

The durability of anchoring effects

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Abstract

Recent research suggests that judgmental anchoring is mediated by a selective increase in the accessibility of knowledge about the judgmental target. Anchoring thus constitutes one instance of the judgmental effects of increased knowledge accessibility. Such knowledge accessibility effects have repeatedly been demonstrated to be fairly durable, which suggests that the effects of judgmental anchoring may also persist over time. Consistent with this assumption, three experiments demonstrate that judgmental anchors influence judgment even if they were present one week before the critical judgment is made. In fact, the magnitude of anchoring was found to remain undiminished over this period of time. Copyright © 2001 John Wiley & Sons, Ltd.

Human judgment is often influenced by salient anchors. In what is probably the best-known demonstration of this effect, Tversky and Kahneman (1974) asked their research participants two consecutive questions about the percentage of African nations in the UN: a comparative and an absolute one. In the comparative anchoring question, participants indicated whether the percentage of African nations in the UN is higher or lower than an arbitrary number (the anchor) that had ostensibly been determined by spinning a wheel of fortune (e.g. 65% or 10%). Subsequently, participants received an absolute anchoring question, which asked them to give their best estimate of this percentage. Absolute judgments were assimilated to the provided anchor value, so that the mean estimate of participants who received the high anchor was 45%, compared to 25% for participants who received the low anchor (for a review of anchoring research, see Mussweiler & Strack, 1999a).

One of the most remarkable characteristics of such anchoring effects is their exceptional robustness (for a discussion see, Mussweiler, Strack, & Pfeiffer, 2000). For one, anchoring occurs even if the anchor values are clearly uninformative for the critical estimate because – as in Tversky and Kahneman's (1974) classic study – anchors are randomly selected (e.g. Cervone & Peake, 1986; Mussweiler & Strack, 2000b) or because they are implausibly extreme (e.g. Chapman & Johnson, 1994; Mussweiler, Förster, & Strack, 1997; Mussweiler & Strack, 1999b, Strack & Mussweiler, 1997). Furthermore, anchoring effects appear to be independent of participants' *motivation* (Wilson, Houston, Etling, & Brekke, 1996) and *expertise* (Joyce & Biddle, 1981; Englich & Mussweiler, in press; Mussweiler *et al.*, 2000; Northcraft & Neale, 1987; Wright & Anderson, 1989). Probably the most striking demonstration of the robustness of the phenomenon, however, stems from research

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demonstrating that *explicit instructions to correct* for a potential influence of an anchor do not mitigate the effect (Wilson *et al.*, 1996). In fact, even explicitly forewarning judges about the potential distortion and informing them about its direction did not diminish the magnitude of judgmental anchoring. Taken together, these findings indicate that anchoring is an exceptionally robust phenomenon that is very difficult to avoid.

Recent conceptualizations of anchoring as a knowledge accessibility effect (Mussweiler & Strack, 1999a,b, 2000a; Strack & Mussweiler, 1997; see also Chapman & Johnson, 1999), suggest yet another way in which anchoring may prove to be remarkably robust. In particular, research on the effects of priming on social perception (e.g. Srull & Wyer, 1979, 1980) has repeatedly demonstrated that knowledge accessibility effects remain influential over substantial periods of time. This suggests that anchoring effects may not only remain uninfluenced by a variety of characteristics of the anchor, the judge and the judgmental context, but may also show considerable robustness over time. The present research was designed to examine this possibility.

ANCHORING AS A KNOWLEDGE ACCESSIBILITY EFFECT: THE SELECTIVE ACCESSIBILITY MODEL

Recently, we (Mussweiler, 1997; Mussweiler *et al.*, 1997; Mussweiler & Strack, 1999a,b, 2000a; Strack & Mussweiler, 1997; for a related account, see Chapman & Johnson, 1999) have proposed a Selective Accessibility Model which conceptualizes judgmental anchoring as a knowledge accessibility effect. In particular, the model postulates that anchoring effects are mediated by a selective increase in the accessibility of anchor-consistent knowledge about the target. We assume that judges compare the target with the anchor by testing the possibility that the target's value is similar to the anchor. For example, judges who are asked whether the average price for a German car is higher or lower than US\$40,000, are assumed to test the possibility that the average price is actually close to US\$40,000. To do so, they selectively retrieve knowledge that is consistent with this assumption (e.g. 'A Mercedes is even more expensive', etc.) (Trope & Liberman, 1996). This leads to a selective increase in the accessibility of anchor-consistent knowledge about the target. In order to generate the subsequent absolute estimate, judges then rely primarily on easily accessible knowledge (Higgins, 1996; Wyer & Srull, 1989). As a consequence, their estimate is heavily influenced by the anchor-consistent knowledge generated before. On the surface, this is apparent in an assimilation of the final estimate to the anchor value (for empirical support of this model, see Mussweiler *et al.*, 1997; Mussweiler & Strack, 1999b, 2000a,b; Strack & Mussweiler, 1997; for an overview, see Mussweiler & Strack, 1999a).

