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The Last Word in Court—A Hidden Disadvantage for the Defense

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In the legal systems of most western countries, defense attorneys present their sentencing recommendation after the prosecution has presented its sentencing demands. This procedural sequence for criminal cases is intended to balance the impact of both parties on the judge's final decision. Especially the positioning of the defense's plea at the end of the trial follows the fundamental legal principle "in dubio pro reo." Research on judgmental anchoring, however, suggests that the standard procedural sequence may in fact work against this principle. Consistent with this implication, the present studies demonstrate that the defense's sentencing recommendation is anchored on, and consequently assimilated toward, the preceding recommendation by the prosecution. This influence prevents the defense attorney from effectively counterbalancing the prosecutor's demand. Instead, the biased defense attorney's recommendation partially mediates the impact of the prosecutor's demand on the judge's decision. These findings suggest that the standard procedural sequence in court may place the defense at a distinct disadvantage.

KEY WORDS: anchoring effect; judicial decision making; legal professionals; sentencing bias.

Everybody wants to receive fair treatment, especially in court. But what is fair? Naive conceptions of justice hold that identical misdeeds ought to be followed by identical punishments (Kohlberg, 1975, 1984). In marked contrast to this simple notion of justice, however, research on judicial decision-making has repeatedly demonstrated that identical crimes are often punished with strikingly disparate sentences. In fact, substantial sentencing disparities result even when judges receive identical case information (Ebbesen & Konecni, 1981; Diamond, 1981; Hogarth, 1971; Partridge & Eldridge, 1974). Elaborate legal procedures have been established to counteract such disparities and to ensure that the doubt and uncertainty inherent in legal decisions (Saks & Kidd, 1980) do not work against the defendant. The purpose

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of these legal procedures is to secure a maximum of procedural justice in court (Leventhal, 1980; Lind & Tyler, 1988; Thibaut & Walker, 1975).

Many of these procedures follow the principle "in dubio pro reo,"[4] which implies that ambiguities ought to be resolved in favor of the defendant. One core procedural practice that is derived from this principle is to grant the defendant the right of the last word in court. Thus, the defense presents its plea after the prosecution's closing argument. At first glance this positioning appears to strengthen the defense, as it allows the defense attorney to present a strong argument at the end of the trial, immediately before the judge makes his or her final sentencing decision. On a more subtle level, however, there is reason to believe that "the last word" in court works not only to the defendant's advantage. The reason for this is that this sequence deprives the defense of the opportunity to set an initial sentencing recommendation.

In fact, initial demands constitute particularly strong influences in a variety of judgmental domains. Specifically, recent research indicates that the first numeric standard or "anchor" (Tversky & Kahneman, 1974) that is considered by decision makers exerts a powerful psychological effect on judgment and decision-making under uncertainty (for an overview see Mussweiler & Strack, 1999a). For example, in negotiations, first offers prove to be a strong predictor of counteroffers as well as final settlement prices (Galinsky & Mussweiler, 2001; Whyte & Sebenius, 1997). Because this influence of an initially considered standard is produced by unconscious processes of knowledge activation (Chapman & Johnson, 1999; Jacowitz & Kahneman, 1995; Mussweiler, 2003; Mussweiler & Strack, 2000; Strack & Mussweiler, 1997), adjustment (Epley & Gilovich, 2001; Tversky & Kahneman, 1974) or conversational inferences (Grice, 1975; Jacowitz & Kahneman, 1995; Schwarz, 1994), decision makers remain unaware of these influences. In fact, the impact of an initially considered standard appears to be so subtle that decision-makers are unable to correct for it, even if they are highly motivated to remain uninfluenced (Wilson, Houston, Etling, & Brekke, 1996), have been explicitly instructed to do so (Wilson et al., 1996), or the standard is clearly irrelevant (Tversky & Kahneman, 1974). Even if anchor values are presented outside of participants' awareness while they are thinking about the average price of a new midsize car or the annual mean temperature in Germany, their estimates are assimilated to the high versus low subliminal anchors (Mussweiler & Englich, 2005).

Thus, judgments under uncertainty are often anchored to an initially considered standard, as a result of which they are assimilated toward it (Tversky & Kahneman, 1974). In a similar vein, judicial sentencing decisions may also be susceptible to this anchoring bias. Consistent with this assumption, previous research (Englich & Mussweiler, 2001) has demonstrated that judges are highly influenced by the prosecutor's demand, which is the first sentencing recommendation that is presented during the court proceedings. In one of these studies, junior lawyers having gathered their first practical experience in the courtroom were instructed to assume the

[4] "If there is any doubt, this should be evaluated in favor of the defendant" or "Giving the defendant the benefit of the doubt" may be adequate translations of the legal principle "in dubio pro reo."

role of a judge in a rape case. The participating junior lawyers worked through a set of rape case materials as well as the corresponding passages from the penal code, which contained very clear and explicit sentencing guidelines. Subsequently, they were confronted with a high or a low sentencing demand from the prosecutor and a defense attorney's recommendation, which was kept constant. Results demonstrate that participants' sentencing decisions were heavily influenced by the prosecutor's sentencing recommendations. More specifically, judges assimilated their sentences toward the prosecutor's demand, meaning that longer sentences were given by judges who were confronted with the high sentencing recommendation.

