

## **Reviews, Expectations, and the Experience of Stories**

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### **Abstract**

Theory suggests that information encountered prior to a story affects the actual experience of the story due to elicited expectations. In two experiments ( $N = 100$ ;  $N = 167$ ) short movies that were introduced with a positive review yielded higher transportation scores than the same movies introduced with a more negative (or neutral) review. Mediation analyses indicate that the reviews had an influence on recipients' expectations, which in turn predicted the experience of the movie. Using the more fine-grained narrative engagement scale, we found evidence for a consistent effect on narrative presence, whereas the influence on emotional engagement, narrative understanding, and attentional focus varied between experiments. Moderation analyses (moderated mediation) showed that recipient's opinion seeking and need for cognitive closure were unrelated to the influence of reviews on expectations and the link between expectations and narrative experience. Our findings add to the theory of story processing and they are of practical relevance for everyone who intends to influence recipients' experience of narrative worlds.

**Keywords:** Transportation; Narrative Engagement; Reviews; Expectations; Opinion Seeking; Need for Cognitive Closure

### **Reviews, Expectations, and the Experience of Stories**

Before we read a novel, watch a movie or stream a TV-series we have often obtained some information about it. This extratextual information (*paratext*, Genette, 1987) could be part of the product itself (e.g., the backcover of a DVD, the *peritext*) or its marketing campaign (e.g., interviews of the actors on a movie's website, the *epitext* in Genette's terms). This information could as well be delivered by a source that is independent of the publisher or production company such as the movie section of a newspaper, an Internet site, or a friend. Independent information such as newspaper reviews can, of course, be more or less favorable. The aim of the current paper is to examine the influence of reviews on the experience of stories. We assumed that information received about a movie elicits expectations about the movie which in turn affect how deeply recipients are transported into the story world and how much they engage with the story (Busselle & Bilandzic, 2008; Gerrig, 1993; Green & Brock, 2000). Two experiments were conducted to test these assumptions. Recipients' expectations were represented as a mediator, and differential effects on the dimensions of narrative engagement as well as individual differences in opinion seeking and need for cognitive closure were taken into account.

### **Experiencing Narrative Worlds**

Stories have the power to grab our attention, to make us get lost in the story world, and to take us on a rollercoaster ride of emotions. Researchers have used several constructs or concepts to describe the state of being psychologically immersed in a story. In addition to concepts that focus on responses to characters (e.g., identification, Cohen, 2001; para-social interaction; Hartmann & Goldhoorn, 2011) concepts were introduced that cover the story experience as a whole. With respect to the latter, two concepts have received particular attention in recent years, transportation and narrative engagement. Transportation, introduced to a wider scientific audience by Richard Gerrig (1993), is based on the metaphor that readers undertake a mental journey into the world of a narrative. When recipients

are transported into story worlds they experience an “integrative melding of attention, imagery, and feelings, focused on story events” (Green & Donahue, 2009, p. 241). In a state of high transportation recipients have a low ability and a low motivation to process story content critically. Thus, information that would be refuted in non-narrative communication (or whenever transportation is low) can change recipients’ attitudes and beliefs (Green & Brock, 2000). In empirical studies the experiential state of transportation is typically assessed with the help of the Transportation Scale (Green & Brock, 2000; short scale: Appel, Gnambs, Richter, & Green, 2015). The facets of attention, emotion, and imagery are represented by the items, but in most studies one aggregate score for transportation is built (cf. Gnambs, Appel, Schreiner, Richter, & Isberner, 2014; Green & Brock, 2000).

Narrative engagement was introduced as an alternative concept to describe and explain the experience of being immersed into a story (Busselle & Bilandzic, 2008; 2009). Sharing much of the theoretical background, narrative engagement differs from transportation in consisting of four dimensions. These dimensions describe a sequence of being immersed in a story world, starting with *narrative understanding* (the ease of building a mental model of the represented events), and further including *attentional focus* (concentration on the story events, not feeling distracted), *emotional engagement* (arousal and experience of emotions), and *narrative presence* (the experience of having entered the story world). The dimensions reflect processes occurring while reading or watching a story, with narrative understanding and attentional focus reflecting basic comprehension processes and emotional engagement and narrative presence reflecting the core of the narrative experience of being engaged or transported into the story world. Narrative engagement is measured with the Narrative Engagement Scale (Busselle & Bilandzic, 2009). When developing the scale a subset of the items were adapted from existing scales (e.g., Appel, Koch, Schreier, & Groeben, 2002), including two items from the Transportation Scale (Green & Brock, 2000).

Given the theoretical and operational overlap, the Narrative Engagement Scale full scale average and the Transportation Scale score show a large empirical association, as indicated by correlations ranging from .73 to .82 (Busselle & Bilandzic, 2009). The Transportation Scale has demonstrated high validity in a range of different contexts and latent state-trait analyses and measurement invariance analyses corroborate its psychometric properties (e.g., Gnambs et al., 2014). The Narrative Engagement Scale, however, allows for a separate assessment of the four dimensions. Thus, the latter provides the opportunity for a more fine-grained analysis of engagement components. Transportation and narrative engagement reflect a positive experience, but both constructs are conceptually distinct from the enjoyment of a story or evaluations of the story on a valence dimension (e.g., Busselle & Bilandzic, 2009; Gerrig, 1993; Green, Brock, & Kaufman, 2004).

Transportation and narrative engagement are psychological states that are subject to variations in a) the story, b) the recipient, c) the situation, and d) potential interactions between these three factors. Prior research showed that differences in state transportation and engagement vary with textual differences (e.g., craftsmanship of the author, story structure, and narrativity; Wang & Calder, 2006) as well as with the readers' stable dispositions, including traits such as "transportability" (Busselle & Bilandzic, 2008; Dal Cin, Zanna, & Fong, 2004) or the need for affect (Appel, Gnambs, & Maio, 2012; Maio & Esses, 2001). The aim of the current manuscript is to examine a hitherto largely neglected, but potentially relevant source of influence: Expectations generated from prior information about the story. More specifically, we examine how newspaper reviews read prior to watching a narrative video influence how deeply readers get transported and engaged in the narrative world.

### **The Role of Expectations**

Individuals are constantly exposed to information about media products. They see ads about an upcoming blockbuster movie, they ask their partner about a book they are uncertain about

reading or they follow tweets about a new TV show. Besides advertising and peer communication (e.g., Liu, 2006), reviews by journalists are a prominent source of information.

We assume that reviews can influence users' transportation and narrative engagement by changing expectations. Expectations are involved in many mental processes, as the psychological anticipation and envisaging of an upcoming event. Fundamental processes of perception have been described from early on as expectation-guided and hypothesis-testing procedures (Bruner & Postman, 1949). These processes are also reflected, for instance, in the evaluation of beverages (Lee, Frederick & Ariely, 2006; Plassmann, O'Dohery, Shiv & Rangel, 2008) or the perceived effectiveness of medications (Shiv, Carmon & Ariely, 2005).

Theory suggests that expectations can as well shape the experience of stories. According to Tan (1996; 2008), a recipient invests cognitive and emotional resources into processing the media stimuli in expectation of certain gratifications. The gratifications are nourished by various factors including the current and past evaluation of the gratification potential of the stimulus, or as Tan put it, "my willingness to continue to follow the narrative depends to a considerable extent on whether or not I am satisfied with what I have seen up to now" (Tan, 1996, p. 100). If, for instance, it is already apparent at the beginning of a film that it offers interesting characters and an exciting plot, the viewer will expect high quality from the rest of the film. Consequently, he or she will be more involved and interested and will invest more resources. A distinctive feature of Tan's concept is that interest is seen as a self-reinforcing process: The more resources that have already been invested, the more resources that will also be invested in the future. Moreover, the experience of transportation and narrative engagement can be conceived as a self-reinforcing, cyclical process due to the uncritical receptive stance associated with transportation and narrative engagement (Green & Brock, 2000). If a higher degree of transportation is already present at the beginning of reception, the

current evaluation of the stimulus will be more positive due to the less critical stance, and the prerequisite for more positive expectations will be fulfilled leading to higher transportation.

