

FULL PAPER

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Exploring the effects of presumed media influence on judges,
prosecutors, and defendants

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Abstract: Based on survey data, the study explores the perceptual and behavioral effects on 271 prosecutors and 447 judges whose trials were covered by the media (direct effects) and on defendants (indirect effects). Results show that many respondents closely followed media coverage more intensively than usually. They also reported negative media reports as having strong effects on: (a) their emotions, (b) their perceptions of effects on laymen in the courtroom, and (c) the sentence (e. g. defendants). In contrast, they perceived only weak effects on professionals. Negative emotions depended on the attention paid to coverage and perceived inaccuracy of media reports. Nevertheless, the sentence handed down was affected by perceived weak effects on professionals and independent from perceived strong effects on laymen. Based on the findings, the social relevance of direct and indirect effects of experienced and of presumed media influences are discussed.

Keywords: indirect media effects, reciprocal effects, influence of presumed influence, trials, judges, prosecutors

Zusammenfassung: Der vorliegende Beitrag untersucht auf Basis einer Befragung direkte Medieneffekte auf 271 Staatsanwälte und 447 Richter sowie daraus resultierende indirekte Effekte auf die Angeklagten. Es zeigt sich, dass Befragte, über deren Verfahren in den Medien berichtet wird, die Berichterstattung aufmerksam und intensiv verfolgen. Außerdem nehmen sie starke Medieneffekte auf (a) die eigenen Emotionen, (b) die Wahrnehmung von Medienwirkungen auf Laien im Gerichtssaal und (c) das Strafmaß wahr. Mit Blick auf die Angehörigen ihrer Profession gehen sie dagegen nur von schwachen Medienwirkungen aus. Das Ausmaß negativer Emotionen hängt in erster Linie von der wahrgenommenen Genauigkeit der Berichterstattung und der Aufmerksamkeit ab, mit der diese verfolgt wird. Auswirkungen auf das Strafmaß hat in den Augen der Richter und Staatsanwälte vor allem die wahrgenommene Wirkung auf Professionsangehörige. Die wahrgenommene Wirkung auf Laien bleibt diesbezüglich weitgehend folgenlos. Die gefundenen direkten und indirekten Medieneffekte werden hinsichtlich ihrer sozialen Relevanz diskutiert.

Schlagwörter: indirekte Medieneffekte, reziproke Effekte, Influence of presumed influence, Gerichtsverfahren, Richter, Staatsanwälte

In his article on the third-person effect W. Phillips Davison (1983) presented a far reaching concept for the analysis of direct and indirect media effects – effects on people who perceive media coverage and on those people who are affected by the media induced behavior of the former.¹ According to the “perceptual hypothesis”, “people will tend to overestimate the influence that mass communications have on the attitudes and behavior of others” (p. 3). The so called “behavioral hypothesis” assumes that the “impact they expect this communication to have on others may lead them to take some action” (p. 3). Both effects can be regarded as direct effects of media coverage on recipients. Davison illustrated his basic ideas with an episode from World War II. White officers withdrew black soldiers from the battlefield on Iwo Jima Island because they believed Japanese anti-white propaganda, distributed in the form of leaflets, would have a strong direct effect on them. According to Davison, there was “no evidence that the propaganda had an effect on the troops at all. But it sure had an effect on the white officers. The leaflets seem to have caused a substantial reshuffle of personnel” (p. 2). This decision had remarkable consequences for the soldiers withdrawn and for the soldiers sent in. Most likely, many of the former were saved; many of latter were wounded and killed. These consequences have to be regarded as indirect effects of the leaflets.

This paper examines the direct and indirect effects of negative media coverage in the context of judicial trials by taking into account both – its effects on recipients’ perceptions, emotions and behavior as well as the consequences for the people who are affected by the recipient’s behavior. More precisely it asks whether judges and prosecutors as protagonists of media coverage are influenced by reports on trials they are personally involved in and if these effects have consequences for other people in court. In line with Gunther and Storey (2003) we consider the influence of presumed media influence to be the crucial variable within the process. In contrast to most previous studies in the field, we distinguish two groups of ‘others’ within the courtroom: judicial professionals and laymen, both subject to participants’ assessments of media effects.

For various reasons judicial trials offer a good opportunity to test our assumptions: Many trials are covered by the media and get criticized, along with the people involved (Branahl, 2005; Graber, 1980; Imrich, Mullin, & Linz, 1995; Peleg & Bogoch, 2012; Pritchard, 1986). Judges, prosecutors, and other persons in the courtroom can be regarded as protagonists of media reports, and are therefore personally involved in the subject. Persons involved in the trial (e.g., victims, defendants, judges, prosecutors) can be categorized as judicial professionals and laymen, and therefore differ in terms of social distance to the protagonists under investigation. The judges and prosecutors probably speculate about the effects of media coverage on other people. Their perception of effects might in turn influence their behavior, affecting the sentence handed down which we regard as an indirect effect on the accused.