However, since a prosecutor is a legal expert, one could argue that it makes sense to follow his or her recommendation. Therefore, in a second study Englich and Mussweiler (2001) examined whether sentencing decisions would also be assimilated to the sentencing demand of a legal layperson. To that end, participants in this second study—again junior lawyers—were told that the prosecutor's demand was generated by a computer-science student, who had no judicial expertise and came up with the recommendation after reading through the case material. Even though the prosecutor's sentencing recommendation clearly did not represent any judicial expertise, sentencing decisions were again influenced by it. One might still argue that participants in these studies were junior lawyers and therefore had little experience with criminal cases. However, a third study demonstrates that even experienced criminal trial judges who worked at a regional superior court in Germany and had an average of 15 years experience in dealing with criminal cases in the courtroom were influenced by the computer-science student's sentencing recommendation. In fact, experienced judges and junior lawyers were influenced by this demand in similar ways. Taken together, these findings suggest that judicial decision-making is influenced by the prosecutor's recommendation. This holds true even if the prosecutor's recommendation is proposed by a non-legal expert and if the judge is highly experienced. More recent studies further emphasize the fact that the prosecutor's recommendation does not have to stem from a legal expert to have an effect on the sentencing decisions of legal experts: even if the prosecutor's sentencing recommendation is explicitly determined at random by throwing dice, judges' sentencing decisions are assimilated toward them (Englich, Mussweiler, & Strack, in press).

Recent evidence in the context of criminal law provides further converging evidence that judges heavily weigh prosecution requests in their legal decisions. In particular, real bail decisions in British courts were found to strongly depend on whether the prosecution requested conditional bail or opposed bail (Dhami, 2003). In particular, this study pitted two predictors of real bail decisions against each other: a very simple heuristic and a more complex decision-making rule. The simple heuristic depicts judges as basing decisions on just one cue, whereas the more complex rule conceptualizes decision-making as a more elaborate process. To test these two predictors against each other, observers in the courtroom recorded details of real cases presented in court and the bail decisions that were handed down. They used a structured coding scheme including 25 verbal, nonverbal, and written cues that are usually available to judges during bail hearings. Results show that the simple heuristic clearly outperforms the more complex model as a predictor of the real

bail decisions observed. The prosecutor's demand proved to be one of the central cues driving real bail decisions.

Furthermore, research in the civil context of damage awards shows a similar pattern of results. Here it has been demonstrated that the higher a plaintiff's request in court, the higher the award that is given (Hastie, Schkade, & Payne, 1999; Malouff & Schutte, 1989; Marti & Wissler, 2000). In personal injury verdicts, the requested compensation systematically influences the compensation awarded by the jury as well as the judged probability that the defendant caused the plaintiff's injuries (Chapman & Bornstein, 1996). Ironically, even limits on damage awards serve as anchors and therefore increase damage awards (Hinsz & Indahl, 1995). In much the same way, high caps on punitive damages increase the size as well as the variability of punitive damage awards, compared to a control condition in which no cap is given (Robbennolt & Studebaker, 1999). In all these studies in the civil context, lay people—mainly students and jury-eligible adult citizens—assumed the role of civil jurors or jury members charged with making an impartial decision.

Taken together, what these studies show about anchoring in the courtroom is that judges' sentencing decisions—whether the decisions of students in the role of jury-members or the decisions of experienced trial judges—are assimilated toward certain anchors—whether the prosecutor's sentencing demand, the plaintiff's request, a non-expert's suggestion, or a limit on damage awards. Even legal experts are influenced by these anchors, regardless of the anchor source (Englich & Mussweiler, 2001; Englich et al., in press). These findings may be taken to suggest that anchoring influences are an omnipresent force in the courtroom.

The Present Research

At the same time, however, some of the specific characteristics of legal decision-making may potentially work against such anchoring influences. More specifically, most legal decisions in the courtroom are made in the context of more than just one potential anchor. In the context of a criminal case, for example, at least two obvious anchors exist: the sentencing recommendation of the prosecution and that of the defense. By definition, it is the role of the defense to argue against the prosecution's position and to offer an alternative view of the case in question. In this respect, the defense may be able to establish a powerful counter-anchor that works against the initial anchor set by the prosecution. However, defense attorneys will only be able to successfully work against the prosecution's anchor if they do not assimilate their own sentencing recommendation to this anchor itself. Is it possible for the defense to successfully introduce a counter-anchor and therefore work effectively in the interest of their client? Or will the defense be influenced by the prosecution's initial anchor—despite the fact that the defense is highly motivated to work against it?