A strong influence of early information and early experience is also expected by work on the confirmation bias (e.g., Darley & Fazio, 1980; Nickerson, 1998; Snyder & Swann, 1978). People are motivated to select new information such that it fits with existing knowledge structures. The selectivity of perception and memory is the decisive mechanism behind this distortion of perception: The perception is guided towards aspects which are commensurate with the original knowledge. Contradictory information is overlooked or forgotten. With regard to the reception of narrative texts, this means that attention is guided to those aspects of the presentation that correspond to the expectations, such as expectations regarding particularly impressive special effects or terrible acting. Although expectations can and will be developed by story features at the early stages of the work, they are often initiated prior to exposure. With respect to movies, people often go to the cinema after at least having found out some small pieces of information about a film, for instance from reviews in newspapers or on websites (Gunter, 2018). This information often contains dedicated statements about gratifications which the recipients can expect.

The subdimensions of the narrative experience should differ in their sensitivity towards reviews. Popular stories often do not require a large amount of cognitive resources for comprehension (Hutson, Smith, Magliano, & Loschky, 2017). Thus, the effects could be small or even absent for narrative understanding and attentional focus. Recipients should still be able to comprehend the story and to focus on the events unfolding, even if they read a negative review. Reviews and related expectations should be particularly powerful to alter the intensity of emotional engagement and narrative presence.

### **Reviews and the Success of Motion Pictures**

Outside the field of media psychology, investigations on the link between reviews and audiences have a long-standing tradition. Researchers from marketing and related disciplines have examined factors that influence the success of motion pictures at the box office for many decades (see Gunther, 2018, for an overview on the field as whole and the influence of critics' reviews on box office returns more specifically). One basic methodological approach in this field is to correlate the aggregated valence of published reviewer scores (along with other factors such as the popularity of cast members) with actual attendance numbers of the same films. Most of these studies show that better critics' evaluations go along with greater box office returns (e.g., Basuroy, Chatterjee, & Ravid, 2003; Eliashberg & Shugan, 1997; Litman, 1983)<sup>1</sup>. Of course, such associations do not speak to causality, as the quality of the film (e.g., its story or directing) very likely affects both, critics and audience members (who may learn about the film's quality through other users). Related lab experiments examined the causal influence of critics' reviews on participants' intentions to go see the movie. In these studies, participants who were exposed to a positive review reported higher interest to go see the movie than participants who were exposed to a mixed or negative review (e.g., Wyatt & Badger, 1987; 1990). Another classic experiment in this field, albeit not focused on the influence of critics, was conducted in a natural movie theater situation (Burzynski & Bayer, 1977). Participants waited for a screening and overheard comments by other patrons (actually confederates) who evaluated the film more or less positively after they had ostensibly just seen the movie. After actually watching the movie themselves, the movie evaluations of the participants (scored on a 10-point scale from "terrible" to "excellent") differed depending on the valence of the confederates' comments.

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<sup>1</sup> Please refer to Gunter (2018) for findings on moderating factors, such as film genre or critic popularity.



In sum, these studies speak to the influence of critics' reviews. To the best of our knowledge, there has been no study in this field that explored story experience akin to transportation and no study examined theory guided personality differences. Importantly, expectations are considered to be the mediating variable translating critics' influence (Gunther, 2018), but empirical evidence in this regard is lacking.

### **Prior Studies on Reviews, Expectations, and Transportation**

Initial evidence for the role of expectations was provided by Appel and Malečkar (2012) who asked their participants about their explicit expectations regarding stories introduced as fiction, non-fiction, or fake (a story introduced to be non-fictional and factual but turned out to be non-factual). Participants expected to be more deeply transported by the fictional story than by the non-fictional story, and the fake story elicited the lowest expectations to get immersed. When an unrelated sample was presented with different paratexts (introducing the story to be fictional, non-fictional, or fake) prior to reading the same story, transportation scores were the lowest in the fake condition, but fiction and non-fiction did not differ significantly.

Two previous lines of research directly addressed the influence of reviews on transportation. In a study by Shedlosky-Shoemaker, Costabile, DeLuca, and Arkin (2011) participants were asked to read a short story and to write a review of the story afterwards. Supposedly in order to show them examples of what their task would be like, the participants got reviews of previous non-expert participants, which were either positive or negative. In a control condition, no reviews were provided. Results indicate that participants that read positive comments enjoyed the short story more and showed higher levels of transportation than participants who received negative comments (no differences between the review conditions and the control condition were observed). Shedlosky-Shoemaker et al. (2011) speculated that this difference in enjoyment and transportation occurred because of the manipulation of expectations of the reader.

In a second relevant study on reviews and the experience of stories, Dixon, Bortolussi, and Sopčák (2015) examined the influence of reviews on the evaluation of written story excerpts. Stories were accompanied by either negative or positive reviews, and both the review source (expert review vs. peer review) and the position of the reviews (reading the review before or after the story) were manipulated. Responses to the stories were assessed with the help of four evaluation items that were unique to this study. This scale shows some but not complete overlap with transportation and narrative engagement (e.g., “I feel I can understand and appreciate the main character and situation in the story“, “I found the writing style to be clear and straightforward“). The results indicate that reviews presented prior to the story influenced the evaluations (more positive evaluations after reading positive reviews), but only if the source was an expert source (the book review section of Toronto’s NOW magazine or the Sunday book review section of the Los Angeles Times) not if the source was a non-expert (a customer review on Amazon.com or a review in the university student newspaper). When reviews were presented after the story, the non-expert source was more influential than the expert source. The finding that non-expert reviews presented prior to the story did not affect the evaluations is in contrast to the results presented by Shedlosky-Shoemaker and colleagues (2011) whose reviews – ostensibly provided by non-experts – did affect subsequent reading experiences.

### **Predictions and Study Overview**

Our work was guided by several objectives. Our first aim was to examine the influence of reviews on the experience of audiovisual stimuli. Based on the work on written texts (Dixon et al., 2015; Shedlosky-Shoemaker et al., 2011) we assumed that recipients who read positive reviews from an expert source experience more transportation and narrative engagement than recipients who read negative reviews from the same source. Second, the experience of transportation and narrative engagement is considered to consist of several facets (Green & Brock, 2000) or subdimensions

(Busselle & Bilandzic, 2009). While recipients who follow a story may pay attention and be able to understand the story irrespective of a review and related expectations, we assumed that narrative presence and emotional engagement are reduced when recipients are exposed to negative (as opposed to positive) reviews with both subdimensions carrying the overall effect on narrative engagement. Third, theory and prior research on reviews and experiential states was guided by the assumption that reviews affect recipients' expectations about their experience (Dixon et al., 2015; Shedlosky-Shoemaker et al., 2011; Tan, 2008). Expectations, in turn, are assumed to shape how deeply recipients are drawn into the narrative world. We therefore assumed that expectations mediate the effect of reviews on transportation and narrative engagement.<sup>2</sup>

We further expected that reviews do not affect individuals in one and the same way. Stable individual differences could on the one hand predict the influence of reviews on expectations, and on the other hand stable individual differences could predict the influence of expectations on experiential states. In the present research the influence of two potential moderator variables were taken into account. Our fourth prediction addressed individual differences with respect to the effect of reviews on expectations. The extent to which people follow others' opinions and advice varies from individual to individual and is described by the construct of opinion seeking (Flynn, Goldsmith & Eastman, 1996). In our study, reviews were ascribed to professional film critics, thus, opinion seekers should be particularly likely to align their expectations with those of the professional opinion leaders. Statistically speaking, we expected an interaction effect between the experimental factor and trait opinion seeking, characterized by a positive association between trait opinion

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<sup>2</sup> Although Shedlosky-Shoemaker et al. (2011) measured the participants' expectations prior to the film and used the variable for a manipulation check, they did not analyze whether the differences in enjoyment and transportation were indeed due to different expectations or whether other variables drive the effect.

seeking and expectations in the positive review condition and a negative association between trait opinion seeking and expectations in the negative review condition.<sup>3</sup>

Fifth, recipients' stable dispositions could further affect the link between expectations and experiential states. The need for cognitive closure describes the disposition to accept a preliminary judgment as final (Kruglanski & Webster, 1996; Webster & Kruglanski, 1994). We assumed that expectations are such a preliminary judgment, hence, the hypothesis is put forward that the need for cognitive closure moderates the relationship between expectations and experiential states. Statistically speaking, we expected an interaction effect between recipients' expectations and trait need for cognitive closure. More specifically, the positive association between recipient's expectations and experience was hypothesized to increase with an individual's need for cognitive closure. The moderated mediation model resulting from our hypotheses is presented graphically in Figure 1.

