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by

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# On the relationship between social distance and threat

Astrid C. Buba\* & Natascha de Hoog

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## Abstract

We investigated the dependence of threat perception and reaction on social distance estimation. Social identity threat was imposed within a 2x2 between subjects design, with N=163 students reading a criticising comment about their ingroup assigned to originate from one of two possible outgroups. The participants completed parts of the scale Overlap of self, ingroup and outgroup (OSIO, Schubert and Otten, 2002) as a measure of social distance either before or after the threat manipulation. Results show significantly differing social distance estimations as a reaction towards the threatening comment depending on the criticising outgroup. The implications of these findings and the possibility of social distancing being another kind of defensive mechanism towards social identity threat are discussed.

JEL Classification: D74

APA-Classification: 3020, 3040

Key words: social identity threat, criticism, distance

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## 1 Introduction

Self categorisation theory (Turner et al., 1987; Tajfel and Turner, 1986) states that individuals use categories to structure and organise their environment. When categorising things, events, people, etc. one basic principle individuals are likely to follow is similarity: we tend to group those that are similar. The same is true for self-categorisation, i.e., assigning oneself to certain social groups. We rather see ourselves as belonging to groups whose members share common features with us and with which we can identify. Another basic principle of categorisation is being able to maintain a positive self-concept. On the individual level of representation, self-concept refers to the personal self, but it also includes a social self, which means seeing oneself as a group-member. These group memberships give us different social identities, which are integrated in the self-concept and which individuals derive part of their self-esteem from by social comparison (Festinger, 1954). Therefore the groups individuals identify with are selected particularly in terms of providing them with a positive social identity. Self-categorisation in a given situation as a member of a certain group therefore follows, amongst others, those principles and means choosing a social category that groups us with similar others, defines our place in the world, gives us a sense of belonging and also provides us with a positive social identity.

As individuals have a basic need to feel good about themselves and to maintain a positive social identity, they do not appreciate comments about themselves or their groups that could have negative consequences for their self-concept (e.g. Steele, 1988). As soon as negative information potentially decreases self-esteem, feelings of threat can be the consequence (Tajfel and Turner, 1979). The impact of threatening information has been widely researched on the personal level, but less research has been done on threat to social identity. Social identity threat can be imposed, for example, if an important ingroup's value is called into question concerning relevant dimensions like status- or competence-dimensions. As social identity is a part of the self, an attack on a group with which an individual identifies is in almost the same manner an attack on the individual itself. When social identity is threatened, defensive reactions will be the consequence, which are thought to repair the negative affect experienced. Such reactions in the face of threatening information can be, for example, ingroup favouritism, self-stereotyping, outgroup derogation or perceiving the outgroup as more homogenous and negative evaluation of the information itself and the source of information (see Branscombe et al., 1999, for an overview).

One widely used possibility to measure threat is assessing it indirectly through individuals'

defensive reactions. However, defensive reactions can only occur if a threat has already been perceived. They reflect the process of reacting to the threat in order to repair the potential harm to self-concept. In this paper, we will focus on two main processes in the face of negative information about an individual's group: the perception of threat, that is, what factors determine whether individuals perceive a threat, and, once a threat is perceived, what is the individual's reaction towards it.

First we address the issue of which factors determine the perception of threat. Hornsey and colleagues (Hornsey et al., 2002, 2004) focus on a special form of threatening information: criticism. They found that if information is positive, ingroup and outgroup critics are evaluated equally, but as soon as threatening information - here in the form of criticism - is imposed, the source of the criticism (that is group membership) becomes important for evaluation. The critic is evaluated much more negatively, and the criticism is not agreed with as much and is found to be less constructive if the source is an outgroup member compared to a member of the ingroup (Hornsey et al., 2002). Assuming that negative evaluation is a form of defensive reaction against perceived threat, Hornsey and colleagues have shown that the source of the negative information may be an important factor determining the perception of threat. They also found important mediators, namely identification with the ingroup and attributed constructiveness as a motive for the criticism.

One explanation for the differential effects of criticism depending on the source of critique (the differential attribution of constructiveness) is that the ingroup is generally thought to share the same beliefs, to be aiming for the same goals and is seen as trustworthy (Stephan and Stephan, 1985; Tyler, 2001; Wilder, 1984). In contrast, the outgroup is often distrusted. It is expected that members will compete or discriminate against the own group, if they get the chance. Therefore, constructiveness is attributed to the criticism of an ingroup member, whereas an outgroup member is not expected to act in good faith.

