Flash Reports

Feel the difference! The influence of ease experiences on the direction of social comparisons

Michael Häfner *, Thomas W. Schubert

Department of Social and Organizational Psychology, Utrecht University, Heidelberglaan 1, 3584 CS Utrecht, The Netherlands

ABSTRACT

The present work investigates if ease/difficulty experiences associated with social comparison information shape the direction of the comparison. In particular, we test the hypothesis that standards of comparison associated with experiences of ease lead to assimilation whereas standards processed under experiences of difficulty result in comparative contrast. In line with this hypothesis, we found in Experiment 1 that the easy processing of a standard led to assimilation whereas difficult processing of the same standard led to contrast. This finding was replicated in Experiment 2, even though the ease/difficulty experiences were this time introduced independently of the standard. Finally, Experiment 3 tested the boundary conditions of the influence of experiences by showing their flexible use in judgmental processes.

© 2008 Elsevier Inc. All rights reserved.

Introduction

The act of social comparison can be laborious, time-consuming and effortful, but it can also happen unintentionally, effortlessly, and with amazing speed (Gilbert, Giesler, & Morris, 1995). Whereas a host of research revealed the cognitive-motivational underpinnings of deliberate comparisons (see Mussweiler, 2003), much less work investigated the processes underlying spontaneous comparisons. This may have to do with the fact that only recently it was discovered that spontaneous comparisons bear – much like their deliberate brothers – a great deal of flexibility, and can result in assimilation or contrast depending on the context (Blanton & Stapel, 2008; Mussweiler, Rüter, & Epstude, 2004).

How can this flexibility be explained? There are at least two explanations: On the one hand, it seems plausible that the same cognitive-motivational processes as in deliberate comparisons take place, with the only difference that these processes are automated (Mussweiler et al., 2004). On the other hand, one could assume that spontaneous comparisons involve less resource-consuming processes. Specifically, deliberate comparisons are determined by judgments of aspects such as shared categories (Mussweiler & Bodenhausen, 2002), attainability (Lockwood & Kunda, 1997), or extremity of the target (Mussweiler et al., 2004). These are resource-intense *information-based judgments*. However, it is known from other social cognitive research that, over and above such

information-based judgments, judgments can also be based on experiences (see e.g., Koriat, 2007; Schwarz & Clore, 2007; Strack, 1992)[1]. These *experience-based judgments* are quick, efficient and operate at minimal (if any) levels of conscious awareness: Experiences like the "feeling of knowing" of a stimulus emerge right on perception of a stimulus and therefore are readily usable for all sorts of judgments, long before other informational cues are accessible (Koriat, 2007). Hence, the interesting question arises if such experiential cues also play a role for determining the direction of social comparisons in a meaningful and predictable way. However, before answering this question one has to answer the question *which* experiential cues might at all be likely to do so.

Drawing on recent research on the influence of familiarity on the outcome of social comparisons (Häfner, in press), we hypothesized that ease/difficulty experiences influence social comparisons. This should be the case because ease/difficulty experiences are a good proxy for the information-based judgment of closeness/distance: Experiencing easiness when perceiving a standard—for instance because the standard is familiar or easy to decode—should signal closeness, which should in turn lead to the integration of the standard into the self, and, consequently to assimilative self-evaluations. Conversely, experiencing difficulty when perceiving a standard should trigger contrastive comparisons, because this feeling is likely to be interpreted as a signal of distance (see also, Förster, Liberman, & Kuschel,

---

* Corresponding author. Fax: +31 0 30 253 4718.
  E-mail address: m.hafner@uu.nl (M. Häfner).

[1] The term experience is used in this context because of the perceptual and instantaneous quality of this process (Neumann & Strack, 2000).

2008). Taken together, ease/difficulty-based judgments could thus be what we were looking for, namely quick and effortless experiential alternatives to information-based judgments giving direction to social comparisons. We will present three experiments that tested this hypothesis.

Experiment 1

Following from our assumptions in a straightforward manner, we manipulated the ease with which a comparison standard can be perceived in Experiment 1.

Method

Participants and design

Ninety female university students served as participants in exchange for partial course credit. Participants were randomly assigned to one of four conditions in a 2 (ease: fluent versus affluent) × 2 (standard: high versus low) between participants design.

