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A Closer Look at an Eye for an Eye: Laypersons' Punishment Decisions Are Primarily Driven by Retributive Motives

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Abstract According to recent research on laypersons' punitive attitudes people's sentencing decisions are primarily driven by a desire for retribution. The research designed to test this notion, however, can be criticized for suffering from several limitations. Three online-based studies were conducted with samples from Western Europe with the aim of replicating the findings of Carlsmith (J Exp Soc Psychol 42:437–451, 2006) in which participants' punishment motives were inferred from their behavior in a process tracing task. In the present research, this approach was adopted and modified in order to provide a more conservative test for the notion that people mainly care about retribution. Although these modifications strongly influenced the overall pattern of results, retribution still was the most important punishment motive in all three studies.

Keywords Retribution · Punishment motives · Punishment justifications · Behavioral process tracing · Just deserts

Introduction

The debate between retributive and utilitarian justifications of punishment was hold among philosophers as early as the eighteenth century. Immanuel Kant (1797/1968) argued that the primary reason for punishing criminal offenders is to rebalance the moral scale that was disequilibrated by the offenders' deed. According to this retributive view, punishment is appropriate if the severity of a sentence is

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proportionate to the magnitude of harm and to the offender's criminal intent. By contrast, Jeremy Bentham saw punishment as an evil, which "ought only to be admitted in as far as it promises to exclude some greater evil" (1830/2008, p. 23). Following this utilitarian stance, the principal aim of punishment is to prevent future crimes by deterrence. Whereas legal philosophers dispute over what a sanction ought to achieve on the basis of moral and ethical principles, social psychologists are more interested in what laypersons think a sanction ought to achieve.

Punishment justifications can be differentiated beyond the dichotomy of retribution and utilitarianism. Dimensions of classification refer to (a) which social entity the punishment is directed at (i.e., the perpetrator, the victim, or the general public), (b) whether the sanction focuses rather on negative or rather on positive aspects, (c) whether the sanction is backward-oriented (i.e., retributive in nature) or forward-oriented (i.e., utilitarian in nature; cf. Oswald, Hupfeld, Klug, & Gabriel, 2002; Vidmar & Miller, 1980). *Retribution*, for example, mainly aims at the perpetrator, focuses on negative aspects, and is largely backward-oriented (e.g., Carlsmith, Darley, & Robinson, 2002; Darley, Carlsmith, & Robinson, 2000). *Special prevention*[1] aims at the perpetrator, but is forward-oriented, and can imply both negative aspects (deterrence) and positive aspects (i.e., rehabilitation). *General prevention* is forward-oriented and includes negative and positive aspects, but aims at the general public. *Incapacitation* aims at the perpetrator, is forward-oriented, and implies a negative sanctioning form (such as incarceration).

In the psychological literature, punishment justifications have traditionally been conceptualized as attitudes. Accordingly, people differ in their preferences for particular punishment justifications (Endres, 1992; Suhling, Löbmann, & Grewe, 2005). Nevertheless, when these attitudes are assessed via verbal self-reports people tend to agree (more or less) with all of the proposed justifications (Darley, 2002; Doble, 2002). Some authors argue that self-reports rather reflect people's beliefs about their motives than what actually drives their decisions (Carlsmith, 2008; Nisbett & Wilson, 1977). This is one of the reasons why recent research has been devoted to the construction of measures that avoid asking people directly about their punishment motives. Indirect methods, on the other hand, try to infer the underlying punishment motive from people's behavior without asking them directly about their punitive attitudes (Carlsmith & Darley, 2008). One of those indirect approaches is the Behavioral Process Tracing (BPT) task, which was originally described by Jacoby et al. (1987) and applied to research on punishment motives by Carlsmith (2006).

Behavioral Process Tracing

In the BPT task, participants are confronted with a criminal case in which certain pieces of information are missing. Typically, the only information people have is that a crime has been committed and that the perpetrator now faces punishment.

[1] Bentham used the term *particular prevention* (Bentham, 1830/2008). When only focusing on negative aspects, the justification was also named *specific deterrence* (Wenzel, 2004; Rucker, Polifroni, Tetlock, & Scott, 2004; Sidanius, Mitchell, Haley, & Navarrete, 2006).