1 We are fully aware that our concept of indirect effects differs from the existing definition offered by Gunther and Storey (2003) who speak of indirect effects as individual reactions to perceived media influence on others. Whereas their definition refers to a psychological level our concept refers to the social consequences of the behaviors triggered by perceptual effects.

1. Theory

There are two important aspects of Davison's theory which should be noted: First, he describes an effect on people who were at least indirectly addressed by the messages (white officers). They were not just bystanders who might have reflected on other people mentioned in the leaflets but protagonists of the leaflets who might have reflected their personal situation. Therefore, the effects on them can be classified as "reciprocal effects". The term describes media effects on protagonists of media coverage and their reference group, for example the effects of a report on Michael Schumacher on himself, his racing team or his close friends (Kepplinger, 2007). Second, Davison actually refers to three types of effects: (1) effects on the officers' cognitions, as they suspected the leaflets to be effectual (perceptual hypothesis), (2) effects on the officers' decision to withdraw (behavioral hypothesis), and (3) effects on white soldiers who replaced the black soldiers and who might not even have read the Japanese leaflets (indirect effect).

Perceptual effects: After more than two decades and a remarkable number of empirical studies in *direct effects*, there is increasing evidence that the *perceptual hypothesis* applies. People tend to assume that negative mass communications affect other people more intensively than themselves (Paul, Salwen, & Dupagne, 2000, 2007; Perloff, 1999, 2002; Sun, Pan, & Shen, 2008). This perceptual bias increases as ego involvement (Perloff, 1989, 1996, 2002), and the social/political distance between observers and the 'others' grow (Cohen, Mutz, Price, & Gunther, 1988; Tewksbury, 2002; Chia, Lu, & McLeod, 2004; Jensen & Hurley, 2005; Paul, Salwen, & Dupagne, 2007; Sun, Pan, & Shen, 2008).

Behavioral effects: Although the study at hand can be located within the larger realm of third-person effect research, we do not focus on the effects of a gap between perceived media influence on others and the self as described by Davison. Instead, we follow Gunther and Storey's (2003) concept of the "influence of presumed media influence" (IPMI), and assume that *behavioral reactions* of legal professionals are due to their perceptions of media effects on others. Several studies confirmed this more general assumption, e.g. in terms of censorship support for sexually explicit media content (Tal-Or, Cohen, Tsfati, & Gunther 2010), the individual desire to be thin (Park, 2005), engagement in social media activism (Lim & Golan, 2011), strategic voting (Cohen & Tsfati 2009), and a broad range of other behaviors (e.g. Gunther, Bolt, Borzekowski, Liebhart, & Dillard, 2006; Cohen & Weimann, 2008).

Besides examining the respective effects on regular recipients some studies in the IMPI also focused on individuals with a high potential to exert an influence on large social groups or even society as a whole. Cohen, Tsfati and Sheaffer (2008), e.g. show that politicians react to individual perceptions of media effects by increasing their efforts to appear in the media as well as their parliamentary activity. Similar motivational and behavioral patterns were observed for scientists: Scholars who were convinced that the media exert a strong influence were more motivated to obtain media attention and were more successful in actually receiving it (Tsfati, Cohen, & Gunther, 2011). Regarding the judicial sphere in particular, Peleg and Bogoch's (2012) analysis of qualitative interviews with legal

professionals in Israel indicates that judges and lawyers also believe in strong media effects on the public (p. 970).

In addition to their decisive roles in society there is good reason to believe that experts as described above also assume stronger media effects on the public than novices or laymen do. In an empirical attempt to compare perceptions of media influence of experts and novices Huh and Langteau (2007) showed that consumer experts in the field of prescriptive drugs perceived greater influence of advertising on the public than consumer novices. However, actual experts (physicians) ascribed smaller effects to advertising than consumer experts did.

Legal professionals are not just experts within their field, but also protagonists of media coverage, because the trials they are involved in are covered regularly by the media. There are two reasons why protagonists should be treated separately regarding their reactions especially to negative media coverage. First, protagonists of negative media coverage are more involved than simple bystanders (Kepplinger & Glaab, 2007) and therefore assume stronger media effects on others (Perloff, 1989; Reid & Hogg, 2005; Sun, Pan, & Shen, 2008). Second, protagonists are often in charge of social power and thus make far-reaching decisions which in turn might affect a large number of people (Kepplinger, 2007).

Because of their special characteristics, protagonists might also differ in terms of behavioral reactions to media coverage when compared to ordinary recipients. According to reference group theory, individuals are primarily influenced by the behavior of members of their own social group (Shils & Janowitz, 1948), by group members with high status (Kelley & Volkart, 1952), and by authorities rather than by majorities (Luchins & Luchins, 1961). The tendency to resist influences from outside is extremely strong among professionals and other experts (Macdonald, 1995, pp. 157–186). From these findings, we can conclude that the behavior of professionals and other experts is primarily influenced by the assumed or observed effects of media coverage on socially close individuals like other professionals or experts.