From this theoretical perspective, judgmental anchoring constitutes a special case of knowledge-accessibility effects. In particular, the comparative anchoring task is similar to a priming task that increase the accessibility of a specific (i.e. anchor-consistent) subset of knowledge about the target. Given this conceptual proximity, the characteristics that apply to other instances of knowledge accessibility effects may also apply to anchoring effects. The present research was designed to examine this relation for one specific characteristic of knowledge accessibility effects, namely their durability.

THE DURABILITY OF KNOWLEDGE-ACCESSIBILITY EFFECTS

Research on knowledge accessibility effects in the context of trait priming in social judgment (for recent reviews, see Higgins, 1996; Sedikides & Skowronski, 1991; Wyer & Srull, 1989) has repeatedly

demonstrated that increasing the accessibility of a trait concept influences judgment even if there is a substantial delay between the priming and the judgment task (e.g. Srull & Wyer, 1979, 1980). For example, Srull and Wyer (1980) primed participants with hostility and then had them judge a target person ('Donald') who was described in ambiguously hostile terms. These judgments were given either immediately subsequent to the priming, after one day, or after one week. Although the strength of the resulting priming effect decreased with the length of the delay, the results indicated that, even after a one-week delay, participants who had been primed with hostility judged 'Donald' to be more hostile than those who had not been primed. Thus, the effects of priming on social judgment appear to be characterized by a remarkable durability.

Interestingly, for the case of trait priming in social judgment this durability appears to depend on the frequency with which information that is relevant to the critical judgment is encountered during the delay. In particular, the priming episode appears to have a stronger and more durable effect, if no or very few alternative concepts that are related to the critical judgment are encountered. If, however, alternative information is encountered frequently, these encounters may function as priming events themselves and may thus weaken or ultimately offset the effects of the original priming episode (for a more elaborate discussion, see Wyer & Srull, 1989). Consistent with this assumption, it has been demonstrated that the effects of trait concept priming are more durable for supposedly less frequent hostile behaviors than for supposedly more frequent kind behaviors (Srull & Wyer, 1979).

THE PRESENT RESEARCH

The present research was designed to test the implications of this work on the durability of priming effects in social perception for judgmental anchoring. If anchoring effects are indeed conceptually related to these priming effects in that both are mediated by knowledge accessibility – as recent evidence suggests (for an overview see Mussweiler & Strack, 1999a) – then they may be similarly durable as priming effects in social judgment have been demonstrated to be (Srull & Wyer, 1979, 1980). Just as unscrambling sentences with hostile content influences judgments of hostility that are given one week later (Srull & Wyer, 1980), comparing a target to a given anchor may influence judgments of the target that are given one week later.

In fact, there is even reason to believe that anchoring effects may prove to be more durable than standard priming effects. This is the case because the mode of knowledge activation differs critically in both paradigms. Whereas in the standard priming paradigm the activated knowledge is externally provided by the experimenter, in the anchoring paradigm it is self-generated by the judges (for a more detailed discussion of this difference and its implications, see Mussweiler & Strack, 1999b). Self-generated material, however, appears to be processed more deeply than externally provided material (Slamecka & Graf, 1978) and may thus have stronger and more durable effects on judgment. Consistent with this assumption, it has been demonstrated that self-generation contributes to the robustness of knowledge accessibility effects in judgmental anchoring (Mussweiler & Strack, 1999b) and social perception (Mussweiler & Neumann, 2000). In much the same way, self-generation may also increase the durability of knowledge-accessibility effects. Thus, anchoring effects may be at least as durable as standard priming effects. To examine this possibility, we conducted three experiments in which the comparative and the absolute anchoring tasks either immediately followed one another or were one week apart.

