

Running Head: Self-Affirmation Effects and Controllability

“Certainly I am not attractive, but very intelligent.”
Self-Affirmation Effects and Controllability¹

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Abstract

This study examined the effects of controllability on self-affirmation processes. The core question was: Does threatening a particular facet of one's self lead to self-affirmation processes in other non-related self-dimensions. In two trials subjects conducted self-evaluations on valent attributes that were either controllable or uncontrollable. Before the second trial, they had to rate highly or non-attractive models. This was done to question perceived physical attractiveness. Presenting highly attractive models led to reduced attractiveness ratings, whereas presenting less attractive models led to higher attractiveness ratings. At the same time, subjects changed their self-evaluations. While self-evaluations for controllable attributes remained stable, positive uncontrollable attributes received higher self-ratings when highly attractive models were shown. Such asymmetrical effects are discussed against the backdrop of controllability.

What happens when we are confronted with information that endangers the view of our self? There are many ways to face deficits in important self-dimensions, e.g., ‘denying’ (see Baumeister, Dale, & Sommer, 1998), ‘symbolic self-completion’ (Wicklund & Gollwitzer, 1982; see also Gollwitzer, Bayer, & Wicklund, 2002) or ‘self-immunization’ (e.g., Greve & Wentura, 2003; see also Greve, Rothermund, & Wentura, 2005). Many researchers have focused on this issue and have found motivational influences on self-perception (e.g., Kunda, 1990; Taylor & Brown, 1988), self-evaluation (e.g., Rothermund, Bak, & Brandtstädter, 2005), self-enhancement processes and biases (e.g., Brown, 1986; Ditto & Lopez, 1992; Klein & Kunda, 1993) or pronounced activities to change possible negative effects respectively to emphasize positive effects of the situation (e.g., Brandtstädter, Wentura, & Rothermund, 1999). Brunstein and Gollwitzer (1996), for example, found that failure on a task relevant to one's self-definition led to enhanced performance on a subsequent task associated with the challenged self-dimension. Baumeister and Cairns (1992) showed that subjects spent more time processing positive than negative feedback. Ross, McFarland, and Fletcher (1991) reported that subjects after listening to ‘experts’ who said that brushing teeth frequently was unhealthy, estimated that they performed this behaviour in the past less often. Sanitioso, Kunda, and Fong (1990) found that students, who were made to believe that extroversion was positively related to academic success, recalled more of their own extroverted behaviours. Students who were made to believe that introversion was related to academic success were more likely to recall more of their own introverted behaviours. Rothermund et al. (2005) demonstrated that such self-protecting biases are not unspecific or generally favouring positivity, but are moderated also by the

perceived controllability. Personal attributes may vary in the degree to which they are modifiable by personal effort: Some attributes have a stable, trait-like character (e.g., attributes related to intelligence or personality), while other attributes are more related to behavioural dispositions and habits and can be changed by self-regulatory effort (e.g., punctuality, kindness, appearance). Rothermund et al. (2005) led students to rate the degree to which they possess attributes that were described as having either positive or negative implications for academic success. Uncontrollable, trait-like attributes were given higher self-ratings when the attributes were presented as positive predictors of achievement than when the same attributes were presented as risk factors. This effect was interpreted as a self-enhancement bias. In contrast, attributes that were perceived as controllable received higher self-ratings when presented as risk factors. This effect can be seen as a self-correction bias. In cases where I can influence a particular self-attribute, it makes sense to be realistic and to face possible deficits. This may help to engage in self-correction activities. In cases where an attribute is resistant to personal effort, focusing on a problematic image of one's self is no longer functional for the self-regulation. It could be more self-protecting to embellish these facts (Rothermund et al., 2005).

What this line of research has in common is the focus on self-enhancing or self-protecting effects in the area of the threatened self-dimension. The aim of the present study was to investigate self-enhancing effects on dimensions that are not threatened. Supporting evidence for such more general protecting processes comes from the 'self-affirmation theory' (Steele, 1988; Steele & Liu, 1983). This theory postulates a self-affirming and self-image maintaining process that is elicited by self-threatening

