

THE EFFECT OF MOOD ON THE EXPRESSION OF STEREOTYPES AS A FUNCTION OF NORMATIVE PRESSURE

Françoise Askevis-Leherpeux, Loris Tamara Schiaratura, Céline Douilliez

Presses universitaires de Grenoble | « [Revue internationale de psychologie sociale](#) »

2012/2 Tome 25 | pages 41 à 57

ISSN 0992-986X

Article disponible en ligne à l'adresse :

<https://www.cairn.info/revue-internationale-de-psychologie-sociale-2012-2-page-41.htm>

Pour citer cet article :

Françoise Askevis-Leherpeux *et al.*, « The effect of mood on the expression of stereotypes as a function of normative pressure », *Revue internationale de psychologie sociale* 2012/2 (Tome 25), p. 41-57.

Distribution électronique Cairn.info pour Presses universitaires de Grenoble.

© Presses universitaires de Grenoble. Tous droits réservés pour tous pays.

La reproduction ou représentation de cet article, notamment par photocopie, n'est autorisée que dans les limites des conditions générales d'utilisation du site ou, le cas échéant, des conditions générales de la licence souscrite par votre établissement. Toute autre reproduction ou représentation, en tout ou partie, sous quelque forme et de quelque manière que ce soit, est interdite sauf accord préalable et écrit de l'éditeur, en dehors des cas prévus par la législation en vigueur en France. Il est précisé que son stockage dans une base de données est également interdit.

The effect of mood on the expression of stereotypes as a function of normative pressure

L'effet de l'humeur sur l'expression des stéréotypes en fonction de la pression normative

*Françoise Askevis-Leberpeux**

*Loris T. Schiaratura**

*Céline Douilliez**

Abstract

This study examined the influence of mood states on the expression of stereotypes as a function of normative pressure. Sad or happy participants were asked to list either cultural stereotypes or personal beliefs about a high or a low normatively protected group. The valence of these attributes, the percentage of group members assumed to share these attributes, and the abstractness of the descriptions were analysed. As expected, mood affected the expression of group stereotypes only when normative pressure was low. When listing cultural stereotypes about a low protected group, sad participants (in comparison to happy ones) were more likely to associate negative characteristics with the group, but were less prone to make generalisations about the group or to use abstract attributes to describe it. Results are discussed in terms of the role of normative pressure in

Résumé

Cette étude examine l'effet des états émotionnels sur l'expression des stéréotypes en fonction de la pression normative. On a demandé à des participants tristes ou joyeux de lister les stéréotypes culturels ou leurs croyances personnelles concernant un groupe à forte ou faible protection normative. L'analyse a porté sur la valence des attributs, le pourcentage des membres du groupe supposés les partager et le degré d'abstraction des descriptions. Conformément aux hypothèses, l'état émotionnel n'a d'effet que lorsque la pression normative est faible. Quand ils ont à lister les stéréotypes culturels d'un groupe faiblement protégé, les participants mis dans un état de tristesse utilisent plus de caractéristiques négatives, mais sont moins enclins à faire des généralisations et à utiliser des attributs abstraits, que ceux qui se sentent joyeux. La discussion est centrée sur le rôle

Key-words

Stereotyping, valence, generalisation, abstractness, mood states, normative pressure

Mots-clés

Stéréotypisation, valence, généralisation, abstraction, état émotionnel, pression normative

We thank Leslie Jouastel and Simon Vasseur-Bacle for collecting data. We also thank François Ric for his helpful comments and Holly Miller for her proof-reading of the manuscript.

*Laboratoire PSITEC, Université Lille Nord de France – UDL3, Domaine Universitaire du "Pont de Bois", 59653 Villeneuve d'Ascq Cedex, France. E-mails: francoise.askevis-leberpeux@univ-lille3.fr; loris.schiaratura@univ-lille3.fr; celine.douilliez@univ-lille3.fr

moderating the impact of mood states on stereotyping at both individual and group levels.

modérateur de la pression normative dans le lien entre humeur et stéréotypisation individuelle et groupale.