Procedure

On arrival to the lab participants were seated in front of a computer and told that they would be briefly presented with the photograph of a person, which they would later have to identify in a set of photos. Subsequently, participants were presented with either a sharp (i.e., fluent) or blurry photo (i.e., affluent) of either a moderately high (i.e., attractive) or moderately low (i.e., unattractive) female comparison standard for 30 s.[2] On the following screen participants were asked to provide demographic information. Amongst these questions, participants were asked to indicate how beautiful they felt on a ten point rating scale (1 = not at all to 10 = very much).

Results

These self-evaluations were analyzed in a 2 (ease) × 2 (standard) ANOVA with both factors varied between participants. As predicted, this analysis yielded a significant ease by standard interaction, $F(1,86) = 14.52$, $p < .01$, $\eta_p^2 = .14$; all other Fs < 1. As Fig. 1 illustrates, ease led to assimilation whereas difficulty led to contrast. Therefore, the fluent high standard tended to trigger higher self evaluations ($M = 6.64$, $SD = .85$) than the fluent low standard ($M = 6.26$, $SD = .86$), $T(86) = 1.58$, $p = .12$, $\eta_p^2 = .03$, whereas the affluent high standard led to lower self evaluations ($M = 6.18$, $SD = .85$) than the affluent low standard ($M = 7.09$, $SD = .60$), $T(86) = 3.81$, $p < .01$, $\eta_p^2 = .14$.

Discussion

Results of Experiment 1 support our hypotheses that experiences of ease/difficulty triggered by a standard influence the direction of social comparisons to this standard. As predicted, ease resulted in assimilative self-evaluations, whereas difficulty resulted in contrast. This happened for both high and low standards, thereby effectively ruling out the potential alternative explanation that the positive affect seemingly triggered by ease experiences was driving the effects (Winkielman, Schwarz, Fazendeiro, & Reber, 2003).

---

[2] In order to make sure that our manipulations did not alter the beauty of the models, participants were in the end asked to indicate how beautiful they found the depicted model on a ten-point scale (1 = not at all to 10 = very much). The analysis of this manipulation check revealed only a main effect for type of standard, such that the high standards (blurry and sharp) were perceived to be more beautiful than the low standards; $F(1,86) = 3.36$, $p = .07$, $\eta_p^2 = .04$.

Experiment 2

Even though Experiment 1 yielded good support for our hypothesis, it would be desirable to separate experiences of ease/difficulty from the perception of the standard itself in order to better study their impact. This goal can be achieved elegantly by a small change of a procedure previously used by Mussweiler (2001). He manipulated the initial holistic assessment of similarity by inducing participants to focus on similarities versus dissimilarities between pictures in a priming task. We followed this procedure, but also manipulated the actual amount of similarities between the pictures used in the priming task by using two rather similar or two rather dissimilar pictures. Thereby, we intended to create experiences of ease/difficulty that were independent of the search strategy: Generating similarities for similar pictures (and dissimilarities for dissimilar pictures) should be experienced as easy, whereas generating similarities for dissimilar pictures (and dissimilarities for similar pictures) should be experienced as difficult. Hence, if ease is in fact an important experiential cue that shapes social comparisons, we should find an interaction effect of focus and picture pair, such that the resulting experience and not the focus or the actual similarities of the pictures (alone) has an influence.

Method

Participants and design

One hundred and eleven female university students served as participants in exchange for partial course credit. Participants were randomly assigned to one of four conditions in a 2 (focus: similarities versus dissimilarities) × 2 (picture pair: similar versus dissimilar) between participants design.

Procedure

This experiment was part of a bigger online testing session. Participants thought they would take part in a couple of independent studies the first of which dealt with validating a task testing the cognitive capacities of children. Depending on the condition, participants were instructed to generate as many similarities or differences as came to their mind between two similar (a rhino and a
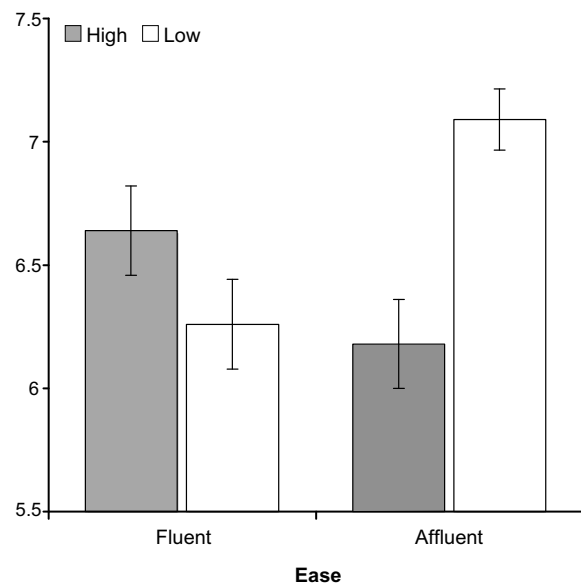

