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The Influence of Paratext on Narrative Persuasion: Fact, Fiction, or Fake?

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#### Abstract

The present research examined the role of personality factors and paratextual information about the reliability of a story on its persuasiveness. Study 1 (N=135) was focused on recipients' explicit expectations about the trustworthiness/usefulness and the immersiveness/entertainment value of stories introduced as non-fiction, fiction, or fake. Study 2 (experimental, N=186) demonstrated that a story was persuasive in all three paratext conditions (non-fiction, fiction, or fake vs. belief-unrelated control story) and that its influence increased with the recipients' need for affect. Participants' need for cognition increased the difference in persuasiveness of a non-fictional versus a fake story. Additional mediation analyses suggest that fiction is more persuasive than fake because readers of fiction get more deeply transported into the story world.

Keywords: narrative persuasion, paratext, fiction, fake, non-fiction, news, transportation, need for cognition, need for affect.

The Influence of Paratext on Narrative Persuasion: Fact, Fiction, or Fake?

Much of the information that people encounter every day is presented in the form of a story or narrative. This includes mediated stories that are fictional such as novels, soap operas, and feature films as well as mediated stories that are non-fictional such as journalistic first-hand accounts, biographies, radio features, and television documentaries. Throughout human history, philosophers, politicians, and religious leaders have considered stories as a powerful tool to change the beliefs and behavior of the audience (Green & Brock, 2002). Recent studies from different fields of psychology and communication science have corroborated this assumption and identified mediating and moderating variables of narrative persuasion (for an overview see Green & Donahue, 2009; Hinyard & Kreuter, 2007). Surprisingly little, however, is known about the influence of information that signifies the narrative as being non-fictional, fictional or even a blatant lie. This information is often found in the paratext (Genette, 1987), i.e., in text that accompanies the story (for example, in a disclaimer at the beginning of the movie, or in the genre labels "novel" or "biography" on a book cover).

The general aim of the present paper was to shed light on the influence of paratextual cues regarding the reliability of a story on its persuasive influence. Extending previous research on the influence of non-fictional and fictional stories, we examined the persuasiveness of a story introduced to be a fake story. According to our definition a fake story is a) untrue (the events never took place), and b) the author claimed at some point (or still claims) that the story was/is true (often motivated by the intention to deceive the audience). Our main interest in this regard was theory-driven — we wanted to examine the boundaries of narrative persuasion. However, these results were supposed to be of real-life value, since encountering a story that is known to be a lie is arguably an experience familiar to most people. For example, a number of stories circulate

on the internet that pretend to portray real-life events but are accompanied with the disclaimer that the story is untrue (e.g., a hoax).<sup>1</sup>

Our second research emphasis was on individual differences: We investigated the influence of the *need for affect* and the *need for cognition* on the persuasive effects of text and paratext variations.

Two studies on the interplay of text, paratext, and personality were conducted. Our initial study examined recipients' expectations about narratives that are introduced as non-fictional stories, fictional stories, or fake stories (Study 1). In our main study the impact of the text and the paratextual information on narrative persuasion was put to an experimental test (Study 2). We assumed that at least for participants who are dispositionally motivated to process information thoroughly (need for cognition, Cacioppo & Petty, 1982) a non-fictional narrative should be more influential than a fake story. Moreover, we examined the influence of the need for affect (Maio & Esses, 2001) on narrative persuasion and we investigated the influence of introducing the story to be fiction or fake on readers' sensation of being transported into the narrative world (Gerrig, 1993; Green & Brock, 2000) and the resulting belief change.

# Narratives and persuasion

A number of studies published in recent years have demonstrated the influence of stories on recipients' attitudes and beliefs about real-world issues (narrative persuasion, e.g., Appel & Richter, 2007; 2010; Dahlstrom, 2010; Gerrig & Prentice, 1991; Green & Brock, 2000; Mazzocco, Green, Sasota & Jones, 2010; Morgan, Movius, & Cody, 2009; Prentice, Gerrig & Bailis, 1997; Slater, Rouner, & Long, 2006). Persuasive effects of narratives appear to be rather durable and may even increase over time (Appel & Richter, 2007; Jensen, Bernat, Wilson, & Goonwardene, 2011; see also Appel, 2008a).<sup>2</sup>

The persuasive power of narratives has been attributed to an experiential state called *transportation* (Gerrig, 1993; Green & Brock, 2000; 2002) which is based on the metaphor that readers of a narrative undertake a mental journey into the story world. The state of transportation is characterized by an "integrative melding of attention, imagery, and feelings, focused on story events" (Green & Donahue, 2009, p. 241). This concept of a holistic experience of being absorbed by a story overlaps to a large degree with other concepts that address the immersion into a story world (e.g., narrative engagement, Busselle & Bilandzic, 2009). The idea that transportation is a general mechanism that underlies persuasion through narratives has received consistent empirical support: The more recipients were transported in the narrative, the more they endorsed story-consistent beliefs (e.g., Appel & Richter, 2010; Green, 2004; Green & Brock, 2000). Transportation does not involve an effortful examination or elaboration of the information in the story. The activation of previous experiences and knowledge is typically restricted to story-cued remindings which tend to be congruent with the story and contribute to story-consistent belief change rather than a generation of counterarguments (Green & Brock, 2000; Larsen & Lazlo, 1990; Strange & Leung, 1999).

# Fiction, Non-fiction, Fake, and the relevance of paratext

In the field of narrative persuasion the distinction between fictional and non-fictional stories has received substantial attention. This distinction can be traced back to different norms that apply for authors with respect to the correspondence of the information and events depicted on the one hand and real-world events and information on the other. For the creation of non-fiction, such as print news, "truth is the guiding principle" (APME, 2011). This principle is suspended when it comes to fiction. Authors of fiction are free to make up persons and events; however, at times they may intend to portray real-life characters and events as accurate and unbiased as journalists would (cf. Eco, 1994). Fictional stories are not to be confused with lies or

fake stories (Lamarque & Olsen, 1994). The events in fake stories are always invented by the authors (no report of real-life incidents), but at some point the story has been described as a true account (Williams, 2002). Lie stories told for the sake of deception are good examples of fake stories as these include the unjustified claim of the story's correspondence with real-life, despite non-correspondence.

Based on the different modes of practice, it seems safe to assume that information from a non-fictional source is more likely in line with real-world incidents than information from a fictional source and fake stories being lowest on this continuum. Paratexts 'non-fiction', 'fiction', and 'fake' indicate the likelihood that the events depicted in a story correspond to real-life events. This notwithstanding, we agree with others (e.g., Mar & Oatley, 2008) that the correspondence to real-life events is only one perspective when it comes to the truth in stories. Fictional stories, for example, can provide valuable information on human functioning and social principles and a number of studies pointed at the usefulness of (fictional) stories in the development of social abilities (Djikic, Oatley, Zoeterman, & Peterson, 2009; Mar, Oatley, Hirsh, de la Paz & Peterson, 2006; Mar, Oatley & Peterson, 2009).

