing, leadership, business skills, crafts)
14. The person is described as being having some form of education (school, training, university)
15. The person is described as being intelligent, insightful, clever, astute

Low Competence

16. The person is described as jobless or struggling to make a living
17. The person is described as being dependent on others
18. The person is described as having few skills
19. The person is described as being uneducated
20. The person is described as being unintelligent, naïve, clueless, superstitious