< Figure 1 around here >

To test our hypotheses, we conducted two studies. In both studies, participants read a positive or negative review of a movie (or no review), stated their expectations towards it and watched the movie afterwards. Subsequently, participants indicated their transportation and narrative engagement. While in Experiment 1, participants watched the movie in a setting similar to a movie theater, participants in Experiment 2 watched a different movie that was presented individually on a computer screen. By presenting two studies with different movies and different settings, our aim was to allow conclusions beyond a single finding.

The data and stats codes of both experiments, as well as the pre-registration of Experiment 2 are available at <https://osf.io/7mytq>.

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<sup>3</sup> Throughout the manuscript *higher* expectations indicate *more positive* expectations.

## Experiment 1

### Method

**Sample.** Participants were 100 undergraduate students (80 women) who were recruited in lecture courses and were rewarded with partial course credits for their participation. Their age ranged between 18 and 31 years ( $M_{\text{age}} = 21.10$ ;  $SD_{\text{age}} = 1.91$ ).

**Stimulus film.** The stimulus film was the German short film “Der Ausreißer” [The Runaway] from 2004 (Grote, 2004). The film is 23 minutes in length and was nominated for the Academy Award for Live Action Short Film. Reviews from the public and critics tended to the positive (IMDb rating 7.1). Despite its success, the film was relatively unknown at the time of the experiment.

**Reviews.** Two different reviews were used in this study. Both reviews were introduced as information about the film. Following the title and the cast of the film the review consisted of either a positive or a negative review of the film. The *Hamburger Abendpost*, supposedly a local newspaper from the distant city of Hamburg, was cited as the source. In both conditions, participants read about the quality of the stimulus as well as the gratification potential of the film. In the positive review, the film was praised for its ability to excite the viewer and for making the viewer empathize with the main characters. The director was mentioned as talented and the actors described as outstanding. Following the review, the awards of the film were listed (Student Oscar 2005 and nomination for the Short Film Oscar 2006). In contrast, the negative review criticized the confusing story and the irritating end. The performance of the actors was described as average or worse and the image quality was described to be poor. In the end, a screening at a short film competition is mentioned, where the film was awarded the 13<sup>th</sup> place out of 14 competitors. The participants in the control condition were presented a more detailed list of the film staff and a blurb of one sentence about the story of the film but neither a positive nor a negative evaluation was provided. In order to

manipulate solely the expectations, only the content of the review text was changed, whereas the structure was kept similar. The instructions prior to the review, the title, and the staff were kept constant. Also, all three reviews included the same information about the story of the film, which was kept at a minimum. The reviews can be found in the online supplement.

**Procedure.** Two weeks before the main study, the participants were asked to fill in an online questionnaire that consisted of the *Approach* subscale of the Need for Affect Scale (Maio & Esses, 2001) and their preferences for different movie genres (i.e., crime, comedy, action, drama). The need for affect is a trait that was found to consistently predict recipients' transportation scores (e.g., Appel & Richter, 2010). In the current study, it was measured as part of a matched group design in order to minimize the likelihood that the experimental conditions differed due to underlying differences in the propensity to experience transportation (cf. Kahneman, 1965; McGuigan, 1993).<sup>4</sup>

The main study took place on two occasions in a lecture hall at the University of Koblenz-Landau. Members of the matched groups were randomly assigned to the three experimental conditions. Seats were allocated systematically to guarantee that the distance and angle to the screen were balanced out between conditions. At least one seat was kept empty between the participants in order to minimize disruptions. When seated, the participants filled in the scales measuring opinion seeking and need for cognitive closure, and then read the reviews. Next they were asked to state their expectations regarding the film. Subsequently the film was presented on a large projection screen. After the film, transportation and narrative engagement were measured, and socio-

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<sup>4</sup> More specifically, participants with the three highest need for affect scores were assigned to three different groups (with the highest score assigned to group 1, the second-highest score to group 2, and the third-highest score to group 3). Then the next three highest scores were assigned to the three groups (in an opposite order; the highest score to group 3, the second-highest score to group 2, and the third-highest score to group 1), and so on (with the two orders alternating). In doing so, we ensured that need for affect is equal across all groups. Subsequently, the three groups were randomly assigned to the three conditions.

demographic information was gathered. Moreover, the participants were asked whether or not they had seen the film previously. All participants stated that they had never seen the film before.<sup>5</sup>

< Table 1 around here >

### **Measures**

***Need for affect.*** Need for Affect was measured using the German version of the Need for Affect Questionnaire (Appel, 2008; Maio & Esses, 2001) and consisted of 13 items (example “I am a very emotional person”) that went with a 7-point scale ranging from -3 = *strongly disagree* to 3 = *strongly agree*. The internal consistency was satisfactory, at  $\alpha = .78$ .

***Opinion seeking.*** Opinion seeking was measured with a German translation of the Opinion Seeking Scale (Flynn et al., 1996). The translation was done using the backtranslation method (Smith, 2004). Six items ask about how much attention is paid to the opinion of opinion leaders before purchasing products (example “When I consider buying a DVD, I ask other people for advice”), with a 7-point-scale going from 1 (*do not agree*) to 7 (*strongly agree*). The scale was slightly modified to better depict the reference to film reception (“DVD” instead of “product”). Means, standard deviations, Cronbach’s alphas, and zero-order correlations of measures used in the main part of Experiment 1 can be found in Table 1.

***Need for cognitive closure.*** This variable was assessed with the German short scale for measuring the need for cognitive closure (16-NCCS, Schlink & Walther, 2007; Webster & Kruglanski, 1994). The scale consists of 16 items, e.g. “I dislike unpredictable situations”, and its 6-point scale reached from *do not agree* (= 1) to *strongly agree* (= 6).

***Expectations.*** To measure expectations regarding the film, a specially developed scale was employed. One item contained the general expectation of the quality of the film (“I expect that I will

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<sup>5</sup> Additional items that were asked, but not analyzed further, addressed participants’ mood and sleepiness as well as their enjoyment and evaluation of the film.

like the film”). To cover expectations regarding the reception experience per se, four items were developed in line with the Narrative Engagement Scale (Busselle & Bilandzic, 2009). From each subscale, one item was selected and reformulated to express an expectation (e.g. “I expect that my thoughts will be entirely within the fictional world of the movie”). The range of the five items went from 1 (*do not agree*) to 7 (*strongly agree*).

***Transportation.*** In order to assess transportation, the German version of the Transportation Scale was used (Appel & Richter, 2010; Green & Brock, 2000). Participants were asked to state their agreement with 13 statements, such as “While I was watching the film, I could easily picture the events in it taking place.” The 7-point-scale reached from 1 (*do not agree*) to 7 (*strongly agree*). The scale consisted of 11 general items regarding the film and 2 items referring to the protagonists of the film.

***Narrative engagement.*** Narrative engagement was measured using the German version of the Narrative Engagement Scale (Busselle & Bilandzic, 2009). The Narrative Engagement Scale is composed of four subscales, namely narrative understanding, attentional focus, narrative presence, and emotional engagement, each having 3 items. The items went with a 7-point-scale ranging from 1 (*do not agree*) to 7 (*strongly agree*). The four different dimensions represent different engagement processes (Busselle & Bilandzic, 2009). In addition to the total scales, scores for each of the four subscales were built. *Narrative understanding* can be seen as the “ease in comprehending a narrative, or from a mental models perspective, ease in constructing models of meaning” (Busselle & Bilandzic, 2009, p. 341); one item is “At points, I had a hard time making sense of what was going on in the program“ (item reversed). *Attentional focus* describes, how much the viewer is focusing on the narrative, e.g. “While the program was on I found myself thinking about other things” (item reversed). *Narrative presence* describes the feeling of entering the world of the narrative, item example ”During the program, my body was in the room, but my mind was inside the



world created by the story”. Finally, *Emotional engagement* can be seen as the feeling for and the feeling with characters, item example “During the program, when a main character succeeded, I felt happy, and when they suffered in some way, I felt sad”.