Whereas texts are potentially ambiguous with regard to the fiction vs. non-fiction distinction (e.g., Schreier, 2004; Lamarque & Olsen, 1994)<sup>3</sup> extratextual information specifies the category that applies to a specific text (Eco, 1994). Such extratextual cues can be found in the paratext of a work (Genette, 1987; Schreier, 2004). Genette (1987) introduced the term paratext to describe different forms of information that accompany a text, for example the author's name, genre label, back-cover, dedications, preface or interview with the author or director. Paratexts can be found around the main text to jointly constitute a book or another media product (peritexts). Paratexts might also be dislocated from the main text but nevertheless function as an introduction to it, as for example an interview with the author of a book as part of its marketing

campaign does (epitexts). Although Genette focused his treatise on books, the notion of paratext fits various kinds of media products, including movies and computer games. For example, prior to its box office start, a movie may be advertised with a TV spot that highlights its awards won at Cannes, Berlin or Sundance (or with an endorsement by Britney Spears, cf. Gray, 2010). Regarding the distinction between fiction and non-fiction, paratexts may be particularly informative in the form of genre labels such as "news report", "novel", "TV-series", or "documentary". Other relevant paratextual cues involve disclaimers that all characters in the work are fictitious, or a 'making of the film' on a DVD.

#### **Paratext and Narrative Persuasion**

Theories on persuasion in general (e.g., Petty & Caciopppo, 1986) and narrative persuasion specifically (Green & Brock, 2002) are based on the assumption that people are motivated to develop beliefs that are consistent with the real world. Given that paratextual cues can inform recipients about norms and conventions that guided the production of a text and therefore about the likely overlap of story information with real-world incidents, such information should be relevant for narrative persuasion processes and effects. However, previous research provided little evidence that paratexts do indeed have an influence. A number of studies demonstrate the persuasiveness of narratives even when they are introduced as fictional (e.g., Appel & Richter, 2007; Peterson & Thurstone, 1933; Butler, Koopman, & Zimbardo 1995). Others compared the persuasive effects of different story introductions and/or source labels prior to story exposure. These studies suggest that when the narrative is introduced as non-fiction (e.g., "news") it is not more persuasive than when it is introduced as fiction (both source labels made sense for the specific texts chosen, Green & Brock, 2000; Wheeler, Green & Brock, 1999; Strange & Leung, 1999; see also Konijn, Walma van der Molen, & van Nes, 2009)<sup>4</sup>. Although

the source label fiction (as compared to non-fiction) informs about the suspension of truth standards, recipients are on average equally persuaded by fictional and non-fictional narratives.

Based on the limited effects of non-fiction vs. fiction labeling on transportation or belief change, Green and Brock (2000, Study 3) examined a third paratextual cue that introduced the narrative as a dream, which was supposed to indicate that the text is even less founded in reality than the fictional text. However, the dream manipulation neither affected transportation nor belief change. In sum, the research to date shows that stories have persuasive power irrespective of paratexts which signal that authors may not have adhered to truth standards (fiction labeling) or simply dreamed the narrative sequence (Green & Brock, 2000).

## Individual differences in the processing of text and paratext

General models of persuasion such as the Elaboration Likelihood Model (ELM, Petty & Cacioppo, 1986; Petty & Wegener, 1999) have established need for cognition as the primary motivational disposition that determines the processing and the impact of persuasive messages. Rhetorical texts such as editorials, political speeches, or advertisements exert their persuasive power by presenting arguments for or against particular claims. Individuals that seek and enjoy effortful cognitive activities are more likely to engage in elaborative processing of these arguments. Rhetoric claims backed-up by high-quality arguments might thus lead to belief changes that are stable and resistant against further persuasive attempts. For narrative texts, however, a systematic relationship of the need for cognition could neither be demonstrated with regard to recipients' transportation (Green & Brock, 2000) nor to the magnitude of persuasive effects (e.g., Appel & Richter, 2007; Green & Brock, 2000; Wheeler et al., 1999).

Whereas the processing and effects of stories and other affect-based messages appears to be independent from the need for cognition, studies that measured individual differences in the need for *affect* showed more promising results. Need for affect was introduced by Maio and

Esses (2001) as the "general motivation of people to approach or avoid situations and activities that are emotion inducing for themselves and others" (p. 585). Individuals high in need for affect actively seek out emotional media and tend to intensify their emotional experiences (Maio & Esses, 2001; Appel, 2008b; Bartsch, Appel, & Storch, 2010). After exposure to an affect-based message, stronger persuasion could be observed for participants with high rather than low need for affect (Haddock, Maio, Arnold, & Huskinson, 2008). Likewise, the need for affect moderated the persuasive effects of a fictional narrative compared to a belief-irrelevant control story and the persuasiveness of a story with high versus low emotional content (Appel & Richter, 2010). The latter work further demonstrated that the need for affect determines readers' transportation into the story world and the moderator effects of need for affect on story's persuasiveness were mediated by the moderator effects of transportation.

Research on the interactive effects of paratextual information and individual differences is limited. Green and Brock (2000, Studies 2 and 3) examined the influence of individual differences in need for cognition on the persuasiveness of stories introduced as fiction, non-fiction or as a dream. Participants' tendency to routinely engage in a systematic processing of information was found to be unrelated to the belief measures and no interaction with the paratext manipulation was reported. These results are somewhat surprising since paratextual information can likely serve as a variable that attracts elaborative activities due to its role as an indicator of reliability (cf. Petty & Wegener, 1998). Possibly, neither introducing a story as fiction or as a dream served as an argument against the information provided by a story – introducing a story as a dream may in fact not be a conclusive indicator of low reliability, as dreams may at times accurately reflect real-world issues.

Thus, one reason for the lack of evidence that paratext matters in narrative persuasion (at least for participants high in the need for cognition) is that the low-reliability cues employed in

previous research (fiction, dream) were somewhat ambiguous with respect to the overlap of the story's information with real-world. The ultimate test for the (lack of) influence on narrative persuasion would be to introduce a story to be a fake story, i.e., a narration about events that have not really happened although the author claimed so.

# How do recipients interpret paratext labels?

Another, albeit related reason for null effects of paratext information could be that cues such as fiction or non-fiction have less (or another) meaning for lay people than expected by researchers. If non-fiction and fiction were perceived as similarly trustworthy, why should persuasion processes and effects differ? There is only one study we are aware of that explicitly asked non-experts about the relationship between information in fictional stories and real life (Prentice & Gerrig, 1999). In this study students agreed that authors of fiction often invent information that is untrue in the real world for the sake of their plots and they agreed that fictional information can change their real-world beliefs. They neither agreed nor disagreed when asked whether fictional information should be assumed to be untrue in the real world and they were also ambivalent when asked whether information in fiction is (always) invented by the author. According to Prentice and Gerrig these findings suggest that students were hesitant "to endorse broad-based statements about fiction's unreliability" (p. 532). Exclusively focused on fiction, differences between fictional stories and non-fictional or fake stories were beyond the scope of this brief study. Pointing at a different dimension of expectations than those about reliability and trustworthiness, Green and colleagues (Green et al., 2006; Green & Donahue, 2009) suggested that extratextual cues may influence participants to process a story differently; those who read a story labeled as fiction might be prepared to get more deeply transported into the story world.