Emotional effects on protagonists: Media messages can not only influence cognitions – ideas about their effect on other people – but also trigger *emotions* (Nerb & Spada, 2001), especially when recipients themselves are part of media coverage (Kepplinger, 2007). Previous research on reciprocal effects suggests that negative coverage on ordinary people and on celebrities is likely to induce negative emotions like anger or outrage as well as a feeling of helplessness. This can stimulate certain behaviors, e.g. like official complains about media coverage (Kepplinger & Glaab, 2007). Emotional reactions to media criticism – mainly feelings of vulnerability and helplessness – can also be observed in the legal sphere (Peleg & Bogoch, 2012).

Indirect effects: The *indirect effect* as described by Davison has only been discussed occasionally (Cohen et al., 1988) and investigated empirically (Cohen, Ts-fati, & Sheaffer, 2008). Thus, the social aspect of his theory has largely been ignored. It is important to note that the conception of an indirect effect as presented here differs from Gunther and Storey's (2003) who offered a more general approach considering the effects of perceived media influence ("indirect effects-model"). While they refer to indirect effects as individual reactions to perceived

media influence on others, we think of them as effects *resulting* from the behavioral changes caused by perceived media influence.

Applying this conception we describe a chain of reactions starting with mass media communications and (1) its influence on protagonists perceptions of presumed media influence, emotions and behavior and (2) indirect effects on other people, which might not even have recognized the relevant information but are nevertheless affected by reactions of recipients (see Kepplinger, 2007). This extended sociological perspective on indirect effects might contribute to a more realistic view on the role of media in society.

Hypotheses

Based on the theories and the empirical findings outlined, we propose six hypotheses:

1. Judges and prosecutors follow media coverage of trials in which they are involved more intensively than the coverage of trials in which they are not involved.
2. Judges and prosecutors assess the accuracy of the coverage of trials in which they are involved and often believe that reports are inaccurate.
3. Judges and prosecutors react emotionally to coverage which they think is wrong, misleading or generally negative. In this case they get annoyed, outraged and feel helpless.
4. Judges and prosecutors assume that socially more distant laymen in the courtroom are affected more strongly by negative media reports on the trial than socially more close professionals are.
5. Judges and prosecutors perceive and admit the influence of negative media coverage on their own professional behavior.²
6. The behavior of judges and prosecutors is more affected by the perceived effects on professionals and experts in the court than by the perceived effects on laymen.
7. The behavior of judges and prosecutors has an indirect effect on defendants (the time they have to stay in prison, a release on probation, decision on preventive detention).

In order to understand the design and analysis of the following study some additional remarks regarding the German judicial system might be in order: There are two differences between the judicial system in Germany and most other countries, which should be known. Prosecutors do not play a purely accusatory role in the way they do for example in the US judicial system (Whitman, 2009). Although German prosecutors formally accuse the defendants, they are committed to treat them 'neutrally' in the sense that they are not permitted to present one-sided arguments. Like judges, they are bound to proceed objectively. In Germany, there is no jury in criminal proceedings. Up to three professional and two nonprofes-

2 Because in this study, behavioral effects are indicated by self-reports, consciousness is a necessary condition. If it were possible to use independent measures, this condition would not be necessary.

sional judges hand down the sentence. Therefore, effects of media coverage on the sentence are restricted to effects on prosecutors and judges and by effects on other people involved in the trial. Despite these differences, empirical studies in both countries provide little evidence of media effects on the guilty or not guilty verdict, but remarkable evidence of media effects on the length of sentences in cases of convictions (Bruschke & Loges, 1999, 2004, pp. 76-133; Gerhardt, 1990, 2004; Kepplinger & Zerback, 2009; Peleg & Bogoch, 2012; Pritchard, 1986, 1990).

The studies mentioned do not explain the origin of these effects. Like almost all laboratory studies examining the effect of media coverage on the outcome of trials have tested college students (Bornstein, Whisenhunt, Nemeth, & Dunaway, 2002; Fein, McCloskey, & Tomlinson, 1997; Kramer, Kerr, & Carroll, 1990; Wilson & Bornstein, 1998), who are personally unaffected by the trial coverage; only two studies analyzed samples of jury members (Kramer et al., 1990; Padawer-Singer, Singer, & Singer, 1974). Because media effects on students cannot be generalized (Paul, Salwen, & Dupagne, 2007; Sun, Pan, & Shen, 2008) the majority of studies in both fields lack external validity. Therefore it is necessary to test those people whose behavior has to be explained.