Furthermore, using a spatial metaphor to describe the relationship towards the group, ingroups are seen as psychologically proximal. This spatial metaphor also conveys the connotation of feelings of closeness, shared beliefs, trust and familiarity, which implies constructiveness as a motive. Schubert and Otten (2002) have pointed out that we often use spatial metaphors in our daily language to describe our relationship towards or between certain entities or groups, as we "distance" ourselves from a group or even as we use the terms in- and out-group. They also provide evidence for the validity of measures of self-categorization which depict the relationship between groups as circles with

different distances between them. They clearly show the applicability of spatial metaphors for assessing the relationship between groups. Furthermore they demonstrated that, even though not depicted in the measure, distances carry certain connotations like similarity and existence of conflict between groups, demarcation, familiarity of the outgroup or shared goals. Thus, individuals automatically reveal their appraisal of the relation between the two groups by answering the question, how distant a particular outgroup is perceived. This implies that perceived distance also conveys the relationship towards a group, which is related to a specific amount of trust and attributed motives (e. g., constructiveness).

In line with that view are the suggestions of construal level theory (CLT; Liberman et al., 2007). CLT assumes that anything that is not directly experienced here and now needs to be created as a mental representation and this involves mental construal. The multiple levels of construal vary in terms of concreteness-abstractness and thus form more or less inclusive categories. CLT suggests that there is an association between psychological distance and level of construal: the more distant things, events or groups are seen, the higher the level of construal and vice versa. As psychological distance increases, the categories used for representation become less specialised and more inclusive, simpler, more schematic and more prototypical. So the extent of abstractness increases with growing distance and the amount of construal which is involved. Although there are four dimensions of psychological distance (spatial, temporal, social distance and hypotheticality) we will focus on social distance.

When focussing on social distance it becomes clear that distinctions between self and other, similar and dissimilar others, familiar and unfamiliar others, ingroup and outgroup and status differences all may be considered as instances of social distance and therefore relate to different levels of construal (Liberman et al., 2007) and thus abstractness. Indeed, compared to ingroups, outgroups are described in more abstract terms (Fiedler et al., 1995), are perceived as more homogenous (Jones et al., 1981) and less differentiated into subgroups (Park et al., 1992). In terms of CLT this means that the outgroup, which is perceived as more distant than the ingroup, is construed on a higher level. As mentioned above, this distance also carries connotations of trust and similarity.

One of the questions in the beginning of this paper was which factors determine whether we perceive negative information as a threat to our social identity. So far we have argued that the source of negative information matters for the emergence of threat. Social distance has been found to sum up some of the most important features depicting groups' relations:

proximity bears the connotation of feelings of trust and similarity, construal of information takes place on a lower level and in a more specialised form, and proximity leads to a higher intensity of affect, whereas distance carries the connotation of distrust and conflict, construal of information takes place on a higher level and in a more abstract form, but also distance leads to lower intensity of affect. Considering that, we can conclude that threatening information has a different impact depending on the social distance perceived. Regarding the positivity or negativity of the relationship between social distance and threat theory and research findings yield conflicting implications.

CLT on one hand points to the assumption that outgroups perceived as far away, and therefore not relevant, might not have the potential to evoke feelings of being threatened. Greater social distance would, therefore, result in lower threat-levels. Following Hornsey (e.g. Hornsey et al., 2002) on the other hand, it could be the case that an attribution of constructiveness has to fail at great social distance, so that threatening information can affect self-esteem. Distrust towards the outgroup would, therefore, evoke higher threat-levels with increased social distance. As this was the first study to examine the relation between social distance and threat we aimed at getting a first basic impression, and we decided to leave the hypothesis unspecified regarding the kind of relationship (positive or negative). From CLT and research on criticism we derived our first hypothesis: the perception of threat varies with the social distance between groups.