information. In response to a particular threat to one's self-dimension, subjects may engage in affirming some other important aspects of their self, whenever such information is available (see also Steele, Spencer, & Lynch, 1993). Based upon these considerations and in conjunction with the Rothermund et al. (2005) study, it was hypothesized that when one particular self-dimension was threatened self-enhancing effects should be observable for other self-dimensions - especially for uncontrollable attributes. To realize a more or less self-endangering situation, we showed our test subjects photos of highly or non-attractive people (factor: *attractiveness*). Many studies have found that being confronted with perfect-looking beauties induces social comparisons (Hannover, Mauch, & Leffelsend, 2004; Häfner & Stapel, 2007) with negative consequences for the recipient, for example, dissatisfaction with one's own body (Lavine, Sweeney, & Wagner, 1999; Polce-Lynch, Myers, Kliewer, & Kilmartin, 2001, Groesz, Levine, & Murnen, 2002; Holmstrom, 2004). Just recently Schemer (2007) investigated the moderating effect of self-esteem on such upward comparisons. He demonstrated that women with low self-esteem were more susceptible to upward comparisons with attractive models, resulting in dissatisfaction with the attractiveness of their own bodies. To assess changes in self-evaluations, subjects had to evaluate themselves in two different trials (before and after presentation of attractive or non-attractive models) on a list of attributes, differing with regard to *valence* (positive vs. negative) and *controllability* (controllable vs. uncontrollable). Confronted with self-threatening information (highly attractive models), people should evaluate themselves more with positive, but uncontrollable attributes. Attributes perceived as controllable should foster tendencies of self-improvement and self-correction, resulting in a more

realistic view (see also Brandtstädter & Rothermund, 2002a, 2002b; Dunning, 1995; Duval & Silvia, 2002; Gilbert & Ebert, 2002). Confronted with non-threatening or even self-beneficial information (not attractive models) should elicit neither self-protecting nor self-improving processes. This is because in such cases, it is not necessary to cope with discrepancies.

Method

Test Subjects

80 people took part in the study (40 women and 40 men; mean age 26.94; SD = 10.67).

Materials

Photographs of attractive and non-attractive models

80 photos (40 men and 40 women) displaying only faces were selected from ordinary magazines. In a pilot study with 20 students (10 male, 10 female; mean age =21.40, SD=1.92) attending Fresenius University of Applied Sciences, Cologne (Germany), the stimulus material was selected. Each subject had to evaluate all photos on a scale ranging between 0 ('not at all attractive') and 5 ('very attractive'). Based upon the evaluation results, 8 photos were selected for the experiment. 2 photos of the most attractive men, 2 of the most attractive women, 2 of the less attractive men and 2 of the less attractive women.

Controllable and uncontrollable attributes

Selection of attributes was a three step process. First, 100 attributes were taken

into account that were unmistakably positive or negative, according to a norm list of 908 common German adjectives (Hager, Mecklenbräuker, Möller, & Westermann, 1985; Möller & Hager, 1991). In a pilot study with 4 students (3 female, 1 male; aged from 21 to 23), these attributes were judged with respect to controllability. Based upon the results of that classification: 6 positive, controllable attributes (kontaktfreudig (sociable), belesen (literate), kooperativ (cooperative), hilfsbereit (helpful), unternehmungslustig (venturesome), ehrlich (honest); 6 negative controllable attributes (unpünktlich (unpunctual), träge (inactive), unzuverlässig (unreliable), geizig (stingy), ungerecht (unfair), ungeduldig (impatient); 6 positive, uncontrollable attributes (beliebt (liked), geschickt (skilled), spontan (spontaneous), humorvoll (humorous), einfallsreich (imaginative), intelligent (intelligent); and 6 negative, uncontrollable attributes (verzweifelt (despaired), neidisch (envious), ängstlich (fearful), spießig (square), depressiv (depressive), pingelig (fussy) were selected (mean valence scores are shown in Table 1).

The attribute ‘attractive’ that should measure direct effects of social comparisons with the displayed models completed the stimulus list.

Procedure

Subjects were told that the present study was part of a project, concerning the stability of personal characteristics, and therefore they had to participate in two trials. At the trial, they had to evaluate 25 attributes in random order (see Materials) on a 10 point scale between 1 (‘applies not at all’) and 10 (‘applies completely’) with respect to themselves. Two weeks later, subjects were separated in 4 groups (group 1 and group 2 with each 20 women, group 3 and group 4 with each 20 men). Each group was asked to

also participate in a separate study about “casting shows”. Subjects had to evaluate the attractiveness and prospect of success of two displayed models. Group 1 (women) and group 3 (men) evaluated very attractive models of the same sex as the judges, group 2 (women) and group 4 (men) very unattractive persons of the same sex as the judges. Afterwards, all subjects had to fill out again the questionnaire with the 25 attributes in a newly randomized order. Upon completion of the study, all subjects were informed about the real aim of the study.