In fact, there is reason to believe that defense attorneys' motivation to remain uninfluenced by the prosecutor's demand may not be sufficient to protect them from this influence. Research on the role of motivation to correct for anchoring influences in other domains has demonstrated that increased motivation does not reduce the magnitude of anchoring (Wilson et al., 1996). Even if participants are

promised a dinner prize if they give the best answer to general-knowledge questions like "How many physicians are listed in the Yellow Pages of the phone book?," their answers are still influenced by a given numerical anchor. The fact that anchoring effects—as these findings attest—constitute such a robust and ubiquitous influence on human judgement suggests that even the defense may be involuntarily influenced by the prosecution's recommendation. As a consequence, the robustness of anchoring effects casts doubt on the assumption that having the right of the last word in court is indeed in the defendant's best interest. Because the first sentencing recommendation appears to be a strong anchor for judges' sentencing decisions, the standard procedural sequence may put the defense at a distinct disadvantage. In fact, this sequence may even limit the defense's ability to work to the advantage of the defendant by presenting a lower sentencing recommendation that counterbalances the effect of the prosecutor's demand on the judge's final decision. In light of the ubiquity of anchoring effects (Tversky & Kahneman, 1974), the defense's recommendation may itself be influenced by the recommendation of the prosecution.

In the present research, we put this possibility to an experimental test. Experiment 1 examined whether legal experts who assume the role of a defense attorney in a rape case scenario are influenced by the sentencing recommendation of the prosecutor and assimilate their own recommendation toward it. Experiment 2 then examines how this potential influence on the defense further influences judges' sentencing decisions. With these experiments, we attempt to extend previous research in three important ways. First, we examine legal decisions by legal experts rather than lay people. Second, we examine the defense's ability to work against and counterbalance the established anchoring effect of the prosecutor's initial recommendation to the court. This ability is a crucial prerequisite for the "in dubio pro reo" principle to be in effect. Third, we want to determine the extent to which even partial decision-makers like defense attorneys may be influenced by the anchoring bias, even if this influence clearly works against their own interests.

Case Material

All participants in both studies received identical case material describing a hypothetical case of alleged rape. The case material was four pages long and consisted of brief descriptions of the incidence, the victim (Sabine K.), the defendant (Peter F.), the opinions of a medico-legal and a psycho-legal expert, as well as statements by the victim, the defendant, and two witnesses. Participants took about 15 min to study this material. The material included all the information (e.g., psychological consequences for the victim, resistance of the victim, threats by the assailant) that has been found to be important to allow for an ascription of guilt in cases of rape (Krahé, 1991). Alcohol consumption by victim and perpetrator was described as moderate (see e.g., Schuller & Stewart, 2000).

Additionally, this case material was presented together with the relevant passages from the penal code. In Germany, the penal code traditionally includes clear sentencing guidelines, specifying precisely the range of sentences for certain crimes. The code describes and differentiates several types and subtypes

of crimes and defines mitigating and aggravating factors. These passages from the penal code were supplemented by actual commentaries, which report on recent decisions that might be helpful in guiding legal experts' decisions on crucial questions of the crime. After participants had formed an opinion about the case, they were handed the critical questionnaire (while keeping the material as a reference).

The material concerned a case of alleged rape: Sabine K. and Peter F. get to know each other at a party and start flirting intensely. They drink a few glasses of wine together. At the end of the party, Peter offers to give Sabine a ride home, but then takes her to a nearby forest instead of her apartment. In spite of Sabine's resistance, Peter attempts to have sex with her and finally penetrates her, which the victim experiences as rape. In the end, Peter takes Sabine back home.

To ensure that the material seemed realistic and included all necessary information, it was designed in close collaboration with several experienced trial judges. Specifically, these judges worked through the material and added information they believed was necessary for determining a sentence. Furthermore, this material had been pre-tested in previous studies (see Englich & Mussweiler, 2001) and was judged to be complete and realistic by the participating legal professionals.

EXPERIMENT 1

In the first experiment we examined whether a prosecutor's initial demand in court does indeed influence the defense attorney's counter demand, as an anchoring perspective on legal decision-making would suggest. We expected the defense attorney's counter demand to be assimilated to the prosecutor's sentencing demand.

Method

To test for this potential influence, we recruited 21 male and 21 female German legal experts as participants. They were junior lawyers gaining their first practical experiences in the court room, having handled criminal cases for several months. On average they were 27.10 years old ($SD = 1.69$) and came from different courts all over Germany. These junior lawyers were recruited during a supplemental national postgraduate training program at the German University of Administrative Sciences Speyer. Participants were asked to read the rape-case material. After reading the material, participants were confronted with a prosecutor's sentencing demand that was either high (34 months in prison) or low (12 months in prison). Participants were then asked to indicate if they considered the prosecutor's demand to be "too low," "too high," or "just right." Finally, the participating legal experts were instructed to put themselves into the role of the defense attorney in the given case and to determine the sentencing demand that they would present in their closing speech. They were first asked to indicate the length of the sentence they would recommend as a defense attorney, and were then asked if the sentence they would impose would be for probation or a prison term. These two questions follow the sequence of decisions

required by German Law: the first, and main, step in a German court is to decide on the length of the sentence; in a distinct second step, the decision is made whether the sentence is for probation or prison.

Participants were randomly assigned to one of the two conditions (high vs. low sentencing demand of the prosecution). Male and female participants were equally distributed across the conditions.