As pointed out above, in the case of judgmental priming the durability of knowledge-accessibility effects appears to depend on the frequency with which judges encounter information that is relevant to the critical judgment. Thus, one possibility is that anchoring effects also prove to be more durable if

the judgmental target is extremely rare. On the other hand, however, because of the self-generation mode of knowledge activation the durability of anchoring effects may also prove to be independent of the frequency with which information about the target is encountered during the delay. Given that the effects of self-generated information are generally more robust, they may also remain uninfluenced by erratic encounters of target information. To examine these alternative possibilities, we used three different judgmental targets. Study 1 examined the durability of anchoring effects in judgments about a fictitious target object ('Xiang Long'). Recent research has demonstrated that such judgments are strongly influenced by judgmental anchors (Mussweiler & Strack, 2000b). Because judges cannot encounter information about a fictitious target, judgments about such an object may be more likely to remain influenced by a judgmental anchor over a long delay. Study 2 then examines the durability of anchoring effects in judgments of actually existing targets (Albert Einstein, a whale) for which participants are somewhat more likely to encounter relevant information during the delay. Finally, Study 3 examines the durability of anchoring effects for judgments about a target quantity for which judges are likely to encounter relevant information on a daily basis (temperatures in Germany).

STUDY 1

The first experiment examined the durability of anchoring effects in judgments about a fictitious target. In particular, participants were first asked whether 'Xiang Long' was younger or older than either 2000 or 60 years. They gave their absolute estimate for the age of 'Xiang Long' either immediately after the comparative judgment or one week later.

Method

Participants

We recruited 40 male and female students at the University of Würzburg who were not enrolled in psychology classes as participants and randomly assigned them to one of four experimental conditions. They were asked to participate in a series of psychological studies, which would last for a total of about one hour. As a compensation, they were offered 15 German Marks (about US\$8).

Materials

The questionnaire consisted of five pairs of comparative and absolute anchoring questions. The critical question was embedded in four context questions that were taken from a pool we have used in our previous research on anchoring (Mussweiler & Strack, 1999b; Strack & Mussweiler, 1997). All context questions pertained to existing (rather than fictitious) judgmental targets such as the length of the river Elbe. The fifth question pair was the critical one that pertained to the age of the fictitious target 'Xiang Long' for which participants received no background information. This question has also been used in some of our previous work (Mussweiler & Strack, 2000b). For about half of the participants, the comparative anchoring question included the high anchor of 2000 years, for the other half it included the low anchor of 60 years.

Procedure

Participants were recruited over the phone. Upon arrival in the lab, they first participated in a series of experiments that were unrelated to the current one. One of these experiments included large numbers of general-knowledge questions, which also pertained to numeric quantities. After completion of these studies, participants were given the experimental materials for the current study and were told to read instructions attentively. Here, they were informed that they were taking part in a pretest for the construction of a general-knowledge questionnaire. The purpose of the pretest was ostensibly to find the best wording for general-knowledge questions. To reduce the prescribed informativeness of the anchors and thus discourage conversational inferences (Grice, 1975), participants were told that the values were randomly selected.¹ Moreover, the mechanism of random selection was described in detail and it was pointed out that because the anchors were randomly selected, they were not informative with respect to the actual values of the targets. It was further explained that this random selection of the anchors was necessary to minimize their impact on the answers and to identify the impact of different question formats. Finally, participants were instructed to answer the questions as accurately as possible.

To test for the temporal robustness of anchoring, we varied the delay between the comparative and the absolute questions. For about half of our participants both question types immediately followed one another. For the other half, however, they were separated by a one-week delay. In particular the latter group of participants received a set of five comparative questions at a first experimental session and then received the set of five matching absolute questions at a second session held seven days later. At the end of the second session, these participants were asked whether they could remember the anchor values they had received a week ago, which none of them could.

In sum, Study 1 is based on a 2(high versus low anchor) \times 2(no versus one-week delay) factorial design. All factors were manipulated between participants.

Results and Discussion

Two participants were excluded from the analysis because their estimates deviated from the mean by more than three standard deviations.²

As inspection of Table 1 reveals, the typical anchoring effect was replicated. In particular, absolute estimates were assimilated to the anchor values so that comparing the age of 'Xiang Long' to the high anchor yielded higher estimates ($M = 1010.52$ years) than comparing it to the low anchor ($M = 80$). Moreover, this anchoring effect is equally apparent in the estimates in the no-delay and the one-week delay condition.