Results

Analysis for perceived attractiveness

Self-ratings on the attractiveness attribute were used to investigate the effects of social comparisons with highly and non-attractive models. A 2 (*measurement occasion*) x 2 (*attractiveness*) ANOVA on this attribute yielded an effect for *measurement*, $F(1,78) = 4.04$, $p < .05$ and a significant interaction, $F(1,78) = 8.19$, $p < .01$. Attractiveness evaluations only differ at second measurement (see Table 2). Subjects who had judged high attractive models evaluated their own attractiveness lower, $t(39) = 1.68$, $p = .10$, and subjects who had judged non attractive models evaluated their attractiveness higher, $t(39) = -2.35$, $p < .05$. As expected, evaluating attractive or non-attractive models changed the comparison standard for self-evaluations upwards or downwards.

Analyses for controllable and uncontrollable attributes

Average difference scores between measurements from the two trials were computed for controllable positive attributes, controllable negative attributes,

uncontrollable positive attributes, and uncontrollable negative attributes for the two attractiveness conditions (see Table 3). A 2 (*valence*) x 2 (*controllability*) x 2 (*attractiveness*) ANOVA for the difference scores yielded a significant main effect of *attractiveness*, $F(1,78) = 8.11, p < .01$, and a significant interaction of *valence*, *controllability* and *attractiveness*, $F(1,78) = 11.75, p = .001$. Difference scores were higher for the highly attractive condition. And only for that condition, there is an interaction of *valence* and *controllability*, $F(1,39) = 11.87, p = .001$ but not for the low attractive condition, $F(1,39) = 1.72, n. s.$ Separate analysis for *controllability* show that difference scores for controllable attributes do not differ, $t(39) < 1, n. s.$, but for uncontrollable attributes, $t(39) = 2.66, p = .01$. Ratings for uncontrollable positive attributes are much higher than for uncontrollable negative attributes. Additional correlation analyses between differences in scores for the attractiveness rating and the differences in scores for the valent controllable respectively uncontrollable attributes did not produce significant results (all $|r| < 0.22, n. s.$).

Discussion

The present study was conducted to investigate self-protecting processes in the face of self-threatening information. While most research focus on such effects within the threatened self-dimension, this study examined effects on other self-dimensions as well as those considered in the self-affirmation theory (Steele, 1988; Steele & Liu, 1983). Based upon the findings of Rothermund et al. (2005), a moderating effect of controllability for the general self-enhancement effect was hypothesized. In other words, effects should be stronger for uncontrollable attributes, because they are more open to subjective and embellishing interpretations without endangering developmental

processes that were possibly not initiated when self-discrepancies were negotiated. Results are clear cut. First, it could be shown that viewing highly attractive models leads to minor self-attractiveness evaluations and that viewing non-attractive models leads higher self-ratings. Second, this study confirmed self-enhancement effects on other self-dimensions not threatened, but only for attributes that are not controllable by the trait holder. These results concur with the results and analyses of Rothermund et al. (2005) and expand the self-affirmation theory (Steele, 1988; Steele & Liu, 1983) with a functional perspective, i.e., self-affirmation processes are not unspecifically positive but favour uncontrollable self-dimensions. To embellish at random would surely not be functional. Discrepancies not seen cannot be coped with. It is important to face the truth in areas in which one has control to change the situation or oneself. In cases where one is not capable of changing something, it could be functional to embellish, so there is no more need to change (the unchangeable). This study's results solidly support this point of view. When a particular self-dimension is threatened, self-affirmation effects were found in other non-related self-dimensions that are uncontrollable by the subject. Although such effects are probably temporary (see Swann, 1983), they may have a strong impact on the evaluation of the given situation.

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Footnote

¹ Many thanks Larissa Jost, Thomas Kessler, Anke Kopp and Svenja Zierenberg for collecting the data and Todd Toussaint for reading and correcting the manuscript.

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Table 1

Mean valence scores for controllable and uncontrollable attributes (standard deviations in parentheses)

	Controllable attributes	uncontrollable attributes
Positive	+56.30 (3.27)	+61.50 (7.12)
Negative	-55.00 (9.32)	-53.00 (18.93)

Table 2

Average self-ratings (standard deviations in parentheses) for the attribute 'attractive' in the conditions 'presented high attractive models' and 'presented non attractive models' for two measurements

Presented models	Time of measurement		
	Measure 1	Measure 2	Difference
High attractive	7.05 (1.83)	6.55 (1.92)	-.50
Low attractive	7.05 (1.50)	7.78 (1.35)	+.73

Table 3

Average difference scores (standard deviations in parentheses) for controllable and uncontrollable positive and negative attributes in the conditions 'presented high attractive models' and 'presented non attractive models'.

Presented models	Controllability			
	controllable		uncontrollable	
	positive	negative	positive	negative
High attractive	+0.00 (0.98)	+0.12 (1.41)	+0.92 (1.12)	-0.10 (1.89)
Low attractive	+0.04 (1.13)	-0.31 (1.40)	-0.25 (1.05)	-0.21 (1.68)