2. Method

The population of the current study included all judges and prosecutors in five German states: Bavaria, Baden-Württemberg, Bremen, Rhineland-Palatinate, and Saxony.³ Respondents received identical questionnaires, adjusted to both professions if necessary (shown below; specific wording for prosecutors is shown in square brackets). The survey was conducted anonymously in November 2006 using a Web-based questionnaire.⁴ In cooperation with the state ministries of justice, the survey was announced via e-mail, followed by another e-mail several days later containing a link to the actual Web survey. Follow-up e-mails were sent to the respondents about 10 days and 2 weeks after the e-mail containing the link. In total, 1,777 judges and 1,268 prosecutors were contacted, of which 447 and 271 returned a completed form corresponding to response rates of 25% and 21%, respectively. In the final sample, of those participants who answered the question about their gender, 77% of the judges were men and 21% were women (prosecutors: 67% men, 28% women). On average, judges were older than prosecutors (47 vs. 41 years, respectively) and had spent a longer time working in their current roles (16.0 vs. 11.2 years). It is not possible to estimate the representativeness of the sample because no information is available regarding the entire populations of judges and prosecutors.

3 The five German states mentioned were included in the survey because the ministers of justice had agreed to support our research in the described manner.

4 The study and the questionnaire were prepared using the results of qualitative interviews with prosecutors and judges who were involved in heavily covered criminal proceedings from a former study (Gerhardt, 1990).

3. Results

Attention paid to coverage of own trials

The use of trial coverage by judges and prosecutors was measured by their responses to the following question: “How do you use media covering trials in which you are involved? I...”. Several items were presented, each accompanied by a five-point scale ranging from (1) “Fully applies” to (5) “Doesn’t apply at all”. In addition to the means presented in the following table, the percentages of respondents are mentioned who marked point 1 or 2 of the scale. Nearly half of the prosecutors (43%) and judges (49%) do not change their reading habits when the media cover a trial in which they are involved. But a remarkable percentage of prosecutors and judges (44% respectively 37%) read more about their trials than about other trials. A minority (22% respectively 19%) even reads newspapers that they usually ignore. These findings partly confirm hypothesis 1 (table 1).

Table 1: Attention paid to coverage regarding trials personally involving judges and prosecutors

	Judges (n = 425)		Prosecutors (n = 267)		Total (n = 692)	
	M	SD	M	SD	M	SD
“... act as usual, nothing has changed”	2.5 ^a	1.5	2.8	1.5	2.6	1.5
“... read more about ‘my trial’ than about other trials”*	3.0	1.4	2.8	1.4	2.9	1.4
“... read media that I usually ignore”*	3.7 ^a	1.3	3.5	1.3	3.7	1.3
“... read individual articles repeatedly”*	4.6	0.8	4.5	0.9	4.5	0.9

Note: Question wording: “How do you use media covering trials in which you are involved? I...”. Respondents marked their answers on a five-point scale ranging from (1) “Fully applies” to (5) “Doesn’t apply at all”; 26 respondents did not answer the question. Means (M) and standard deviations (SD) are based on the respondents who stated that they followed the coverage of their trials intensely or that they did not avoid it.

*Items used to construct the scale ‘attention’ with a structural equation model (α = .618).

^aSignificant differences between judges and prosecutors (p < .05).

Attention paid to coverage regarding trials personally involving judges and prosecutors.

Perceived inaccuracy of media reports

From the protagonists’ point of view, inaccurate and therefore misleading media coverage is an example of negative media coverage. Therefore, the judges and prosecutors were asked the following question: “If you think about your trials covered by the media, what was coverage like?” Respondents were asked to rate the accuracy of reports on a five-point scale ranging from (1) “Facts were presented accurately” to (5) “Facts were presented inaccurately”. Most of the judges and prosecutors had experienced inaccurate coverage, although to a moderate extent. Nearly two-thirds of both groups (63% of judges, 69% of prosecutors) said that the facts were presented “partly accurately, partly inaccurately”. Minorities of judges (32%) and prosecutors (21%) stated that the facts mentioned in reports were presented “in a predominantly accurate way”, but a significantly

smaller fraction (4% of judges, 9% of prosecutors) said that the facts were presented “*in a predominantly inaccurate way*”. Only two respondents checked one of the scale extremes. Thereby hypothesis 2 is also partly confirmed.

Emotional reactions to media criticism

Judges and prosecutors were asked to remember their spontaneous reactions to critical reports, regardless of the type of criticism.⁵ The question read as follows: “*What was your spontaneous reaction to negative coverage?*” Respondents were provided with various answers reflecting possible emotional reactions and were asked to mark their answers on a five-point scale ranging again from (1) “*Fully applies*” to (5) “*Doesn’t apply at all*”. Almost half of the judges (46%) and an even higher proportion of the prosecutors (55%) felt “annoyed”, or had the feeling that they “couldn’t really defend” themselves⁶ (45% resp. 38%). The three items are used to construct a general scale of emotions experienced by the protagonists of negative media coverage – see below.⁷ The data partly confirm hypothesis 3 (table 2).

