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# Emotions as constituents, predictors and outcomes of dehumanization

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Because emotions are a defining factor of humanity as well as being involved in intergroup prejudice, the dehumanization of individuals and groups has often been studied in relation to emotions. First, perceptions of capacity to feel specific complex emotions have been used to measure perceptions of the human essence of other groups. Second, hostile emotions can promote the dehumanization of other groups. Finally, people who feel they are being dehumanized by others can have negative emotional reactions. The importance of emotions to social relations is reflected in the many ways in which they intersect with dehumanization.

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# Emotions as constituents, predictors and outcomes of dehumanization

The concept of *infrahumanization* pioneered by Leyens and colleagues is based on a distinction between two kinds of emotion rooted in Western philosophy. Aristotle in the *Rhetoric* situated some emotions as uniquely human, while others were shared with animals [1]. Later, in medieval scholastic philosophy, "the highest virtues, such as love, hope, and faith, were not classified as emotions as such, but were rather elevated to a higher status and often (e.g. by Thomas Aquinas) equated with reason" ([2], p. 6). David Hume also proposed that certain moral sentiments are particular to humans [3]. Some modern European languages, in line with this philosophical heritage, distinguish between hot passions (e.g. French 'émotion') and more cognitively complex sentiments (e.g. French 'sentiment'; [4]). It is this distinction that Leyens and colleagues drew upon, contrasting *secondary* emotions seen as uniquely human such as nostalgia and guilt, with *primary* emotions shared by all animals (at least mammals) such as fear and pleasure.

[5] initially proposed this distinction as an indirect measure of one aspect of intergroup bias: seeing other human groups as having a less than fully human essence, or infrahumanization. Three studies involving students from distinct groups - Canary Islands and mainland Spanish — showed that secondary emotions were seen as more typical of ingroup members, while primary emotions were attributed equally among groups. Subsequent research showed similar results among different national and ethnic group pairings [6,7] as well as showing implicit associations between group status and primary/secondary emotions [6,8]. Other studies have shown that expressions of secondary emotions can increase prosocial behaviors and evaluations, but only when they come from members of the ingroup [9-11]. For further reviews, see [12] and [13].

Although this research began with adult samples, research on children demonstrates that the perspective of emotions and other features associated with humanity also exists before adulthood [14-17]. This includes biases in primary and secondary emotion attribution among children [18,14,19,20]. [15], for example, showed in the context of ingroup and outgroup reactions to outcomes of national football matches that 6–7 and 10–11 year old children both showed emotional infrahumanization bias.

Sometimes, developmental effects are also shown or implied when comparing child to adult outcomes. For example, [21] replicated foundational work on the characteristics of emotions seen as uniquely human (e.g. [22,23]) among 11–12 year old children. While the children did not relate duration, morality and cross-cultural applicability to humanity of emotions, they did recognize that uniquely human emotions emerge later in life, are more cognitively complex, and are less visible. Children implicitly associated basic, universal emotions with the moral character of individuals, but adults instead related morality to culturally variable secondary emotions.

While the primary/secondary emotions paradigm has generated much research, questions remain about how it relates to the humanity concept. First, the term 'infrahumanization' was consciously coined in contrast to full dehumanization, or exclusion of a group from the human category [12]. In this view, believing that other groups are less capable of uniquely human emotional experience denies them fully human essence, without being seen as literally non-human. Thus, some objections to dehumanization as an explanation of historical atrocities are answered more convincingly by an infrahumanization account — for example, that victimized groups were subjected to humiliations that depended on their human status (e.g. [24,25]).

As an indirect measure, infrahumanization through emotions has other ambiguities. Its word lists are based on participant judgments of which emotions are characteristic of humans as opposed to other animals. However, [22] showed that secondary emotions had other differences from primary emotions: they were seen as less visible, more related to morality, more cognitively complex, longer lasting, developing later in life, internally caused, and culturally variable. Thus, infrahumanization through emotion endorsement may reflect other beliefs about a group than its human essence.