In the beginning of this study we focused on two main issues: factors referring to the perception of threat and to the reaction to threat. The question now is: is there a theoretical basis for perceived threat influencing social distance? When a threat is perceived, could this be reflected in the distance estimation displayed, which could then be understood as another defensive reaction to repair self-esteem? It is important to note that, according to CLT, not only distance has an impact on the level of construal, but also vice versa. This means, the higher the level of abstractness and inclusiveness of the category, the more distant the outgroup is going to be perceived. The level of construal individuals use depends on cognitive, as well as on motivational factors (e.g., self-enhancement). The latter is important, because the need to maintain a positive self-concept in the face of threat could provide this motivational factor for choosing a higher level of construal. Hrabá, Radloff, and Gray-Ray (1999) have already shown that perceived outgroup threat is associated with the amount of social distance. As individuals distance themselves from the source of threat, it becomes less relevant and has less affective impact, thereby repairing the harm

to self-concept and maintaining a positive social identity. Thus, distancing could be an effective way to reduce perceived threat and may be another defence mechanism. Therefore our second hypothesis is that experiencing threat has an impact on social distance.

### Hypotheses

1. Differences in perceived social distance go together with different levels of perceived threat.
2. Perception of threat has an impact on the perceived social distance.

## 2 Methods

### *Design*

For the study we chose a 2x2-design with one factor being time of measurement of distance as dependent variable (pre vs. post threat manipulation) and the other being type of outgroup as source of negative information (doctors vs. construction workers). Both factors were varied between subjects, resulting in 4 conditions, which subjects were assigned to randomly. The sample being confronted with negative information about the own group were students. The negative information which established our threat manipulation was criticism of students, imposed by either doctors or construction workers. A measure of distance towards the outgroup was taken either before or after the threat manipulation.

### *Sample*

The study was conducted online with the participants being students from all over Germany, who were recruited by e-mail. Mean age was 22.48 ( $SD=2.69$ ). 163 (74 male, 89 female) of the initial 230 participants finished the study and could be used for analyses (drop-out rate of 29 %). The purpose of the study was said to be the collection of student opinions. All participants could take part in a lottery and had the chance to win 50 Euro.

### *Measures*

The OSIO-scales (Schubert and Otten, 2002) were used to measure the perceived distance between ingroup and outgroup. They are pictorial measures of intergroup relations, designed for the assessment of the metaphorical mapping of these relations on a spatial



dimension, namely distance. For our purposes we chose one of the three OSIO-scales, the measure of relation ingroup-outgroup. Different distances are depicted in seven pictures: two circles, representing ingroup and outgroup are placed on the poles of a horizontal line in the first picture growing nearer with every picture until they almost fully overlap. Subjects are asked to mark the picture that best depicts the distance of the specified groups at this moment. The validity and sensitivity of the OSIO-scales have been shown clearly by Schubert and Otten (2002). For our purposes we used one scale for measuring the distance between students and doctors or construction workers. This measure was recoded in the analyses, so that greater scores indicate greater distance.

Identification with the ingroup. Five items served as a measure of identification with the ingroup. The items are formulated as statements like "Being a student is an important part of my identity". Subjects were asked to rate how much these statements apply to themselves on a 7-point-Likert scale, with higher scores showing a greater amount of identification with the ingroup (Cronbachs Alpha=.83).

Evaluation of ingroup and outgroup. We chose seven items which each specified good and bad characteristics e.g. "nice", "mean". Subjects were asked to use a 7-point-Likert scale to rate how much each characteristic applied to the specified group (Cronbachs Alphas for evaluation of the ingroup =.70, evaluation of doctors pre manipulation =.85, evaluation of doctors post manipulation =.84, evaluation of workers pre manipulation =.76, evaluation of workers post manipulation =.77).

#### *Threat manipulation and manipulation check*

A set of bad stereotypes of students, which students had previously judged to be correct in a study by de Hoog (2007), served as basis for the formulation of a critical comment. The comment was the same for the whole sample, but the source of criticism, and therefore the speaker, was either identified as a doctor or as a construction worker.

*When I think of students, I see quite arrogant young people who treat others in a patronising way. This "tough" study life students talk about all the time actually does not exist in my opinion. They are just lazy and don't know what working hard really means. I think they do not even try to come to an end of their studies quickly. Most of the time they go out to party and shirk at the expense of us working people. Many of them still get money for that and have a nice life then - they are quite irresponsible. I think this is not good for our society.*

As a manipulation check we used four items expressing feelings of being threatened (e.g., “offended” or “threatened”). People could use a 7-point scale to rate how much they felt the specified way (Cronbachs Alpha=.73).

### *Additional checks*

All additional checks were realised as 7-point-scales. For an evaluation of the critique we asked for the degree of perceived positivity and negativity of the comment. Another item was provided for the subject’s personal agreement with the negative information. Furthermore we had one item for the perceived similarity between ingroup and specific outgroup at the end of the study, serving as an extra check for perceived distance (see Schubert and Otten, 2002).

