Distinctiveness is Key: How Different Types of Self-Other Similarity Moderate Social Comparison Effects

Diederik A. Stapel and David M. Marx

Pers Soc Psychol Bull 2007; 33; 439
DOI: 10.1177/0146167206296105

Distinctiveness is Key: How Different Types of Self-Other Similarity Moderate Social Comparison Effects

Diederik A. Stapel
Tilburg University, the Netherlands

David M. Marx
San Diego State University

In relevant research to date, the impact of self-other similarity on the outcome of social comparison effects is not well understood. The authors argue that the extent to which this similarity is distinctive is a key to understanding such effects. In two experiments, they demonstrate that when self-other similarity is distinctive (unique), assimilation is more likely, whereas when self-other similarity is nondistinctive (common), contrast is more likely. These results suggest that what matters is the type rather than the quantity of similarity: Similarity on one distinctive dimension more readily leads to assimilation than similarity on numerous nondistinctive dimensions. Importantly, these assimilation effects are especially likely to occur when the comparison dimension is unimportant. Contrast is more likely to occur when the comparison dimension is important. Thus, these findings both replicate and extend Tesser's (1988) Self-Evaluation Maintenance Model.

Keywords: *social comparison; similarity; distinctiveness; self-evaluation; contrast; assimilation*

> "Resemblances are the shadow of differences. Different people see different similarities and similar differences."
>
> Vladimir Nabokov (Pale Fire, 1962)

Frequently, if not always, self-knowledge is obtained through social comparison. The things we most want to know about ourselves can often be known only by comparing our thoughts, emotions, and achievements with those around us. We do not compare ourselves with just anyone, however. Indeed, both sociologists working within the tradition of reference group theory (e.g., Hyman, 1960) and psychologists working within the tradition of social comparison theory (e.g., Festinger, 1954) assign self-other similarity a central role in social comparison processes. In the present research, we test the hypothesis that to further our understanding of the role of similarity in social comparison processes it is important to distinguish between *distinctive similarity* (comparison target and self are similar in a relatively distinctive, unique manner) and *nondistinctive similarity* (comparison target and self are similar in a relatively nondistinctive, common manner).

DIFFERENT EFFECTS OF SIMILAR OTHERS

What is the effect of increased self-other similarity on social comparison processes and outcomes? The current literature provides at least two answers. On one hand, there is research showing that self-other similarity is an

Authors' Note: Address correspondence to Diederik A. Stapel, Tilburg Institute for Behavioral Economics Research (TIBER), Tilburg University, PO Box 90153, 5000 LE Tilburg, the Netherlands, or by e-mail to: d.a.stapel@uvt.nl. This research was supported by a "Pionier Grant" from the Dutch National Science Foundation awarded to the first author. The research and writing was supported by a "Pionier" grant from the Dutch Science Foundation (Nederlandse Organisatie voor Wetenschappelijk Onderzoek) awarded to the first author.

PSPB, Vol. 33 No. 3, March 2007 439-448
DOI: 10.1177/0146167206296105

important determinant of whether social comparisons exert self-evaluative effects at all (see Biernat & Thompson, 2002; Stapel & Koomen, 1997; Tajfel & Turner, 1979; Tesser, 1988). This line of research suggests that self-other similarity is a proxy for the perceived relevance of the comparison standard, such that similarity breeds relevance and thus impact, whereas dissimilarity breeds irrelevance and thus indifference. A nice illustration of this point is provided by the work of Cash, Cash, and Butters (1983). These researchers showed that female students felt less attractive after they had been exposed to pictures of physically attractive women (high similarity), but such contrast effects did not occur when respondents knew that the attractive women were professional fashion models (low similarity). Apparently, supermodels are irrelevant comparison standards for mere mortals (for reviews see Blanton, 2001; Wood, 1989).

On the other hand, there is an emerging literature that suggests that increased self-other similarity results in assimilation rather than contrast (e.g., Blanton, Christie, & Dye, 2002; Brewer & Weber, 1994; Cialdini et al., 1976; McFarland, Buehler, & MacKay, 2001; Tiedens & Jimenez, 2003). Research by Brown, Novick, Lord, and Richards (1992) provides a provocative illustration of this phenomenon. Brown et al. showed female students photographs of physically attractive or unattractive same-sex comparison targets and found that respondents assimilated evaluations of their own attractiveness to those targets that they believed had the same attitudes and values as they did (high similarity), whereas contrast occurred when the targets' attitudes and values were deemed as different (low similarity).

SIMILARITY, IMPORTANCE, AND DISTINCTIVENESS

The aforementioned research suggests that increased similarity may sometimes result in contrast and sometimes in assimilation effects. An important question then is what determines the impact of self-other similarity on social comparison processes? We believe that one way to approach this question is to make a distinction between two types of similarity: distinctive and nondistinctive similarity.

Similar to previous social comparison theories, we hypothesize that when self-other similarity is relatively low (e.g., I am a professor, the comparison target is a movie star), the comparison target will *not* be perceived as a relevant comparison standard and therefore it is unlikely that any self-evaluative effects will occur. When self-other similarity is relatively high, social comparisons are likely to exert self-evaluative influences.