For the last three decades, a lot of research has examined the role of mood on stereotyping and, more precisely, on stereotype application. However, most studies have examined situations where participants were asked to judge individual group members, and have neglected situations that may concern a group as a whole (Bodenhausen, Mussweiler, Gabriel, & Moreno, 2001).

An extensive literature on individual group members' judgments suggests that mood¹ influences the integration of categorical and individuating information. Compared to happiness, sadness promotes systematic processing (Bless & Schwarz, 1999) and reduces reliance on stereotypes. Sad people do not simply ignore stereotypic information but they also appear to correct their stereotypes before integrating all pieces of information (Lambert, Khan, Lickel, & Fricke, 1997). Stereotype activation is followed by an evaluation of its appropriateness, based on societal norms against stereotyping and prejudging others.

At this stage, sadness serves as a signal that the situation is problematic (Schwarz, 2001) and increases motivation to correct stereotypes before integrating all available information (Lambert et al., 1997).

By contrast, research examining the role of mood in judging groups as units and expressing stereotypes is scarce and results are mixed. For instance, Esses and Zanna (1995) have observed that people in a negative mood expressed more negative stereotypes than people in a positive mood. Nevertheless, there was no effect of mood on the tendency to make generalisations about groups. The authors concluded that sadness makes the evaluative meaning of attributes consistent with mood state, but is not

1. In this paper, we use either "mood" or "affect" as qualifying a low-level affective state, more objectless and longer term than a specific emotion (for a discussion of definitions, see e.g. Niedenthal, Krauth-Gruber, & Ric, 2006).

associated with any change in stereotyping. This conclusion appears inconsistent with other studies demonstrating that sadness increases deliberative processing and reduces perceived group homogeneity (Stroessner & Mackie, 1992), even within novel groups for which no stereotype is available (Stroessner, Mackie, & Michalsen, 2005). Moreover, some studies suggest that sad people do not use the same kind of attributes as happy ones. Mood influences processing style and linguistic abstractness of cognitive representations. Compared with happy people, sad people use more analytic and contextual descriptions and tend to avoid using broad mental categories that are more resistant to change (Beukeboom & Semin, 2006). To summarize, it appears that mood influences not only the valence of stereotypic attributes but also two aspects of stereotyping, i.e., within-group generalisation and abstractness of descriptions.

Nevertheless, while it has been shown that mood effects depend on situational factors and can be eliminated by motivational goals (e.g., Berkowitz, Jaffee, Jo, & Troccoli, 2000; Forgas, 2002), the aforementioned studies did not take the normative context into account. Thus, the main objective of the present study was to examine whether normative pressure influenced the tendency of sad people to express more negative stereotypes, to perceive groups as less homogeneous, and to describe groups in less abstract terms, than happy people.

Normative pressure is defined in terms of the characteristics of the target group (low vs. high normative protection) and the type of judgement required about that group (cultural stereotypes vs. personal beliefs). Recent literature on prejudice emphasizes the role of groups' normative protection (Dambrun & Guimond, 2004; Franco & Maass, 1999). Protection is low when it is normatively appropriate to express negative feeling. On the contrary, normative protection is high when there is a high external motivation to control the expression of negative stereotypes (Crandall, Eshelman, & O'Brien, 2002). This literature also emphasizes the distinction between cultural stereotypes and personal beliefs (Devine, 1989). A cultural stereotype is defined as how individuals believe that ingroup members perceive other groups. Through exposure and learning, cultural stereotypes become

internalised and strongly associated with their target group. These stereotypes are automatically activated upon encountering group members or a symbolic representation of the group. In contrast, personal beliefs are endorsed and accepted as being true. Their expression requires conscious attention and is sensitive to normative context (for a review, see Devine & Monteith, 1999).

Thus normative pressure is lower when the target group is low, rather than highly, protected, and when participants have to give cultural stereotypes, rather than personal beliefs.

Knowing that mood effects can be eliminated when motivation goals dominate responding (Forgas, 2002), we predicted that mood would interact with normative pressure.