## Results

**Main effects of the reviews.** In order to analyze the influence of the reviews we conducted ANOVAs for the transportation and narrative engagement scales and well as for the narrative engagement subscales. The ANOVAs included the review factor (positive review condition, negative review condition, or control group) as the independent variable. We expected that participants who read positive reviews should report higher transportation and narrative engagement (total) scores than participants in the control group, who in turn should report higher scores than participants who received negative reviews.

< Table 2 around here >

The first ANOVA was conducted using transportation as the dependent variable (see Table 2, left columns, for all descriptive results). A significant difference between the conditions was identified ( $F_{2,97} = 5.81, p = .004, \eta^2 = .107$ ), with participants reading the positive review showing the highest levels of transportation, participants reading the negative review showing the lowest levels and the participants in the control group in-between. When using the narrative engagement total score as a dependent variable only a marginally significant effect was found ( $F_{2,97} = 2.80, p = .066, \eta^2 = .055$ ).

Next we analyzed the four dimensions of narrative engagement. We expected that reviews would not affect understanding and attention, while influencing narrative presence and emotional engagement. As expected, there were no significant differences found regarding narrative understanding ( $F_{2,97} = 1.03, p = .360, \eta^2 = .021$ ) and attentional focus ( $F_{2,97} = 1.22, p = .300, \eta^2 = .025$ ). When comparing the groups with regard to narrative presence, no significant difference could

be found ( $F_{2,97} = 2.03, p = .137, \eta^2 = .040$ ). However, the analysis of emotional engagement showed a significant impact of the review conditions ( $F_{2,97} = 3.21, p = .045, \eta^2 = .062$ ). Thus, when analyzed separately, only differences in emotional engagement could be observed.

When comparing the positive review condition with the negative review condition (omitting the control group, cf. Shedlosky-Shoemaker et al., 2011), results indicate that the participants with a positive review experienced more transportation than the participants with a negative review ( $t_{W 61.91} = 3.73, p < .001, \text{Cohen's } d = .91$ )<sup>6</sup>. The participants in the positive review condition further showed a higher level of narrative engagement ( $t_{W 59.77} = 2.29, p = .026, \text{Cohen's } d = .55$ ). When considering the subscales of narrative engagement, the analyses revealed the expected results. The differences between the two experimental conditions were not significant with regard to narrative understanding ( $t_{65} = .99, p = .327, \text{Cohen's } d = .24$ ) and attentional focus ( $t_{W 55.39} = 1.39, p = .169, \text{Cohen's } d = .34$ ). However, narrative presence ( $t_{65} = 2.00, p = .0498, \text{Cohen's } d = .49$ ) and emotional engagement showed significant differences ( $t_{65} = 2.33, p = .023, \text{Cohen's } d = .57$ ).

**Mediation and moderation effects.** In the second step, it was tested whether the effects of reviews on the experiential states are mediated by recipients' expectations. To this end, a mediated path model was calculated using Hayes' PROCESS macro (2013). The conditions were dummy-coded (0 = negative review, 1 = positive review) and all continuous predictor variables were mean-centered. Our model contained the experimental condition as the independent variable and transportation as the dependent variable. Expectations were used as a mediator between the two variables. Furthermore, the model included the moderation effects of opinion seeking and the need for cognitive closure. Thus, our analysis tested the complete model depicted in Figure 1. We expected that the effect of the reviews on transportation was mediated by expectations, while the

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<sup>6</sup> We conducted t-tests with Welch correction whenever a Levene's test indicated inhomogeneity of variances. Welch-corrected t-Tests are indicated with a subscript  $W (t_W)$ .

mediation effect was moderated by opinion seeking and need for cognitive closure. The reviews had a considerable effect on the participants' expectations ( $B = 1.79$ ,  $SE B = .20$ ,  $p < .001$ , 95% CI [1.38, 2.19]), which in turn had a significant effect on Transportation ( $B = 0.33$ ,  $SE B = .10$ ,  $p = .003$ , 95% CI [0.12, 0.54]; model:  $R^2 = .29$ ,  $p < .001$ ). The indirect effect was statistically significant ( $B = 0.59$ ,  $SE B = 0.23$ , 95% CI [0.19, 1.09]). The direct effect, on the other hand, was not significant ( $B = 0.03$ ,  $SE B = 0.25$ ,  $p = .892$ , 95% CI [-0.46, 0.53]). These results provide evidence for the assumption that reviews affect transportation because of a change in expectations.

The results revealed no significant effects of the moderators. Opinion seeking as a supposed moderator of the effect of the review on expectations showed no significant effect (interaction:  $B = -0.11$ ,  $SE B = 0.14$ ,  $p = .422$ , 95% CI [-0.39, 0.17]). Also, no significant effect of the need for cognitive closure as a moderator of the effect of expectations on transportation could be found (interaction:  $B = -0.11$ ,  $SE B = 0.13$ ,  $p = .380$ , 95% CI [-0.36, 0.14]). In sum, these results show that the effect of the reviews on transportation is mediated by expectations, but the effects are neither moderated by opinion seeking nor by the need for cognitive closure.

In a next step we tested this model using emotional engagement as the dependent variable. The preceding analyses showed that reviews had a strong effect on emotional engagement as a dimension of narrative engagement. We therefore examined the effects of mediator and moderators on this effect. For this purpose, we used the same model as before, only replacing the dependent variable with emotional engagement. As expected, expectations mediated the effect of reviews on emotional engagement. While the effect of reviews on expectation was significant ( $B = 1.79$ ,  $SE B = 0.20$ ,  $p < .001$ , 95% CI [1.38, 2.19]), the effect of expectations on emotional engagement was only marginally significant ( $B = 0.34$ ,  $SE B = 0.18$ ,  $p = .060$ , 95% CI [-0.02, 0.70]; model:  $R^2 = .13$ ,  $p = .060$ ). The indirect effect was significant, though, ( $B = 0.61$ ,  $SE B = 0.33$ , 95% CI [0.01, 1.34]), whereas no direct effect was observed ( $B = 0.02$ ,  $SE B = 0.43$ ,  $p = .959$ , 95% CI [-0.83, 0.87]). Like

in the previous model, we found no significant moderating effects of either opinion seeking (interaction:  $B = -0.11$ ,  $SE B = 0.14$ ,  $p = .422$ , 95% CI  $[-0.39, 0.17]$ ) or need for cognitive closure (interaction:  $B = -0.24$ ,  $SE B = 0.22$ ,  $p = .270$ , 95% CI  $[-0.67, 0.19]$ ). Again, the interaction effects were very small ( $f^2 = .005$  and  $f^2 = .018$  for the opinion seeking and the need for cognitive closure interaction, respectively). In sum, we found no support for the influence of opinion seeking or cognitive closure.

## Discussion

We showed that the nature of a newspaper review influenced transportation, with higher transportation while watching a movie that was introduced with a positive review as compared to a negative review or neutral information about the movie. Using the more fine-grained narrative engagement scale, we found no evidence for an effect on the subdimensions subjective narrative understanding or attentional focus, whereas the reviews had an influence on recipients' emotional engagement (and narrative presence, when positive and negative reviews were compared). A subsequent mediation analysis supported our assumption that the reviews had an influence on recipients' expectations, which in turn had an effect on the experience of the movie. Our moderation analyses yielded no indication that this effect varies with a recipient's opinion seeking or his or her need for cognitive closure.