In extension of previous social comparison theories, we posit that the *direction* of these influences depends on whether the similarity refers to a relatively broad category (is common and therefore relatively nondistinctive, such as people who like peanut butter) or refers to a special attribute (is unique and therefore relatively distinctive, such as people who like Skippy extra-crunchy honey-roasted peanut butter and banana sandwiches; Brewer & Weber, 1994). That is, when it concerns understanding and predicting the impact of similar others on self-evaluations *distinctiveness* is the key: Nondistinctive similarity is more likely to lead to contrast, whereas distinctive similarity is more likely to lead to assimilation. Why? We believe that Tesser's (1988) Self-Evaluation Maintenance (SEM) model may be helpful in answering this question.

In Tesser's SEM model, whether a comparison other will have any impact on the self depends on the extent to which the other is "similar." One's self-evaluation may be raised to the extent that this similar other performs well on some task. One may bask in the reflected glory of a similar other's good performance and feel worthy—an assimilation effect. An outstanding performance by a similar other may also diminish one's feelings of self-worth—a contrast effect. In the SEM model, one critical determinant of whether comparison targets lead to assimilation or contrast is the *importance* or self-relevance of the comparison dimension. Assimilation is more likely to occur when a dimension is unimportant ("I am a scientist and I feel proud because my brother is a famous concert pianist"). Contrast is more likely to occur when the relevant dimension is important ("I am a psychologist and I feel bad because my colleague has much more impact on the field").

Distinctiveness and Similarity

Tesser's (1988) description of the role of importance in the determination of assimilation versus contrast effects is elegant and inspiring. Unfortunately, however, that other crucial construct in the SEM model, "similarity," is defined rather loosely. Specifically, in the SEM model (Tesser, 1988, p. 183) self-other similarity is assumed to increase with the meaningfulness of social bonds, such as family ties ("friends are closer than strangers"), but also merely with the amount of shared characteristics ("persons with more characteristics in common are closer than persons with fewer characteristics in common").

One of the goals of the present research is to further elucidate the role of similarity in social comparison effects. What does similarity do and when? It is our contention that whether social comparisons lead to assimilation or contrast may be a question of not only the importance of the dimension (as the SEM model posits), but also the *type* of self-other similarity: namely, whether

similarity is unique and thus *distinctive* versus common and thus *nondistinctive*. We thus posit, in extension of the SEM model, that when similarity is common and nondistinctive (e.g., I am a psychologist, you are a psychologist, we are both at a psychology conference), it is likely to signal comparability, such that the comparison target is likely to initiate comparative processes, and thus contrastive self-evaluations. When similarity is unique and distinctive (e.g., the comparison target and I are the only psychologists at an astronomy conference; the comparison target and I are born on the same day; the target and I share the same peculiar taste for Eastern European polka music), it is likely to signal unique psychological similarity, such that the comparison target is more likely to initiate associative processes, and thus assimilative self-evaluations (for similar types of reasoning, see Blanton et al., 2002; Brewer & Weber, 1994; Brown et al., 1992; Jetten, Spears, & Manstead, 1998; Mussweiler, 2003; Pelham & Wachsmuth, 1995; Stapel & Marx, 2006; Stapel & Suls, 2004).[1]

Distinctiveness and the Amount of Similarity

It is important to note that when it concerns the present distinctiveness hypothesis, we argue that what matters is the *type* of similarity rather than the *amount* of similarity (see also Miller, Turnbull, & McFarland, 1988). Of course, these two variables are generally highly correlated (see Jetten et al., 1998; Tversky, 1977). When there is a lot of similarity, chances are that this similarity is relatively rare and distinctive. To give an example, when Damien and Daniel are similar on only one dimension (they are both psychologists), both the amount and the type of similar are lower than when Damien and Daniel are similar on several dimensions (they are both European-born psychologists, have blue eyes, and like to drink a glass of red wine once in a while). In other words, by definition, increasing the quantity of similarity implies increasing its distinctiveness. However, we argue that the distinctiveness of similarity rather than the quantity of similarity determines whether social comparison leads to assimilation or contrast. In other words, assimilation is more likely when there is similarity on only one dimension *and* this similarity is distinctive, whereas contrast is more likely when similarities are abundant *and* none of those similarities are particularly distinctive. It is important to note that—independent of the relation between quantity and quality of similarity—whether similarity is distinctive is partly context dependent. Whether two psychologists will feel distinctively similar depends not only on *who* they are, but also on *where* they are. As some of the examples given earlier try to point out, these psychologists are more likely to feel nondistinctively similar when they meet at a *psychology* conference, whereas they are more likely to feel distinctively similar when they meet at an *astronomy* conference (see Miller et al., 1988).