### *Procedure*

After a short introduction all subjects completed the measure of identification with students, which also had the effect to make this group the salient social identity. If the subject had been assigned to one of the pre-conditions, he or she filled out the OSIO, choosing the picture that was thought to reflect the relationship between students and doctors or between students and construction workers best. If the subject had been assigned to one of the post-conditions, he or she did not get to fill out the OSIO, but went straight on to the evaluation of the outgroup, which was completed by all subjects independent of condition. In the next step the whole sample read the criticising comment about students, with the criticising outgroup member being either a doctor or a construction worker, and then answered the questions concerning their feelings because of this critique. We also asked participants about the perceived positivity/negativity of the comment at this point. For the subjects assigned to the post-condition, the distance measure was taken now; the other participants went straight to the evaluation of the outgroup and then the ingroup, which were completed by all subjects. Finally, we asked for agreement with the comments as well as for perceived similarity between the ingroup and the specific outgroup. The subjects were given the opportunity to comment on the study and write an e-mail if they had questions or wished further information.

### 3 Results

#### *Preliminary analyses*

The subsamples consisted of  $n=36$  (docpre),  $n=50$  (workpre),  $n=45$  (docpost) and  $n=32$  (workpost) subjects, total  $N=163$ . Mean age was 22.48 ( $SD=2.69$ ). An ANOVA with factors outgroup and time of distance measurement yielded no significant main or interaction effects on age. Men and women were distributed equally in all four conditions ( $\chi^2=.79$ ). Running analyses with identification as covariate did not change significance of results, nor did gender as an additional factor. The mean identification was high with  $M=5.22$  ( $SD=.99$ ), showing a score significantly higher than the scale mean ( $t=16.37$ ,  $p=.00$ ). The mean level of threat feelings shown by the threat manipulation check was  $M=3.1$  ( $SD=1.17$ ). The main assumption that the two outgroups were perceived different in distance towards the ingroup was confirmed by an ANOVA with time 1 distance estimations as dependent variable and type of outgroup as a factor ( $F(1,84)=12.94$ ;  $p=.00$ ;  $\eta^2=.13$ ). Workers were perceived as more distant ( $M=6.00$ ;  $SD=.76$ ) than doctors ( $M=5.22$ ;  $SD=1.23$ ).

#### *Hypothesis 1*

The first hypothesis was that differences in perceived social distance go together with different levels of perceived threat. To test this hypothesis we conducted a regression analysis with perceived distance as predictor and perception of threat as a dependent variable. Results showed that perceived distance was not a significant direct predictor of perception of threat ( $\beta=.12$ ;  $p=.26$ ;  $R^2=.02$ ). However an ANOVA conducted with outgroup and time of distance measurement as factors yielded a marginally significant main effect of outgroup on perceived threat ( $F(3,159)=3.66$ ;  $p=.06$ ;  $\eta^2=.02$ ). Doctors evoked less threat than workers ( $M=2.92$ ;  $SD=1.15$  vs.  $M=3.28$ ;  $SD=1.18$ ). That is, two outgroups, which are perceived as differentially distant from the ingroup, also differ in the intensity of threat perception they evoke. This is in line with our first hypothesis. That outgroup, which was rated lower in social distance, also evoked less intense threat by its criticism.

#### *Hypothesis 2*

Our second hypothesis was that perception of threat has an impact on the perceived social distance. In order to test this hypothesis we conducted a regression for the subjects

with distance measurement at time 2 with threat as predicting variable and distance as dependent variable. The results showed that perceived threat is a significant predictor of distance rating at Time 2 ( $\beta=.23$ ;  $p=.04$ ;  $R^2=.05$ ). Higher levels of threat go together with higher levels of distance ( $r=.23$ ).