Cortes et al. [26] provided some evidence that outgroup infrahumanization could not be explained solely by the greater visibility of primary emotions (that is, familiarity with an ingroup might entail greater sensitivity to their more subtle expressions). Most research using the paradigm has also balanced positively versus negatively evaluated emotions of both types, so that results cannot be ascribed simply to associating an outgroup with more negative feelings. However, the possibility remains that people endorse more secondary emotions for ingroups because they believe these groups to be more moral, mature, cognitively advanced, etc.

A strong critique along these lines comes from recent studies specifically testing emotion words seen as uniquely human (as Demoulin et al. found for the likes of 'resentment' and 'disgust') but antisocial and unflattering to the group that feels them. These words, in fact, were attributed more to outgroups than to ingroups [27]. This suggests that emotion-based biases reflect judgments of the morality or desirableness of the group more than their humanity.

In the infrahumanization paradigm, it is also not strongly acknowledged that participants might attribute emotions

to a group based on their situation rather than their essence. For example, they may assume that a disadvantaged outgroup feels shame, resentment, humiliation, and other secondary emotions, or a privileged outgroup feels pride and contempt, because of their status, or following specific historical occurrences. This 'noise' in the paradigm may account for instances in which predicted group bias did not materialize (e.g. [26,28]).

Finally, emotions have been connected to dehumanization beyond the primary-secondary comparison. For example, dehumanizing people as machines or inanimate objects implies denying them all subjective experience, including emotions. In [29] research, denial of human nature (HN), as opposed to human uniqueness (HU), means denying characteristics associated with any kind of emotionality. Interestingly, [30] also note a more thorough denial of feelings, including pain, as a problem in the medical profession's relations with patients, especially across divides of race or social status. However, some studies show that when participants are presented with low HN (mechanized) and low HU (animalized) groups, secondary emotions are denied to both groups. And conversely, when groups with low secondary emotions are presented, participants deny them both traits of HN and HU [31]. These findings may show the importance of secondary emotions such as curiosity in signaling the warmth and humane nature of outgroups.

There are other ways in which emotion can relate to humanity without involving secondary emotions. [32] showed that feeling primary emotions similar to outgroup members' reported emotions (specifically, fear vs. anger towards an increase in traffic accidents) improved Jewish Israelis' attitudes towards Palestinians, and reduced dehumanization of them. Other research [33] compared outgroups who were described as feeling four primary emotions on two separate occasions. The emotions were either grouped to have the same valence at any given occasion (e.g. fear + anger, both negative), or to be mixed-valence on both occasions (e.g. fear + joy). The mixed-valence emotions increased positivity of attitudes toward outgroups and reduced their dehumanization, presumably because the ability to feel conflicting primary emotions is also a sign of a complex inner life.

# Which emotions lead to dehumanization?

Although we have discussed primary/secondary emotions as an indicator of humanity, some studies have investigated the active role that emotions can play in dehumanizing other people and groups. Initially, [29] showed that animalistic dehumanization of other groups is more related to negative emotions such as disgust and contempt while mechanistic dehumanization is linked to indifference and lack of empathy.

From the subsequent research literature, disgust and contempt seem to be the emotions most often studied for links with a lower attribution of humanity (for a review, see [34]). For example, [35] showed that the dehumanization of refugees implies contempt and lack of admiration towards this group, while others [19] have shown how disgust and contempt are precedents of the dehumanization of immigrants. Experimentally induced disgust has also been linked to increased outgroup dehumanization [36]. [37] showed that when groups that elicited disgust in participants (such as homeless people) were presented, the area of the brain responsible for social perception (the medial prefrontal cortex) was not activated. More generally, in the context of the conflict between Israel and Palestine, [38] found that blatant dehumanization was associated with intergroup emotional hostility between both groups.

Often, however, these studies have tried to confirm the hypothesis of links between dehumanization and a single emotion, without taking a comparative approach. Challenging the assumption of a special relationship between disgust and dehumanization, [39] showed that anger and fear also relate to direct denial of human status, just as strongly as disgust. While disgust responded to bodily and contamination concerns associated with dehumanization, anger and fear responded to groups dehumanized because they were judged as evil and threatening. Fear also had a unique role as a predictor of mechanistic dehumanization.

Certainly, more studies are needed to involve emotions other than anger and fear (such as contempt, hatred or frustration) as well as additional emotions specifically linked to mechanistic dehumanization (for instance, envy). But taken together, these studies highlight how dehumanization is linked to hostile emotions and also suggest how these emotional states might facilitate negative attitudes towards dehumanized groups.