Previous Research

Has the distinctiveness hypothesis regarding the outcome of social comparison effects ever been tested systematically? There are theories and studies that argue that assessments of similarity (e.g., Blanton et al., 2002; Jetten et al., 1998; Mussweiler, 2003), closeness (e.g., McFarland et al., 2001; Tesser, 1988), or "we-ness" (e.g., Stapel & Koomen, 2001) are important determinants of the direction of social comparison effects, but none of those explicitly posit that it is the *type* of similarity rather than the *amount* of similarity that is important for determining the direction of social comparison effects. Interestingly, there is some research that provides *indirect* support for at least *part* of our distinctiveness hypothesis. For example, Miller et al. (1988) found that sharing a distinctive similarity with another person (e.g., both of us are devotees of Bertolt Brecht) led to greater feelings of similarity than did sharing a common or nondistinctive similarity (e.g., both of us like ice cream). In other words, sharing a distinctive attribute with another person may create a sense of bondedness that is stronger than when the shared attribute is nondistinctive (see also Blanton et al., 2002; Brewer & Weber, 1994; Brown et al., 1992; Eiser & Stroebe, 1972; Gerard & Hoyt, 1974; Jellison & Zeisset, 1969; McFarland et al., 2001; Tajfel & Turner, 1979). However, when it concerns the *direct* impact of distinctively similar versus nondistinctively dissimilar comparison targets on individuals' self-evaluations, it seems safe to conclude that these have never been tested empirically and systematically.

RESEARCH OVERVIEW

In the present experiments we examined our reasoning about the self-evaluative consequences of social comparisons being jointly determined not only by comparison importance—as Tesser (1988) has suggested—but also by similarity distinctiveness. Both of these variables determine whether social comparison will result in assimilation or contrast. We predict that when there is no self-other similarity, social comparison will have no self-evaluative effects. When there is similarity, both the perceived importance of the comparison dimension and the distinctiveness of the similarity will determine whether assimilation or contrast occurs. When the comparison dimension is important, contrast will occur, independent of whether similarity is distinctive. When the comparison dimension is unimportant, similarity distinctiveness does

matter: In this situation, assimilation will occur when self-other similarity is distinctive, whereas no effects will occur when self-other similarity is nondistinctive.

EXPERIMENT 1: DISTINCTIVENESS AND IMPORTANCE

Method

Participants and Design

One hundred thirty-nine psychology students participated for course credit. For this experiment we used a 2 (Target Performance: upward, downward) × 3 (Target Similarity: distinctive similarity, nondistinctive similarity, dissimilarity) × 2 (Task Importance: important, unimportant) between-participants design.

Procedure and Materials

Upon entering the laboratory, participants were informed that they would complete a series of tasks, consisting of questionnaires that are commonly used in the social and behavioral sciences. They were then told that the experimenter would time them while they worked on each of these tasks.

Social comparison information. After some filler items (unscrambling fruit names), participants were given six items from the "Remote Associates Task" (RAT). A RAT item consists of three words that have something in common. The participants' task was to figure out the one thing that these three words have in common. For example, the remote associate of the words *car*, *swimming*, *cue* is *pool* (see further Stapel & Koomen, 2001).

In the *important* conditions, the RAT was described as an instrument that correlates highly with people's IQ, is often used in personnel selection batteries, and is one of the best predictors of success in "life and work" that exists. In the *unimportant* conditions, the RAT was described as an interesting, yet rather useless exercise that did not correlate much with anything, and had met with very limited success in the testing industry. Furthermore, participants were told that the RAT does not correlate with managerial success or interpersonal skills.

On the next page, participants were given 5 minutes to complete the six RAT items. When these 5 minutes were over, the participants were asked to turn to the next page in their booklets, which contained the answers to the six RAT items that they were just given. Furthermore, the participants were instructed to rate their own performance and then write down how many items they had answered correctly (0-6).

Afterward participants turned to the next task, called *aesthetic preferences*. For this task, participants were shown four "artistic" line drawings and were then told that "the following pictures have been rated by a large number of students. Please look at the following four pictures for a moment and circle the number of the picture that you feel is the most beautiful." When participants had indicated their preference, they were then instructed to go to a particular page in the questionnaire book. Because it was unknown beforehand what picture participants would choose, the page they were instructed to go to was a function of participants' picture choice and condition. The questionnaire booklet was thus designed in such a way that all participants could indicate their own choice and still end up in the right condition. Next, participants worked on an *impression formation* task.

On the impression formation page, target similarity and target performance were manipulated. On this page, participants were first given information about their aesthetic preference and some brief information about another person, "Chris," who had also completed the RAT and the aesthetic preference task. Together, the aesthetic preference and target information allowed us to manipulate similarity and distinctiveness as follows:

Similarity. T he three different levels of the *similarity* factor were manipulated as follows: In both the distinctive similarity and nondistinctive similarity conditions, Chris was a student and Chris' picture preference was the same as the participant's preference (e.g., when a participant had chosen picture 2, Chris' preference was also 2). In the *distinctive similarity* conditions, participants were additionally told that their picture preference was "unique" for university students. Specifically, they were told that "This is a unique choice. We know from previous research with university students that only 1 out of 100 people tend to select this option." In the *nondistinctive similarity* conditions, participants were additionally told that their picture preference was "common" for university students. Specifically, they were told that "This is a common choice. We know from previous research with university students that 85 out of 100 people tend to select this option." In contrast, in the *dissimilarity* conditions, Chris was a medical doctor, working at the local hospital and Chris' picture preference was different from the participant's preference (e.g., when a participant had chosen picture 2, Chris' preference was 4). In addition, in this condition, participants were not given any information about the distinctiveness of their choice.