In sum, little is known about the interpretations and resulting expectations of lay persons with respect to story labels. Because such knowledge may be crucial for examining the influence of paratexts on narrative persuasion, our empirical work not only included an experiment in a classic narrative persuasion design but a survey study on recipients' explicit expectations.

# Study overview and predictions

The first step of the present research was to extend the approach by Prentice and Gerrig (1999) and to shed light on recipients' expectations about stories introduced with different paratexts: non-fiction, fiction, or fake (Study 1). Expectations were requested on the dimensions of trustworthiness and usefulness on the one hand and transportation and entertainment on the other. A fictional story was assumed to signal a moderate degree of reliability (Prentice & Gerrig, 1999) whereas the ultimate low end of a story's reliability should be a lie or a fake story – a narrative that is untruthful and has no reliability with regard to the events described. Thus, we expected that a non-fictional story would be perceived as more trustworthy and useful than a piece of fiction which in turn would be perceived as more trustworthy and useful than a fake story (Hypotheses 1a for trustworthiness, Hypothesis 1b for usefulness). We anticipated a different picture with regard to recipients' expectations to be transported and entertained by a story (Green et al., 2006). A fictional story was supposed to be rated as most entertaining (Hypotheses 2a) and transporting (Hypothesis 2b). No clear assumptions were made regarding differences between fake and non-fiction, because reading or watching fake events could be judged as at least somewhat transportive and entertaining, despite its low reliability.

Study 2 was experimental and investigated the persuasive influence of a story introduced as non-fiction, fiction or fake. A control condition was further included in the study design. We expected that recipients in both the non-fiction and the fiction condition would endorse more story-consistent beliefs than participants who were assigned to the control group and read a

belief-unrelated text (Hypothesis 3a for non-fiction, Hypothesis 3b for fiction). We further examined the persuasive influence of the story introduced as fake versus the control story. Research on narrative persuasion pointed at the pervasive influence of stories despite prior information that the story may not adhere to truth standards, as indicated by the dream manipulation in prior experiments (Green & Brock, 2000). Thus, we assumed that a story introduced as fake would lead to more story-consistent beliefs than a belief-unrelated control story (Hypothesis 3c). Reflecting previous interest but inconclusive results on the influence of paratext on state transportation, the influence of the experimental treatment on state transportation was also inspected.

Appel and Richter (2010) demonstrated that participants with a higher need for affect were more strongly persuaded by a moving story because they experienced more transportation. In line with these findings we expected that irrespective of paratext the influence of the belief-related story (vs. belief-unrelated control story) would increase with participants' need for affect (Hypothesis 4). Reflecting previous findings (e.g., Appel & Richter, 2007; Green & Brock, 2000) we did not expect the need for cognition to moderate the influence of the textual manipulation. We did expect, however, that the influence of paratext on persuasion is subject to individual differences in the need for cognition, particularly when paratext non-fiction is compared to paratext fake. This hypothesis is based on the assumptions that a) paratextual information is relevant for judging the reliability of a story (Schreier, 2004; Lamarque & Olsen, 1994), and that b) non-fiction is ascribed the most and fake the least trustworthiness and usefulness (Hypotheses 1a and 1b). If these assumptions hold true, then a story introduced as non-fiction should be more persuasive than a story introduced as fake, given that participants engage in a thorough processing of all information provided. Participants high on the need for cognition tend to process information thoroughly even if elaborative activities are not motivated by situational factors (cf.

Petty, Brinol, Loersch, & McCaslin, 2009). Thus, we assumed that differences in the persuasive influence of a story introduced as non-fiction versus a story introduced as fake would increase with recipients' need for cognition (Hypothesis 5). We did not expect the need for affect to moderate the influence of the paratext.

## Study 1

# Method

**Participants.** Participants were 135 undergraduate students (88 women) between the ages of 19 and 39 (M = 22.31 years; SD = 2.87). All participants were enrolled in a lecture on Educational Psychology at a central European University and received partial course credit.

Stimuli and Material. All materials were presented on-line and were accessed by the participants via the web browser of their home computers. This study was part of a larger survey that contained additional questions unrelated to the present research. Individual differences in need for cognition were measured with the short version of the scale (Cacioppo et al., 1984; German language version Bless, Bohne, Wänke, & Schwartz, 1993, Cronbach's  $\alpha$  = .89). Individual differences in need for affect were assessed with Maio and Esses's questionnaire (2001; German language version Appel, 2008b, Cronbach's  $\alpha$  = .89). Regarding the expectations elicited through paratextual information, participants initially read that the following part of the survey dealt with background information and the processing of stories. They were informed that we were particularly interested in the processing of news stories ("e.g., a reportage by a journalist"), fictional stories ("e.g., short stories or novels"), and fake stories ("stories that are untrue and intend to deceive the reader"). Based on this background information, participants were instructed to indicate their anticipations about the narrative. Specifically, they were asked for their expectations regarding *absorption/transportation* ("I can be immersed into the story and participate in the events taking place"), *entertainment* ("The story will be entertaining"), *real-life* 

usefulness of the story content ("The story contains information which is useful for my everyday life"), and trustworthiness ("The source is trustworthy"). Each item was followed by three paratext labels (news, fictional, and fake story) together with a five-point scale ranging from do not agree (1) to completely agree (5). Items and paratext labels were presented in randomized order.

# **Results and Discussion**

Mean scores for the paratext ratings on the four dimensions are depicted in Figure 1. The data on the anticipated usefulness of the information and on the trustworthiness of the source are consistent with Hypotheses 1a and 1b. For both variables, non-fiction received the highest scores (M = 4.41, SD = 0.69; M = 4.15, SD = 0.87), fake the lowest (M = 2.26, SD = 0.97; M = 1.70, SD= 0.99), and fiction ranged in-between, (M = 3.14, SD = 1.00; M = 2.71, SD = 1.00), repeated measures ANOVAs F(2,131) = 189.36, p < .001,  $\eta^2 = .74$ ; F(2,130) = 197.30, p < .001,  $\eta^2 = .75$ ; all pairwise differences were significant at p < .001. In support of Hypotheses 2a and 2b, the participants expected to be more deeply immersed by the fictional story (M = 4.23, SD = 0.82) than by the non-fictional story (M = 3.50, SD = 1.08) and the fake story (M = 2.79, SD = 1.12), F(2,131) = 70.16, p < .001,  $\eta^2 = .52$ , all pairwise differences p < .001. Most entertainment was expected from the fictional story (M = 4.39, SD = 0.76) as compared to the non-fictional story (M= 3.36, SD = 1.05) and the fake story (M = 3.44, SD = 1.14), F(2,131) = 43.20, p < .001,  $\eta^2$  = .25. Fiction differed from non-fiction and fake (p < .001), but there was no difference between nonfiction and fake (p = .54). Although not part of our set of hypotheses we additionally examined whether need for cognition or need for affect were related to any of the ratings along the four dimensions and whether differences induced by the paratext were moderated by these personality traits. The results reveal that neither need for affect nor the need for cognition is related to any of the four dimensions when the scores for the three paratexts were collapsed (all Fs < 2.3; all ps >

.14). Moreover, differences between the paratexts on any of the four variables are neither significantly related to the need for cognition (all Fs < 2.0; all ps > .15) nor to the need for affect (all Fs < 0.5; all ps > .63).