#### What do dehumanized groups feel?

The emotional experience of victims of dehumanization remains relatively unresearched, except for a handful of works. Pioneering this topic, [40] proposed that being targeted by each of the two dimensions of dehumanization (i.e. animalistic and mechanistic) provokes a specific emotional experience and cognitive response by the victim. In two studies, these authors found that animalistic dehumanization especially elicited self-conscious emotions (shame, embarrassment, and guilt) and self-conscious cognition (e.g. aversive self-awareness), whereas mechanistic dehumanization elicited non-selfconscious emotions (anger and sadness) and cognitive deconstructive states (e.g. not being able to think clearly, numbing) related to the experience of social exclusion [41]. The explanation was that victims experiencing denials of HU (i.e. animalistic dehumanization) have their status threatened, which would then evoke self-conscious emotions. In contrast, denials of HN (i.e. mechanistic dehumanization) threaten core aspects of the victim's identity, leading to reduced selfawareness and self-regulation [41]. However, no direct evidence supporting these processes was provided.

The findings of Bastian and Haslam were only partially replicated by [42] in two studies that, as the authors acknowledged, had some limitations (for instance, the lack of a measure for shame in one of the studies, and the different methods used to compare the emotions evoked by both types of dehumanization). Further research is therefore needed to confirm the hypotheses proposed by Bastian and Haslam. In particular, their argument about identity threat from mechanistic dehumanization leading principally to non-self-conscious emotions is difficult to reconcile with literature about shame and humiliation, which has identified threat to the target's identity as a key appraisal [43]. Humiliation has been also associated with severe experiences of maltreatment that threaten the target's identity [44], making this emotion a likely response to mechanistic dehumanization.

Women are often dehumanized especially by hostile sexist people [45], as well as in the form of sexual objectification. Some studies have found robust evidence that the experience of sexual objectification among women triggered primarily shame (humiliation was not measured), mediated by self-objectification [46]; that is, adopting the third-person objectified perspective of their own bodies [47]. Self-objectification bears obvious similarities to the internalization of a devaluation of the self, a cognitive appraisal mediating the effect of maltreatment on the emotional experiences of shame and humiliation [43]. Indeed, a recent gualitative research conducted in a suburb of Pietermaritzburg, South Africa [48] found that Black African residents who worked or had a family member who worked as a domestic laborer for an Indian<sup>1</sup> family experienced humiliation as a consequence of the dehumanizing treatment received from the high-status employer group members.

To sum up, from the still scarce literature about the emotional response of victims of dehumanization it can be concluded that experiencing dehumanization triggers strong negative emotions. Given the threat to core aspects of the victim's identity that dehumanization implies, strong negative self-conscious emotions such as

<sup>&</sup>lt;sup>1</sup> Indian South Africans descend from migrants from British India who arrived at the beginning of the 20th Century. Their status as a racial group in South Africa has historically been slightly higher than that of Black people.

shame and humiliation should be given more consideration in future research.

## Conclusion

Dehumanization cannot be understood without including the study of emotions and their impact on intergroup relations. Whether emotions are seen as a component of dehumanization, an instigator of dehumanization, or an outcome of communication of dehumanizing attitudes, research has taken multiple perspectives on the dehumanizing encounter. This multiplicity creates challenges in research at times. For example, if we want to see how emotional feelings affect the tendency to dehumanize other groups, the infrahumanization measures that are themselves based on emotions are less advisable to use, because of the influence of awareness of one emotion upon judgments of the others. As another example, feelings are part of the stereotype of women. Thus, if we ask the participants to indicate how many feelings they attribute to them, it is possible to observe a spurious 'hyperhumanization' of women that is actually a simple reflection of the traditional stereotype by which they are perceived as especially emotional, warm and affectionate. Nevertheless, research that proceeds in parallel to examine all of these perspectives separately has the potential to further our understanding of dehumanization, perhaps the one form of discrimination that carries the most extreme exclusionary implications.

# **Data Availability**

No data was used for the research described in the article.

### **Declaration of Competing Interest**

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