Participants are given a list of questions such as "Prior record of similar crimes: Is the offender a repeat offender?" or "Publicity: Are the crime and trial attracting a lot of media attention?" Their task is to request and select those pieces of information they need in order to come to a judgment about "appropriate" punishment. Thus, people are instructed to select only those questions that they consider important in order to make a sentencing recommendation. After people selected a piece of information, Carlsmith (2006) provided the specific information that they had chosen. Then they were asked to make a sentencing decision. This procedure was repeated five times.

The BPT provides a variety of dependent variables that can be analysed. For example, the method reveals how a certain piece of information influences the sentencing recommendation. Additionally, researchers can study which pieces of information people selected, how many, and in which order. The BPT is based on the assumption that participants tend to focus on those pieces of information that are related to punishment motives they strongly endorse, whereas they tend to ignore those pieces of information that are related to motives they do not endorse. For instance, a person who strongly endorses retribution is more likely to pick information about the offender's intent. A person who strongly endorses incapacitation is more interested in whether the offender is likely to commit similar crimes in the future. A person who strongly endorses general prevention is more interested in whether the punishment attracts a sufficient amount of media attention and so forth.

The pattern of results in Carlsmith's (2006) studies was relatively clear: Participants strongly focused on those pieces of information that were indicative of a retributive perspective. He therefore concluded that "when people sentence criminals, they do so from a retributive rather than utilitarian stance" (p. 446).

Critical Aspects of the Original Study

Although Carlsmith's findings appear to be unambiguous at first glance, it should be noted that there are several factors that could have artificially increased the probability that participants selected retribution-related items. First, participants were not informed what type of crime the offender had committed; rather, this information could be selected in the BPT task as an item related to retribution. Those participants who did not pick this item had no information about what happened at all. Thus, one might argue that selecting "type of crime" does not indicate a desire for retribution, but rather a desire for basic information. Moreover, when asked to imagine a "crime", people usually have a severely violent crime in mind (e.g., Roberts & Doob, 1990; Stalans, 2002), and more severe crimes tend to evoke stronger support for retribution (Gromet & Darley, 2006). In the present research, participants were informed from the beginning what type of crime had happened (Studies 2 and 3). Second, Carlsmith's studies only included three punishment motives, that is, retribution, general prevention, and incapacitation. Including more (or other) than these three motives might affect the pattern of results. Hence Study 3 included special prevention as a fourth punishment motive. Third, retribution-related items tended to be shorter and less abstract than items not

related to retribution. For Study 3, items were slightly altered to make them more comparable to each other with regard to length, concreteness, and comprehensibility. Taken together, the present studies were designed to put a stronger test to the notion that people "care most about retribution" (Carlsmith, 2006, p. 447).

Information-Selection Task

The BPT was called a process tracing task because people made a sentencing judgment immediately after requesting and receiving a single piece of information. This paradigm allows researchers to study how the sentencing judgments depend on the information that was provided. The problem with this paradigm is that receiving information about a particular aspect of the crime may influence which piece of information they select next. Therefore, when two participants select a different piece of information in the BPT, and continue to seek different information, it may be due to their punishment motives, but it could also be due to the specific content of the information they received. Thus, the pieces of information selected across trials are not independent of each other. In the present research, we modified the BPT in order to avoid this interdependence. Our participants received the information all at once after they had decided which pieces of information they would like to see. The new paradigm was thus not designed to trace the process of how people formed their sentencing decision; rather, the aim was to better reflect people's punishment motives. This is why refer to our modified as an information-selection task (IST) rather than a behavioral process tracing task.

Study 1: Information-Selection Task

The first study aims to estimate the baseline of people's choices in the IST independently of further modifications introduced in Studies 2 and 3.

Method

Pretest

First, pieces of information that were used in the BPT task were pretested in order to ensure that they unanimously represented a particular punitive orientation. The procedure was identical to the pretest described in Carlsmith (2006). Thirty-nine students of the University of Berne participated in the pretest.[2] Participants were given detailed information about three different punitive justifications (retribution, general prevention, and incapacitation) and the penal theories underlying them. After that, they were given 12 pieces of information; these pieces were framed as questions rather than answers ("target items"; see Table 1). Each target item was constructed to fit a particular punitive justification. Additionally, three filler items

[2] Gender, age, and aspired degree were not assessed. Approximately, 95% of the sample consisted of students of psychology, 65% were female, and ages ranged between 21 and 27 years.