In sum, Study 1 supports previous assumptions regarding recipients' perception of paratexts. Recipients expect to be more entertained and more transported by a fictional story than by a non-fictional story or by a fake story. This confirms previous assumptions that a paratext indicating that a story is fictional elicits a preparedness to get transported into the story world (Green et al., 2006; Green & Donahue, 2009). Moreover, a non-fictional story is ascribed more usefulness and trustworthiness than a fictional story. But the explicit comparisons also reveal that fiction is distinguished from fake, the latter receiving the lowest usefulness/trustworthiness ratings. The findings of Study 1 may not be surprising. However, they are important as they rule out recipients' unexpected interpretations of story introductions as one possible explanation of the hitherto found null effects of paratextual cues in narrative persuasion.

Previous research compared belief change elicited by stories introduced as non-fiction versus fiction. However, no existing study examined the persuasive influence of a story introduced as fake. The aim of Study 2 was to address this research lacuna and to examine the influence of text and paratext for recipients who vary in their need for cognition and their need for affect.

## Study 2

## Method

**Participants.** A self-selected sample from a larger pool of volunteers participated in the study which was conducted online. The participants were members of a British online-panel who are regularly invited to participate in (market) research studies. The data revealed that eight participants did not respond thoroughly; their time employed to complete the study indicated that

they merely clicked through the web-based material. Two additional participants were excluded due to missing data. The remaining sample consisted of 186 adult volunteers (108 women) between the ages of 17 and 62 (M= 31.0 years; SD = 7.2). About one third of the participants reported high school or less as their highest educational level, a little less than one third had obtained a one or two-year college degree, and about one third of the sample had a university degree.

### Stimuli and Material.

Stories. The experimental text material was based on the short story *Murder at the Mall* (Nuland, 1994), which had been used in the persuasion studies conducted by Green and Brock (2000, Experiments 1-3), Dal Cin, Zanna, and Fong (2004), as well as Appel and Richter (2010, Experiment 1). This story starts with a brief description of two women and their children who spend a day together at the mall. A man appears out of the blue and kills one of the children with a knife. At the end of the story the reader is informed that the knifeman is a psychiatric patient who had previously attacked other people. In the control condition, we used a story that provides no information about psychiatric patients or crime but originates from the same author and the same collection of stories (Nuland, 1994, experimental story: 969 words; control story: 951 words).

Paratext. Participants were randomly assigned to the control story condition or to one out of the three paratext conditions (non-fiction, fiction, or fake). Prior to reading the story participants read one of the paratexts that introduced it (see Appendix). On the subsequent page, the paratext label was repeated in bold and all uppercase letters in order to call additional attention to the introductory information given. Next, the first page of the story was presented. Participants in the control condition were requested to read the story carefully without any specific information about it given.

*Transportation.* Transportation was assessed with the Transportation Scale developed by Green and Brock (2000). It consists of 15 items (with a 7-point response scale) that refer to affective and imaginative aspects of transportation (e.g., "The narrative affected me emotionally"; "While I was reading the narrative, I could easily picture the events in it taking place"). The internal consistency (Cronbach's α) of the scale was .87.

**Beliefs.** Participants' beliefs were assessed with a measure similar to the psychiatric patient index developed by Green and Brock (2000). Our index consists of five items measuring the belief in the dangerousness of psychiatric patients (e.g., "Psychiatric patients who live in an institution should be allowed to go out in the community during the day," reverse scored) on a seven-point scale ( $1 = do \ not \ agree, 7 = completely \ agree$ ). The internal consistency (Cronbach's  $\alpha$ ) of this scale was .76. High scores indicated negative beliefs towards psychiatric patients.

*Need for Cognition and Need for Affect.* As potential moderators of the experimental treatment effects, individual differences in need for cognition and need for affect were assessed. Need for cognition was measured with the short version of the Need for Cognition Scale (Cacioppo, Petty, & Kao, 1984). In the present sample, the internal consistency (Cronbach's  $\alpha$ ) of this 18-item scale was .89. Need for affect was assessed with the approach subscale of the need for affect instrument (Maio & Esses, 2001; see also Appel, 2008b; Appel & Richter, 2010). This scale is based on 13 items (with a 7-point response scale) that capture the individual disposition to approach emotions (e.g., "It is important for me to be in touch with my feelings"). In the present sample the internal consistency of the scale (Cronbach's  $\alpha$ ) was .87.

Procedure and Design. The main part of the survey consisted of the paratext manipulation, the stories, the belief items, and the transportation scale. Participants were randomly assigned to fill in the need for affect and need for cognition questionnaires either before or after the main part of the survey. The experiment followed a one-factorial between-subjects

design (treatment: non-fiction, fiction, fake or control story) with need for affect and need for cognition as continuous predictor variables.

#### **Results and Discussion**

**Preliminary analyses.** Zero-order correlations for the full sample revealed that need for affect was not significantly related to need for cognition (r = .08, p = .27). Transportation was positively related to need for affect (r = .39, p < .001, cf. Appel & Richter, 2010) and to a smaller extent to need for cognition (r = .14, p = .06). When the four subgroups were examined separately, we found similar patterns of association: positive and significant correlations between need for affect and transportation (all ps < .01), and positive but much smaller and non-significant correlations between need for cognition and transportation (all ps > .15).

Main effect of the experimental manipulation. We predicted that participants who read the experimental story about a psychiatric patient – child murderer would express stronger beliefs in the dangerousness of psychiatric patients than participants who read the control story. We assumed that this persuasive effect could be found in the non-fiction and fiction conditions (Hypotheses 3a and 3b) as well as in the fake condition (Hypothesis 3c). An ANOVA that included all four experimental groups revealed a significant main effect of the experimental treatment, F(3,182) = 12.77, p < .001,  $\eta^2 = .17$ . In line with our hypotheses, the psychiatric patient index was lower after reading the control story (n = 70, M = 3.90, SD = 0.89) compared to the experimental story introduced as fiction (n = 40, M = 4.94, SD = 0.97, p < .001, d = 1.12), non-fiction (n = 36, M = 4.79, SD = 0.96, p < .001, d = 0.96) or fake (n = 40, M = 4.46, SD = 1.02, p = .003, d = 0.59). Subsequently, we inspected the effects of our paratext manipulation among those who read the murder story. Additional post-hoc analyses (LSD) showed that a text labeled as fiction was more persuasive than a text labeled as fake (p = .026, d = 0.48). Belief scores of the

non-fiction group differed neither from scores of the fiction group (p = .52) nor from the scores of the fake group (p = .13).