Mood should affect the expression of stereotypes only in the absence of normative cues that activate control and elaboration, more specifically, when (a) the target-group is low, rather than high protected and (b) when participants have to express cultural stereotypes, rather than personal beliefs. Under these circumstances, sad participants should be more likely to associate negative characteristics with the target group than happy ones (Hypothesis 1). They should also be less prone to make within group generalisations (Hypothesis 2) and to use abstract attributes to describe the group (Hypothesis 3). Nevertheless, we are not in a position to predict whether the effect of mood should occur when either source of normative pressure is removed (sufficiency) or when both sources are removed (necessity). It may be that both normative cues may be necessary; alternatively, one of these alone may be sufficient to cancel mood effects.

These hypotheses were tested by focusing on stigmatized people suffering from physical limitations and disabilities, which received less attention in psychology compared to the dominant interest in ethnicity and gender prejudice (Nosek et al., 2007).

Method

Overview

Students were recruited to participate in two ostensibly unrelated studies, one on “life events” and the other on “group perception”. In fact, there was only one study composed of two sessions. The first session was used to induce either a positive or a negative mood state. The second session assessed cultural stereotypes vs. personal beliefs (type of judgment) about blind vs. overweight people (normative protection). The choice of the two target groups was based on a pre-test showing that blind people are normatively more protected than overweight people (see “normative protection” section below).

Participants and design

Participants consisted of 120 female undergraduate students from different departments at the University of Lille 3, France (mean age = 20.37 years). Only women were recruited because of their greater availability on campus. They were recruited to participate in two studies on an unpaid voluntary basis and were randomly assigned to one of the 8 conditions of a 2 (mood induction) x 2 (normative protection) x 2 (type of judgment) between-participants factorial design. Data from six participants were excluded from the analyses because of missing data.

Normative protection: choice of groups

A pre-test was conducted in order to identify two groups (a) differing in normative protection, but (b) equally viewed as moderately negative. Cultural stereotypes rather than personal beliefs were collected because of their higher negativity and their lower context-dependency (Devine & Elliott, 1995; Krueger, 1996). Forty-eight psychology students at the University of Lille 3 (France), not enrolled in the main research, were recruited to participate in a study on perception of social groups. They were informed that the research focused on people’s knowledge of cultural stereotypes, that is how they think ingroup members see these groups. It was specified that it did not imply that they shared these beliefs. Participants were asked to list the content of

cultural stereotypes of people suffering from eight different physical or intellectual disabilities (alcoholism, Aids, Alzheimer disease, blindness, cancer, drug abuse, overweight, and paraplegia). The 8 groups were separated into two different lists. Each list was rated by 24 participants, who were given a sheet of paper with blank lines to list attributes making up the cultural stereotype of each group. They were subsequently asked to rate how acceptable it was at their university to express negative opinions about each group, on a scale ranging from 1 (not at all acceptable) to 9 (totally acceptable). Five independent raters classified attributes as positive, negative, or undefined. An attribute was classified as either positive or negative if at least four judges agreed on its valence. Two groups fulfilled this criteria: blind and overweight people. Participants indicated that it was less acceptable to express negative opinions about blind people ($M = 4.50$) than about overweighted people ($M = 7.75$), $t(46) = 6.49$, $p < .001$. Moreover, overall proportion of negative attributes was moderate (.54), and was similar for those who were blind (.49) and overweight (.58), $\chi^2_{(1)} = 0.69$, *ns*.

Procedure

Participants were individually enrolled in two independent sessions. The aim of the first session was to induce either happiness or sadness. The second session assessed groups' descriptions, i.e. either cultural stereotypes or personal beliefs. In order to increase credibility, the two sessions took place in two different rooms and were conducted by two different experimenters. The two experimenters were counterbalanced, and participants signed two consent forms, one for each session.

Mood induction

The first session was presented as a study aimed at the construction of a Life Event Inventory (Krauth-Gruber & Ric, 2000). Following a recall-of-events procedure, participants were asked to recall and write about an event that made them either very happy or very sad. Instructions emphasized writing concrete and vivid reports (Strack, Schwarz, & Gschneidinger, 1985). Participants were allotted 10 minutes to complete the task. They were then asked to rate on scales ranging from 1 (not at all) to 6

(extremely) how they felt at the moment: troubled, happy, sad, and touched. Happiness and sadness scales were counterbalanced and used as a manipulation check.