Table 1 Classification of items to punishment justifications (Pretest 1)

Item	Correct classifications (%)	df	χ^2
Retribution			
Magnitude of harm: How big is the financial, physical, and psychological harm the offender has caused committing the crime?	92	3	91.26 ($p < .001$)
Motivation: Why did the offender commit the crime?	41	3	11.56 ($p = .009$)
Intent: Regardless of the outcome, what was the offender's intention?	26	3	5.21 ($p = .157$)
General prevention			
Publicity: Are the crime and trial attracting a lot of media attention?	79	3	62.23 ($p < .001$)
General frequency: How frequently is this crime committed in society, and is that rate increasing or decreasing?	53	3	23.26 ($p < .001$)
Detection rate: How likely is it that any given offender will be caught, prosecuted, and punished for this type of crime?	47	3	18.63 ($p < .001$)
Incapacitation			
Likelihood of violence: Does the offender have a psychological profile suggesting that he will commit violent crimes in the future?	95	1	31.41 ($p < .001$)
Repeat offense: Is the offender a repeat offender?	85	2	46.77 ($p < .001$)
Self-control: Can the offender normally control his behavior, or does he often act on his impulses?	80	3	62.03 ($p < .001$)
Filler items			
Remorse: Did the offender demonstrate remorse for the offense?	23	3	1.51 ($p = .679$)
Nationality: Is the offender of Swiss nationality?	82	3	68.80 ($p < .001$)
Age: How old was the offender when he committed the crime?	67	2	19.85 ($p < .001$)

Note: $N = 39$. χ^2 tests indicate whether an item was significantly more often classified as belonging to a respective punishment justification than to any other punishment justification

were included. The participants' task was to indicate the punitive justification each item was most characteristic for. Response options included retribution, incapacitation, general prevention, and "no theory".

Table 1 depicts the items[3] and the relative frequency with which they were assigned to the intended justification. With one exception (intent), all nine target items were classified as intended. While 23.1% of participants assigned "intent" to retribution theory, 38.5% assigned it to incapacitation theory, and 25.6% thought it did not belong to any of the theories. In order to stick as closely as possible to Carlsmith's (2006) original study, we retained "intent" as an item indicating

[3] The present study is actually based on Carlsmith (2001) where the item concerning extenuating circumstances was titled "motivation".

retribution. Regarding the three filler items, *only nationality of the offender* was retained.

Sample

Seventy-three persons (67% female) from Germany, Switzerland, and Austria participated in the study. The study was advertised through website announcements and university mailing lists and was conducted in German. All participants reported speaking German fluently. Ages ranged between 18 and 67 years ($M = 26.0$, $SD = 7.1$). Forty-eight persons were students.

Procedure

In the introduction, participants were informed that a crime had been committed, and that it was their task to assign a sentence. The ten pieces of information ("items"; see Table 1) were presented as a list on the screen.[4] Each item was marked by a letter. At the lower end of the screen, participants were asked to type in the letter of the information they considered most relevant for making a decision. This procedure was repeated five times. Participants were instructed to arrange their choices in order of priority, and they were not informed about how many items they may select. They were told further that the offender was guilty, and that the information they were about to receive would be correct. As explained above, in contrast to Carlsmith's (2006) study, the information, that is, the answers to each question, was not given immediately after each selection, but rather after all items had been selected.

Dependent Variable[5]

A rank preference score was computed to assess the relative importance of the three motivations. The first selected item received a weight of 5, the second item received a weight of 4, the third a weight of 3, etc. Adding weights for each punishment motive separately resulted in a motive-specific rank preference score. If a person selected three retribution items in the first three trials, then retribution received a score of 12 (= 5 + 4 + 3). If a person selected first one retribution item, then two incapacitation items, and then two general prevention items, then retribution received a score of 5, incapacitation received a score of 7 (= 4 + 3), and general prevention a score of 3 (= 2 + 1).

[4] The order in which the items were presented had no significant effect on the mean rank preference score in any of the studies (Kruskal–Wallis, Study 1: all $\chi^2(2, N = 73) \leq 3.11$, $p \geq .212$; Study 2: all $\chi^2(2, N = 78) \leq 2.28$, $p \geq .320$). In Study 3, the online-tool did not allow for complete counterbalancing. Hence only items of retribution, incapacitation and general prevention, but not special prevention were presented on top of the list. Again, there were no significant differences in mean rank preference scores between the order in which items were presented (Kruskal–Wallis: all $\chi^2(2, N = 54) \leq 3.03$, $p \geq .220$).

[5] After participants had received more information about the criminal case, they indicated their punishment decision. The mean sentences did not differ between the studies, $F(2,193) = .015$, $p = .985$, and will not be further reported.