In summary, in the dissimilarity conditions, the comparison target was a medical doctor who had a different aesthetic preference than the student participants. In the distinctive similarity conditions, the comparison target was a student who had the same, unique aesthetic preference as the student participants. In the nondistinctive similarity conditions, the comparison target was a

student who had the same, common aesthetic preference as the student participants.

Target performance. We manipulated this as follows. For the upward comparison conditions, Chris' RAT score was high (5 out of 6). Because the six RAT items the participants worked on earlier were practically impossible to solve (in fact, most participants answered only one or two items correctly), Chris was an upward comparison target. For the *downward comparison* conditions, Chris' RAT score was low (2 out of 6). Because the six RAT items the participants worked on earlier were very easy to solve, participants' scores were likely to be high (in fact, most participants answered five or six items correctly), thus Chris was a downward comparison target.[2]

Self-evaluations. After having learned about Chris' performance, participants were given a filler task (naming capitals of European countries). Next, they answered some questions about themselves, ostensibly to determine whether the tasks they had just completed might be affected by background characteristics. All participants then rated themselves on the following adjectives: *kind*, *bright*, *friendly*, *dumb*, *sincere*, *lucky*, *incompetent*. These adjectives were chosen such that some of them were related to what the RAT was ostensibly measuring (IQ, academic success), whereas others were not directly related to this dimension. This allowed us to measure and demonstrate global self-evaluation or self-esteem effects that went beyond the specific test situation (see also Stapel & Koomen, 2000, 2001, 2005). To create a single self-evaluation score for each participant we averaged the seven items, after reverse scoring the negative item (incompetent; $\alpha = .83$).[3] To check whether our distinctiveness manipulations were successful, we also asked participants to rate themselves on the "trait" *unique*. For all of these items, participants rated themselves on 7-point scales anchored on the endpoints with the labels 1 (*not at all*) to 7 (*very much*).

Comparison target ratings. Participants rated the comparison target (Chris) on several adjectives (*intelligent*, *competent*, *bright*, *successful*, and *unique*) using a 7-point scale that ranged from 1 (*not at all*) to 7 (*very much*). Responses on the first four items were averaged to form a single index of comparison target competence ($\alpha = .79$). Participants also indicated how similar they felt Chris was to them as well as rated the "likelihood that Chris and I have similar tastes, preferences, and attitudes" (see Miller et al., 1988, p. 912) on 7-point scales ranging from 1 (*not at all likely*) to 7 (*very likely*). These three similarity items were averaged to create a single similarity score ($\alpha = .73$).

Task importance. Participants rated the importance of the RAT on a scale anchored on the endpoints with 1 (*not measuring an important ability*) and 7 (*measuring an important ability*).

Debriefing. On completion of the questionnaire, participants were carefully debriefed about the goal and purpose of the experiment. None of the participants spontaneously indicated suspicion of the actual goal of the experiment or indicated that their self-evaluations might have been influenced either by the filler tasks, the RAT, or the comparison target information. After debriefing, participants were thanked and dismissed.

RESULTS AND DISCUSSION

Manipulation Checks

A Target Performance × Target Similarity × Task Importance analysis of variance (ANOVA) on the participants' ratings of the comparison target's competence revealed the predicted main effect of target performance, $F(1, 127) = 102.09$, $p < .01$, $\eta^2 = .45$, (other Fs < 1). Participants judged the upward comparison target more favorably ($M = 5.60$, $SD = 0.75$) than they did the downward comparison target ($M = 4.38$, $SD = 0.67$).

To examine whether our similarity manipulation was successful, we submitted the participants' similarity scores to a Target Performance × Target Similarity × Task Importance ANOVA. This analysis revealed a main effect of target similarity, $F(2, 127) = 66.34$, $p < .01$, $\eta^2 = .34$ (other Fs < 1). Participants felt most similar to the comparison target when the target was similar in a distinctive way ($M = 5.66$, $SD = 0.53$). Similarity ratings were lowest when the target was dissimilar ($M = 4.06$, $SD = 0.97$). In the nondistinctive conditions, similarity ratings were between these two extremes ($M = 4.59$, $SD = 0.81$; all simple comparisons ps < .05).

Our next manipulation check tested whether our distinctiveness manipulations were successful. A Target Performance × Target Similarity × Task Importance ANOVA on the *self-uniqueness* rating revealed a main effect of target similarity, $F(2, 127) = 17.62$, $p < .01$, $\eta^2 = .12$, (other ps > .19). As expected, this rating showed that self-uniqueness was higher in the distinctive similarity condition ($M = 6.38$, $SD = 0.60$) than in the nondistinctive similarity and dissimilarity conditions (relevant ps < .05) and that self-uniqueness in both the nondistinctive similarity ($M = 5.34$, $SD = 1.03$) and the dissimilarity ($M = 5.48$, $SD = 1.09$) conditions was rated relatively low and did not differ from each other ($F < 1$).