Experiment 1 provided support for the effect of reviews, but it was conducted using a single movie only. Thus, the generalizability of the findings to other movies could be questioned. Moreover, it is possible that our sample size was too small to detect the review effect on narrative understanding and attentional focus, as well as the moderator effects of traits opinion seeking and need for closure. To remedy these limitations, we conducted a second experiment to replicate and extend the findings of Experiment 1.

## Experiment 2

In Experiment 2 we employed a similar study design and mainly used the same measures as in Experiment 1. That said, Experiment 2 differed from Experiment 1 in some key regards. First, we used a completely different short movie. Second, participants watched the movie on a computer screen by themselves, akin to the situation of watching a video on Youtube at home. Third, we omitted the control group without a review so that we compared two review conditions against each other. Fourth, we did not match participants to the conditions based on their need for affect scores (matched group design), instead we randomly allocated the participants irrespective of background variables. Moreover, Experiment 2 was preregistered.

We determined the sample size a priori, following the guidelines for replication studies by Simonsohn (2015) who recommends a sample size 2.5 times as large as the original study's sample size. There were 67 participants in the positive and negative review conditions in Experiment 1, yielding a suggested sample size of 168.<sup>7</sup>

## Method

**Sample.** In total, 183 undergraduate students took part in this study who received course credits for their participation. Following the preregistered exclusion criteria, we excluded 16 participants because they stated that they did not participate seriously ( $n = 2$ ), failed the attention check ( $n = 2$ ), did not speak German as their mother tongue ( $n = 7$ ) and/or did not watch the movie completely ( $n = 5$ ). In the remaining sample ( $N = 167$ ), 115 were women and participants were between 17 and 53 years old ( $M_{\text{age}} = 20.80$ ;  $SD_{\text{age}} = 3.13$ ). A comparison of the included vs.

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<sup>7</sup> We also considered following the safeguard power analysis (Perugini, Gallucci & Costantini, 2014) as an alternative way to determine the sample size for Experiment 2. This approach suggests to use the lower boundary (60%, two-tailed confidence interval) of the original study's effect size to determine the sample size of the replication study. In our case, a power analysis using the lower boundary of the original effect size (i.e.,  $d = .91$  with, 60% CI [0.68, 1.11]) identified an a priori sample size of 96 participants. Because one aim of Experiment 2 was to replicate the original findings with a sufficiently large sample size, we followed the guidelines by Simonsohn (2015) instead.

excluded sample can be found in the online supplement. The subsamples did not differ with regard to the distributions of condition, demographics or transportation.

**Stimulus film.** The stimulus film was the German short film “Eine gute Geschichte” [A good story] from 2013 (Bode, 2013). The film is about 19 minutes in length and received various prizes at short film festivals. Reviews from the public were rather positive (IMDb rating 7.8). Like the film from Experiment 1, the film was relatively unknown at the time of the experiment.

**Reviews.** The positive and negative reviews developed for our first experiment were adapted to fit the new stimulus film. The wordings of the reviews are shown in the online supplement. As noted above, the no-review condition was omitted in Experiment 2. Participants were randomly assigned to the two experimental conditions.

**Procedure.** The study took place in the psychology and communication lab at the University of Würzburg. The participants took part in small groups of up to seven participants. After filling out the written consent form, each participant was seated in front of a desktop computer. An experimental software conducted the randomization and guided the participants through the experiment. Participants filled in the scales measuring opinion seeking and need for cognitive closure; then they read the allocated review. Questions on their expectations regarding the film followed. Subsequently the film was presented, audio was transmitted via headphones. After the film had ended, transportation and narrative engagement were assessed. Finally, socio-demographic information was gathered and the participants were asked whether or not they had seen the film previously. All participants stated that they had never seen the film before.<sup>8</sup>

< Table 3 around here >

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<sup>8</sup> Additionally, participants were asked for their enjoyment. However, we did not further analyze enjoyment.

**Measures.** The same scales that were administered in our first experiment were administered in Experiment 2, with the exception of the Need for Affect Scale. Note that for the opinion seeking scale, we replaced “buying a DVD” with “watch a movie” to adapt it to contemporary consumer behavior as movie streaming has become more popular than buying DVDs (The Digital Entertainment Group, 2018). The opinion seeking scale can be adjusted to particular products and has been validated using different product categories (Flynn et al., 1996). Means, standard deviations, Cronbach’s alphas and zero-order correlations of all measures can be found in Table 3.

## Results

We analyzed the data in the same way we analyzed the results of Experiment 1. However, because Experiment 2 included only two conditions, we report only the results for t-tests and the mediated path model, thereby omitting the ANOVAs. Descriptive results can be found in Table 2 (right column).

**Main effects of the reviews.** In order to analyze the influence of the reviews, we compared transportation and narrative engagement as well as dimensions of narrative engagement across both conditions using t-tests. As expected, participants who had read the positive review reported more transportation than the participants who had read the negative review ( $t_{165} = 2.64, p = .009$ , Cohen’s  $d = .41$ ). Further, participants in the positive review condition showed a higher level of narrative engagement (total score) than participants in the negative review condition ( $t_{W 151.25} = 2.94, p = .004$ , Cohen’s  $d = .45$ ).

Next, we compared the review conditions with respect to the dimensions of narrative engagement. Again, we expected that reviews would affect narrative presence and emotional engagement rather than understanding and attentional focus. However, participants who read the positive review reported higher levels of narrative understanding and attentional focus ( $t_{165} = 2.73, p = .007$ , Cohen’s  $d = .42$ , and  $t_{W 138.85} = 2.02, p = .045$ , Cohen’s  $d = .31$ , respectively). Further,

positive reviews led to significantly higher ratings of narrative presence, but only marginally significantly higher ratings of emotional engagement ( $t_{165} = 2.43, p = .016$ , Cohen's  $d = .38$  and  $t_{165} = 1.69, p = .092$ , Cohen's  $d = .26$ , respectively). Thus, our hypothesis that narrative presence and emotional engagement carry the effect of reviews on emotional engagement was only partially supported in this experiment.

**Mediation and moderation effects.** We again calculated a moderated mediation model to test whether the effect of reviews on transportation is mediated by expectations. As in Experiment 1, we dummy-coded the conditions (0 = negative review, 1 = positive review) and mean-centered all continuous predictor variables. Condition served as the independent variable and transportation as the dependent variable. As in Experiment 1, the model included the moderation effects of opinion seeking and the need for cognitive closure. We expected that expectations mediate the effect of the reviews on transportation, while opinion seeking and need for cognitive moderate the mediation effect.

Reviews had a positive effect on participants' expectations ( $B = 1.82, SE B = 0.14, p < .001$ , 95% CI [1.55, 2.08]) which in turn affected transportation positively ( $B = 0.25, SE B = 0.07, p < .001$ , 95% CI [0.11, 0.39]; model:  $R^2 = .14, p < .001$ ). The indirect effect was statistically significant ( $B = 0.46, SE B = 0.14, 95\% \text{ CI } [0.21, 0.75]$ ), while the direct effect was not ( $B = -0.13, SE B = 0.17, p = .44, 95\% \text{ CI } [-0.47, 0.21]$ ). These results provide further support for our hypothesis that the effect of reviews on transportation is mediated by expectations. Like in Experiment 1, there were no significant effects of the moderators. Neither opinion seeking nor need for cognitive closure showed any moderation effect (interactions:  $B = 0.21, SE B = 0.13, p = .107, 95\% \text{ CI } [-0.05, 0.46]$ ,  $f^2 = .008$ , and  $B = 0.03, SE B = 0.07, p = .695, 95\% \text{ CI } [-0.10, 0.16]$ ,  $f^2 = .001$ , respectively). As in Experiment 1, we tested the same mediated path model with emotional engagement as the dependent variable. The link between expectations and emotional engagement was only marginally significant



( $B = 0.20$ ,  $SE B = 0.11$ ,  $p = .073$ , 95% CI  $[-0.02, 0.42]$ ; model:  $R^2 = .04$ ,  $p = .178$ ), and the indirect effect was not significant ( $B = 0.37$ ,  $SE B = 0.21$ , 95% CI  $[-0.03, 0.79]$ ). Neither was the direct effect ( $B = -0.05$ ,  $SE B = 0.27$ ,  $p = .849$ , 95% CI  $[-0.60, 0.49]$ ). With emotional engagement as the dependent variable, we again did not find significant effects of the moderators opinion seeking and need for cognitive closure (interactions:  $B = 0.21$ ,  $SE B = 0.13$ ,  $p = .107$ , 95% CI  $[-0.05, 0.46]$ ,  $f^2 = .008$ , and  $B = 0.00$ ,  $SE B = 0.11$ ,  $p = .972$ , 95% CI  $[-0.20, 0.21]$ ,  $f^2 < .001$ , respectively).