Fig. 1. Average self evaluation as a function of ease and standard. *Note.* Error bars indicate the standard error of the mean.

hippo) or two dissimilar (a rhino and a crocodile) pictures. They were provided with space for 6 entries and could determine themselves when they would go on. When participants were done with this task, they were presented with a moderately attractive female standard for 30 S and subsequently asked to indicate how beautiful they felt (1 = not at all to 7 = very much), as in Experiment 1.

Results

These self-evaluations were analyzed in a 2 (focus) × 2 (picture pair) ANOVA with both factors varied between participants. As predicted, this analysis yielded a significant focus by picture pair interaction, $F(1,107) = 5.58$, $p < .05$, $\eta_p^2 = .05$; all other Fs < 1. As Fig. 2 illustrates, this effect is driven by a significant contrast in the differences focus. Whereas participants who were instructed to look for dissimilarities for two similar animals later contrasted away in their self-evaluations from a moderately high standard (i.e., they reported to feel not very beautiful; $M = 4.81$, $SD = 1.22$), participants who generated dissimilarities for dissimilar animals assimilated towards the standard in the social comparison ($M = 5.46$, $SD = .66$), $T(107) = 2.57$, $p < .05$, $\eta_p^2 = .06$. Even though this pattern flipped around for participants who were looking for similarities, this contrast was not reliable, $T < 1.05$, ns.

Discussion

Over and above replicating our earlier findings, results of Experiment 2 built a stronger case for our hypothesis. Experiences of ease or difficulty that were generated before the encounter of the standard determined the direction of the comparison. The ease/difficulty experiences we induced were operating as background variables in no relation to the social comparison. Nevertheless, these experiences bled into the comparison process and gave direction to it.

Experiment 3

Experiments 1 and 2 have accumulated evidence for the notion that there is a direct connection between experiences and the direction of social comparisons. However, are there boundary conditions? In both previous experiments, we induced the experiences directly while or before the presentation of the standard. This
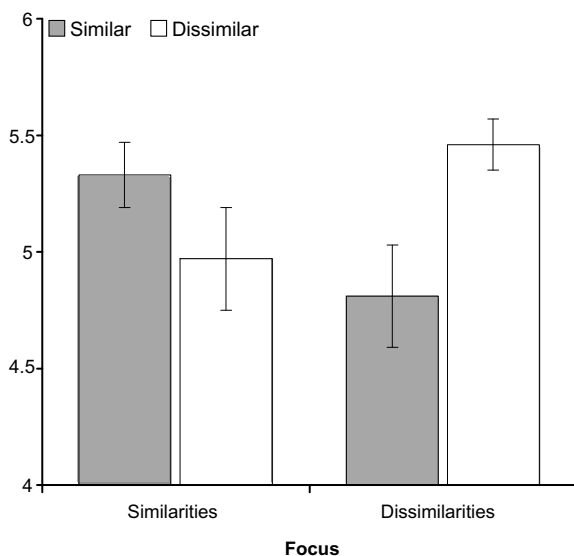

Fig. 2. Average self evaluation as a function of focus and picture pair. *Note.* Error bars indicate the standard error of the mean.

made the feeling directly available to the perception of the standard. However, what happens when the feeling is already used in a judgment *before* the target is encountered? Then, the resultant judgment, but not the experience per se, should shape the subsequent comparison.

In order to test this assumption, we changed the procedural priming by Mussweiler (2001) again by combining it with a classic ease manipulation (Schwarz et al., 1991). Specifically, we asked participants to generate a specific number (4 vs. 8) of similarities or dissimilarities for a pair of similar pictures. Thus, in contrast to Experiment 2, where participants just generated as many similarities or difficulties as came to mind, the explicitly given norm prompted participants to compare their experiences to it (4 vs. 8) and to draw an inference about the actual similarity of the pictures used for the priming task.[3] If the norm is easily fulfilled while searching for similarities, the two pictures should be represented as similar. If the norm is hard to reach while searching for similarities, then participants should conclude that the pictures are in fact dissimilar. Once the experience is used to form a judgment, this judgment should determine the later comparison process. We therefore expect an interaction of the induced experience and the primed search strategy such that an experience of ease only leads to assimilation when it is paired with a similarity search whereas we expect an easy search for dissimilarities to trigger contrast. Conversely, a difficult search for similarities should trigger comparative contrast, while a difficult search for dissimilarities should trigger assimilation.