This pattern of results produced a significant main effect of Anchor in a 2(high versus low anchor) \times 2(no versus one-week delay) ANOVA, using the absolute estimates for the age of 'Xiang Long' as the dependent variable, $F(1, 34) = 10.72, p < 0.002$. In this analysis, none of the remaining effects proved to be significant, all $F < 1$. Subsequent analyses further revealed that the difference

¹It has been suggested (e.g. Jacobowitz & Kahneman, 1995) that applying implicit rules of natural conversations (Grice, 1975) to standardized situations (e.g. Clark & Schober, 1992; Schwarz, 1994; Strack & Martin, 1987) allows participants to use the anchor value in order to infer the actual range of possible answers. Participants who expect the experimenter to be maximally informative (see Grice's, 1975, *maxim of quantity*) in asking his or her questions, may assume that the anchor value is close to the actual value and consequently position their estimate in its vicinity. This explanation, however, presupposes that the anchor value is deliberately selected by the experimenter. Thus, conversational inferences cannot explain the effects of randomly selected anchor values.

²Including these participants did not change the overall pattern of results.

Table 1. Absolute estimates for the age of 'Xiang Long' by anchor and delay (Study 1)

Anchor	Delay	
	No delay	One-week delay
High	1106.57 (<i>N</i> = 7)	962.5 (<i>N</i> = 14)
Low	75.78 (<i>N</i> = 9)	84.75 (<i>N</i> = 8)

Note: Estimates are given in years.

between the high and the low anchor condition is significant in the no-delay, $t(14) = 2.34$, $p < 0.02$ (one-tailed), as well as the one-week-delay condition, $t(20) = 2.29$, $p < 0.02$ (one-tailed).

These findings indicate that the effects of judgmental anchoring can indeed be remarkably durable. In particular, estimates for the age of 'Xiang Long' were assimilated to the provided anchor values, even if the comparative and the absolute judgment were separated by a one-week delay. Moreover, there is no indication that the magnitude of the anchoring effect was diminished over the one-week delay.

STUDY 2

The second experiment was designed to test whether a similar durability would also be apparent in judgments about actually existing targets. In particular, we gave participants anchoring tasks that pertained to the year in which Albert Einstein visited the USA for the first time and the maximum length that whales can reach. As in Study 1, we separated comparative and absolute anchoring tasks by a one-week delay for about half of our participants.

Method

Participants

We recruited 42 male and female students at the University of Würzburg who were not enrolled in psychology classes as participants and randomly assigned them to one of two experimental conditions. As in Study 1, they were asked to participate in a series of psychological studies, which would last for a total of about one hour and were offered 15 German Marks (about US\$8) as a compensation.

Materials and Procedure

The materials were similar to those of Study 1. The questionnaire consisted of four pairs of comparative and absolute anchoring questions. All of them pertained to actual targets and were taken from a pool of questions used in our previous research (Mussweiler & Strack, 1999b; Strack & Mussweiler, 1997). The two critical questions which pertained to the year of Albert Einstein's

first visit to the USA and the maximum length of a whale were embedded in two context questions. The high and low anchors were selected to deviate from the mean estimate of a calibration group ($N=151$) by one standard deviation (see Strack & Mussweiler, 1997). They were 1939 and 1905 for the year of Einstein's first visit to the USA and 49 and 21 meters for the maximum length of a whale. Each participant received one question pair including a high anchor and one question pair including a low anchor. About half of the participants received the high anchor for the first and the low anchor for the second question. For the other half this assignment was reversed.

The procedure was identical to Study 1. Again, about half of the participants received comparative and absolute questions immediately subsequent to one another, whereas for the other half both question types were separated by a one-week delay. None of the participants in the delay condition recalled the anchor values.

In sum, Study 2 is based on a 2(high versus low anchor) \times 2(no versus one-week delay) factorial design. The first factor was manipulated within, the second between participants.

Results and Discussion

To pool answers across the two different content domains, absolute estimates were transformed into z -scores. Thus the resulting scores reflect participants' average deviations from the question mean in units of the pertinent standard deviation.

The means given in Table 2 demonstrate that again the typical anchoring effect was replicated. Absolute estimates were assimilated to the anchor values so that comparing the target to the high anchor produced higher absolute estimates ($M=0.29$) than comparing it to the low anchor ($M=-0.26$). Moreover, this anchoring effect is equally apparent in the estimates in the no-delay and those in the one-week delay condition.

This pattern of results produced a significant main effect of Anchor in a 2(high versus low anchor) \times 2(no versus one-week delay) mixed-model ANOVA, using the absolute estimates as the dependent variable, $F(1, 40) = 6.96$, $p < 0.01$. In this analysis, none of the remaining effects proved to be significant, all $F < 1$. Subsequent analysis further demonstrated that the difference in absolute estimates for participants who had received the high versus the low anchor was significant for the no-delay, $t(18) = 2.47$, $p < 0.01$ (one-tailed), as well as the one-week delay condition, $t(22) = 1.67$, $p < 0.05$ (one-tailed).