Table 2: Judges’ and prosecutors’ emotional responses to media criticism

	Judges (n = 267)		Prosecutors (n = 146)		Total (n = 413)	
	M	SD	M	SD	M	SD
“...was annoyed”*	2.7 ^a	1.3	2.4	1.3	2.6	1.3
“...had the feeling that I couldn’t really defend myself”*	2.8	1.5	2.9	1.4	2.8	1.5
“...was outraged”*	3.9	1.3	3.7	1.3	3.8	1.3

Note: Question wording: “*What was your spontaneous reaction to negative coverage? I...*”. Respondents marked their answers on a five-point scale ranging from (1) “*Fully applies*” to (5) “*Doesn’t apply at all*”. Means (M) and standard deviations (SD) are based on respondents who stated that their trials were criticized by the media.

*Items used to construct the scale ‘emotions’ with a structural equation model ($\alpha = .755$).

^aSignificant difference between judges and prosecutors ($p < .05$).

- 5 Media criticism evokes spontaneous emotions, even if the protagonists are experienced with the media and used to being in the public eye (e.g., politicians and celebrities). Moreover, these media-evoked emotions are long-lasting (Kepplinger & Glaab, 2007).
- 6 The feelings of helplessness and outrage might be more widespread than is indicated by the data, because 12–17% of respondents did not answer this question.
- 7 The requested reactions to negative coverage are based on theoretical assumptions originally derived from psychological research (e.g., Nerb & Spada, 2001, predicted anger or sadness as reactions to negative coverage). However, their reports dealt with environmental damages and respondents were not personally involved. In former studies on protagonists of media coverage, annoyance and helplessness proved to be more adequate, which we therefore included in our questionnaire (Kepplinger & Glaab, 2007).

Perceived effects of negative media reports on professionals and laymen in the courtroom

Two social categories of people involved in the trial can be distinguished: judicial laymen (victims, the public, defendants and witnesses) and professionals (defending lawyers, prosecutors, judges and experts). It should be noted, that “prosecutors” and “judges” were part of the list of professionals as well so that respondents were able to assess effects on their own profession.⁸ Perceived media effects on other people involved in the trial were assessed by asking judges and prosecutors “*When media coverage of a trial is negative: How would you assess the effect on the following persons?*” The question was followed by eight items, each related to a certain party/person involved in the trial. Again, a five-point scale was used to report the answers, ranging from (1) “*Very strong effect*” to (5) “*Very weak effect*”. According to the observations of judges and prosecutors, negative press reports had a much stronger effect on socially distant laymen (average percentage of respondents indicating a “very strong” or “strong” influence: prosecutors 78%; judges 77%) than on socially close members of the legal professions (average percentage of respondents indicating a “very strong” or “strong” influence: prosecutors 15%; judges 18%) participating in the trials.⁹ These findings are in line with previous research into presumed media influence and confirm hypothesis 4 (table 3).

Table 3: Assumed effect of negative media coverage on professionals and laymen in the courtroom

	Judges (n = 429)		Prosecutors (n = 263)		Total (n = 692)	
	M	SD	M	SD	M	SD
Laymen	1.8 ^a	.57	1.8 ^a	.67	1.8 ^a	.61
Professionals	3.8 ^a	.83	3.8 ^a	.84	3.8 ^a	.83

Note: Question wording: “*If media coverage of a trial is negative, how would you assess its effect on the following persons?*” Respondents marked their answers on a five-point scale ranging from (1) “*Very strong effect*” to (5) “*Very weak effect*”. Explorative factor analysis identified two factors used in the SEM: factor I, Laymen ($\alpha = .710$); factor II, Professionals ($\alpha = .766$). Numbers indicate aggregated means of perceived effects on all laymen resp. professionals.

^aSignificant difference between the perception of effects on laymen and professionals ($p < .05$).

- 8 For both respondent groups (judges and prosecutors), the theoretical differentiation was confirmed by factor analysis. Principal component analysis revealed two factors for both respondent groups (judges and prosecutors) with the following loadings. Factor 1 (judges): prosecutors (.877), judges (.870), experts (.677), defending lawyers (.621); Factor 2 (judges): victims (.789), defendants (.774), witnesses (.650), the public (.599); Factor 1 (prosecutors): judges (.906), prosecutors (.884), experts (.661), defending lawyers (.607); Factor 2 (prosecutors): victims (.824), defendants (.786), witnesses (.737), the public (.602).
- 9 To test the differences between the respondents’ perceptions of the laymen and professionals, we conducted paired-sample *t* tests for every possible pair of variables. For the judges, all pairwise differences proved significant ($p < .001$). The same applied to the prosecutors, except for the differences between judges and experts (n.s.), judges and prosecutors (n.s.), and prosecutors and experts (n.s.).