Results and Discussion

The defense attorneys' sentencing demands for the rape case varied between acquittal and 30 months in prison. Most of the defense attorneys, namely 32 (76%), suggested a sentence on probation, whereas 6 (14%) demanded a sentence in prison—two in the low anchor condition and four in the high anchor condition. Four participants (10%) did not specify whether or not the sentence should be on probation.

Note that our central dependent measure was the length of the given sentence independent of whether or not a sentence was put on probation. The following analyses thus rely on a measure combining sentences on probation and sentences in prison, such that sentences on probation and sentences in prison receive the same measurement value. We decided on such a combined measure because in the German legal system the length of a sentence and the question of probation are inextricably intertwined. More specifically, probation can only be granted for sentences that are shorter than 2 years. Any sentence above 2 years automatically is a sentence without probation (§56 Abs. 2 StGB). Hence, there is a certain interdependence of sentence length and the decision for or against probation. In particular, for our rape case the decision to demand a sentence above 2 years includes the decision to demand a sentence without probation. As a consequence of this interdependence, whether or not a given sentence is for probation is often determined in a relatively automatic fashion. Therefore, we focused on the sentence length independent of the question of probation in our analyses. To provide a more complete picture of our data, however, we will report separate means, and—where sufficient sample sizes exist—separate statistical analyses for sentences with and without probation.

Not surprisingly, junior lawyers taking the role of the defense attorney generally demanded a lower punishment for their client than did the prosecutor. Still they were clearly influenced by the prosecutor's demand. To test for this influence, we conducted a *t*-Test for independent samples using the prosecution's sentence recommendation (high vs. low) as the independent variable, and the defense attorney's sentence recommendation as the dependent variable. Participants in the role of the defense attorney demanded a higher sentence for their own client if the prosecutor's demand was high ($M = 16.77$ months, $SD = 6.96$) than if the prosecutor's demand was low ($M = 9.60$ months, $SD = 6.44$), $t(40) = 3.46$, $p < .001$, $\eta^2 = .230$. Notably, the mean difference between the defense attorneys' sentencing recommendations in the two anchoring conditions was more than 7 months. This pattern of means held for sentencing demands on probation ($M = 14.72$, $SD = 5.82$ in the high anchor condition vs. $M = 10.71$, $SD = 4.55$ in the low anchor condition, $t(30) = 2.12$, $p < .05$)

as well as for sentencing demands without probation ($M = 26.00$, $SD = 2.83$ in the high anchor condition vs. $M = 9.00$, $SD = 4.24$ in the low anchor condition, $N = 6$).[5]

Thus, results show that the prosecutor's sentencing demand clearly influences the defense attorney's demand. More specifically, these findings indicate that rather than working against the prosecutor's initial demand, defense attorneys assimilate their own sentencing demand to it. The defense is contingent upon the prosecution. In combination with previous results (Englich & Mussweiler, 2001), the present findings suggest that the prosecutor's demand not only influences the judge's sentencing decision, but also the defense attorney's demand for an appropriate sentence.

Reflecting upon these results, one might argue that defense attorneys usually think in advance about the sentence recommendation they are going to make to the judge. This pre-hearing preparation might reduce the influence of the prosecutor's sentence recommendation on the defense attorney's recommendation. However, because the sentencing process typically involves a substantial amount of bargaining that occurs prior to the trial, defense attorney's are likely to be exposed to the prosecutor's demand while preparing the case. Hence, anchoring may occur even if a defense attorney has a sentencing recommendation planned before trial. Furthermore, it is important to note that the opportunity to think about the given case before exposure to the prosecutor's sentencing demand was also given in the experimental situation of our study. Participants had enough time to think about the case and adequate sentences before they were confronted with the prosecutor's sentencing recommendation. Note that participants first read through the full case materials and checked the penal code, including sentencing guidelines, before they were allowed to proceed further. Participants knew that the experiment was about sentencing in the courtroom. Therefore, they surely thought about adequate sentences while working through the case material. Immediately afterwards they received the sentencing recommendation of the prosecution. Still, they were clearly influenced by this sentencing demand.

Moreover, there is reason to expect that pre-hearing preparation may even increase rather than reduce anchoring effects. According to Chapman and Johnson (1999), thinking about a target object before the introduction of a judgmental anchor increases the anchoring effect. To demonstrate this, Chapman and Johnson asked their participants to elaborate about health versus crime prior to the anchoring manipulation. Specifically, participants in the one condition were asked to list their positive as well as negative health behaviours, whereas in the other condition, they listed their own positive and negative behaviour to help them avoid being a victim of a property crime. Results show that participants, who elaborated on the topic of crime, showed stronger anchoring effects on target questions on this topic than on target questions on the health topic. Consistently, if participants had thought about the health topic prior to the anchoring manipulations, they showed stronger anchoring effects on targets related to health topics than on targets related to crime topics. Similarly, thinking about a certain criminal case before the presentation of

[5]Because only six legal experts in the role of the defense attorney demanded sentences on probation, the resulting N was too small to conduct a separate t-Test.

the prosecutor's demand may not reduce the anchoring effect of this demand on sentencing decisions, but even increase it.