Table 2 Type of information selected in each trial

Trial	Type of information selected				
	Retribution	General prevention	Incapacitation	Special prevention	Filler items
1					
Study 1	93	0	4		3
Study 2	76	0	22		3
Study 3	65	0	20	15	0
2					
Study 1	69	0	30		1
Study 2	69	1	30		0
Study 3	43	4	30	22	2
3					
Study 1	49	1	48		1
Study 2	39	6	54		1
Study 3	39	11	26	20	4
4					
Study 1	40	4	56		0
Study 2	37	9	54		0
Study 3	28	11	28	26	7
5					
Study 1	19	12	67		1
Study 2	30	9	60		1
Study 3	22	22	28	28	0

Note: $N = 73$ in Study 1, $N = 78$ in Study 2, $N = 54$ in Study 3. The numbers indicate the relative frequency of selecting the indicated type of information (across types within each trial)

Results and Discussion

The type of information chosen in each trial is depicted in Table 2.[6] Results show that most people selected retribution items in the first and second trial. Whereas the frequency of selecting retribution items decreased across trials (which is not surprising because there were only three retribution items to select), the frequency of selecting incapacitation items increased across trials. General prevention items and filler items were almost never selected.

Rank Preference Scores

Mean rank preference scores were submitted to a Friedman's ANOVA. Scores differed significantly between punishment motives, $\chi^2(2, N = 73) = 128.68$, $p < .001$. Post hoc tests (Wilcoxon's signed rank test) showed that retribution items had higher scores ($M = 9.86$, Median $= 10.00$, $SD = 2.08$) than incapacitation items ($M = 4.64$, Median $= 4.00$, $SD = 2.02$), $z = -6.72$, $p < .001$.

[6] For all three studies, portfolio analyses were conducted as reported by Carlsmith (2006). Results confirmed the pattern of the mean rank preference scores. The analyses can be requested from the first author.

Incapacitation items had a higher score than general prevention items ($M = 0.25$, Median $= 0.00$, $SD = 0.60$), $z = -7.44$, $p < .001$.

Taken together, the results show a clear preference for retribution and closely resemble Carlsmith's (2006) findings even though the procedure was different. Obviously, Europeans (at least those in Austria, Germany, and Switzerland) do not differ from US-Americans in terms of their retributive motives. Study 2 was designed to test whether we could replicate our findings even when more information about the crime was given.

Study 2: Crime-Specific Assessment

In Carlsmith's original study, participants were not informed about what type of crime the offender had committed; rather, this information could be selected in the BPT as an item related to retribution. Since the type of crime that has been committed is a necessary piece of information for evaluating the case, selecting this item might not indicate a desire for retribution, but rather a desire for basic information. In Study 2, all participants were informed that the offender was guilty of residential burglary before they completed the IST. Since more serious crimes evoke stronger support for retribution (Roberts & Edwards, 1989), we hypothesized that informing participants about the type of crime beforehand might weaken their preference for retribution compared to the previous study.

Method

Sample

The study was advertised through website announcements and university mailing lists. Seventy-eight participants (58% female) with Swiss, German, or Austrian nationality took part in this study. Two persons indicated another nationality. All participants reported speaking German fluently. Ages ranged between 18 and 67 years ($M = 26.4$, $SD = 8.4$). Fifty-five persons were students.

Material and Procedure

Study 2 was conducted in the same fashion as Study 1, with one slight change in the method. Since all participants were informed that the offender was guilty of residential burglary, the item "Type of crime: what type of crime had been committed?" was replaced by "Magnitude of harm: How big is the financial, physical, and psychological harm the offender has caused committing the crime?" Results from a pretest showed that this item was unanimously considered to be indicative of a retributive justification. No other changes were made to the IST. The procedure was the same as in Study 1.

Results and Discussion

Table 2 depicts the type of information people selected in each trial. A comparison between the studies will be reported after Study 3.

Rank Preference Scores

Again, mean rank preference scores differed significantly between punishment motives (Friedman's ANOVA: $\chi^2(2, N = 78) = 109.52, p < .001$). The mean score for retribution ($M = 8.74$, Median = 9.00, $SD = 2.54$) was significantly higher than the score for incapacitation ($M = 5.56$, Median = 5.00, $SD = 2.45$), $z = -5.00$, $p < .001$; and the score for incapacitation was significantly higher than the score for general prevention ($M = 2.11$, Median = 0.00, $SD = 1.05$), $z = -7.52$, $p < .001$.