Experimental tasks

After they had completed the first session, participants moved to another room. A second experimenter presented to them the second session as a separate study on social perception, and more precisely, on how people suffering from physical disabilities are perceived. Participants were given a booklet. Depending on the condition, the first page explained that the researchers were interested in cultural stereotypes or personal beliefs. In the “cultural stereotypes” condition, an additional page provided a definition of a cultural stereotype (see pre-test procedure). The following pages introduced the group under study (either blind or overweight people) and the tasks.

According to the condition, participants were asked to write down either what they thought the cultural stereotype of the group was or their personal beliefs about that group. Instructions mentioned using adjectives or short sentences, and starting a new line for every new attribute. There was no limitation on the number of attributes. Following a procedure adapted from Esses and Zanna (1995), participants were asked to come back after they had finished writing down all the attributes, and to assign a valence to each of them, by rating it as (--), (-), (0), (+) or (++) . Finally, they were asked to indicate the percentage of group members to whom each attribute applied, a higher percentage indicating a higher perceived homogeneity (Brigham, 1971; Esses & Zanna, 1995).

Normative protection of the group under judgment was rated on a scale ranging from 1 (not at all protected, it is totally acceptable to express negative opinion about that group at the university) to 9 (totally protected, it is not at all acceptable to express negative opinions at the university).

Debriefing

Participants were orally debriefed and given a paper explaining the theoretical rationale for the study. No one suspected that there was only one study or that both sessions were related.

Dependent measures

Three aspects of groups' descriptions were analysed: (1) *negativity*, defined as the proportion of negative attributes², (2) *within group generalisation*, measured by the percentages of people within the population believed to share the attributes, and (3) *abstractness*, defined as the proportion of abstract attributes.

Coding of abstractness was initially based on a distinction between label and individual attributes. While label attributes refer to group membership, individual ones apply to specific individuals and can be used to individuate or subtype group members³. Here, a label attribute described how the pathology was perceived (e.g. its origins) or how the group was treated by others (e.g. stigmatisation or discrimination), instead of giving information about individual group members. Thus, only individual attributes (85%) were coded in terms of abstractness. Following the procedure used by Askevis-Leherpeux and Bastounis (1998), attributes were coded as concrete if they provided information about appearance (how people look like, e.g., smiling or poorly dressed) or activities (what do they do, e.g. often watch at TV or live alone). They were coded as abstract if they described properties (how people are internally, e.g., open-minded or anxious), providing generalised and context-free descriptions (Hamilton, Gibbons, Stroessner, & Sherman, 1992; Semin, & Fiedler, 1988). Six independent judges scored the attributes. An attribute was classified as abstract if four judges at least agreed on its content. Abstractness was measured by the

2. A preliminary analysis of negativity with extremity of judgments ([- -] vs. [-]) as a within subject factor did not reveal any main or interaction effects. Thus, results did not take this factor into account.

3. This distinction is similar to the difference between "images", qualifying nations, and "attributes" qualifying people (Hewstone, 1986).

frequency (in %) of attributes describing group members with abstract traits.

Results

Manipulation checks

Normative protection

Analysis confirmed that the group of blind people was perceived as more protected ($M = 6.24$) than the group of overweight people ($M = 4.85$), $F(1, 112) = 14.87, p < .001, \eta^2 = .12$.

Mood induction

Self-reports were analysed as a function of mood condition and of self-report scale (happiness vs. sadness) as a within-participant factor. Analysis revealed a significant interaction between mood and self-report scale, $F(1, 112) = 154.57, p < .001, \eta^2 = .58$. As intended, participants in the happy condition rated themselves as significantly happier than participants in the sad condition ($M = 4.46$ vs. $M = 1.87$), $F(1, 112) = 139.01, p < .001, \eta^2 = .55$. Inversely, participants in the sad condition rated themselves as more sad than their happy counterparts ($M = 3.82$ vs. $M = 1.70$), $F(1, 112) = 83.48, p < .001, \eta^2 = .42$.