EXPERIMENT 2

How exactly does this anchoring effect on the defense (Experiment 1) further influence the judge's sentencing decision? Will the defense weaken the expected anchoring effect of the prosecutor's demand on the judge's decision, or will the defense be the involuntary mediator of the expected bias, even if the role of the defense is clearly to counteract it? This is the question we examined in the second experiment. Based on our previous research, we hypothesized that the judge's sentencing decision would be assimilated toward the prosecutor's sentencing demand. Additionally, we expected that the defense attorney's demand, instead of counterbalancing the prosecutor's demand, would partially mediate this anchoring effect of the prosecution's sentencing demand on the judge's sentencing decision.

Method

To examine this, we presented a high versus low demand from the prosecutor together with the influenced defense attorney's demand from Experiment 1 to another group of 42 experienced German legal professionals. Participants in Experiment 2 were recruited during an educational conference for judges and prosecutors. Forty of our participants were judges and two were prosecutors. Note that in the German system of legal education, judges and prosecutors receive identical training and alternate between both positions in the first years of professional practice. Additionally, one of the two prosecutors in our sample was in the high and one in the low anchor condition. Careful inspection of the data on the two prosecutors reveals that their sentences did not differ systematically from those of the judges in our sample. Therefore, we collapsed data for judges and prosecutors. Nineteen of our participants were female and 23 male. On the average, our participants were 43.21 years old ($SD = 9.39$) and had 13.80 years of professional experience in the courtroom ($SD = 8.44$).

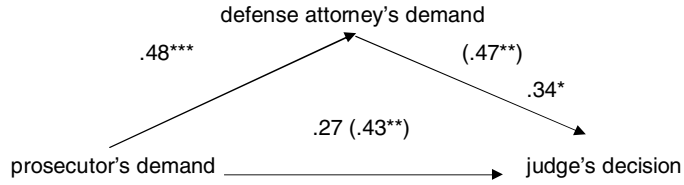
In this second experiment, participants were asked to put themselves into the role of a trial judge. First they read the complete rape case material as in Experiment 1. They were then confronted with the prosecutor's manipulated sentencing demand (high: 34 months in prison vs. low: 12 months in prison) together with a defense attorney's influenced sentencing demand from a participant in Experiment 1. Particularly, we employed a yoked design, in which a defense attorney's demand from Experiment 1 was presented to a judge in Experiment 2. Thus, all defense attorneys' demands from Experiment 1 were systematically distributed to judges in Experiment 2. According to Experiment 1, in order to capture our dependent variable—the sentencing decision of our judges—we asked the participating legal professionals first to indicate the length of the sentence they would decide on, and then if this sentence should be in prison or on probation. After making their sentencing decision, the judges were asked to indicate on a 9-point rating scale ranging

from 1 (*very uncertain*) to 9 (*very certain*) how certain they felt about their judgment. We randomly assigned the participating legal professionals to one of two experimental conditions. Male and female participants were equally distributed across the conditions.

Results and Discussion

Judges' sentencing decisions for the given rape case ranged from 6 months on probation to 48 months in prison. Twenty judges (48%) gave sentences on probation, whereas 21 (50%) gave sentences without probation. One participant (2%) did not make a decision about probation. In order to test for our hypothesis, we conducted a *t*-test for independent samples using the prosecution's sentence recommendation (high vs. low) as the independent variable, and the length of sentence given by the judges as the dependent variable. The prosecutors' manipulated sentencing demands presented together with the defense attorneys' influenced demands from Experiment 1 show a clear effect on the judges' decisions: sentencing decisions are assimilated to the prosecutors' initial demands. Judges come to a much higher punishment when they are confronted with a high prosecutor's demand together with the influenced defense attorney's demand ($M = 27.64$, $SD = 8.70$) than when they are confronted with the low prosecutor's demand and the corresponding defense attorney's demand ($M = 19.30$, $SD = 9.11$). This difference proved to be significant in a *t*-test for independent samples using the prosecution's sentence recommendation (high vs. low) as the independent variable, and the length of sentence given by the judges as the dependent measure, $t(40) = 3.03, p < .005, \eta^2 = .187$. The higher the prosecutor's demand, the higher the sentence. Notably, the mean sentences in the high vs. low anchor conditions differ by more than 8 months.

As in Experiment 1, we used sentence length as our central dependent measure so that we combined sentences with and without probation. In light of the fact that in the German legal system sentencing length and probation are inextricably intertwined, such a combined analysis seems most appropriate. To obtain a more complete picture of our data, however, we also examined separate effects for sentences with and without probation. In Experiment 2, sentences with probation and sentences without probation were each given by about half of the judges. As a consequence, for these separate analyses the resulting N is too small for the appropriate statistical tests, as a result of which we focus on the resulting cell means. The resulting pattern of means is clearly consistent with our hypotheses. For one, longer sentences were given in the high anchor condition, both for sentences that were on probation ($M = 21.00$, $SD = 4.54$ vs. $M = 16.17$, $SD = 6.69$) and for sentences that were not on probation ($M = 32.00$, $SD = 8.33$ vs. $M = 24.00$, $SD = 10.64$). Furthermore, sentences were more likely to be set on probation in the low (29.3%) than in the high anchor condition (19.5%), whereas sentences in prison were given more frequently in the high (31.7%) than in the low anchor condition (19.5%). This suggests that anchoring produces corresponding effects on both the length of the sentences and the decision for or against probation. Taken together, an inspection of these means suggests that exposure to the prosecutor's demand and the corresponding defense attorney's demand had similar influences on combined as well as