Consistent with the findings of our first experiment, Study 2 demonstrates that absolute estimates are assimilated to a previously considered anchor, even if the comparative anchoring task was solved one week prior to the critical judgment. Moreover, as in Study 1 there was no indication that the magnitude of anchoring diminished over the one-week delay.

Table 2. Absolute estimates by anchor and delay (Study 2)

Anchor	Delay	
	No delay	One-week delay
High	0.23 ($N=23$)	0.34 ($N=19$)
Low	-0.31 ($N=23$)	-0.21 ($N=19$)

Note: Z -transformed values are given.

STUDY 3

Although we used actually existing targets in Study 2, for which the likelihood of encountering relevant information is higher than for the fictitious target 'Xiang Long', encounters with information about Einstein's first visit to the USA and the length of a whale may still be relatively infrequent. As a consequence, the durability of anchoring effects still remains to be demonstrated for targets for which judges frequently encounter relevant information. To provide such a demonstration, Study 3 used a target quantity for which judges are likely to encounter relevant information on a daily basis, namely temperatures in Germany.

Method

Participants

We recruited 51 male and female students at the University of Würzburg as participants under the same conditions as in Studies 1 and 2.

Materials and Procedure

The materials and procedures were similar to those of the preceding studies. The questionnaire consisted of four pairs of comparative and absolute anchoring questions. The critical question about the annual mean temperature in Germany was embedded in three context questions which all pertained to actually existing targets. Participants were either asked to compare the target quantity to the high (20°C) or the low anchor value (5°C). Moreover, the absolute question was either asked immediately subsequent to the comparative question, or with a delay of one week. None of the participants in the delay condition recalled the anchor value.

In sum, Study 3 is based on a 2(high versus low anchor) × (no versus one-week delay) factorial design. Both factors are manipulated between participants.

Results and Discussion

Inspection of the means given in Table 3 reveals, that the typical anchoring effect was replicated once again. Higher absolute estimates for the annual mean temperature in Germany were given if

Table 3. Absolute estimates for the annual mean temperature in Germany by anchor and delay (Study 3)

Anchor	Delay	
	No delay	One-week delay
High	16.35 (<i>N</i> = 16)	16.44 (<i>N</i> = 9)
Low	10.5 (<i>N</i> = 15)	9.91 (<i>N</i> = 11)

Note: Estimates are given in °C.

participants had compared the target quantity to the high ($M = 16.38^{\circ}\text{C}$) rather than the low anchor ($M = 10.25^{\circ}\text{C}$). Moreover, this anchoring effect appears to be equally strong in both delay conditions.

This pattern of means was borne out in a significant main effect of Anchor in a 2(high versus low anchor) \times 2(no versus one-week delay) ANOVA, $F(1, 47) = 55.13$, $p < 0.001$. In this analysis none of the remaining effects reached significance, all $F < 1$. Subsequent analyses further demonstrated that the difference between the high and the low anchor was significant in the no delay condition, $t(29) = 5.4$, $p < 0.001$, and the one-week delay condition, $t(18) = 5.4$, $p < 0.001$.

These findings indicate that anchoring effects persist over the period of a one-week delay even if the judgmental target is one for which relevant information is likely to be encountered on a daily basis. Furthermore, as was true in Studies 1 and 2, there is no indication that the magnitude of the observed effect diminishes over the delay.

GENERAL DISCUSSION

Taken together, these findings indicate that anchoring effects are remarkably durable. They reliably influence judgment even if comparing the judgmental target to the anchor and estimating its absolute value are separated by a one-week delay. In fact, our data even suggest that the magnitude of anchoring remains unchanged over this period of time. Thus, the effects of judgmental anchoring appear to be even more robust than knowledge accessibility effects in other paradigms such as judgmental priming (Srull & Wyer, 1979, 1980). As I have suggested above, this increased durability is likely to result from the self-generation mode of knowledge activation in judgmental anchoring. Self-generated material, appears to be processed more deeply than externally provided material (Slamecka & Graf, 1978). As a consequence self-generation may not only increase the robustness of knowledge accessibility effects (Mussweiler & Neumann, 2000; Mussweiler & Strack, 1999b) but also their durability. In this respect, our finding of an effect that remains undiminished over a substantial period of time is quite consistent with previous findings on the effects of self-generation on judgment (Davies, 1997; Mussweiler & Neumann, 2000; Mussweiler & Strack, 1999b).