Preliminary Analyses

First, the total number of attributes was analysed as a function of mood condition (happiness vs. sadness), normative protection (high vs. low), and type of judgment (cultural stereotypes vs. personal beliefs) as between-participants factors. The number of attributes depended on normative protection, $F(1,106) = 5.03, p < .05, \eta^2 = .04$, and type of judgements, $F(1,106) = 4.11, p < .05, \eta^2 = .04$. Protection reduced the length of descriptions (4.92 vs. 5.88) and personal beliefs were richer than cultural stereotypes (5.82 vs. 5.03). There was no mood effect and no interaction effect. Second, correlational analyses showed that negativity was negatively related to percentages, $r(112) = -.34, p < .001^4$ and to

4. As a consequence, analysis of stereotype score used by Esses & Zanna (1995), combining valence and percentage, did not reveal any mood effect or interaction effect with mood.

abstraction, $r(112) = -.26, p < .001$. Percentages and abstraction were unrelated, $r(112) = .14, ns$.

Hypotheses testing

Negativity, percentages, and abstractness (see Table1) were separately analysed as a function of mood condition (happiness vs. sadness), normative protection (high vs. low), and type of judgment (cultural stereotypes vs. personal beliefs) as between-participants factors (one-tailed tests).

TABLE 1:
Mean proportion of negative attributes, mean percentage associated with attributes, and mean proportion of abstract attributes, as a function of mood condition, type of judgments and normative protection.

Mean proportion of negative attributes (<i>SD</i>)				
Mood condition	Cultural stereotypes		Personal beliefs	
	Low protection	High protection	Low protection	High protection
Happiness	.59 (.22)	.39 (.26)	.64 (.23)	.31 (.22)
Sadness	.79 (.19)	.38 (.33)	.55 (.23)	.33 (.31)
	$p < .05$	<i>ns</i>	<i>ns</i>	<i>ns</i>
Mean percentage associated with attributes (<i>SD</i>)				
Mood condition	Cultural stereotypes		Personal beliefs	
	Low protection	High protection	Low protection	High protection
Happiness	43 (15)	44 (16)	44 (20)	57 (13)
Sadness	29 (14)	44 (16)	45 (13)	46 (14)
	$p < .01$	<i>ns</i>	<i>ns</i>	<i>ns</i>
Mean proportion of abstract attributes (<i>SD</i>)				
Mood condition	Cultural stereotypes		Personal beliefs	
	Low protection	High protection	Low protection	High protection
Happiness	.60 (.19)	.63 (.36)	.64 (.26)	.68 (.34)
Sadness	.42 (.34)	.64 (.32)	.52 (.19)	.84 (.26)
	$p = .05$	<i>ns</i>	<i>ns</i>	<i>ns</i>

When significant, three way interactions were analysed using two contrasts (see Table 2), testing a sufficiency pattern (mood effect when either source of normative pressure is removed) vs. a necessity pattern (mood effect only when both sources of normative pressure are removed).

Mood condition	Cultural stereotypes		Personal beliefs	
	Low protection	High protection	Low protection	High protection
I. Sufficiency				
Happiness	+1	+1	+1	0
Sadness	-1	-1	-1	0
II. Necessity				
Happiness	+1	0	0	0
Sadness	-1	0	0	0

TABLE 2:
Sufficiency and necessity contrast weights used to analyze the three way interactions.

*Negativity*⁵

Analysis of the proportion of negative attributes first showed that judgments about the more protected group were less negative ($M = .35$) than judgments about the less protected one ($M = .65$), $F(1, 106) = 38, p < .001, \eta^2 = .26$. It also revealed that cultural stereotypes were more negative ($M = .55$) than personal beliefs ($M = .46$), $F(1, 106) = 2.67, p = .05, \eta^2 = .02$. These main effects were not qualified by mood. Nevertheless, data revealed a three way interaction between mood induction, normative protection and type of judgement, $F(1, 106) = 2.75, p = .05, \eta^2 = .02$. Only necessity contrast was significant, $F(1, 106) = 4.62, p < .05, \eta^2 = .04$, vs. $F(1, 106) < 1, ns$. Compared with happiness, sadness increased negativity of cultural stereotypes associated with the less protected group ($M = .79$ vs. $M = .59$). In the other three cases, there was no mood effect.