Thus, giving participants more detailed information about the type of crime that had happened did not diminish their retributive motive. Retributive items were selected more often than incapacitation or deterrence items. It appears that Carlsmith's (2006) findings can indeed be generalized to even less severe types of crime. Previous research showed that people are more willing to consider non-retributional sanctioning such as rehabilitation on the offender when the offense is less serious (e.g., Gromet & Darley, 2006). In our research, participants selected retributive items more often in Study 1 than in Study 2, which is in line with the argument that minor crimes evoke less retributive responses. Future studies should vary crime severity as an experimental factor and investigate to what extent IST scores are affected by seriousness of the offense.

Study 3: A Wider Range of Punishment Motives

The findings of Studies 1 and 2 revealed that participants preferred retribution over incapacitation and general deterrence. This result might be, however, attributable to a lack of proper alternatives. Participants might have selected fewer retribution items if other punishment justifications had been included. In order to test this notion, we included special prevention as a fourth punishment motive in Study 3. Whereas general prevention is directed at the general public, special prevention is directed at the offender him- or herself. Research has demonstrated that people do care about reforming an offender and that general deterrence and offender reform are conceptually and empirically independent (e.g., Vidmar & Miller, 1980; Okimoto & Wenzel, 2008). Because of the new (fourth) punishment motive, the pieces of information that were used to indicate a punitive justification had to be adjusted. They were slightly altered in order to make them more comparable to each other with regard to length, concreteness, and comprehensibility. Finally, a direct self-report measure of punishment justification was included in Study 3. After each of the four punishment motives was described in a short paragraph, participants rated to what extent they endorsed this motive. Carlsmith (2006, Study 1) included a similar measure and found the same rank order as in the BPT: On both measures, his

participants showed a preference for retribution over incapacitation, and least endorsement of general deterrence. Other studies, however, revealed discrepancies between direct and indirect measures of punishment motives (Carlsmith et al., 2002; Carlsmith, 2008). While people's sentencing behavior was in line with retributive principles (but not deterrence), they more strongly endorsed deterrence in their verbal reports. Study 3 explored whether a similar discrepancy would be found between IST scores and self-reported punishment motive.

Method

Pretest

Thirty-six persons (50% female, $M_{age} = 33.9$; $SD = 15.4$) participated in a pretest similar to the one described above. Participants were given detailed information about four punitive justifications (retribution, incapacitation, general prevention, and special prevention) and the penal theories underlying them. The description of special prevention, which had not been included in Study 1, was taken from Endres (1992). The other descriptions were identical to the ones used in Study 1. Chi-square tests were conducted in order to confirm that each item was more frequently assigned to the intended punitive justification than to any other justification (see Table 3).

Sample

Fifty-four participants (67% female) took part in Study 3. Ages ranged from 15 to 39 years ($M = 24.6$, $SD = 4.5$). Most of them were students ($n = 38$) from various disciplines. Most of the persons who took part lived in Switzerland ($n = 26$) or in Germany ($n = 25$). All participants reported speaking German fluently.

Material and Procedure

As in Study 2, participants were told that a person was convicted of residential burglary. Their task was to assign an appropriate punishment and to gather all information they need for making their decision (IST). The list of items was the same as in the pretest. After participants completed the IST task, they read short descriptions of four punitive justification (we used the same descriptions as in the pretest) and rated to what extent they would endorse each of these approaches on a scale from 1 (not at all) to 7 (definitely). We included this self-report measure to estimate the degree of convergence between the IST and self-reports for measuring punishment motives.

Results and Discussion

Table 2 depicts which piece of information participants selected in each trial.

Table 3 Classification of items to punishment justifications (Pretest 2)

Item	Correct classifications (%)	df	χ^2
Retribution			
Magnitude of harm: How big is the financial, physical, and psychological harm the offender has caused?	86	2	55.17
Restore justice: How severe does the punishment have to be in order to restore justice?	94	2	58.51
Consequences for the victim: What were the consequences for the victim and how is the victim today?	69	3	38.22
General prevention			
Not worthwhile: How severe does the punishment have to be in order to demonstrate that crimes do not pay?	92	3	85.33
General frequency: Will this type of crime become more frequent if the punishment is too lenient?	86	3	71.78
Validity of laws: Will this punishment make people aware that norms and laws are important and valid?	92	2	55.17
Incapacitation			
Likelihood of violence: Will the offender commit a violent crime in the future?	83	2	40.67
Danger for the community: How much would the community be in danger if the perpetrator turned out to be a repeat offender?	89	2	50.17
Repeat offense: What is the probability of the perpetrator being a repeat offender?	94	2	60.50
Special prevention			
Support: How can the offender be supported to live without committing crimes?	100		
Recidivism: What kind of punishment will prevent the offender from committing crimes in the future?	75	3	49.56
Hard punishment: Would it be helpful for the offender if he was punished hard?	86	3	75.51
Filler items			
Location: Where did the crime take place? Is the site of the crime quiet or busy?	67	4	50.94
Nationality of the offender: Was the offender a Swiss national? If not, what was his nationality?	56	3	21.56