Method

Participants and design

Fifty-seven female university students served as research participants in exchange for partial course credit. Participants were randomly assigned to one of four conditions in a 2 (focus: similarities versus dissimilarities) × 2 (ease: easy versus difficult) between participants design.

Procedure

Depending on the condition, participants were instructed to generate four (easy) or eight (difficult) similarities or differences between photographs of two fairly similar animals (a rhino and hippo). Analogously to the previous experiment participants were then presented with a moderately attractive comparison standard and their self-evaluations with respect to how beautiful they feel (1 = not at all to 7 = very much) were collected.

Results

Self-evaluations were analyzed in a 2 (focus) × 2 (ease) ANOVA with both factors as between participants factors. As predicted, this analysis yielded a significant focus by ease interaction, $F(1,53) = 6.21$, $p < .05$, $\eta_p^2 = .11$; all other Fs < 1. As Fig. 3 illustrates, when the focus priming before the social comparison task consisted of the easy production of four similarities, participants tended to feel more beautiful (i.e., assimilation; $M = 5.25$, $SD = .62$) than when they were first busy with the difficult task of generating eight similarities (i.e., contrast; $M = 4.60$, $SD = .99$); $T(53) = 1.67$, $p < = .10$, $\eta_p^2 = .05$. When participants were asked to generate four dissimilarities in the priming task, they were feeling less beautiful (i.e., contrast; $M = 4.50$, $SD = 1.40$) than when they were trying to find eight differences between the two pictures ($M = 5.19$); $T(53) = 1.86$, $p < .07$, $\eta_p^2 = .06$.

---

[3] One might wonder why participants in Study 2 did not always end up with a feeling of ease if they aborted the process as long as answers came to mind. However, they were provided with 6 lines to fill in, inducing them to generate at least a few examples, but without prompting a comparison with an explicit norm, as in Study 2.
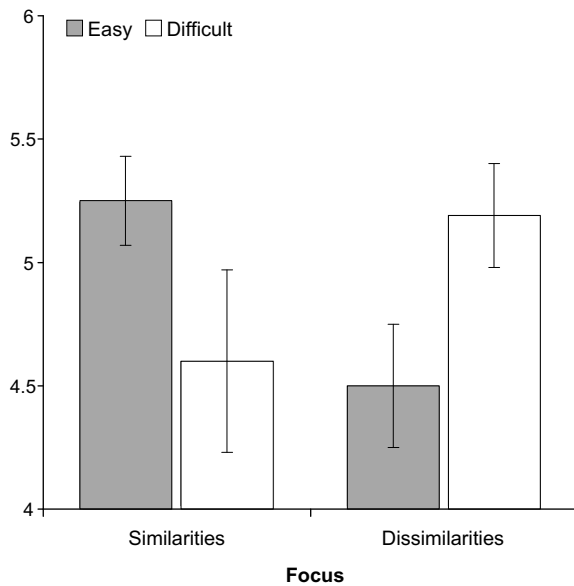
Fig. 3. Average self evaluation as a function of focus and ease. *Note.* Error bars indicate the standard error of the mean.

Discussion

Results of Experiment 3 demonstrate that experiences of ease might interact with factual information or norms in the instruction such that they trigger conclusions rather than exerting a direct influence on social comparisons. As such—and in contrast to our first two studies—ease did only then lead to assimilation when a specified amount of similarities was easy to find, not when differences were easy to find. In the latter case, contrast was the consequence, seemingly because the ease of finding a verbally specified number of differences resulted in the conclusion that the stimuli used to prime the focus were in fact different.

General discussion

Drawing on recent research showing that experiences can be a viable source of judgments, we derived the hypothesis that experiences might also play an important role in the determination of the direction of social comparisons. In particular, we tested the hypothesis that experiences of ease/difficulty, as quick and direct signals of closeness/distance, would influence social comparisons. In line with this hypothesis, we found that ease experiences directly led to assimilative comparisons whereas difficulty led to contrast (Experiments 1 & 2). Moreover, Experiment 3 revealed a boundary condition of this effect: It only occurred when the ease experience was felt as a background during or right before the standard perception. However, when an introduced norm provoked the use of the feeling in a judgment, this judgment and not the ease experience themselves determined the comparison direction.