Percentages

Analysis of percentages associated with attributes revealed that participants associated higher percentages to the more protected group ($M = 47\%$ vs. $M = 40\%$), $F(1, 106) = 7.44, p < .01, \eta^2 = .06$. They were also more prone to generalise personal beliefs ($M = 47\%$) than cultural stereotypes ($M = 40\%$), $F(1, 106) = 7.13, p < .01, \eta^2 = .06$

Data also confirmed that participants in a negative mood associated attributes with lower percentages ($M = 41\%$) than

5. We ensured that there was no mood effect (either main or interaction) on the proportion of positive attributes.

participants in a positive mood ($M = 47\%$), $F(1, 106) = 4.54, p < .05, \eta^2 = .04$. Moreover, there was a three-way interaction between mood induction, normative protection, and type of judgement, $F(1, 106) = 5.19, p < .05, \eta^2 = .05$. Only the necessity contrast was significant, $F(1,106) = 7.16, p < .01, \eta^2 = .06$, vs. $F(1,106) = 2.05, ns$. Compared with happiness, sadness decreased generalisation of cultural stereotypes associated with the less protected group ($M = 29\%$ vs. $M = 43\%$). In the other three cases, there was no mood effect.

Abstractness

Analysis of the proportion of abstract attributes first revealed that descriptions of the more protected group were more abstract ($M = .70$) than descriptions of the less protected one ($M = .54$), $F(1, 106) = 7.55, p < .01, \eta^2 = .07$. It also revealed an effect of type of judgment, $F(1, 106) = 3.14, p = .05, \eta^2 = .03$, showing that personal beliefs were more abstract ($M = .67$) than cultural stereotypes ($M = .57$). Finally, there was an interaction between mood induction and normative protection, $F(1, 106) = 4.64, p < .05, \eta^2 = .04$. Compared to happiness, sadness reduced abstractness of the low protected group descriptions ($M = .47$ vs. $M = .63$), $F(1,106) = 4.02, p < .05, \eta^2 = .03$. There was no effect of mood in the case of high protection.

Discussion

The aim of this research was to examine the role of mood in judging groups as units as a function of two sources of normative pressure, group normative protection and type of judgements. Free group descriptions were analysed in terms of valence of attributes, percentage of group members assumed to share attributes, and linguistic abstractness.

A preliminary analysis of the total number of characteristics did not reveal any effect of mood, confirming that a negative mood does not disrupt the ability to generate attributes (Esses, Haddock, & Zanna, 1994). This analysis also revealed effects of normative pressure, suggesting that the stereotypes of low protected groups are more complex than the stereotypes of high

protected ones, and that it is easier to list personal beliefs than cultural stereotypes.

Results overall confirmed that mood affects expression of stereotypes only when normative pressure is low. In comparison with happiness, sadness increased negativity (Hypothesis 1) and decreased percentages (Hypothesis 2) only when both pressures were low, that is when participants had to give cultural stereotypes about the low-protected group. In contrast, when they were asked to provide judgments about a high protected group or to list personal beliefs, sad participants did not differ from happy ones. This may explain why Esses and Zanna (1995) did not observe any mood effects on percentages when they asked for personal beliefs about different outgroups. Nevertheless, mood effects on abstractness (Hypothesis 3) depended only on normative protection. The reason why the effect of mood was not moderate by type of judgment deserves further examination.