#### *Additional Analyses*

We conducted several ANOVAS with the factors outgroup and time of distance measurement and the additional checks, comment evaluation, agreement with the comment, similarity of outgroup and ingroup and evaluations/change of evaluations as dependent variables. We found a significant main effect of outgroup on comment evaluation concerning the perceived positivity of the comment ( $F(3,159)=4.77$ ;  $p=.03$ ;  $\eta^2=.03$ ), but no effects concerning the perceived negativity of the comment ( $F(3,159)=1.79$ ;  $p=.94$ ;  $\eta^2=.00$ ). Subjects rated the comment as less positive when the criticising subject was a worker ( $M=1.45$ ;  $SD=.67$ ) than when it was a doctor ( $M=1.75$ ;  $SD=.97$ ). There was no effect of outgroup or time on agreement with the comment ( $F(3,159)=.81$ ;  $p=.37$ ;  $\eta^2=.01$ ), but we found a significant main effect of outgroup on similarity-ratings ( $F(3,159)=12.22$ ;  $p=.00$ ;  $\eta^2=.07$ ), such that doctors were perceived more similar to students than workers ( $M=3.46$ ;  $SD=1.37$  vs.  $M=2.74$ ;  $SD=1.16$ ). The two outgroups were evaluated differently at time 1 ( $F(3,159)=19.4$ ;  $p=.00$ ;  $\eta^2=.11$ ) and at time 2 ( $F(3, 159)=22.84$ ;  $p=.00$ ;  $\eta^2=.13$ ), with doctors generally evaluated better (pre  $M=5.02$ ,  $SD=.79$ ; post  $M=4.93$ ,  $SD=.80$ ) than workers (pre  $M=4.50$ ,  $SD=.82$ ; post  $M=4.34$ ,  $SD=.86$ ). No effect of outgroup on change of evaluation occurred ( $F(3,158)=1.02$ ;  $p=.31$ ;  $\eta^2=.01$ ). A marginal effect of time of distance measurement on post-evaluation of the ingroup was found ( $F(83, 154)=3.52$ ;  $p=.06$ ;  $\eta^2=.02$ ).

## 4 Discussion

The basic assumption underlying our operationalisation of distance, i.e. that different outgroups are perceived as different in distance towards the ingroup, was shown to be correct, with workers as outgroup being perceived as further away from the own group than doctors, and also less similar. From our results it is apparent that outgroups are not only perceived differently in distance towards the ingroup, but also that outgroup membership of the critic seems to be related to the level of threat which individuals perceive in the face

of criticism. This means that workers were seen as more distant from own group (students), and also seemed to evoke more threat than less distant doctors. This can be interpreted as support for hypothesis 1, social distance is related to the perception of threat. The second hypothesis that the experience of threat would have an effect on distance-ratings was confirmed. We even found a continuous positive relationship; the more threat is perceived, the greater the distance-rating at time 2. Distancing could therefore be another defensive mechanism and an effective way to reduce the negative affect imposed by threat.

We did not find any differences in agreement to the comments depending on the outgroup membership of the critic. This expands the findings of Hornsey and colleagues (e.g., Hornsey, Trembath and of Gunthorpe, 2004) that show more agreement to a criticism from an ingroup member than to criticism from a member of an outgroup. Similarly, no differences in change of evaluation occurred after the threat manipulation depending on the outgroup. Doctors were evaluated better than workers concerning the specified characteristics at both times and for them not more change in evaluation occurred than for workers. Hornsey and colleagues found a change of the evaluation of a criticising outgroup, but no change for a criticising ingroup.

Although CLT proposes that differences in status or relevance are also depicted in social distance, we cannot rule out the possibility that our findings are not affected by differences in these variables between doctors and construction workers. Therefore one important point for a follow-up-study should be to control for status or relevance, or to pre-test if the chosen outgroups differ in distance but not show status or relevance differences. A follow-up-study should also aim at assessing mediating variables and trying to clarify the process behind these effects. Furthermore, one could also check for the perceived legitimacy of the comments. For our sample it could have been the case that doctors as academics, who have themselves studied for a long time, are seen as more legitimate to make comments about students than construction workers. The lack of legitimacy could also be a mediator in the process which leads to the perception of threat.

Lastly, the effects we found, whereby a group that is perceived as further away can evoke more threat than a group nearer to the ingroup, seem to be counterintuitive. These results are in line, however, with the research of Hornsey and colleagues about the mediating role of constructiveness: attributing a constructive motive to a criticising comment is more likely to happen if the criticising group is seen as psychologically proximal, than if the group is seen psychologically distant. In our study that would mean individuals thought of construction workers as having worse motives in terms of harming the ingroup than

doctors. As one of the first studies to do so, we presented insight in a possible relationship between social distance and the perception of threat. Concerning the perception of threat, we showed that there are different levels of perceived threat depending on outgroups differing in social distance. In the sense of defensive reactions, we found that distancing can be understood as another defensive mechanism in the face of perceived threat. Further research should aim for the clarification of the process underlying these relationships as suggested above.

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