Next, we examined the transportation scores for all four experimental groups. An ANOVA with the experimental treatment (three paratext groups, one control group) showed a main effect on transportation, F(3,182) = 2.61, p = .053,  $\eta^2 = .04$ , that approached significance. Transportation scores were the lowest in the fake condition (M = 3.85, SD = 0.98), somewhat higher among recipients who read the control story (M = 4.06, SD = 0.92), and highest in the fiction (M = 4.28, SD = 1.02) and non-fiction group (M = 4.41, SD = 0.90). Post-hoc analyses (LSD) showed that the fake story elicited significantly less transportation than the fiction (p < .05; d = .43) and non-fiction stories (p < .05; d = .59). All other differences were non-significant (p > .05).

Need for affect (not need for cognition) moderates the influence of text on story-consistent beliefs. Hypothesis 4 predicted that the influence of the story (murder at the mall vs. control) on beliefs would increase with the recipients' need for affect whereas no interaction effect was expected with need for cognition. We conducted a regression analysis with the psychiatric patients index as the criterion variable. Predictors were the story read (effect coded: murder story, all paratext versions collapsed = 1; control story = -1), need for affect (continuous, z-standardized), need for cognition (continuous, z-standardized), and both text-by-personality interactions (story\*need for affect; story\*need for cognition). As indicated by the ANOVAS presented in the previous section, the murder story elicited stronger beliefs about the dangerousness of psychiatric patients than the control story, B = 0.44,  $SE_B = 0.07$ ,  $\beta = 0.41$ , p < .001. Need for cognition was negatively related to the psychiatric patients index as indicated by a significant main effect, B = -0.15,  $SE_B = 0.07$ ,  $\beta = -0.14$ , p = .04, but it did not moderate the persuasive influence of the text, as indicated by a non-significant interaction, B = 0.07,  $SE_B = 0.07$ ,  $SE_B$ 

0.07,  $\beta = 0.07$ , p = .30. No main effect of the need for affect was found, B = 0.12,  $SE_B = 0.07$ ,  $\beta = 0.01$ , p = .86. Congruent with our hypothesis, however, we found an interaction effect of the textual manipulation and need for affect, B = 0.19,  $SE_B = 0.07$ ,  $\beta = 0.18$ , p < .01. Simple slope analyses revealed that – as predicted – need for affect was positively related to beliefs about the dangerousness of psychiatric patients only in participants who had read the experimental story, B = 0.21,  $SE_B = 0.09$ ,  $\beta = 0.20$ , p = .02, whereas there was no significant effect on participants who had read the control story, B = -0.18,  $SE_B = 0.11$ ,  $\beta = -0.17$ , p = .12. To complement our inspection of the interaction effect, we estimated the magnitude of the treatment effect at high and low levels of the need for affect (one standard deviation above or below the mean). In these comparisons, a persuasive effect was obtained at the high level of need for affect, B = 0.63,  $SE_B = 0.10$ , B = 0.59, P < .001, and – to a smaller degree – in participants who reported a low need for affect (B = 0.24,  $SE_B = 0.10$ , B = 0.23, B =

Need for cognition (not need for affect) moderates the influence of paratext on story-consistent beliefs. Hypothesis 5 predicted that the paratextual introduction to the story, particularly regarding non-fiction vs. fake, matters most for participants who are inclined to process information thoroughly. A regression analysis was conducted to test this prediction. The paratext manipulation (non-fiction, fiction, fake) was represented by two dummy-coded variables (fake as comparison group, cf. West, Aiken, & Krull, 1996). Additionally, the need for cognition (continuous, *z*-standardized), the need for affect (continuous, *z*-standardized) and four dummy\*personality interaction terms were entered into the regression equation (see Table 1 for the results). Reflecting the results of the ANOVA on paratext main effects (presented above), we found a significant difference between the story-consistent beliefs in the fiction versus the fake

condition. Moreover, the need for cognition had a negative main effect on story-consistent beliefs. Consistent with Hypothesis 5, the difference between story-consistent beliefs in the non-fiction and the fake condition was qualified by an interaction with the need for cognition, B = 0.56,  $SE_B = 0.25$ ,  $\beta = 0.30$ , p = .03. Please refer to Figure 2 for an illustration of the relationship between need for cognition and beliefs in all four experimental conditions.

An analysis of the simple slopes indicated that the need for cognition is negatively related to the belief scores when the text was introduced as fake, B = -0.33,  $SE_B = 0.16$ ,  $\beta = -0.34$ , p = .045. For the non-fiction group the relationship between need for cognition and psychiatric patients index was positive (albeit non-significant), B = 0.20,  $SE_B = 0.15$ ,  $\beta = 0.20$ , p = .21. In addition, we estimated the difference in influence between the non-fiction and the fake paratext for participants who reported a high degree of need for cognition (one standard deviation above the sample mean) and participants who reported a low degree of need for cognition (one standard deviation below the sample mean). In these comparisons, the impact of paratext non-fiction vs. fake occurred only on participants who reported a high need for cognition (B = 0.43,  $SE_B = 0.16$ , B = 0.43, B = 0.16, B = 0.16

Additional analysis: The difference between fiction and fake is mediated by recipients' transportation. As reported above, the murder story was more persuasive when introduced as fiction than when introduced as fake. Study 1 showed that recipients expect to be more deeply transported in a fictional story than in a fake story. We conducted an additional analysis to examine whether these expectations translate to the actual amount of transportation experienced when reading a story. Higher transportation could in turn mediate the stronger influence of the fictional story on participants' beliefs. This mediation model (transportation as mediator, beliefs as dependent variable) is based on theoretical considerations as well as on

previous findings indicating that story-related beliefs do not affect transportation whereas transportation affects story-related beliefs (Dal Cin et al., 2004).