By the same token, the self-generation mode of knowledge activation may also contribute to a second respect in which anchoring effects are more durable than standard priming effects. As I have pointed out above, standard priming effects have proved to persist over a one-week delay, only if judgment-relevant information is rarely encountered in the interim. Anchoring effects, however, appear to be durable over the same period of time even if the judgment pertains to a frequently encountered target (e.g. temperatures). In light of recent evidence on the consequences of self-generation (Davies, 1997; Mussweiler & Neumann, 2000; Mussweiler & Strack, 1999b), this striking durability of judgmental anchoring is likely to result because the information judges encounter during the delay is typically externally provided rather than self-generated and will consequently have a rather shallow effect. That is, the influence of encountered information is likely to be too weak to undermine the exceptionally robust influence of the self-generated target information that was activated during the comparative anchoring task.

Thus, keeping the specific characteristics of self-generated knowledge in mind, the current findings add to a growing body of evidence which suggests that judgmental anchoring is indeed a special case of a knowledge accessibility effect, as we have suggested in our Selective Accessibility Model (Mussweiler & Strack, 1999a,b; Strack & Mussweiler, 1997). In particular, the fact that anchoring effects are at least as durable as other knowledge accessibility effects supports this notion. At the same time, our data are inconsistent with an alternative account which attributes anchoring to numeric

priming (Jacowitz & Kahneman, 1995; Wilson *et al.*, 1996; Wong & Kwong, 2000). From such a numerical perspective, it is assumed that anchoring results because solving the comparative anchoring task primes the numeric anchor value itself, so that it is more likely to be used as a possible answer when the final estimate is generated (Jacowitz & Kahneman, 1995; Wilson *et al.*, 1996). Note that in contrast to the Selective Accessibility Model (Mussweiler & Strack, 1999a,b; Strack & Mussweiler, 1997), this account assumes that the increased accessibility of the numeric anchor value itself rather than the accessibility of semantic knowledge which indicates that the target value is similar to the anchor value mediates anchoring. Because judges encounter a multitude of numbers in their daily routines, however, the relative accessibility of the numeric anchor value is unlikely to remain at an increased level after a one-week delay. In particular, because the numeric anchor value is externally provided rather than self-generated, its influence is unlikely to be more robust or durable than the influence of any other number that is encountered during the delay. Thus, from a numeric priming perspective, the magnitude of anchoring should decrease dramatically over time. Our results demonstrate that this is not the case and thus argue against this alternative model of anchoring.

The current findings extend previous work on the robustness of judgmental anchoring by demonstrating that anchoring effects remain not only uninfluenced by characteristics of the anchor (e.g. Chapman & Johnson, 1994; Mussweiler & Strack, 1999b; Tversky & Kahneman, 1974), the judge (Englich & Mussweiler, *in press*; Mussweiler *et al.*, 2000; Northcraft & Neale, 1987; Wilson *et al.*, 1996) and the judgmental context (e.g. Wilson *et al.*, 1996). In addition, they appear to be remarkably robust over time. Given that judgmental anchoring is an exceptionally ubiquitous phenomenon that influences human judgment in a broad array of judgmental domains (for an overview, see Mussweiler & Strack, 1999a) this finding has important practical implications. For example, it has been suggested that anchoring plays a significant role in the negotiation process (e.g. Neale & Bazerman, 1991) in that an initial offer may serve as an anchor to which the final agreement is assimilated (Chertkoff & Conley, 1967; Galinsky & Mussweiler, *in press*; Liebert, Smith, Hill, & Keiffer, 1968). The present findings suggest that an initial offer may still have an effect if it has been made substantially before the final agreement is settled. In fact, one may even expect that in the context of a negotiation, the effect of an initial offer *increases* over time. This may be the case because negotiators are likely to see the initial offer itself as a deliberate attempt of their counterpart to influence them and may thus try to argue against it. The knowledge that is activated by processing the initial offer, however, is less likely to be seen as having an influence (Mussweiler & Neumann, 2000; Mussweiler & Strack, 1999b) and may thus be more likely to be used as a basis to find an agreement. To the extent that participants do not remember the initial offer itself, but are still influenced by the knowledge it activated, they are thus less likely to attempt to compensate for the assumed effect of the initial offer and may ultimately be even more influenced by it. Although these speculations are consistent with the current framework, their validity clearly remains to be tested.

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