A Target Performance × Target Similarity × Task Importance ANOVA on the *other-uniqueness* rating showed a similar pattern. This analysis revealed a main effect of target similarity, $F(2, 127) = 50.07$, $p < .01$,

TABLE 1: Mean (SD) Self-Evaluation as a Function of Target Performance, Target Similarity, and Task Importance

Task Importance	*Important*			*Unimportant*		
Similarity	*Distinctive*	*Nondistinctive*	*Dissimilar*	*Distinctive*	*Nondistinctive*	*Dissimilar*
Target performance						
Upward	4.35a (0.77)	4.36a (0.72)	4.84ab (0.82)	5.60b (0.75)	4.93ab (0.56)	4.93ab (0.96)
Downward	5.95b (0.61)	5.84b (0.32)	4.75ab (0.66)	4.09a (0.35)	4.93ab (0.57)	4.82ab (0.96)

NOTE: The scale ranged from 1 (*not at all*) to 7 (*very much*). Higher numbers indicate higher self-evaluation. Means with different subscripts differ at $p < .01$.

$\eta^2 = .28$, (other ps > .34). This rating showed that other-uniqueness was higher in the distinctive similarity condition ($M = 6.50$, $SD = 0.61$) than in the nondistinctive similarity and dissimilarity conditions (relevant ps < .05) and that ratings of other-uniqueness in both the nondistinctive similarity ($M = 5.34$, $SD = 0.67$) and the dissimilarity ($M = 5.29$, $SD = 0.86$) conditions were relatively low and did not differ from each other ($F < 1$).

Finally, we checked whether our importance manipulation was successful. A Target Performance × Target Similarity × Task Importance ANOVA on the importance measure revealed a main effect of importance, $F(1, 127) = 32.38$, $p < .01$, $\eta^2 = .20$, (other ps > .29). This importance effect indicated, as intended, that participants who were told that the RAT measured an important ability, did perceive the task as such ($M = 4.67$, $SD = 1.48$), compared to those participants who were told that the task was trivial ($M = 3.31$, $SD = 1.46$).

Main Analyses

The effects of the independent variables on participants' self-evaluation scores were investigated by performing a Target Performance × Target Similarity × Task Importance ANOVA (see Table 1). This analysis revealed a marginal effect of Target Performance, $F(1, 127) = 3.67$, $p = .06$, $\eta^2 = .03$, a Target Performance × Task Importance interaction, $F(1, 127) = 51.53$, $p < .01$, $\eta^2 = .29$, a Target Performance × Target Similarity, $F(2, 127) = 7.48$, $p < .01$, $\eta^2 = .11$, and a three-way interaction, $F(2, 127) = 21.34$, $p < .01$, $\eta^2 = .14$ (other effects, ps > .15). As can be seen in Table 1, these effects reflect, as hypothesized, that in the dissimilarity conditions, social comparison yielded no self-evaluation effects (Fs < 1). In the distinctive and nondistinctive similarity conditions, however, social comparison *did* have self-evaluative effects.[4]

As can be seen in Table 1, participants in the *distinctive similarity* conditions rated themselves more negatively (showed contrast) when they were exposed to a comparison target who had performed well ($M = 4.35$, $SD = 0.77$) than when exposed to a comparison target who had performed badly ($M = 5.95$, $SD = 0.61$), $F(1, 127) = 30.53$, $p < .01$, $\eta^2 = .13$. Yet, when the dimension was unimportant, participants rated themselves more positively (showed assimilation) when they were exposed to a comparison target who had performed well ($M = 5.60$, $SD = 0.75$) than when exposed to a comparison target who had performed badly ($M = 4.09$, $SD = 0.35$), $F(1, 127) = 23.76$, $p < .01$, $\eta^2 = .15$.

In the *nondistinctive similarity* conditions, contrast occurred when the comparison was important, but a null effect was found when the comparison was unimportant. Namely, when the dimension was important participants rated themselves more negatively (showed contrast) when they were exposed to a comparison target who had performed well ($M = 4.36$, $SD = 0.72$) than when exposed to a comparison target who had performed badly ($M = 5.84$, $SD = 0.32$), $F(1, 127) = 23.75$, $p < .01$, $\eta^2 = .15$. When the dimension was unimportant, however, comparison information had no effect; self-evaluations after upward comparisons were similar to those after downward comparison ($F < 1$).

These findings clearly support our hypotheses. First, they replicate the now classic social comparison finding that for social comparison information to exert an effect on self-evaluations, the comparison target needs to be perceived as similar (see Blanton, 2001; Wood, 1989). Second, and perhaps more interesting, these results show that if the comparison target belongs to the same category (i.e., he is a student, I am a student) and is perceived as similar, the pattern of social comparison effects depends on (a) whether this similarity is perceived as distinctive (i.e., "we both like the same art drawing and this makes us unique because hardly anybody else likes this particular art drawing") or nondistinctive (i.e., "we both like the same art drawing, but that is nothing special because most people like this particular art drawing"), and (b) whether the comparison is perceived as important or unimportant. When the comparison dimension is important, contrast occurs, independent of whether similarity is distinctive. When the comparison dimension is unimportant, assimilation occurs when self-other similarity is distinctive, whereas no effect occurs when self-other similarity is nondistinctive.