In addition to the classic stepwise procedure that is based on a series of regression analyses (Baron & Kenny, 1986), we analyzed this mediation model using the bootstrapping technique (e.g., Preacher & Hayes, 2008). The paratext manipulation (fiction vs. fake) had a significant influence on the dependent variable, B = 0.48,  $SE_B = 0.22$ ,  $\beta = 0.24$ , p = .04, and an influence on transportation as the mediator that approached significance, B = 0.42,  $SE_B = 0.22$ ,  $\beta = 0.21$ , p = .062. Next we examined the regression weights of our treatment variable when the mediating variable was included as an additional predictor. When transportation was included in the equation, transportation predicted story-consistent beliefs, B = 0.42,  $SE_B = 0.10$ ,  $\beta = 0.42$ , p < .001. Including transportation in the equation reduced the association between the treatment variable and the dependent measure to non-significance, B = 0.30,  $SE_B = 0.21$ ,  $\beta = 0.15$ , p = .16. This result suggests that transportation is a mediator of the paratext influence (Baron & Kenny, 1986). The bootstrapping procedure (Hayes, 2009; Preacher & Hayes, 2008) further validated the mediational role of transportation, demonstrating that the 95% confidence interval for the indirect effect using 5000 bootstrap samples did not include zero (lower limit = +0.008, upper limit = +0.447).  $^5$ 

# **General Discussion**

Stories are effective means to change people's attitudes, beliefs, and knowledge (e.g., Green & Donahue, 2009). Not all mediated stories are created to provide factual information about real-life events though; many of the stories told in books, on TV, or internet are fictional and some may even be fake. One of the most puzzling findings in the research on narrative persuasion are the null effects of introducing a story to be non-fiction vs. fiction (Green & Brock,

2000; Wheeler et al., 1999; Strange & Leung, 1999), given that people strive for real-world consistent attitudes and beliefs (Petty & Cacioppo, 1986; Green & Brock, 2002).

The aim of the present work was to shed light on the influence of paratextual information about the reliability of the message on narrative persuasion. To this end, Study 1 examined recipients' interpretation of paratexts. Except for a brief report on expectations regarding fictional stories by Prentice and Gerrig (1999) this is the first empirical work that tests whether assumptions on the meaning of non-fiction and fiction by researchers from the social sciences and humanities correspond with everyday recipients' interpretations. The results largely overlap with previous scholarly expectations (e.g., Green et al., 2006): A non-fictional story is perceived as most trustworthy and useful. A fictional story is seen as more trustworthy and useful than a fake story and paratext fiction signals that the story is entertaining and transporting.

Fake – not fiction – represents the ultimate low end of trustworthiness for scholars and recipients alike. Hence, if paratextual cues mattered at all, a story introduced to be fake should be less persuasive than a story introduced to be non-fiction, at least for participants who are dispositionally inclined to process information thoroughly. In line with this prediction, the fake story was less persuasive than the non-fictional story but only for participants high in the need for cognition. Moreover, the fake story was less persuasive than the fictional story overall, which we could attribute to a decrease in recipients' transportation. In line with previous research, a story introduced to be fiction was as influential as a story introduced to be non-fiction overall. In our study the difference between these two paratexts, however, was that the need for cognition produced a significant interaction with the fake vs. non-fiction comparison but not with the fake vs. fiction comparison. This reflects the notion that the difference between non-fiction and fake on perceived trustworthiness is particularly large (Study 1) and this difference in trustworthiness

matters most for recipients who are dispositionally inclined to process information thoroughly (cf. Petty & Wegener, 1998).

Our results on the influence of story labels on experienced transportation are noteworthy from several perspectives. This is the first time that story labels (fake vs. non-fiction, fake vs. fiction) were shown to influence transportation. This finding adds to the knowledge on the influence of text content (e.g., Dal Cin et al., 2004), stable individual differences (e.g., Appel & Richter, 2010), and processing instructions (e.g., Sestir & Green, 2010). We found similar transportation scores for story labels non-fiction and fiction which is in line with previous findings (Green & Brock, 2000). Recipients' expectations regarding the higher transportiveness of fiction as compared to non-fiction found in Study 1 did not translate to self-reported experience in Study 2. Although non-fictional stories are expected to be less transportive in general (potentially due to previous experiences with news) they may lead to similar or at times even higher transportation scores than fiction, arguably due to the greater relevance of non-fictional incidents to recipients' real life.

We found that even if a story is introduced to be fake it is still persuasive, as compared to a control group that read an unrelated text. To some extent our results on the persuasiveness of fake stories parallel findings on the *continued influence of misinformation-effect* in the field of cognitive psychology (e.g., Johnson & Seifert, 1994; Ross, Lepper, & Hubbard, 1975). Similar to our fake manipulation, participants in a typical misinformation study are informed that a set of information is untrue, but nonetheless this information affects the participants' judgments and behavior. However, unlike our experiment, these studies typically provide the discrediting information *after* the target information. Our study shows that information known to be untrue can be persuasive even if the lack of reliability is made aware at an early stage – at least when the information is provided in form of a narrative. To some extent our results on fake stories also

parallel findings on the influence of forewarnings in classical, rhetorical persuasion. Metaanalytic results suggest that a message that is accompanied with forewarning information is still
somewhat persuasive, as compared to a no-warning, no message control condition (Wood &
Quinn, 2003). However, forewarning conditions typically employed in rhetorical persuasion
studies differ substantially from the fake condition of the present research. In the former studies
the forewarning consisted of information about the intent to persuade or of information about the
topic and stance of the following message. Our forewarning differed from these
operationalizations as it informed that the following information was untrue. It remains an open
question to what extent a fake condition would reduce the influence of a rhetorical message.

Likewise we are aware of no studies in the field of narrative persuasion that tested the influence
of highlighting the persuasive intent of a story on its persuasive effects.

# Need for affect, need for cognition, and two-system models of information processing

Our data fit recent two-system models of information processing (e.g., Epstein, 1998; Gawronski & Bodenhausen, 2006) which imply intriguing avenues for future research on narrative persuasion. Results gathered in this study establish need for cognition as a moderator of the paratextual manipulation, whereas need for affect moderated the persuasive effect of the text itself (cf. Appel & Richter, 2010). This pattern is in line with models that distinguish two systems of human information processing (Maio & Esses, 2001; cf. Epstein, 1998; Gawronski & Bodenhausen, 2006), the automatic/impulsive/associative system and the deliberative/reflective/propositional system. In the associative-propositional evaluation (APE) model (Gawronski & Bodenhausen, 2006, 2007) which concentrates on attitudes and attitude change, associative processes are characterized by spreading activation, independent of subjective truth or falsity. Participants with a strong need for affect are supposed to be particularly sensitive to stimuli that appeal to this system (Appel & Richter, 2010; Maio & Esses,

2001). The propositional system on the other hand, is based on elaboration and reasoning, and does include an ascription of truth values. The need for cognition seems to reflect the intensity with which individuals respond to stimuli that appeal to this system (cf. Epstein, 1998). The influence of the need for affect suggests that following a narrative is linked to an experiential or associative way of information processing (cf. Green & Donahue, 2009). In contrast, given the impact of the need for cognition, the processing of paratextual information appears to affect the persuasive outcome primarily via the propositional system. Future studies on narrative persuasion are encouraged to test empirical assumptions derived from this rather new general persuasion models, including the influence of stories and paratexts on implicit rather than explicit attitudes.