* = p < .05 ** = p < .01 *** = p < .001

Fig. 1. The defense attorney's demand partially mediates the influence of the prosecutor's demand on the judge's decision instead of counterbalancing the influence of the prosecutor's demand.

separate measures of sentencing length, and on the likelihood that sentence would be given on probation.

As is true for the defense's counter-demand, judges' sentencing decisions are thus assimilated toward the prosecutor's initial demand. Additionally, we expected that it might be the influenced defense's counter demand that strongly pulls the judges' sentences toward the prosecutor's recommendation. In fact, further analyses reveal that this assimilative sentencing bias is produced primarily by the defense attorney's counter-demand. To examine this possibility, we employed a mediation analysis. The influence of the prosecutor's demand on the judge's decision is partially mediated by the defense attorney's demand, if [1] the defense attorney's demand is significantly related to the prosecutor's demand, [2] the prosecutor's demand is significantly related to the judge's decision, [3] the defense attorney's demand is significantly related to the judge's decision, and [4] the influence of the prosecutor's demand on the judge's decision is reduced to non-significance after controlling for the defense attorney's demand (Baron & Kenny, 1986).

Our data fulfil these conditions. We conducted regression analyses to test for the expected mediation. As shown in Fig. 1, both the prosecutor's and the defense attorney's demand are significantly related to the judge's decision (βs = .43 and .47). Moreover, the defense attorney's demand is significantly related to the prosecutor's demand ($\beta = .48$). However, when controlling for the defense's demand, the influence of the prosecutor's demand on the judge's decision was reduced to non-significance ($\beta = .27$).

This pattern clearly shows that the defense attorney's sentencing demand is one mediator of the effect the prosecutor's demand has on the judge's sentencing decision. At the same time, however, it is also clear that the defense attorney's demand is not the only factor that drives this effect. This suggests that there are additional direct influences on the sentencing decision. It seems likely that over and above its indirect influence via the defense attorney's demand, the prosecutor's demand has an additional direct influence on the sentence. In this respect, the defense attorney's sentencing demand is a partial mediator of the influence the prosecutor's demand has on the judge's sentencing decision.

Taken together, defense attorneys seem to adjust their demands to the prosecutor's demand, which in turn affects the judge's decision. Rather than counteracting the prosecutor, the defense attorney's demand seems instrumental in pulling the sentencing decision closer to the prosecutor's demand. Instead of working against and counterbalancing the effects of the prosecutor's demand, the defense attorney thus becomes a partial mediator of the effect that the prosecutor's demand has on the judge's sentencing decision (Fig. 1). A Sobel Test indicates that the reduction in the path coefficient is significant, $Z = 1.83$, $p < .05$ (one-sided). Furthermore, combined with the influenced defense attorney's demand, the prosecutor's demand is a strong predictor of the judge's sentencing decision, $R^2 = .27$.

Notably, the same pattern of partial mediation held in an independent study analyzing real court files ($N = 32$) of mayhem and rape cases. The analysis included all cases of rape and mayhem prosecuted in the district Nuernberg-Fuerth (Germany) in 1997. They were available at the prosecution headquarters of Nuernberg-Fuerth in August 2002 and contained complete information on the prosecutor's sentencing demand, the defense's counter-demand, and the judge's decision. Even though this sample was quite small and its selection was not representative, it was blind to any systematic influences. Therefore, this data may serve as a first tentative hint to the ecological validity of our experimental data. In fact, in these real court files, 71% of the variance in judges' sentencing decisions was explained by the combined influence of the prosecutor's demand and defense attorney's demand. Thus, both demands strongly determined the judges' sentencing decisions in these real cases.

Expertise and Susceptibility to Bias

In our second experiment, the judges were 18 legal professionals experienced in criminal cases, and 24 legal professionals inexperienced in criminal cases. Would the above described influence depend on judges' expertise? It could be argued that experts in criminal law are less susceptible to the assimilative sentencing bias than non-experts. But according to our data, expertise does not make any difference. Higher sentences were given after exposure to a high rather than a low anchor by experts in criminal law ($M = 26.22$, $SD = 4.74$ vs. $M = 20.00$, $SD = 9.00$) as well as by non-experts ($M = 28.62$, $SD = 10.72$ vs. $M = 18.73$, $SD = 9.60$). This pattern yielded a significant main effect of Anchor in a 2 (Expertise: High vs. low) $\times$ 2 (Anchor: High vs. low) ANOVA using sentencing decisions as the dependent measure, $F(1, 38) = 8.08$, $p < .01$, $\eta^2 = .175$. None of the remaining effects in this analysis reached significance, $F < 1$. In particular, results show that experts in criminal law were not significantly protected from the assimilative sentencing bias when compared to non-experts, $F < 1$ for the interaction. Thus, judges' expertise does not significantly reduce the effect of the prosecutors' sentencing demands on the judges' sentencing decisions.