In sum, the moderated mediation analysis successfully replicated the findings obtained from Experiment 1 regarding recipients' expectations and transportation. Based on a lack of evidence for a total effect on emotional engagement, the indirect effects on this subscale could not be corroborated.

## Discussion

Because the results of our first study were based on a single film, the aim of this second study was to replicate and extend the findings, using a different film and a larger sample size. Thereby, we wanted to provide further evidence demonstrating the robustness of the proposed effect across movies and movie settings. To this end, participants received a positive or negative review about a film and subsequently indicated their expectations towards the film. Afterwards the film was presented and participants indicated their transportation and emotional engagement.

Replicating the results of our first experiment, reviews had a significant effect on transportation and narrative engagement. Although the effect sizes for these effects were not as large as in Experiment 1, the successful replication provides further evidence for the robustness of the effect. Our analyses further revealed a mediation of reviews on transportation via expectations, which supports our proposition that expectations are responsible for the effects of reviews on narrative experiences. Regarding the subcomponents of narrative engagement, narrative presence along with narrative understanding and attentional focus were affected by the reviews, whereas

emotional engagement was not (at the  $p = .05$  level). This finding was contrary to our expectations and the results of Experiment 1. Following this result, the mediation could not be replicated for emotional engagement. As in Experiment 1, the effects were neither moderated by participants' opinion seeking nor by their need for cognitive closure.

In sum, Experiment 2 replicates the main findings of the first experiment and provides further evidence for the effect of reviews on the experience of recipients. However, this study did not support our hypothesis that reviews affect narrative presence and emotional engagement, rather than attentional focus and narrative understanding. Thus, it appears that reviews reliably influence the holistic experience of transportation and narrative engagement by changing expectations. The relative impact of the reviews on engagement subcomponents, however, seems to be more variable.

### **General Discussion**

Since ancient times people have told stories to inform about recent events, to make the audience laugh, to motivate others to behave in certain ways, to provide insight and meaning or to console (Gottschall, 2013). The experience of stories differs from the experience of non-narrative texts (such as lists of arguments, e.g., Gerrig, 1993) and several concepts are used to capture recipients' experience of stories. The research presented here is based on transportation and the closely related concept of narrative engagement that have attracted a lot of empirical research in recent years. As the experience of a story is a predictor of its impact in terms of changing or consolidating attitudes, beliefs, and behavior (e.g., Appel & Richter, 2010; Lewis, & Sznitman, 2017; van Laer, de Ruyter, Visconti & Wetzels, 2014), identifying the predictors of engagement is of substantial interest, from both a theoretical and an applied perspective.

Theory suggests that experiential states during media use depend on variations in a) the story, b) the recipient, c) the situation, and d) potential interactions between these three factors. Our focus was on the situation, showing not only that reviews do affect transportation and narrative

engagement, but illuminating the process underlying the effect. Across two studies, the effect of reviews on transportation is mediated by recipients' expectations towards the movie. This effect appears to be robust across different levels of opinion seeking and need for cognitive closure as indicators of participants' personality. The contribution of the two studies is substantial. It is one of the rare theory-guided examinations of situational influences on narrative experience (see Tal-Or, 2016, for the effects of co-viewing), and the results provide empirical evidence on prior theoretical accounts that elucidated the role of expectations in the process of listening to or watching stories (Tan, 1996, 2008).

Importantly, our findings have considerable implications for the practice of communication science in applied settings as well as for future research. Transportation is typically a pleasant and sought after experience. Thus, ways to increase (or decrease) this experiential state are relevant to those interested in marketing a media product. Our findings underscore the efficacy of strategies aimed at providing positive information about a film to viewers (see Basuroy, Chatterjee, & Ravid, 2003; Eliashberg & Shugan, 1997; Gunter, 2018). Our research is also relevant to researchers who wish to manipulate transportation or narrative engagement as part of an experimental study (cf. Tukachinsky, 2014). In research on narrative persuasion, for example, it is considered highly important to establish causality – are attitudes towards a product more positive because recipients are more deeply transported into the world of a narrative ad or do prior attitudes towards a product cause recipients to be more or less transported? Prior attempts at manipulating transportation or narrative engagement have often relied on instructions to read or watch a story in certain ways (e.g., to be more or less distanced) or recipients were instructed to engage in an additional task (e.g., to identify words that are difficult to comprehend at fourth grade reading level, cf. Green & Brock, 2000). Others have re-ordered sections of the story (e.g., Schreiner, Appel, Isberner & Richter, 2018; Wang & Calder, 2006). As compared to these alternative approaches, providing reviews

might be a feasible option to manipulate transportation in a more ecologically valid way (cf. Tukachinsky, 2014).

### **Limitations and Future Directions**

Despite the contributions of our work, its limitations need to be acknowledged. First, demand characteristics could play a role within our experimental setting, leading to review-consistent results. Although this notion cannot be ruled out entirely (demand effects could play a role in much of the experimental media effects literature) we believe that influence of demand effects has been small. Unlike instructions to follow a story in a certain way, recipients were quite free to perceive and report on the following stimulus. A review could, for example, set an anchor against which transportation experiences are compared, leading to a contrast effect (e.g., “given that mediocre review the movie was actually rather engaging”). We believe that the influence of both mechanisms should not have been particularly strong, given the substantial length of the movies.

Second, and relatedly, our focus was on the subjective experience of being engaged and transported into the story world and we used self-report questionnaires that were administered after the story had ended. This procedure followed the majority of studies in the field. It rests on the assumption that recipients can provide a meaningful overall statement of their experiential state, although the engagement with a story likely fluctuates in substantial ways during the course of a narrative. We believe that future studies can profit from integrating additional methodologies to measure responses to stories as they occur, such as thinking aloud protocols, facial action coding, secondary tasks, as well as psychophysiological or neurophysiological measures (cf. Bezdek & Gerrig, 2017; Jacobs, 2016).

Third, even more replications of the effect of reviews on transportation and related measures are needed. After parts of this work were completed the effect of the review manipulation on transportation was demonstrated in another study (Gebbers, de Wit, & Appel, 2017), using a

different sample and a different film as part of an independent investigation (reviews were used as a method to manipulate transportation, see also Isberner et al., in press). The current line of research could profit from replication studies in independent labs.

Fourth, we investigated the influence of reviews and related processes, as well as the potential moderating role of personality traits as recipient factors. However, opinion seeking and the need for cognitive closure are not the only individual difference variables that could influence the impact of reviews. For example, individual differences on emotional reactivity could play a role. Future research is encouraged to provide additional insight on the effect of reviews and related boundary conditions.

Fifth, our review source was a newspaper article. While expert reviews in newspapers or websites are a relevant source of information, peer-to-peer communication is another important source. Given that our study was based on previous work that examined the influence of information given by supposed non-expert participants (Shedlosky-Shoemaker et al., 2011) we are confident that the basic findings generalize to different kinds of informational sources. Given the high interest in the effects of evaluations provided on the Internet by different sources, our findings should inspire exciting future studies.

## **Conclusion**

The nature of reviews encountered prior to a story affects transportation and narrative engagement, with positive reviews leading to stronger engagement compared to negative reviews. This effect is mediated by recipients' expectations towards the story. These results did not vary with recipients' personality (trait opinion seeking, need for cognitive closure). In addition to its theoretical contribution, our findings are relevant to researchers and practitioners who wish to influence how recipients respond to a story.