EXPERIMENT 2: DISTINCTIVENESS VERSUS AMOUNT OF SIMILARITY

In Experiment 2, we take our investigation of the *distinctiveness is key* hypothesis one step further by testing an important implication of this hypothesis: What matters is the *quality* of similarity (is it distinctive?) rather than the *quantity* of similarity (is it a lot?). We test this hypothesis by exposing people (psychology students) to (a) a comparison target who is dissimilar on several dimensions (e.g., age, profession, gender, education, nationality; he is a German-born, practicing medical doctor who studied at University X, I am a female first-year psychology student at University Y), but with whom one also shares a unique, distinctive aesthetic taste (i.e., we both like the same art drawing and this makes us unique because hardly anybody else likes this particular art drawing) or (b) a comparison target who is similar on several dimensions (e.g., we are both Dutch, female, first-year psychology students at University of X), and with whom one shares a common, nondistinctive aesthetic taste (i.e., we both like the same art drawing, but that is nothing special because most people like this particular art drawing). If the quantity (amount) of similarity is what matters, then assimilation should be more likely to occur in the "non-distinctive similarity" conditions. If the quality (distinctiveness) of similarity is what matters, then assimilation should be more likely to occur in the "distinctive dissimilarity" conditions. Following Experiment 1 and Tesser's (1988) SEM model, we predict that such assimilation should be especially likely to occur when the comparison dimension is unimportant.

Method

Participants and Design

Participants were 97 first-year, female psychology students who took part for course credit. For this experiment we used a 2 (Target Performance: upward, downward) × 2 (Target Similarity: distinctive dissimilar, nondistinctive similar) × 2 (Task Importance: important, unimportant) between-participants design.

Procedure and Materials

The general procedure and comparison target manipulations were similar to those used in Experiment 1, with the following exceptions.

Similarity and *distinctiveness* were manipulated together as follows to create nondistinctive similar conditions and distinctive dissimilar conditions. To manipulate similarity, in the nondistinctive similar conditions, Chris was similar to the participants on several dimensions (e.g., age, profession, gender, education, nationality): Chris was a Dutch, female, first-year psychology student at the University of Groningen. In the distinctive dissimilar conditions, Chris was dissimilar on those dimensions: Chris was a German-born, practicing medical doctor who had studied at the University of Hamburg. To manipulate distinctiveness, in the nondistinctive similar conditions, participants were told that their aesthetic preference (picture choice) was common and that Chris' preference was similar to theirs. In the distinctive dissimilar conditions, participants were told that their aesthetic preference (picture choice) was unique and that Chris' preference was similar to theirs.

Another difference with the first experiment was that we used different items to check whether our distinctiveness and similarity manipulations were successful. Specifically, participants rated the amount of similarities they thought there were "between Chris and me" on a 7-point scale ranging from 1 (*not many*) to 7 (*a lot*). Participants also rated whether there was some kind of "special bond" between Chris and them using a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*). This item focuses explicitly on the distinctiveness of the other-self relation and is therefore a good proxy (compared to similarity-type measures) of perceived distinctive similarity (see also Miller et al., 1988).

After completion of the experiment, participants were given course credit and debriefed. Again, none of the participants spontaneously indicated suspicion of the actual goal of the experiment or the relation between the different tasks they had completed.

RESULTS AND DISCUSSION

Manipulation Checks

A Target Performance × Target Similarity × Task Importance ANOVA on the participants' ratings of the comparison target's competence revealed the predicted main effect of target performance, $F(1, 89) = 78.12$, $p < .01$, $\eta^2 = .47$, (other Fs < 1). Participants judged the upward comparison target more favorably ($M = 5.57$, $SD = 0.69$) than they did the downward comparison target ($M = 4.33$, $SD = 0.61$).

To examine whether our manipulations of the quantity and quality of self-other similarity were successful, we first submitted the participants' similarity scores to a Target Performance × Target Similarity × Task Importance ANOVA. This analysis revealed the expected main effect of target similarity, $F(1, 89) = 17.96$, $p < .01$, $\eta^2 = .17$ (other Fs < 1). Participants felt that there were more similarities between them and the comparison target when this target was similar on several (nondistinctive) dimensions

TABLE 2: Mean (SD) Self-Evaluation as a Function of Target Performance, Target Similarity, and Task Importance

	Important		*Unimportant*	
Task Importance / *Similarity*	*Distinctive* / *Dissimilar*	*Nondistinctive* / *Similar*	*Distinctive* / *Dissimilar*	*Nondistinctive* / *Similar*
Target performance				
Upward	4.47a (0.63)	4.21a (0.61)	5.44b (0.87)	4.76ab (0.66)
Downward	5.65b (0.97)	5.41b (0.85)	4.25a (0.62)	4.86ab (0.75)

NOTE: The scale ranged from 1 (*not at all*) to 7 (*very much*). Higher numbers indicate higher self-evaluation. Means with different subscripts differ at $p < .01$.