The only significant difference we obtained between the experienced and inexperienced legal professionals in treating criminal cases was that the experts felt more certain about their judgments: on a 9-point rating scale ranging from 1 (*very uncertain*) to 9 (*very certain*), the mean certainty ratings were $M = 6.44$ ($SD = 1.76$) for experts and $M = 4.21$ ($SD = 2.50$) for non-experts. A *t*-test for independent samples

indicates that this difference is significant, $t(39.87) = 3.40$, $p < .005$, $\eta^2 = .208$. The certainty experienced by the judges, however, proved to be unrelated to their susceptibility to bias: in our analysis, the degree of bias was indicated by the distance between the prosecutor's initial demand and the judge's sentence and thus reflects the extent to which judges' sentences were assimilated toward the initial anchor. In fact, certainty and bias were not correlated, $r = -.07$, $p > .6$. This suggests that experts may mistakenly see themselves as less susceptible to biasing influences on their sentencing decisions. According to our data, however, experts of criminal law just as non-experts are susceptible to the anchoring bias. Experts in our study simply feel more certain about their biased judgments.

Additional Analyses

The above presented results may be taken to suggest that adapting to the prosecutor's demand is a common defense strategy and may have been intentionally chosen by our participants in the role of the defense attorney (Experiment 1). However, when asked about the defense strategy that they applied, not 1 of the 42 participating legal experts in Experiment 1 indicated that he or she had tried to adapt to the prosecutor's demand. Instead, participants listed defense strategies such as trying to force the possibility of probation, demanding an acquittal, demanding the lowest possible sentence, or presenting information against the prosecution. Therefore, the demonstrated influence of the prosecutor's demand on the defense's demand (Experiment 1) seems to be an unwanted bias rather than a chosen defense strategy.

To further differentiate between a common defense strategy and an unwanted influence, we additionally asked the 42 participating legal professionals in Experiment 2 whether the assimilation of the defense attorney's demand to the prosecutor's demand is a typical defense strategy in court. Furthermore, we asked our participants whether it would be a convincing defense strategy according to their experience. Only 3 out of the 42 participating legal professionals saw an orientation toward the prosecutor's demand as the most convincing defense strategy in the presented case. None of them indicated that—according to their experience—assimilation to the prosecutor's demand would be a typical defense strategy in court. Instead, demanding acquittal (50%), trying to reach a sentence on probation (25%), or demanding the lowest possible sentence (23%) were seen as typical defense strategies in reference to the given rape case. These findings indicate that the observed assimilation of the defense seems to be more of an unexpected influence than a recommended strategy.

GENERAL DISCUSSION

According to our results, defense attorneys assimilate their sentencing demand to the demand from the prosecutor. This assimilation is neither a chosen nor a recommended defense strategy, but an unintended process. Rather than effectively counteracting the prosecutor's demand, the defense attorney's demand is instrumental in securing the prosecutor's influence on judges' sentencing decisions. The

biased defense attorney's demand and strongly pulls the final sentencing decision toward the prosecutor's sentencing demand. Additionally, expertise does not protect against assimilative sentencing bias.

These results suggest that the standard procedural sequence in the courtroom actually puts the defendant at a distinct disadvantage. By granting the defense attorney the right of the last word, the legal system simultaneously grants the prosecutor the right of the first word. This allows the prosecution to introduce a judgmental anchor that determines the final sentence, by influencing the judge not only directly, but also (and predominantly) indirectly via its influence on the defense attorney's demand. In this respect, the standard procedural practice undermines the "in dubio pro reo" principle. The right of the last word seems to weaken the defense. Consequently, to secure an effective defense, procedural sequences in court may have to be reassessed.

Applicability to Other Legal Systems

Because our studies were conducted in the German legal system, the question may arise how these influences play out in different legal systems. One may wonder if the presented findings are applicable to judicial systems outside of Europe, in general, and to the adversarial system, in particular. Clearly, many profound differences exist between US law and German law, or more generally between Common Law and Continental Law. At the same time, fundamental similarities between these different legal systems ensure the applicability of the presented research to other legal systems. More specifically, the procedural sequence we took as a basis in the present research is equally apparent in many core aspects of other legal systems. For example, in virtually every phase of state criminal proceedings in the United States (voir dire, plea bargaining, opening statements, presentation of the evidence, closing statements, and sentencing hearing in the penalty phase), the prosecution does get to go "first." However, this order is not always strictly adhered to, and in some states the defense even gives the first closing statement (e.g., New York). In Germany, where this study was conducted, and more generally in Continental Law, the order of the sentencing recommendations by the prosecution and the defense is definitively fixed. In the court of first instance dealing with criminal cases, the prosecutor always goes first. Consequently, looking at the various legal systems we would conclude the following: whatever the specific sequence in the different law systems, the present studies suggest that "going first" constitutes a strong advantage. And this message is applicable to almost every legal system.