Effects of negative media reports on prosecutor's and judge's behavior

In Germany, the sentence handed down in criminal proceedings is the consequence of the charge made by the prosecutors and the decision made by one up to three professional and two nonprofessional judges. Therefore, the perceived influence of media coverage on the sentence indicates the admitted influence of the media coverage on the professional behavior of the prosecutors and judges. The perceived influence of negative media coverage on the length of the sentence handed down to the accused was measured using the following question (table 4): “*What do these effects consist of? Please consider the possibilities listed below*”. Respondents were provided with six items using the following three-point scale: (1) “*Often*”, (2) “*Sometimes*”, and (3) “*Never*”.

Probably, many protagonists whose behavior has actually been influenced by negative media coverage will not admit this influence, because it would contradict their self-image and their public image. This will be especially true for legal professionals who are expected to act independently from external influences, and it will manifest primarily in their statements about media effects on their professional behavior. Surprisingly, a remarkable minority of prosecutors and judges admit an influence of negative media coverage on their own professional behavior. Nearly one third admitted effects on the length of the sentence (“often” or “sometimes” observed by 30% of all interviewees), about one fourth mentioned effects on the release of convicted persons on probation (“often” or “sometimes” observed by 24% of all interviewees), and about one out of ten reported effects on the decision on preventive detention (“often” or “sometimes” observed by 12% of all interviewees). In contrast to the answers related to the type of sentence, nearly all interviewees deny an effect of media coverage on the question of guilt (“often” or “sometimes” observed by 5% of all interviewees). Again, there are only small differences between the statements of the prosecutors and judges. These findings partly confirm hypothesis 5 at least with regard to the length of the sentence and a possible release on probation (table 4).

Table 4: Effects of media coverage on prosecutors and judges

	Judges (n = 447)		Prosecutors (n = 271)		Total (n = 718)	
	M (SD)	%**	M (SD)	%**	M (SD)	%**
“... the length of sentence”*	2.7 ^a (0.5)	25	2.6 (0.5)	37	2.7 (0.5)	30
“... release on probation”*	2.8 ^a (0.4)	20	2.7 (0.5)	30	2.7 (0.5)	24
“... the experts’ testimonies”	2.9 (0.4)	11	2.9 (0.3)	10	2.9 (0.3)	11
“... the decision on preventive detention”*	2.9 (0.4)	10	2.8 (0.4)	14	2.9 (0.4)	12
“...the question of guilt”	3.0 ^a (0.2)	3	2.9 (0.3)	9	2.9 (0.3)	5

Note: Question wording: “*What do these effects consist of? Please consider the possibilities listed below. Media coverage has an effect on...*”. Respondents marked their answers on the following three-point scale: (1) “*Often*”, (2) “*Sometimes*”, (3) “*Never*”.

*Items used to construct the scale ‘sentence’ in the structural equation model ($\alpha = .796$).

**Percentage of respondents perceiving media effects “Often” or “Sometimes”.

^aSignificant difference between judges and prosecutors ($p < .05$).

Direct and indirect media effects

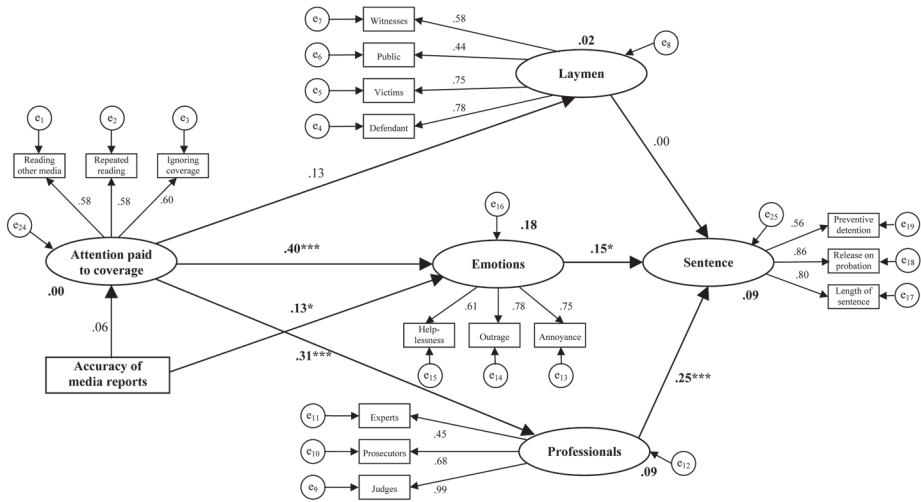
Attention paid to coverage by judges and prosecutors as well as perceived inaccuracy of reports are regarded as independent variables in a media effects model. Attention paid to coverage of own trials is indicated by the combined reactions to three items (table 1), perceived inaccuracy of reports is indicated by the 5-point Likert-scale question mentioned above. Protagonists' emotional reactions to media coverage and their perceptions of effects on other people involved in the trial are considered as intervening variables, with mediating effects on the behavior of judges and prosecutors being considered the dependent variable. Emotional reactions are indicated by combined answers to three items (helplessness, outrage, annoyance) (table 2), perception of effects on others is also indicated by summarizing answers to different types of laymen and professionals (table 3 and figure 1), behavior of judges and prosecutors is indicated by their combined answers to three items (preventive detention, release on probation, length of sentence) (table 4). The relationships between these latent variables were analyzed using a structural equation model (SEM)¹⁰ (figure 1). The model is estimated using AMOS 7.0 software and consists of five latent constructs, all of which show good reliability.¹¹ The global model fit fulfills the requirements commonly proposed in this context (standardized root mean square residual [SRMR] = .059, root mean square error of approximation [RMSEA] = .043; comparative fit index [CFI] = .948) (Holbert & Stephenson, 2002).