($M = 4.77$, $SD = 0.99$) than when the target was relatively dissimilar on those dimensions ($M = 3.94$, $SD = 0.78$). Next, we submitted participants' scores on the "special bond" item to a Target Performance × Target Similarity × Task Importance ANOVA. This analysis revealed the expected (but opposite) main effect of target similarity, $F(1, 89) = 19.15$, $p < .01$, $\eta^2 = .18$ (other Fs < 1). Participants felt that they shared more of a special bond with the comparison target when they shared a unique aesthetic preference with this target ($M = 3.67$, $SD = 0.72$) than when this shared taste was relatively common ($M = 2.85$, $SD = 1.09$).

Together, these "similarity" and "special bond" measures show that our manipulation of quantity versus quality of similarity was successful. Participants in the "similar on many dimensions" condition felt relatively more similar *and* also felt less of a psychological bond to the comparison target, and participants in the "distinctively similar on a few dimensions" condition felt relatively less similar *and* also felt more of a special bond. This suggests that our unique similarity manipulation was successful in eliciting a type of similarity that was special, distinctive, and meaningful to our participants.

Finally, we checked whether our importance manipulation was successful. A Target Performance × Target Similarity × Task Importance ANOVA on the importance measure revealed a main effect of importance, $F(1, 95) = 25.42$, $p < .01$, $\eta^2 = .21$, (other Fs < 1). This importance effect indicated, as intended, that participants who were told that the RAT measured an important ability did perceive the task as such ($M = 4.98$, $SD = 1.20$), compared to those participants who were told that the task was trivial ($M = 3.58$, $SD = 1.51$).

Main Analyses

We averaged the seven self-evaluation items (e.g., kind, bright) into a single self-evaluation score ($\alpha = .89$) after reverse scoring the negative item (incompetent). Participants' self-evaluation scores were investigated by performing a Target Performance × Target Similarity × Task Importance ANOVA (see Table 2). This analysis revealed a main effect of Target Performance, $F(1, 89) = 4.35$, $p < .05$, $\eta^2 = .05$, a Target Performance × Task Importance interaction, $F(1, 89) = 32.15$, $p < .01$, $\eta^2 = .27$, a Target Performance × Target Similarity interaction, $F(1, 89) = 4.51$, $p < .05$, $\eta^2 = .05$, and the predicted three-way interaction, $F(1, 89) = 4.43$, $p < .05$, $\eta^2 = .05$ (other effects, Fs < 1).

As can be seen in Table 2, these effects reflect, as hypothesized, that when the dimension was important, participants in the distinctive dissimilar conditions showed contrast, such that they rated themselves more negatively when they were exposed to a comparison target who had performed well ($M = 4.47$, $SD = 0.63$) than when exposed to a comparison target who had performed badly ($M = 5.65$, $SD = 0.97$), $F(1, 89) = 11.07$, $p < .01$, $\eta^2 = .11$. Yet, when the dimension was unimportant, participants showed assimilation and rated themselves more positively when they were exposed to a comparison target who had performed well ($M = 5.44$, $SD = 0.87$) than when exposed to a comparison target who had performed badly ($M = 4.25$, $SD = 0.62$), $F(1, 89) = 12.39$, $p < .01$, $\eta^2 = .12$.

In the nondistinctive similar conditions, contrast occurred when the comparison was important, but a null effect was found when the comparison was unimportant. Namely, when the dimension was important participants rated themselves more negatively when they were exposed to a comparison target who had performed well ($M = 4.21$, $SD = 0.61$) than when exposed to a comparison target who had performed badly ($M = 5.41$, $SD = 0.85$), $F(1, 89) = 12.39$, $p < .01$, $\eta^2 = .12$. When the dimension was unimportant, however, comparison information had no effect; self-evaluations after upward comparisons were similar to those after downward comparison ($F < 1$).

These findings further corroborate our distinctiveness is key hypothesis. They also nicely replicate the findings of Experiment 1. More important perhaps, they support the notion that when it concerns the impact of self-other similarity on the direction of social comparison effects (assimilation or contrast), the quality (distinctiveness) of similarity rather than the quantity (amount) of similarity is a crucial determinant of whether assimilation or contrast occurs. These results

thus extend previous perspectives on the role of similarity in social comparison (see, e.g., Biernat & Thompson, 2002; Brown et al., 1992; Jetten et al., 1998; McFarland et al., 2001; Mussweiler, 2003; Stapel & Koomen, 1997) by explicating and empirically demonstrating that the type (distinctiveness) of similarity matters. Increased similarity does not always lead to contrast (cf., Cash et al., 1983), neither does it necessarily lead to assimilation (cf., McFarland et al., 2001). The present results suggest that the importance of the task and the distinctiveness of target-self similarity jointly determine the outcome of social comparison effects. When the task is important, both distinctively and nondistinctively similar targets yield contrast. When the task is unimportant, however, comparison targets who are perceived as relatively dissimilar, but with whom one shares one distinct attribute (e.g., you and the comparison target see beauty where most other people do not), lead to assimilation, whereas comparison targets with whom one shares many, but relatively common attributes have no effect.