Note: $N = 36$. χ^2 tests indicate whether an item was significantly more often classified as belonging to a respective punishment goal than to any other punishment goal. All $p < .001$

Rank Preference Scores

As before, mean rank preference scores differed between the four punishment motives (Friedman's ANOVA: $\chi^2(3, N = 54) = 73.17, p < .001$). Pairwise differences between motives were tested via Wilcoxon signed rank tests. Since the fourth motive required a greater number of pairwise comparisons, levels of significance were corrected with

Bonferroni-adjustment ($\alpha = .05/6 = .0083$). The mean score for retribution ($M = 6.89$, Median = 7.00, $SD = 2.58$) was significantly higher than the mean score for incapacitation ($M = 4.38$, Median = 4.00, $SD = 2.51$), $z = -4.13$; $p < .001$, the mean score for special prevention ($M = 3.64$, Median = 2.00, $SD = 2.46$), $z = -5.00$; $p < .001$, and the mean score for general prevention ($M = 1.92$, Median = 0.00, $SD = 1.02$), $z = -6.29$; $p < .001$. Incapacitation did not differ from special prevention, $z = -1.28$; $p = .200$, but yielded higher scores than general prevention, $z = -5.36$, $p < .001$. Also, the mean score of special prevention was significantly higher than the score of general prevention, $z = -4.49$; $p < .001$ (see Fig. 1).

Explicit Preferences

Mean preference scores on the explicit items were submitted to repeated-measures ANOVA with punishment justifications (retribution, incapacitation, general prevention, and special prevention) as a within-subjects factor. Means differed significantly between punishment justifications, $F(3,156) = 36.08$, $p < .001$; $\eta_p^2 = .41$. Pairwise comparisons were analyzed with *t*-tests for dependent samples with Bonferroni-adjusted levels of significance ($\alpha = .05/4 = .0125$). As depicted in Table 4, special prevention ($M = 6.34$; $SD = 0.92$) was rated as more important than incapacitation ($M = 4.72$; $SD = 1.75$), $t(52) = 6.17$, $p < .001$. Incapacitation was judged as more important than general prevention ($M = 3.77$; $SD = 1.54$), $t(52) = 3.60$, $p = .001$. No differences were found between incapacitation and retribution ($M = 4.08$; $SD = 1.62$), $t(52) = 2.03$; $p = .047$, or between retribution and general prevention, $t(52) = 1.13$; $p = .264$. Except for general prevention ($M = 3.77$), all mean values were above the theoretical midpoint of the scale (4). One-sample *t*-tests confirmed that in case of special prevention and incapacitation the difference was significant, $t(52) \geq 2.99$, $p \leq .005$ whereas the mean of retribution did not differ significantly from the midpoint, $t(52) > 2.99$, $p = .735$.

The main purpose of Study 3 was to test whether the preference for retribution persists even if a fourth punishment motive is included. Moreover, the items were slightly altered in order to make them more comparable to each other with regard to length, concreteness, and comprehensibility. These alterations were introduced in order to put the hypothesis that people are motivated by a desire for retribution to a stronger test. In spite of the modifications, retribution items still yielded higher scores than incapacitation, general prevention, or special prevention items. A different pattern of results emerged when punishment justifications were measured via self-report. Participants preferred special prevention over incapacitation while retribution and general prevention received lowest support.