The results of the analysis can be summarized as follows. Perceived inaccuracy of reports did not influence the amount of attention paid to coverage by judges and prosecutors, although it did slightly affect their emotional reactions. Attention had a significant effect on emotional states: The more closely respondents followed reports on their trials the stronger were their emotional reactions (e.g., annoyance, outrage and helplessness). Higher attention to media coverage also resulted in the impression that other professionals are affected by it. In contrast, the protagonist's perception of media effects on laymen did not depend on how closely they followed coverage. This might be explained by a ceiling effect: Even those who followed media coverage only occasionally perceived strong media effects on laymen.

10 Handling nonresponse: Respondents whose trials were never criticized in the media and those who consciously avoided media coverage were excluded from the analysis so, overall, 400 respondents were included in the final standard error of mean (SEM). However, most variables still yielded a small proportion of missing values. To handle this problem, we used the full information maximum likelihood (FIML), an effective algorithm that allows the estimation of models that include missing values (Enders & Bandalos, 2001; Wothke, 2000; Wothke & Arbuckle, 1996). Handling the non-multinormality of data: Statistical inference in SEM is based on the assumption that the variables included in the model are joint multivariate normally distributed (Schumacker & Lomax, 2004). As in most studies, our data violate this assumption. There are various ways to handle non-normality (e.g., transformation of the original data); we decided to use the bootstrapping technique to deal with this problem. Bootstrapping is a resampling method, performed by drawing multiple subsamples from the original sample so a new (empirically based) distribution can be generated for any given population parameter e.g., means (Elfron, 1979, 1987). The following tests of inference are based on this new distribution and yield more reliable results when the data are not normally distributed (Byrne, 2001, pp. 267–286; Yung & Bentler, 1996). Bootstrapping cannot be performed with missing values, so this analysis was based on 248 respondents. However, the results differed only slightly from those obtained within the original sample (n = 400). The results presented here are based on the smaller sample.

11 Cronbach's α values for latent variables: α (attention) = .618; α (emotions) = .755; α (laymen) = .710; α (professionals) = .766; α (sentence) = .796.

Figure 1: Effect of attention paid to coverage on judges' and prosecutors' emotions, perceived media influence on others, and behavior



Standardized coefficients: $***p < .01$; $**p < .05$; $*p < .10$. Model fit: SRMR = $.059$; RMSEA = $.043$; CFI = $.948$; $n = 248$; e_i = residuals of the model's structural equations and errors in measurements of the latent constructs.

Emotions evoked by negative media coverage, and the perception of media effects on other professionals, had a significant effect on the behavior of prosecutors and judges, as reflected in the sentence handed down: The stronger the effects on their emotions and the stronger the perceived effects on other professionals, the more likely they reported an effect on their own professional behavior. The finding therefore confirms hypothesis 6. Prosecutor's and judge's professional behavior, as indicated by the admitted effects of media coverage, had an indirect effect on the defendants: It influenced the time they would spend in prison (length of the sentence), the chance to leave the courtroom as a free person (release of the convicted person on probation), and the risk of extra punishment (preventive detention). This confirms hypothesis 7. It has to be remembered that these findings are based on the experiences of 20-35% of the respondents who indicated an effect of media coverage on the type of sentence passed.¹²

12 The same structural equation model was calculated using 'own behavior' instead of 'perceived behavior' as a dependent variable. The judges' own behavior was measured by asking: "Concerning trials the media discussed in a controversial way, did you consider the public's acceptance of your judgement?" (Default answers were: "Yes, strongly" = 10%; "Yes, somewhat" = 48%; "No" = 42%). A similar question was posed to the prosecutors: "Concerning trials the media discussed in a controversial way, did you consider the public's acceptance of your inquiry/demand for a penalty?" (Default answers were: "Yes, strongly" = 3%; "Yes, somewhat" = 39%; "No" = 58%). The two sets of calculations yielded similar results, with the exception that the respondents' perceptions of how the media reports affected other professionals were weaker in the latter calculations (correlation: $.20$). The same applied to the media's effect on emotions (correlation: $.24$). Both correlations were statistically significant, although the model fit showed a slight reduction compared with the current model (RMSEA = $.047$; CFI = $.940$). This finding suggests that the present results can be interpreted in a causal manner, although certain necessary restrictions must be taken into account.