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Table 1

*Experiment 1: Means, standard deviations, internal consistencies, and zero-order correlations of the measures.*

Measure	M	SD	$\alpha$	1	2	3	4	5	6	7	8	9
1. Expectations	4.45	1.09	.76	-								
2. Transportation	4.53	0.78	.83	.53**	-							
3. Narrative Engagement Total Score	5.18	0.91	.86	.42**	.78**	-						
4. Narrative Understanding	5.16	1.19	.69	.17	.39**	.68**	-					
5. Attentional Focus	5.86	1.12	.90	.32**	.53**	.71**	.49**	-				
6. Narrative Presence	4.46	1.48	.85	.37**	.62**	.76**	.24*	.29**	-			
7. Emotional Engagement	5.22	1.16	.84	.37**	.73**	.78**	.31**	.40**	.57**	-		
8. Opinion Seeking	3.51	1.51	.88	.09	.03	.07	-.14	.07	.06	.21*	-	
9. Need for Cognitive Closure	3.47	0.55	.77	-.01	-.04	.02	-.02	-.02	.04	.04	.05	-

Note. \* $p < .05$ , \*\*  $p < .01$ .  $\alpha$  = Cronbach's alpha

Table 2

*Means and standard deviations of Transportation and Narrative Engagement, depending on the experimental treatment. Results of Experiments 1 and 2*

	Experiment 1						Experiment 2			
	Review						Review			
	negative ( <i>N</i> = 35)		control ( <i>N</i> = 33)		positive ( <i>N</i> = 32)		negative ( <i>N</i> = 84)		positive ( <i>N</i> = 83)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Transportation	4.25 <sup>a</sup>	0.78	4.50 <sup>a</sup>	0.86	4.87	0.57	4.56 <sup>c</sup>	0.78	4.88 <sup>d</sup>	0.78
Narrative Engagement Total Score	4.91 <sup>a</sup>	1.08	5.22 <sup>ab</sup>	0.81	5.42 <sup>b</sup>	0.72	5.30 <sup>c</sup>	0.94	5.67 <sup>d</sup>	0.68
Narrative Understanding	4.93 <sup>a</sup>	1.30	5.33 <sup>a</sup>	1.13	5.23 <sup>a</sup>	1.14	5.86 <sup>c</sup>	0.90	6.23 <sup>d</sup>	0.84
Attentional Focus	5.63 <sup>a</sup>	1.42	5.96 <sup>a</sup>	0.98	6.02 <sup>a</sup>	0.82	5.65 <sup>c</sup>	1.36	6.00 <sup>d</sup>	0.84
Narrative Presence	4.09 <sup>a</sup>	1.46	4.55 <sup>ab</sup>	1.50	4.79 <sup>b</sup>	1.42	4.35 <sup>c</sup>	1.22	4.81 <sup>d</sup>	1.21
Emotional Engagement	4.99 <sup>a</sup>	1.25	5.05 <sup>a</sup>	1.15	5.64	0.99	5.33 <sup>c</sup>	1.25	5.65 <sup>c</sup>	1.13

*Note.* Means sharing the same superscript are not significantly different from each other ( $p < .05$ ). All scales have a 7-point-range going from 1 to 7.

Table 3

*Experiment 2: Means, standard deviations, internal consistencies, and zero-order correlations of the measures.*

Measure	M	SD	$\alpha$	1	2	3	4	5	6	7	8	9
1. Expectations	4.40	1.27	.83	-								
2. Transportation	4.72	0.80	.82	.36**	-							
3. Narrative Engagement Total Score	5.49	0.84	.86	.36**	.80**	-						
4. Narrative Understanding	6.04	0.89	.61	.30**	.45**	.65**	-					
5. Attentional Focus	5.83	1.14	.87	.31**	.56**	.76**	.48**	-				
6. Narrative Presence	4.58	1.24	.75	.27**	.59**	.74**	.21**	.35**	-			
7. Emotional Engagement	5.49	1.20	.82	.19*	.75**	.83**	.41**	.47**	.56**	-		
8. Opinion Seeking	3.76	1.08	.71	.02	.21**	.08	-.04	.01	.09	.14	-	
9. Need for Cognitive Closure	3.36	0.64	.81	-.18*	-.15*	-.15	-.20*	-.22**	-.03	-.03	-.15	-

Note. \* $p < .05$ , \*\*  $p < .01$ .  $\alpha$  = Cronbach's alpha

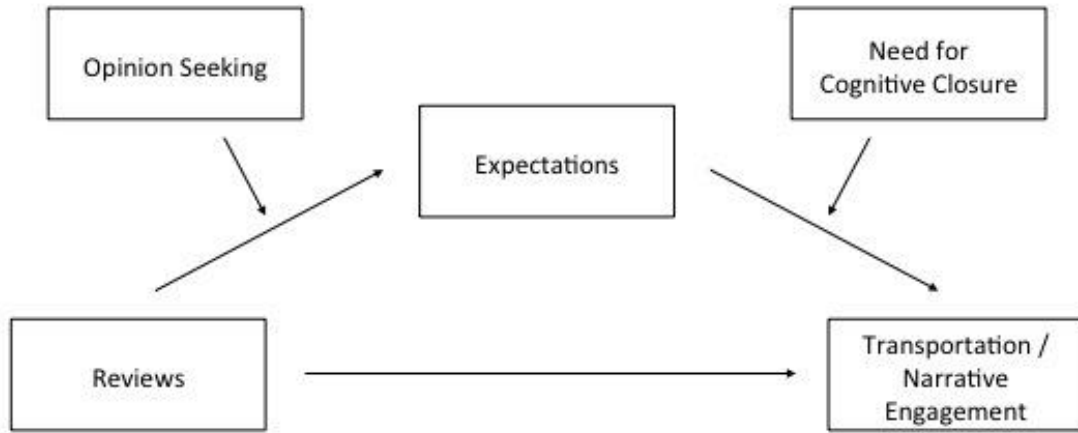


Figure 1  
*A moderated mediation model on the effects of reviews on the experience of stories*

**Online Supplement for the manuscript**

***Reviews, Expectations, and the Experience of Stories (Tiede & Appel)***

<b>Supplement A: Experimental Review Conditions in Experiment 1</b>	<b>page 2</b>
<b>Supplement B: Experimental Review Conditions in Experiment 2</b>	<b>page 6</b>
<b>Supplement C: Comparison of the samples included and excluded for analysis</b>	<b>page 9</b>



**Supplement A: Experimental Review Conditions in Experiment 1 (translated from German)**

*All study participants read the following:*

“You are about to watch a short film for approximately 20 minutes. As an introduction, you find some information about the film below. Please read it carefully because it is relevant to the film.”

*Subsequently, one out of three reviews was presented.*

**Negative review condition:****The Runaway (2004)**

Director: Ulrike Grote  
Screenplay: Linus Foerster  
Music: Jörn Kux

Walter: Peter Jordan  
Yuri: Maximilian Werner

**Hamburg Evening Post film review (September 23, 2004)**

"'The Runway' is a film by Ulrike Grote, a film studies graduate of Hamburg University. The short film is twenty-two minutes long and tells the story of a father and his son. What starts with a growing father-and-son relationship ends in a story in which confusion and contrived scenes take turns. Already the first meeting of the protagonists seems clichéd to the audience member. As the story continues, it offers scenes which keep raising questions. Again and again, the audience member has to wonder about the plot and is hardly able to follow the film. Apparently, it was more important to Grote to fit as much action as possible into the film than to structure the story in a logical and comprehensive manner. In cartoons or fairy tales this might be quite common, but it is unsuitable for a dramatic short film. The combination of confusing scenes culminates at the end, which leaves the audience member completely on his/her own. The final scene is totally detached from the rest of the story and provokes questions nobody is able to answer. Although this can indeed be thrilling in films, bewilderment does not leave any room for suspense in this case.

Grote's choice of cast is also subject for debate. Beside little Maximilian Werner, Peter Jordan plays below his potential. It is quite apparent that he has trouble slipping into his role within the short time frame. Compared to his parts in longer motion pictures, his performance is average at the most.