Table 4 Mean explicit preferences in Study 3 (absolute frequency)

	Retribution	General prevention	Incapacitation	Special prevention
M	4.08_{ab}	3.77_{a}	4.72_{b}	6.34_{c}
SD	1.62	1.54	1.75	0.92

Note: Means with different subscripts differ at .0125 level of significance (Bonferroni-adjusted)

Comparison Among Studies

For a comparison among the studies, items of incapacitation, general prevention, and special prevention were categorized as "non-retributive items" and contrasted with retributive items. Table 5 illustrates how many participants selected a retributive versus a non-retributive item in the first trial in each of the three studies. A log-linear analysis (i.e., a logit model) tested whether retributive items were chosen significantly more frequently than non-retributive items across all three studies, and whether the log-odds differed significantly between studies (with Study 1 as the reference category) and participants' gender. The conditional main effect of punishment motive was highly significant, $\omega = -3.01$, $SE = 0.65$, $z = -4.64$; $p < .001$, indicating that across all studies, retributive items were selected more frequently than the other items in the first trial. Furthermore, participants selected more retributive than non-retributive items in Study 1 than in Study 2, $\omega = 1.79$, $SE = 0.74$, $z = 2.43$, $p = .015$, and they also selected more retributive than non-retributive items in Study 1 than in Study 3, $\omega = 2.21$, $SE = 0.74$, $z = 2.99$, $p = .003$. None of the other effects was significant. Specifically, IST scores were not affected by gender, $p = .12$, nor by any gender $\times$ study interaction, $p > .25$.

Figure 1 depicts the mean rank preference scores for all three studies. For each punishment motive, Kruskal–Wallis Tests revealed significant differences between the studies, $H(2) > 13.91$, $p < .002$. Between Studies 1 and 2, post hoc Mann–Whitney tests showed a significant decrease for retribution, $U = 2103.50, z = -2.80$, $p = .005$, and a significant increase for incapacitation, $U = 2237.00$, $z = -2.31$, $p = .021$, whereas the scores of general prevention did not differ, $U = 2608.00$, $z = -1.25, p = .212$. Compared to Study 2, retribution and incapacitation had lower scores in Study 3, both $U < 1360.50, z < -3.48, p < .002$. However, the mean score of general prevention significantly increased, $U = 1630.00$, $z = -2.62$, $p = .009$.

In sum, the comparison between studies confirmed that retributive items were selected more frequently in Study 1 than in the other studies. In contrast, items of general prevention were selected most frequently in Study 3.

General Discussion

The present research aimed at testing Carlsmith's (2006) notion that people's sentencing decisions are primarily affected by retribution. As in the original study, participants' punishment motives were inferred by investigating the kind of information people seek

Table 5 Comparison of items selected in the first trial between studies

	Study 1	Study 2	Study 3
Retribution	68	59	35
Other motives	3	17	19

Note: Other motives include items of general prevention, incapacitation, and special prevention (only in Study 3)

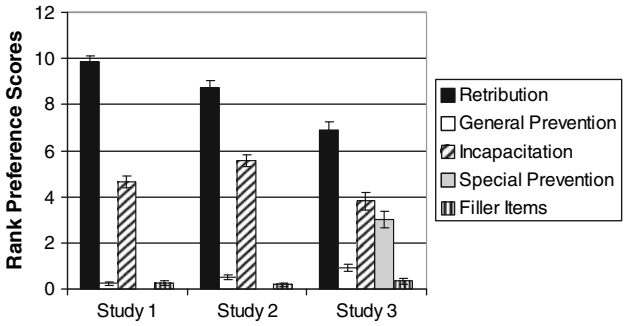

Fig. 1 Comparison of mean rank preference scores between studies

while judging a criminal offense and a criminal sanction. Three studies investigated whether the preference for retribution persists (a) when the methodological approach from the original study (Carlsmith, 2006, Study 2) was altered: In the IST information was only provided after participants had made their choice. People's choices were thus not affected by the different information they had received about the case, (b) when more information about the crime was provided, and (c) when special prevention was included as a fourth punishment motive.

The results in Study 1 closely resembled Carlsmith's (2006) findings: People selected more pieces of information connected to retribution than to general prevention or incapacitation. In Study 2, in which participants received a priori information about the type of crime that had been committed, the preference for retribution persisted. Even when special prevention was included as a fourth punishment motive in Study 3, the mean rank preference score for retribution was still higher than scores for any other punishment motive. Thus, the studies provide additional support for Carlsmith's (2006) conclusion that people's subjective punishment motives are largely shaped by a desire to see the offender punished, and to have the punishment fit the crime.