GENERAL DISCUSSION

In the social comparison literature it is widely acknowledged that similarity is one of the core variables that determines the impact of comparison targets on self-evaluations (Taylor & Lobel, 1989; Wood, 1989). Typically, similarity is treated as a precondition for the occurrence of social comparison effects (e.g., Lockwood & Kunda, 1997; Tesser, 1988). When the comparison target and the self are dissimilar, that is when the comparison target is categorized as belonging to a different category as oneself, there will be no social comparison effects. No similarity, no effect (for reviews see Blanton, 2001; Wood, 1989).

The current research *replicates* previous social comparison studies in demonstrating that at least a certain degree of similarity seems to be necessary for comparison contrast to occur. More interesting perhaps, the current research *goes beyond* previous social comparison studies in demonstrating that when there *is* a certain degree of self-other similarity the self-evaluative consequences of social comparisons will be jointly determined by comparison importance (a crucial variable in Tesser's [1988] SEM model) and similarity distinctiveness (the main new variable introduced here).

Across two experiments, our findings show that when a comparison dimension is unimportant, distinctiveness matters. When self-other similarity is distinctive, social comparisons typically lead to assimilation, but when similarity is nondistinctive, social comparisons have no self-evaluative impact. When the comparison dimension is important, distinctiveness does not matter and contrast occurs. The current research further demonstrates that the distinctiveness rather than the amount of similarity is an important determinant of whether social comparison leads to contrast or assimilation. Thus, whether social comparisons result in assimilation is a function of whether one shares a special, unique bond with the comparison target rather than whether one is similar on none, one, or many dimensions. It is in this sense (by pointing to the importance of the distinctiveness of other-self similarity) that we have elucidated the role of the similarity construct in social comparison outcomes (cf., McFarland et al., 2001; Tesser, 1988).

Subtyping Similarity

In our opinion, aside from providing an important test of Tesser's (1988) SEM model, the present experiments provide an empirical demonstration of the importance of subtyping the similarity construct in terms of distinctiveness. In doing so, our analysis provides an interesting view on the seeming inconsistencies that have plagued previous studies of the similarity construct, by suggesting that distinctiveness should make a difference. And indeed, one noteworthy difference between the many studies that have shown contrast other-self similarity increases and the few studies that have shown assimilation when other-similarity increases is that in the latter studies comparison targets were similar to participants in a manner that was *distinctive* (for reviews see Blanton, 2001; Wood, 1989). To illustrate this with an example from the distinctive-similarity-breeds-assimilation category of empirical evidence, Brewer and Weber (1994) found assimilation when participants were members of a distinctive minority group and comparison targets were members of the same group (see Gerard & Hoyt, 1974). Similarly, Brown and his colleagues (1992) found that assimilation occurred when participants thought they shared distinctive attitudes or were born on the same day as the comparison target. The present studies add to these previous studies by (a) explicitly and directly *defining* and *manipulating* the distinctiveness of other-self similarity and (b) explicitly and systematically *testing* the impact of distinctive versus nondistinctive similarity under different levels of a variable that is known to influence the direction of social comparison effects, comparison importance.

NOTES

1. We would like to stress that this is a *ceteris paribus* argument. Although it could be argued that contrast is likely to be the most typical and frequent social comparison effect (see Suls & Wheeler, 2000), we know empirically that there are a large number of moderators, which jointly determine the direction of social comparison effects (e.g., extremity of the comparison's target's performance, importance

of the comparison dimension, perceived distinctness of the comparison target, attainability of the comparison target's success, self-esteem, and self-certainty). However, when all things are equal, we feel it is safe to say that given that the comparison is perceived as extreme and important, the effect of a similar other on self-evaluation is likely to be contrastive (see also Stapel & Marx, 2006).

2. It is important to note that in a separate control study, we established that giving participants the difficult (n = 12) versus easy (n = 13) "Remote Associates Task" (RAT) did not affect their self-evaluations (M = 4.99 and M = 4.74, respectively, F < 1). This indicates the RAT becomes meaningful only or mainly when participants can compare their own RAT score to a (similar) comparison target. Without having such a point of reference, the easy and the difficult RAT affect self-evaluations similarly.

3. It is important to note that here, as in the other experiment reported in this article, separate analyses over each of the self-evaluation items yielded the same pattern of results as on the self-evaluation index. For reasons of parsimony and presentation, we chose to report the effects on the indexed scores rather than the separate scores.

4. Another way to find out whether our hypotheses were supported is to compute the correlations between target ratings and self-evaluations ratings in each of the cells of the experiment (see also Manis, Biernat, & Nelson, 1991; Newman & Benassi, 1989). One would then expect to find positive target-self correlations in cells where assimilation was found (the more positive target ratings, the more positive self-ratings) and negative target self-correlations in cells where contrast was found (the more positive target ratings, the more negative self-ratings). Such analyses indeed indicated that correlations were indeed positive in "assimilation" cells (r .19 to .27), whereas they were negative in "contrast" cells (r –.17 to –.28). Similar correlations were found in Experiment 2.

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Received November 9, 2005
Revision accepted September 8, 2006