4. Limitations and discussion

Limitations

There are several reasons for interpreting the results with caution. The response rate was rather low, as it is typical for online surveys. It was not possible to check the representativeness of the sample because there is no information available on socio-demographics of judges and prosecutors in the various countries. Judges and prosecutors who had experienced media coverage were probably more likely to have participated in the survey. Additionally, their answers were not necessarily related to specific trials and may instead have reflected a mixture of experiences and observations from different occasions. Maybe some judges and prosecutors did not describe their own experiences, but instead reported impressions acquired when observing their colleagues. Maybe some did not mention all their emotional responses and all the perceived effects of media coverage on the sentence. In addition, self-reports can provide preliminary information about media effects but cannot replace independent exact measurements.

Because of these limitations, the data partly overestimate and partly underestimate the effects of media coverage. However, unlike most studies of third-person effects, respondents not just assumed media effects on other people but also had the chance to observe them in their daily work. This enhances the validity of their statements. In addition respondents did not just indicate behavioral intentions but reported actual past behavior. Nevertheless, in the case of legal professionals self-reported media effects on behavior might underestimate the actual effects.

Discussion

This study analyzed the consequences of perceived media influence in a judicial context. We distinguished three effects: direct effects of media coverage on the perceptions of the protagonists; direct effects of media coverage on the behavior of protagonists (judges, prosecutors); and indirect effects on other individuals who might not even be aware of the media coverage (defendants). The analysis supports the theoretical assumption: Many judges and prosecutors follow the coverage of trials in which they are involved more intensively than they follow the coverage of trials in which they are not involved. Many react emotionally to media coverage which is – according to their own judgment – partly incorrect. As a result, they become annoyed and outraged, and feel helpless. Nevertheless, they do not avoid media coverage. Obviously, this finding contradicts the theory of cognitive dissonance, which suggests the opposite: avoiding instead of seeking. The main reason for their behavior is probably the perceived personal importance of the dissonant information which enables them to analyze their personal risks and chances (Feather, 1962) in the courtroom and in public life. Most judges and prosecutors assume that laymen are more strongly affected by media reports about a trial than professionals. A small but still remarkable number report that media coverage even influences their professional behavior indicated by the sentence handed down to the defendants.

The structure of these relations indicates: Prosecutor's and judge's behavior is more affected by perceived weak effects on professionals and experts in the courtroom than by perceived strong effects on judicial laymen. This is especially important for the analysis of the influence of media effects perceived by decision makers in politics, business and administration. It means that even perceived weak effects on individuals belonging to a relevant reference group exert a strong influence on behavior. As a consequence, research should systematically relate to reference group theory and consider effects perceived in relevant social groups when explaining behavior. Finally, the influence of negative (and probably positive) media coverage on the sentence, acknowledged by the prosecutors and judges, has consequences for the defendants, who might not even have followed media coverage (indirect effect). The fact that negative media coverage has a significant effect on the behavior of protagonists, which has consequences for other people, should not lead to the conclusion that it occurs regularly. Nevertheless, the data support Davison's basic idea of combining psychological and sociological aspects of media effects.

Taken together, the findings indicate that neglecting the sociological part of Davison's ideas misses one key element of his approach – the link between (influential) individuals who use the mass media and their social environment which gets affected by media induced behavior. This also means that reciprocal effects on protagonists of media coverage should be included in theoretical and empirical analyses of presumed media effects. The influence of media coverage on few but often powerful people like politicians or employers, whose professional behavior may have far reaching consequences for a large number of other people is an important sociological aspect of media effect research. Ignoring this would mean to misunderstand the role of the media in society.

Since the publication of Davison's article, an increasing number of decision makers and ordinary people have become protagonists of positive and negative media coverage. Especially the internet has added to an expansion of potential and actual publicity which in some cases can occur very spontaneously (e.g. shitstorms). On the other side, social media like facebook have become worldwide marked places where formally unknown protagonists can assemble applause and support. Therefore, an increasing number of individuals will face positive and negative reactions in public, which in former times has been experienced only by very few people. This raises three final questions: First, are decision makers prepared to deal with intensive media coverage of their personality or private and professional activities? Second, what are the behavioral consequences of perceptions of presumed media effects by ordinary people who become protagonists of positive and negative messages in social networks and other online platforms? Third, what are the indirect effects of direct effects on these protagonists of positive and negative coverage - their relationship to colleagues, friends, and family? Will they increase or decrease their interactions in real life, intensify or reduce their emotional relations etc.?

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