### The truth in fiction

As noted throughout this paper, fictional stories may or may not entail information that conforms to real world issues and events. However, as mentioned briefly in the introductory section, the (lack of) correspondence to real-life facts and events is only one noteworthy aspect regarding 'the truth in fiction'. Fictional stories can achieve high levels of 'psychological realism' – they can depict the inner life of characters and their social relations in a way that enables readers to relate with them and experience identification and empathy. Mar and Oatley (2008) conceptualize the function of fiction as the abstraction and simulation of social experiences; this claim is in line with the finding that reading fictional stories develops readers' social abilities, such as empathy and social reasoning (Mar, Djikic, & Oatley, 2008). Thus, Mar and Oatley (2008) argue that the information communicated through fictional literature is primarily social knowledge rather than general world knowledge. It follows from this claim that readers do not approach fictional stories to learn facts about the real world, but to gain insight in the human experience shared with the characters. Oatley (1999) argues that although fiction fails the criterion of correspondence truth, it fulfils the criteria of truth as coherence and personal

insight. Through the simulation of events and characters' emotions, which has to be coherent with what readers know from their direct experience or as learned by others, personal truths can be explored that enable recognition and insight.

## Limitations and outlook

Despite the contribution of the present studies, limitations and additional avenues for future inquiry deserve attention. The goal of the present research was to extend our knowledge on the boundaries of narrative persuasion rather than to examine the underlying processes. Thus, its contribution to the latter field of inquiry is limited. We do believe, however, that this is a crucial and important direction for future research on narrative persuasion. Previous studies in this field quantified user experiences with the help of the Transportation Scale (as we did in Study 2) or other post-expository self-report scales which scores would arguably correlate highly with the Transportation Scale. What is still lacking, however, are answers to the question of *how* transportation affects persuasion. Green and Donahue (2009) suggested three mediating mechanisms, the reduction of counterarguing, the resemblance of story events to personal experiences, and adopting statements and incidents that are connected to characters that recipients like and identify with. To date there is few evidence for any of the processes (hypothetically) involved in transportation to mediate the impact of narratives on recipients beliefs, except for some tentative support of counterarguing reduction (Green & Brock, 2000) and identification (de Graaf, Hoeken, Sanders, & Beentjes, 2011; see also Moyer-Gusé & Nabi, 2010, for the relationship between potential process measures). Future research on narrative persuasion needs to address this lacuna by examining, for example, basic cognitive activities such as epistemic monitoring (Richter, Schroeder, & Wöhrmann, 2009; Schroeder, Richter, & Hoever, 2008) or peri-receptional emotional responses (cf., Clore & Schnall, 2005; Green, Brock, & Kaufman, 2004).

Second, the emphasis of the present studies was on the main effects of different paratext labels as well as related mediation and moderation analyses. Study 1 suggests that different story labels elicit different expectations on average. However, there appears to be non-trivial variance in expectations within all paratextual conditions. An important shortcoming of previous experiments on the influence of story labels as well as the present research (Study 2) is that individual differences in the interpretation of story labels has not been related to persuasion outcomes. Future research is encouraged to consider these differences.

Third, our experimental results are based on one stimulus text only. Using "Murder at the Mall" allows us to compare the results with previous research on narrative persuasion (e.g., Green & Brock, 2000), however, the specific characteristics of this text need to be noted when considering how our results translate to other stimuli. For one, the main plotline of this text is of negative valence which is in line with many stories found in the news and much of the fictional media fare (which frequently offers a just ending, though, cf. Appel, 2008a). Particularly with regard to our results on the need for affect, stories with more uplifting content may yield different results. There has been a tendency to relate the need for affect to the processing and the effects of media products that promise negative emotions (e.g., Bartsch et al., 2010), less is known about its influence on the processing of comedies or other more positively valenced stories. Another characteristic of the stimulus text is its ability to get recipients easily transported into the narrative world – at least when compared to other short printed texts (one of the previous studies found one of two short audiovisual clips to be more transportive, Zanna et al., 2004). In our approach, transportation was measured (rather than manipulated) and served as a mediating variable. Thus, we were unable to answer the question whether or not the narrativity of a text (or any other feature that influences recipients' transportation) matters with regard to the influence of paratexts on beliefs.

Fourth, potential limitations regarding our samples need to be discussed. Both studies reported here were conducted on-line. Previous analyses regarding the quality of online versus offline data assessment point at the validity of web-based research (e.g., Farrell & Petersen, 2010; Gosling, Vazire, Srivastava, & John, 2004). The software used in both studies, EFS-Survey, blocked potential repeat responders, one main obstacle in web-based studies (Gosling et al., 2004). Thus, we believe that the quality of our data was not impaired by presenting the stimuli and questions online. Study 1 was based on a sample of undergraduate students who received credit for a class in Educational Psychology. As this class was completely unrelated to the topic of Study 1, we believe that neither the participants' narratological knowledge nor particular demand characteristics obfuscated the findings of Study 1. However, future research is encouraged to examine explicit expectations triggered by genre labels or other paratexual information in samples more representative of the general population. The sample in Study 2 was drawn from a commercial online panel which is managed by a for-profit company (respondi.com). Online panels consist of a pool of registered people who occasionally take part in web-based studies (Göritz, 2007). Members of this and many other panels are younger and more educated than the general population, but they are sociodemographically more diverse than undergraduate samples or online panels that consist exclusively of University students (cf. Reips & Birnbaum, 2011). One potential problem with online panels is that undesirable response patterns can emerge in case the panel members are repeatedly requested to work on very similar or identical studies (panel bias, Göritz, 2007). The great majority of studies our panelists previously participated in addressed issues of applied market research, and the questions and stimuli were unrelated to narrative persuasion or personality questionnaires. Thus, we are confident that potential panel bias did not affect our findings. Like much of the research in the Social Sciences, our research was conducted in two western, educated, industrialized, rich, and

democratic countries (WEIRD, Heinrich, Heine, & Norenzayan, 2010). Initial evidence from the field of entertainment education suggests that stories influence attitudes and beliefs in many societies worldwide (e.g., Paluck, 2009). It appears worthwhile to extend our findings by studying the scope of narrative persuasion in societies that do not share the attributes mentioned above.

Finally, the present research is limited given that the influence of paratext on narrative experience and persuasion likely goes beyond the reliability of the text which was the emphasis of the present work. Genette (1987) outlined a number of extra-textual factors that may have a substantial influence on the processing and the influence of a story. For example, the reading of *Everything I Possess I Carry With Me*, a first-person narration about a male deportee from post-WW II Romania by Herta Müller, is potentially influenced not only by the label *novel* on the cover page but by a bunch of other information related to text. This includes the author's female gender, that Ms. Müller won the Nobel Prize in literature, or that she had lived in Romania for most of her life. Likewise, adolescents may find an adventure computer game more compelling when they know about the unprecedented production costs or the participation of a particular developer (cf. Gray, 2010). Future research is encouraged to examine the influence of extratextual information that is or is not part of the media product (peritexts and epitexts) on narrative experience and narrative persuasion.

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#### Footnotes

<sup>1</sup> For example, among the media hoaxes and urban legends is the story of two armed illegal aliens of Mexican descent in the US who perpetrated a home invasion and were killed by an 11-year-old girl who had grabbed her father's 12 gauge Mossberg 500 shotgun. According to internet pages such as snopes.com the story never happened but was "widely cited as a validation of anti-illegal immigration and/or pro-gun ownership positions" (http://www.snopes.com/politics/crime/ homeinvasion.asp).