However, when punishment goals were additionally assessed via self-report in Study 3, participants considered special prevention to be more important than any other punishment justification. In a recent study, Carlsmith (2008) reported a similar result. In this study, laypersons' endorsement of retributive and utilitarian punishment motives was measured with two different methods. Participants were confronted with four criminal scenarios and asked to recommend a sentence. The vignettes differed with regard to factors connected to a retributive justification (e.g., severity of harm, offender's intent), and with regard to factors connected to a utilitarian justification (e.g., publicity of crime, likelihood of detecting the crime). If people endorse a specific punishment motive, varying the corresponding factors should have an impact on their sentences. Carlsmith's (2008) participants tended to punish in line with retributive principles but reported higher support for utilitarian justification when goal importance was measured via self-report. The present research provides further evidence for the notion that there is a discrepancy between self-reports (which assess people's punitive attitudes directly) and alternative measures (which infer their punitive attitudes indirectly from their behavior).

Different Methods, Different Constructs?

How can we make sense of the finding that the IST and the self-reports produce discrepant results? According to our reasoning, these discrepancies emerge because the measures tap two different constructs. The first construct can be described as an intuitive preference for retribution. The present finding of the IST is in accordance with Hogan and Emler's (1981, p. 131) assertion that "the process of retribution is older, more primitive, more universal, and socially more significant" than other justice-related attitudes (see also Baron & Ritov, 1993; Carlsmith et al., 2002; Darley & Pittman, 2003; Sunstein, 2005; Vidmar, 2002). The other construct can be described as an attitude shaped by more deliberate cognitive processes. When people are directly asked to what extent they endorse different justifications, they may take into account a broader range of information, including possible consequences of the punishment or whether or not the perpetrator could foresee all consequences of the crime. The resulting preferences may also be more susceptible to self-presentational strategies: People might be motivated to avoid presenting themselves as hardliners or overly punitive persons. Of course, people's information-seeking behavior is also shaped by deliberate strategies. We do not argue that people do not deliberately decide which piece of information they would like to select in order to make their sentencing decision. However, since participants are not aware that the IST is supposed to measure their punishment motives, other deliberative influences (such as strategic self-presentation) that influence self-reports may not affect IST scores. Hence we argue that deliberate or self-presentational strategies are less likely in the IST than in self-reports.

Still, self-reports are valuable predictors for outcomes that are also shaped by more deliberate reasoning, deception, or self-presentational strategies. For example, when people are asked to put themselves in a position of a lay judge whose task is to impose fair and reasonable punishment, their judgments should be influenced by reasoning about mitigating circumstances and foreseeability (e.g., Oswald & Stucki, 2009). Thus, explicit sentencing judgments may be better predicted by direct measures, whereas BPT and IST and other indirect measures should be a better predictor for spontaneous responses as to whether and why an offender should be punished.

Possible Influence of the Sample

The results of Study 1 closely resemble Carlsmith's findings despite considerable differences between the studies. Not only do they differ with regard to methodological aspects but also with regard to the sample. While the original study was conducted with American students, there were predominantly Swiss and German citizens who participated in our online studies. Previous research demonstrated cross-national differences between the US and Europe concerning punitive attitudes: For example, US respondents tend to impose longer sentences than respondents from Austria (e.g., Mayhew & van Kersteren, 2002). By contrast, our studies reveal that the punishment decisions of German and Swiss participants appear to be driven by a retributive motive, just as in Carlsmith's (2006) US sample.

Although our study was advertised in the internet, the sample still consisted predominantly of students and people with academic degrees. One might argue that the preference for retribution could be even more pronounced in a less educated sample. Altemeyer's right-wing authoritarianism (RWA) was found to be more prevalent among people with lower compared to higher education (Altemeyer, 1981; Napier & Jost, 2008; Steiner & Fahrenberg, 2000). Also, RWA is related to higher punitiveness (Carroll, Perkowitz, Lurigio, & Weaver, 1987; Feather, 1996; Gollwitzer, 2004). Thus, it could be expected that authoritarian values and a preference for retribution are more pronounced in a less educated sample.

Conclusion

Although the preference for retribution survived all modifications of the method, the differences in the pattern of results between the three studies we reported here are noteworthy. For example, the mean rank preference score of retribution was lower in Study 3 than it was in Studies 1 and 2, whereas the score of general prevention was higher. Thus, there is some reason to assume that Carlsmith's (2006) original design favored retribution items to some extent. We therefore suggest using a modified version of the original method in future studies. The present research adds to a growing body of literature that investigates laypersons' punitive motives with non-obtrusive, indirect approaches beyond self-reports. Such approaches may help gaining a deeper and more profound understanding how laypersons' punitive responses are formed.

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