Therefore, independent of the differences between legal systems, the presented findings extend previous work on judgmental anchoring and judicial decision-making in three important ways. First, they demonstrate that anchoring influences in the court room are not limited to legal novices, but equally influence legal experts. In many previous studies about anchoring in the courtroom (e.g., Chapman & Bornstein, 1996; Hastie, Schkade, & Payne, 1999; Hinsz & Indahl, 1995; Malouff & Schutte, 1989; Marti & Wissler, 2000; Robbenolt & Studebaker, 1999), lay people served as participants, leaving open the question whether experts would have been influenced in the same way and to the same extent. Second, our findings demonstrate

that an initial sentencing demand influences not only judges' sentencing decisions (Englich & Mussweiler, 2001), but also the following counter demand. This limits the chances of working against the anchoring effect of the first sentencing demand presented in the courtroom. Finally and most importantly, these data show that it is the defense's influenced counter demand which partially mediates the prosecution's influence on judges' sentencing decisions. At the same time, these findings show that it is not only neutral decision-makers like judges or juries who are influenced by anchors, but also partial decision-makers like defense attorneys, who unintentionally end up working against their own clients.

The present research points to a number of additional considerations and questions. A first set of considerations has to do with the psychological mechanisms that may explain the demonstrated subtle influence of the prosecutor's demand.

Psychological Mechanisms Underlying Anchoring in the Courtroom

In light of recent research on the psychological processes that underlie anchoring effects in other domains (Chapman & Johnson, 1999; Mussweiler & Strack, 1999a, 2000; Strack & Mussweiler, 1997), these effects may well result from selective activation of anchor-consistent information. More specifically, defense attorneys and judges who have been exposed to the prosecutor's demand may follow their general tendency of consistent hypothesis testing (e.g., Snyder & Swann, 1978; Trope & Bassok, 1982) by considering the possibility that the prosecutor's demand constitutes an appropriate sentence. Considering a high sentencing demand, for example, may consequently put information that speaks for a high sentence topmost in defense attorneys' and judges' minds. As a consequence, the sentencing decision is selectively based on this information, as a result of which the defense attorney's demand as well as the final sentence is subtly assimilated toward the prosecutor's demand. Because judges probably remain unaware of this mechanism of knowledge activation, it is difficult to control or to correct this process (Wilson et al., 1996).

Further Research

A second set of considerations emerges if the present findings are examined in light of classic research on persuasion (e.g., Chaiken, Wood, & Eagly, 1996). The fact that anchoring effects may be seen as a minimal form of persuasion (Wegener et al., 2001) suggests that anchoring effects in the courtroom may also depend on classic determinants of persuasion, such as argument quality or primacy- and recency-effects.

Future research may have to take into account that closing statements or sentencing hearings usually consist not only of both parties' sentencing demands. In real trials, these demands are accompanied by arguments. As a next step, the influence of arguments and anchors presented in court should thus be examined together and therefore integrated into anchoring research in the courtroom. A natural question that arises in this context is this: Is the defense able to counteract the prosecution by arguments? Although good arguments by the defense would obviously be helpful for the accused, recent anchoring research suggests (Mussweiler, Strack, & Pfeiffer,

2000; Mussweiler & Strack, 1999b) that they would be insufficient to eliminate the anchoring bias entirely. In line with the findings of Mussweiler and Strack (1999b, Study 4), we would expect that counterarguments that are presented to judges would be less effective at decreasing the anchoring effect than would counterarguments self-generated by the judges.

Following the idea of selective activation of anchor-consistent information (Chapman & Johnson, 1999; Mussweiler & Strack, 1999a, 2000; Strack & Mussweiler, 1997), we would additionally expect that defense attorneys assimilate not only their counter demands, but even the content of their arguments to the prosecutor's demand; as a result, they would not effectively counterbalance the prosecutor's arguments. Weaker defense arguments might be more accessible after the presentation of a high prosecutor's demand than after a low demand. But this is still an open empirical question, and the exact interplay of argument-based and anchor-based influences remains to be examined.

Another question derived from classic persuasion research in light of the presented results, which suggest a revision of the usual order of the sentencing demands, might be: Do anchoring effects in the courtroom critically depend on the order of the presentation of both sentencing demands? Primacy and recency effects may also be obtained for anchoring effects in the courtroom. Research on sequence anchoring (Peake and Cervone, 1989) would suggest a critical role of the order of presentations for anchoring effects in the courtroom.

Many studies on primacy and recency effects in persuasion have demonstrated that under specific conditions both the first or the last persuasive message may have a stronger effect (McGuire, 1985). For example, whether the first or the last message has a stronger effect critically depends on the time interval between the arguments and the critical judgment (Insko, 1964; Miller & Campbell, 1959). Therefore, primacy and recency effects on anchoring in the courtroom should be carefully interpreted regarding the time intervals between the pleas, as well as between the pleas and the final sentence. Further research is needed on the interplay between anchoring effects and the order of the demand—presentations by both parties in the courtroom, and on the role of arguments accompanying these sentencing demands.

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