Moreover, correlational analyses revealed an interesting pattern. First, negativity was negatively related to percentages, indicating that negative descriptions are generalised less than positive ones. One may argue that this simply reflects the fact that individuals are less willing to apply negative attributes than positive attributes to a group. Nevertheless, introducing valence of attributes as an additional factor showed that valence had no effect on percentages. Second, like Maass, Montalcini, and Biciotti (1998), we observed a negative correlation between negativity and abstractness, indicating that negative stereotypes are less abstract than positive ones. This implies that negative descriptions are more concrete and more prone to be disconfirmed. Finally, we observed that homogeneity and abstractness were unrelated. Increasing abstractness of group descriptions does not imply assuming that groups are more homogeneous. It may be due to the fact that linguistic processes are less controlled than explicit expressions of stereotyping such as percentages (Dambrun & Guimond, 2004). In line with this interpretation, post hoc analyses showed that the correlation between abstraction and percentages depended on normative protection, and was marginally higher when the normative protection was low, $r(57) = .27$, $p < .05$, rather than high, $r(53) = -.09$, ns, $\chi^2_{(1)} = 3.69$, $p = .054$.

But, it may also mean that homogeneity and abstractness refer to different aspects of stereotyping, respectively within group attribute sharing and attribute breadth (Maass et al., 1998).

To summarize, we demonstrated that, when normative pressure is low, sadness (in comparison to happiness) makes stereotypic thoughts more negative. These thoughts are less likely to be applied to individual group members and to consist of abstract attributes. What is potentially more harmful? Negativity or generalisation? Negativity or abstractness? When integrating stereotypic information with individuating one, sadness should increase negativity of stereotypic information. At the same time, it should decrease the probability of its application to individual group members and decrease the probability of using attributes that are resistant to disconfirmation.

In conclusion, in comparison with happiness, sadness increases negativity of stereotypic thoughts, but may reduce stereotyping at two levels. First, as largely illustrated in the literature, sadness reduces stereotype application at an individual level (e.g., Bodenhausen et al., 2001). When required to integrate categorical and individuating information, sad people are less likely to base their judgement on stereotypes than happy one, especially if they consider stereotypic thoughts as inappropriate (Lambert et al., 1997). However, as demonstrated by our study, sadness also reduces stereotyping independently of any integration of stereotypic information with individuating one. When they have to judge groups as units, sad people are more prone to express negative characteristics, but less prone to make generalisations and to use abstract descriptions. Thus, compared with happiness, sadness exacerbates group-level evaluations, but reduces the application of group-level evaluation to individual judgments. This confirms that we have to “warn against the broad usage of terms such as stereotyping” (Park & Banaji, 2000, p. 1020). Nevertheless, this balance between valence of stereotypic thoughts and their applicability looks encouraging. People are hopefully less often sad than happy, and this role of sadness is cancelled by normative pressure. At this stage, we need more research on the role of normative pressure in moderating the

impact of mood states on judging not only individual group members, but also the group to which they belong.

References

Askevis-Leherpeux, F., & Bastounis, M. (1998). Differences in ingroup-outgroup representations: An empirical examination of the familiarity hypothesis. *International Review of Social Psychology*, *11*, 19-31.

Berkowitz, L., Jaffee, S., Jo, E., & Troccoli, B. T. (2000). On the correction of feeling-induced judgmental bias. In J. P. Forgas (Ed.), *Feeling and thinking: The role of affect in social cognition* (pp. 131-152). New York: Cambridge University Press.

Beukeboom, C. J., & Semin, G. R. (2006). How mood turns in language. *Journal of Experimental Social Psychology*, *42*, 553-566.

Bless, H., & Schwarz, N. (1999). Sufficient and necessary conditions in dual-process models: The case of mood and information processing. In C. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp. 423-440). New York: The Guilford Press.

Bodenhausen, G. V., Mussweiler, T., Gabriel, S., & Moreno, K. N. (2001). Affective influences on stereotyping and intergroup relations. In J. P. Forgas (Ed.), *Handbook of affect and social cognition* (pp. 319-343). Mahwah, NJ: Laurence Erlbaum Associates, Inc.

Brigham, J. C. (1971). Ethnic stereotypes. *Psychological Bulletin*, *76*, 15-38.

Crandall, C. S., Eshleman, A., & O'Brien, L. T. (2002). Social norms and the expression and suppression of prejudice: The struggle for internalization. *Journal of Personality and Social Psychology*, *82*, 359-378.

Dambrun, M., & Guimond, S. (2004). Implicit and explicit measures of prejudice and stereotyping: Do they assess the same underlying knowledge structure? *European Journal of Social Psychology*, *34*, 663-676.

Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, *56*, 5-18.

Devine, P. G., & Elliott, A. (1995). Are racial stereotypes really fading? The Princeton trilogy revisited. *Personality and Social Psychology Bulletin*, *22*, 22-37.

Devine, P. G., & Monteith, M. J. (1999). Automaticity and control in stereotyping. In C. Chaiken & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp. 339-360). New York: The Guilford Press.

Esses, V. M., & Zanna, M. P. (1995). Mood and the expression of stereotypes. *Journal of Personality and Social Psychology*, *69*, 1052-1068.

Esses, V. M., Haddock, G., & Zanna, M. P. (1994). The role of mood in the expression of intergroup stereotypes. In M. P. Zanna & J. M. Olson. (Eds.), *The Psychology of Prejudice: The Ontario Symposium* (Vol. 5, pp. 77-101). Hillsdale, NJ: Laurence Erlbaum.

Forgas, J. P. (2002). Feeling and doing: Affective influences on interpersonal behaviour. *Psychological Inquiry*, *13*, 1-28.

Franco, F. M., & Maass, A. (1999). Intentional control over prejudice: When the choice of the measure matters. *European Journal of Social Psychology*, *29*, 419-556.

Hamilton, D. L., Gibbons, P. A., Stroessner, S. J., & Sherman, J. W. (1992). Stereotypes and language use. In G. R. Semin & K. Fiedler (Eds.), *Language, Interaction and Social Cognition* (pp. 102-128). London: Sage.

Hewstone, M. (1986). *Understanding attitudes to the European Community: A social-psychological study in four member states*. Cambridge: Cambridge University Press.

Krauth-Gruber, S., & Ric, F. (2000). Affect and stereotypic thinking: A test of the mood-and-general-knowledge model. *Personality and Social Psychology Bulletin*, *26*, 1587-1597.

Krueger, J. (1996). Personal beliefs and cultural stereotypes about racial stereotypes. *Journal of Personality and Social Psychology*, *71*, 536-548.

Lambert, A. J., Khan, S. R., Lickel, B. A., & Fricke, K. (1997). Mood and the correction of positive versus negative stereotypes. *Journal of Personality and Social Psychology*, 72, 1002-1016.

Maass, A., Montalcini, F., & Biciotti, E. (1998). On the (dis-)confirmability of stereotypic attributes. *European Journal of Social Psychology*, 28, 383-402.

Nosek, B. A., Smyth, F. L., Hansen, J. J., Devos, T., Lindner, N. M., Ranganath, K. A., Smith, C. T., Olson, K. R., Chugh, D., Greenwald, A. G., & Banaji, M. R. (2007). Pervasiveness and correlates of implicit attitudes and stereotypes. *European Review of Social Psychology*, 18, 1-53.

Park, J., & Banaji, M. R. (2000). Mood and heuristics: The influence of happy and sad states on sensitivity and bias in stereotyping. *Journal of Personality and Social Psychology*, 78, 1005-1023.

Schwarz, N. (2001). Feelings as information: Implications for affective influences on information processing. In L. L. Martin & G. L. Clore (Eds.), *Theories of mood and cognition: A user guidebook* (pp. 159-176). Mahwah, NJ: Laurence Erlbaum Associates, Inc.

Semin, G., & Fiedler, K. (1988). The cognitive functions of linguistic categories in describing persons: Social cognition and language. *Journal of Personality and Social Psychology*, 54, 558-568.

Strack, F., Schwarz, N., & Gschneidinger, E. (1985). Happiness and reminiscing: The role of time perspective, affect, and mode of thinking. *Journal of Personality and Social Psychology*, 69, 5-16.

Stroessner, S. J., & Mackie, D. M. (1992). The impact of induced affect on the perception of variability in social group. *Personality and Social Psychology Bulletin*, 18, 546-554.

Stroessner, S. J., Mackie, D. M., & Michalsen, V. (2005). Positive mood and the perception of variability within and between groups. *Group Processes and Intergroup Relations*, 8, 5-25.