Taken together, the three experiments presented here therefore strongly suggest that experiences play an important role in the determination of social comparisons. We believe that this finding is in and of itself interesting. However, this finding becomes even more interesting if one looks at its integrative potential. As stated earlier, we chose to manipulate ease experiences because these experiences might provide a quickly available proxy for the different kinds of information to be used in spontaneous comparisons and allowing them to be flexible. As such, we believe that ease/difficulty experiences could be the basis of holistic target-standard similarity judgments, perceived attainability, and the overlap of the self and a given standard. The latter information-based judgmental processes could then parsimoniously be described as "situationalized" experiences: A standard is first experienced and only subsequently is this experience, depending on the context, translated into a judgment about the standard of comparison. Maybe, in a work context, feeling easy about someone renders this person motivating and thus attainable in our eyes, whereas in a more personal situation, the experienced ease might be interpreted as indicating similarity or overlap. Clearly, such a conceptualization comes with the advantage that experiential processes are very quick and do not cost much cognitive resources (Koriat, 2007) and can therefore also account for spontaneous comparisons.

Acknowledgments

References

Blanton, H., & Stapel, D. A. (2008). Unconscious and spontaneous and complex: The three selves model of social comparison assimilation and contrast. *Journal of Personality and Social Psychology, 94*, 1018–1032.

Förster, J., Liberman, N., & Kuschel, S. (2008). The effect of global versus local processing styles on assimilation versus contrast in social judgment. *Journal of Personality and Social Psychology, 94*, 579–599.

Gilbert, D. T., Giesler, R. B., & Morris, K. A. (1995). When comparisons arise. *Journal of Personality and Social Psychology, 69*, 227–236.

Häfner, M. (in press). Knowing you, knowing me: Familiarity moderates comparison outcomes to idealized media images. *Social Cognition*.

Koriat, A. (2007). Metacognition and consciousness. In P. D. Zelazo, M. Moscovitch, & E. Thompson (Eds.), *Cambridge handbook of consciousness* (pp. 289–325). New York: Cambridge University Press.

Lockwood, P., & Kunda, Z. (1997). Superstars and me: Predicting the impact of role models on the self. *Journal of Personality and Social Psychology, 73*, 91–103.

Mussweiler, T. (2001). Seek and ye shall find: Antecedents of assimilation and contrast in social comparison. *European Journal of Social Psychology, 31*, 499–509.

Mussweiler, T. (2003). Comparison processes in social judgment: Mechanisms and consequences. *Psychological Review, 110*, 472–489.

Mussweiler, T., & Bodenhausen, G. V. (2002). I know you are but what am I? Self-evaluative consequences of judging ingroup and outgroup members. *Journal of Personality and Social Psychology, 82*, 19–32.

Mussweiler, T., Rüter, K., & Epstude, K. (2004). The man who wasńt there. Subliminal social standards influence self-evaluation. *Journal of Experimental Social Psychology, 40*, 689–696.

Neumann, R., & Strack, F. (2000). Experiential and non-experiential routes of motor influences on affect and evaluation. In H. Bless & J. P. Forgas (Eds.), *The message within: Subjective experiences and social cognition* (pp. 52–68). Philadelphia: Psychology Press.

Schwarz, N., Bless, H., Strack, F., Klumpp, G., Rittenauer-Schatka, H., & Simons, A. (1991). Ease of retrieval as information: Another look at the availability heuristic. *Journal of Personality and Social Psychology, 61*, 195–202.

Schwarz, N., & Clore, G. L. (2007). Feelings and phenomenal experiences. In E. T. Higgins & A. Kruglanski (Eds.), *Social psychology. A handbook of basic principles* (2nd ed., pp. 385–407). New York: Guilford Press.

Strack, F. (1992). The different routes to social judgments: Experiential versus informational strategies. In L. L. Martin & A. Tesser (Eds.), *The construction of social judgments* (pp. 249–257). Hillsdale, NJ: Lawrence Erlbaum.

Winkielman, P., Schwarz, N., Fazendeiro, T., & Reber, R. (2003). Hedonic marking of processing fluency: Implications for evaluative judgment. In J. Musch & K. C. Klauer (Eds.), *Psychology of evaluation: Affective processes in cognition and emotion* (pp. 189–217). Mahwah, NJ: Erlbaum.