<sup>2</sup> Outside the field of persuasion intriguing studies focused on stories' influence on other cognitive variables such as knowledge and memory (e.g., Appel, 2011; Fazio & Marsh, 2008; Marsh & Fazio, 2006; Marsh, Meade, & Roediger, 2003)

<sup>3</sup> To distinguish between non-fiction and fiction, scholars in semiotics and literary theory have referred to content, style, and modes of practice, the latter communicated through paratextual information (cf., Schreier, 2004; Lamarque & Olsen, 1994). Some scholars have focused on formal textual elements to tell between fiction and non-fiction, e.g., verbs that describe internal processes, imperfect tense, third-person narrator, or the poetic quality of the language (e.g., Hamburger, 1968; Riffaterre, 1990). These formal features may indeed be more often used in fictional than nonfictional texts, most notably in literary texts (Schreier, 2004). However, formal and stylistic aspects are neither necessary nor sufficient characteristics: Authors of fiction may refrain from using any of these stylistic features and at the same time non-fictional works may include poetic language or any other of these elements. Similar objections can be raised with regard to semantic approaches. Fictional narratives frequently involve a protagonist

who has no equivalent in the outside world and whose actions may be impossible based on our current conception of natural laws. However, non-fictional texts may consist of invented content (e.g., word problems in a math textbook; "what-if"-scenarios in a scientific paper, e.g., Lebow, 2006). And – most importantly – fictional narratives may provide accounts that are perfectly in line with real world events and facts (Schreier, 2004). Indeed, more often than not fictional narratives build on basic real-world facts, e.g., in a police thriller the Arc de Triomphe is located in Paris rather than in Berlin (cf. Eco, 1994).

<sup>4</sup> The results of Konijn and colleagues are somewhat ambivalent. The authors presented a documentary-style narrative either without a specific introduction (recipients were expected to perceive the material to be a non fictional documentary) or the same documentary was introduced to depict the play of actors (similar to a fictional format or a so-called 'fake-documentary'). Whereas one sample of participants ascribed less information value and perceived realism to the fictional story (i.e. the fake-documentary) when they watched the documentary alone as compared to when they watched it with a confederate, this simple main effect could not be observed for a second sample.

<sup>5</sup> We also examined whether transportation may have served as a moderator rather than a mediator of the paratext treatment. A moderated regression analysis with the psychiatric patients index as the criterion and the paratext treatment (the three Murder at the Mall-groups only, two dummy-coded variables, fake as reference group, cf. West et al., 1996) and transportation (z-standardized) as well as the product terms as predictors was conducted. This analysis yielded no significant interactions (|t|s < 1, ps > .40). Additionally, we explored potential interaction effects with the help of an alternative coding scheme. Two separate regression analyses were conducted

and each involved only one variable to code the experimental treatment. In analysis a) the treatment groups were coded 0 = fake; 1 = fiction; 2 = non-fiction; in analysis b) the treatment groups were coded 0 = fake; 1 = non-fiction; 2 = fiction. In both analyses, the psychiatric patients index was regressed on the coded treatment variable, transportation (z- standardized) as well as the product term. Both regression analyses yielded no significant interaction between the experimental treatment and transportation (|t|s < 1, ps > .60).

Table 1.

Summary of a hierarchical regression analysis including the need for affect, the need for cognition, and the paratext variations. Results of the complete equation are displayed.

	Psychiatric Patients Index			
	$B(SE_B)$	β	p	$\Delta R^2$
Main effects				
Intercept $(B_0)$	4.48 (0.15)			
Fiction vs. Fake <sup>a</sup>	0.50 (0.22)	0.24	.03	.03
Non-fiction vs. Fake <sup>a</sup>	0.31 (0.22)	0.15	.16	.02
Need for cognition b	-0.37 (0.18)	-0.35	.04	.04
Need for affect b	0.07 (0.15)	0.07	.65	.00
Two-way interactions				
Fiction vs. Fake * need for cognition	0.21 (0.24)	0.13	.37	.01
Non-fiction vs. Fake * need for cognition	0.56 (0.24)	0.30	.03	.04
Fiction vs. Fake * need for affect	0.29 (0.22)	0.17	.19	.01
Non-fiction vs. Fake * need for affect	0.13 (0.23)	0.07	.58	.00

*Notes*. <sup>a</sup> dummy coding, fake as reference group. <sup>b</sup> z-standardized. Model fit of the complete model:  $R^2 = .14$ , F(8, 107) = 2.25, p = .03.

Figure 1.

Expectations regarding stories with different paratextual information.

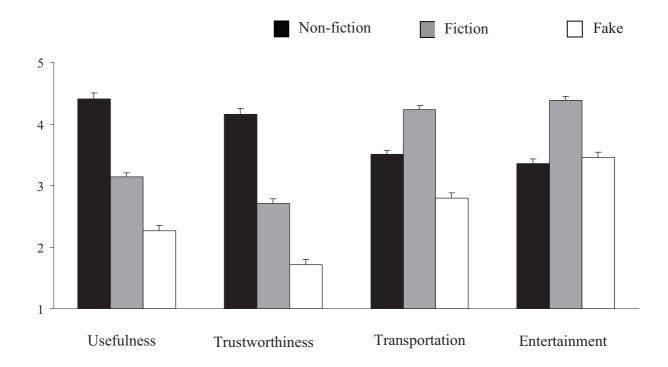
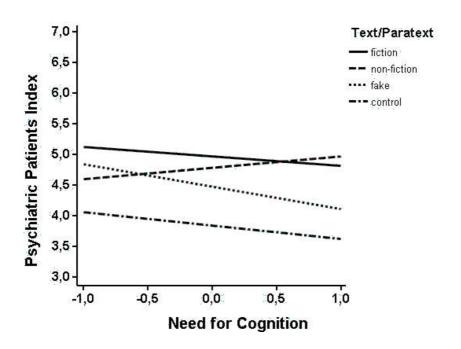


Figure 2.

Simple slopes of all four experimental groups with the belief measure (Psychiatric Patients Index) regressed on the need for cognition.



# Appendix

*Non-fiction condition:* "You are going to read a non-fictional story by Roderick James, a news magazine article called "Murder at the Mall". The events in the article occurred in October 2005 and were reported in an online news magazine shortly after the incident. Please read the story carefully."

Fiction condition: "You are going to read a fictional short story by Roderick James, a short story called "Murder at the Mall". It was published in a literary magazine in October 2005. The resemblance to any real persons and places is of course coincidental. Please read the story carefully."

Fake condition: "You are going to read a fake story by Roderick James, called "Murder at the Mall". Originally, the author claimed that the story was true. When the story's degree of truth was examined, the whole story turned out to be a lie (which was later acknowledged by James). Please read the story carefully."