It remains a mystery why Grote did not select a better picture quality. By not doing so, she completes the negative overall impression, leaving the audience wondering why such a film was even made, considering the costs. To sum it up, this film leaves a lot of questions, not only the ones regarding the plot but also the question why Grote did not get more support from the university during the production. Too bad."

## Screenings at Festivals:

- Short Film Competition Oberstedt (ranked 13 out of 14)

**Positive review condition:****The Runaway (2004)**

Director: Ulrike Grote  
Screenplay: Linus Foerster  
Music: Jörn Kux

Walter: Peter Jordan  
Yuri: Maximilian Werner

**Hamburg Evening Post film review (September 23, 2004)**

"'The Runaway' is a graduation project by the Hamburg student Ulrike Grote and evidence that Hamburg University is with good reason known as one of the world's leading talent pools in respect of film studies. The film tells a father-and-son story and succeeds in fascinating the audience not only with its touching plot but also with unpredictable scenes. The film starts cheerfully, one chuckles and immediately falls in love with little Yuri (Maximilian Werner). Just as she has the audience assuming that it is a normal story about the relationship between father and son, Grote shows scenes which one would not anticipate. This demonstrates Grote's talent and sets the film apart from others of that genre. These unexpected scenes make the film special, a mixture of realistic drama and mysterious fairy tale.

Although the film does not reach its peak until the end, the introduction to the final scene is so catching that the audience is thrilled in a way only movies achieve - and that after just 22 minutes. Altogether, the film captivates the audience in no time at all and does not let him go until the end. Before you know it, you empathize with the father (Peter Jordan) and suffer even more with little Yuri whom you long to console. This is, of course, also the actors' success. Peter Jordan excels in the role of Walter and acts so incredibly authentic that one tends to believe that he has already experienced such a situation in real life. Little Maximilian Werner certainly bears comparison to Jordan. His convincingly portrayed innocence and sadness virtually drives the audience member to hug him and tell him: 'Everything will be fine, little Yuri!'

This film is evidence of a short film being able to offer what is normally expected from long motion pictures only: a touching story, ingenious scenes and great actors. Rating: highly recommended!"

## Awards:

- Students' Oscar 2005
- Nomination for an Oscar in the category *short film* (2006)

**Control condition:****The Runaway (2004)****Crew**

Director: Ulrike Grote  
Screenplay: Linus Foerster  
Production: Constantin Castell & Niels Hein  
Music: Jörn Kux  
Camera: Ute Freund  
Cut: Gisela Gondolatsch

**Cast**

Walter: Peter Jordan  
Yuri: Maximilian Werner  
Architect Born: Burghart Klaußner  
Neighbor: Monica Bleibtreu

Playing time: 22 minutes  
Country of production: Germany  
Year of publication: 2004

**Extract from the cover text:**

"'The Runaway' tells the story of an unusual father-and-son relationship which first has to grow..."

**Supplement B: Experimental Review Conditions in Experiment 2 (translated from German)**

*All study participants read the following:*

“You are about to watch a short film for approximately 19 minutes. As an introduction, you find some information about the film below. Please read it carefully because it is relevant to the film.”

*Subsequently, one out of two reviews was presented.*

**Negative review condition:****A Good Story (2013)**

Director: Martin-Christopher Bode  
Screenplay: Michael Seidel & Martin-Christopher Bode  
Music: Manfred Mildenberger

Helga Landowsky: Petra Kelling  
Jakub Lato: Michael Tregor

**Hamburg Evening Post film review (September 23, 2013)**

"'A Good Story' is a short movie by Martin-Christopher Bode, a film studies graduate of Hamburg University. In 19 minutes, the film narrates about the effect of stories. However, the attempt to convey a big message fails due to the limited possibilities of a short movie. Except for the flashback, Bode struggles to hold the suspense, because in nearly 20 minutes, there is only little action and the storyline develops very slowly. Therefore, the movie seems chewy and one has problems getting mentally involved in the movie. Unfortunately, the stiltedly sounding dialogues of the characters contribute to that as well. Although the antiques dealer is necessary for the old lady to tell her story, his desire to hear the story appears exaggerated and false. Quite apparently, his only function is to induce the childhood story. Even though Bode manages to have the old lady tell a quite touching story, he wraps this sadly much too short part into a practically unnecessary frame story.

Bode's choice of cast is also subject for debate. Beside Petra Kelling, Michael Tregor plays below his potential. It is quite apparent that he has trouble slipping into his role within the short time frame. Compared to his parts in longer motion pictures, his performance is average at the most. Only the little girl in the childhood story is convincing.

It remains a mystery why Bode did not select a better picture quality. The movie appears antiquated and could have been produced in a similar fashion in the early sixties. By doing so, he completes the overall negative impression, leaving the audience wondering why such a film was even made, considering the costs. It remains an open question why Bode did not get more support from the university during the production. Too bad."

## Screenings at Festivals:

- Short Film Competition Oberstedt (ranked 12 out of 14)

**Positive review condition:****A Good Story (2013)**

Director: Martin-Christopher Bode  
Screenplay: Michael Seidel & Martin-Christopher Bode  
Music: Manfred Mildenberger

Helga Landowsky: Petra Kelling  
Jakub Lato: Michael Tregor

**Hamburg Evening Post film review (September 23, 2013)**

"'A Good Story' is a graduation project by the Hamburg student Martin-Christopher Bode and evidence that Hamburg University is with good reason known as one of the world's leading talent pools in respect of film studies. The film is about how valuable it is to tell stories and which impacts good stories can have. Throughout the whole movie, Bode sustains suspense which is not caused by a series of exciting events but rather the result of a certain depth and tranquility. Like the antiques dealer, the audience wonders with increasing curiosity why the old lady wants to buy this pitcher so badly – and eventually gets rewarded with a dramatic story about loss, fear and mercy. Due to the arc of suspense developing from the unspectacular outset towards the childhood story, this movie is truly something special.

In just 19 minutes, this short movie achieves something which one would expect at best from motion pictures: The film captivates the audience, which allows the audience to easily picture themselves in the situation and especially in the narrated story. You empathize with the old lady when she reveals her experiences and want to know more about her. This is, of course, also the success of the main actors which fit perfectly to their roles and play them expressively. Petra Kelling excels in the role of the old lady and plays her so authentically that one tends to assume that she has already experienced a situation like that herself. Furthermore, in this short movie all narrative elements and stylistic devices fit together perfectly – just as the missing fragment which can be put back into the pitcher again in the end. Finally, the marvelously fluent transitions to the flashback and the atmospherically stunning camera work need to be stressed which, in a subtle way, manages to create a somewhat fairy-tale flair throughout the film.

Altogether, this film is evidence of a short film being able to offer what is normally expected from long motion pictures only: a touching story, impressive actors and a big message. Apparently, the German Film and Media Rating Agency awarded this movie the rating 'highly recommended' for good reason!"

## Awards:

- Students' Oscar 2014
- Nomination for an Oscar in the category *short film* (2015)

**Supplement C: Comparison of the samples included and excluded for analysis**

Table S1

*Comparison of the samples that were included and excluded for analysis. Standard deviations are written in parentheses.*

Characteristics	Included sample ( <i>N</i> = 167)	Excluded sample ( <i>N</i> = 16)	Included vs. excluded sample
Condition			
<i>N</i> negative	84	8	$\chi^2(1) = 0.00, p = .982$
<i>N</i> positive	83	8	
Gender			
<i>N</i> female	115	9	$\chi^2(1) = 1.06, p = .302$
<i>N</i> male	52	7	
Age	20.80 (3.13)	22.12 (4.22)	$t_{W 16.6} = 1.23, p = .235^9$
Transportation	4.72 (0.80)	4.52 (0.76)	$t_{181} = 0.97, p = .333$

<sup>9</sup> We conducted t-tests with Welch correction whenever a Levene's test indicated inhomogeneity of variances. Welch-corrected t-Tests are indicated with a subscript *W* ( $t_W$ ).