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Fictional Narratives Cultivate Just World Beliefs

Markus Appel

University of Linz, Austria

Address for correspondence:

Markus Appel

Department of Education and Psychology

Altenberger Str. 69, A-4040 Linz, Austria

markus.appel@jku.at

++43-732-2468-8632

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Abstract

Cultivation research has identified several misrepresentations on television, and has shown that the more people watch TV, the more their beliefs correspond to the TV world. In recent years, experimental research has demonstrated that fictional narratives are powerful means to change audience beliefs. Theories on the narrative structure of fictional narratives and disposition-based theories of media enjoyment suggest that televised fictional narratives tend to portray the world as a just place. We propose that the amount of fiction watched on television predicts the belief in a just world (BJW). Further, we assume this effect to be compatible with the television use/mean world relationship expressed by *cultivation theory*. Two cross-sectional studies with $N = 128$ participants (German sample) and $N = 387$ participants (Austrian sample) corroborate our assumptions. The self-reported frequency of watching fiction on television was positively related to the BJW, while the general amount of television viewing was positively related to mean and scary world-beliefs. In the German sample, mean world beliefs were also affected by viewing tabloid-style (infotainment) television news.

Keywords: cultivation, fiction, beliefs, just world, media use

Fictional Narratives Cultivate Just World Beliefs

The relationship between the reality depicted by the media and the worldviews held by the audience is a fundamental question of mass communication research. Starting from cultivation theory, we posit that watching fictional narratives on TV goes along with an increased *belief in a just world* (BJW) while general TV use and watching infotainment non-fiction is related to the *belief in a mean world*. After introducing relevant theory and research, we present two cross-sectional studies that corroborate our assumptions.

Cultivation of Beliefs

Cultivation theory assumes that the “television-world” differs from our daily experiences, which leads heavy viewers to believe in the television-world rather than in real-world statistics. Most prominently, the more people watch television, the more they overestimate crime-related incidents and believe in a mean and scary world (Gerbner, Gross, Morgan, Signorielli, & Shanahan, 2002). Meta-analytic studies yielded a significant but rather small relationship between watching television and fear-related beliefs (Shanahan & Morgan, 1999). Television portrays the world as a dangerous and treacherous place, and those who watch a lot of television tend to believe in a mean world. After much criticism (see Shanahan & Morgan for a review), cultivation theory remains one of the most dominant theories in mass communication research of the 21st century, as indicated by frequency of use in the high quality communication journals (Bryant & Miron, 2004). This may be partly due to the fact that, over the years, cultivation research has been a dynamic enterprise. The violent and mean world has not been the only meta-message that research has focused on. Supplementary meta-stories have been identified. Researchers highlighted recurrent images of and messages about certain parts of our society, about politics and values that are related to sex-role traditionalism (Morgan, 1982), authoritarianism (Shanahan, 1995), or materialism (Shrum, Burroughs, & Rindfleisch, 2005)

among the heavy viewers. The aim of this article is to draw attention to a meta-story that so far has not been investigated systematically: the just world in fictional narratives. The reasonable and just line of events that constitute fictional narrations cultivates a belief in a just world. We will show that television use is related to both, a belief in a mean world and a belief in a just world, if the use of different genres is considered.

Fictional Narratives Change Beliefs

There are numerous anecdotes about pieces of fiction shifting people's world view. As Strange (2002) points out, *Uncle Tom's Cabin* by Harriet Beecher Stowe (1853/ 1981) seems to have changed many readers' beliefs about equal rights. Its publication is even connected to the outbreak of the US Civil War. Apart from the vast amounts of literature on the effects of aggressive media content and pornography, fiction has been widely neglected by mass communication researchers – clearly in contrast to the regularly ascribed impact on individuals and societies. Among approaches aimed at filling this gap, the idea of a 'persuasion through fiction' has received the widest attention. A growing body of research has demonstrated profound persuasive effects shortly after recipients encounter fictional stories (Gerrig & Prentice, 1991; Green & Brock, 2000; Prentice, Gerrig, & Bailis, 1997; Strange & Leung, 1999; Wheeler, Green, & Brock, 1999) and an even higher impact after a two week-delay (Appel & Richter, in press). People who read about a fictional character who quit school because of personal problems tend to attribute school drop outs to individual circumstances in the real world as well (Strange & Leung, 1999), while people who read about someone who thinks that wearing a seat belt is unsafe are less convinced about wearing seat belts themselves, etc (e.g., Appel & Richter, in press; Prentice et al., 1997). Recipients seem to learn whatever 'facts' fictional narratives teach them.

As there are many stories told outside the lab, one may doubt that there is a common message in fictional narratives. And, unlike expository or persuasive texts and programming

(e.g., the news, ads or political speeches), fictional narratives do not necessarily contain a line of argument. However, they usually follow a plot line with relatively schematic elements (e.g., setting, event, attempt, reaction, and consequence, Rumelhart, 1975). Their endings typically include a resolution that brings together unconnected story lines, thus restoring balance and, ultimately, justice.

The Just World as a Meta-Narrative of Fictional Narratives

We claim that fictional narratives depict a world that is guided more by the principle of justice than the real world is. To support this assumption we provide two lines of argumentation. First, the conventional structure of narratives is an interdependent (or causal) chain of events that leads to a resolution (Chatman, 1978). Second, fictional narratives tend to stimulate moral evaluation and entertaining programming contains characters that are easily identified as good or bad – leading to the better end for the good girl/guy.

To support the notion of a meta-story that is valid for a vast majority of fictional programming, it seems useful to have a glimpse at the well-known conventions and norms that guide its production (Gerbner, 1969). Popular guidelines for (aspiring) screenwriters strongly recommend a plotline that leads to a resolution of the central problems, questions, and conflicts which have unfolded throughout the story. “The dramatic structure of the screenplay may be defined as a linear arrangement of related incidents, episodes or events leading to a dramatic resolution” (Field, 2005, p. 29). As fictional stories come to an end, information is fit together as to finally make sense and provide the protagonists with an outcome that is probable or at least explainable based on previous story elements.¹ In newer fiction there is seldom an ending *deus ex machina* (Aristotle in Halliwell, 1987), as the outcome of the narrative is typically laid out in the story and the plotline is guided by the principle of relatedness and, in many cases, of causality (Chatman, 1978). There is usually a strong relationship between a character’s traits and behavior,

and the development of the story, including the good and bad things which may happen to him or her – a dependency which is close to what is typically seen as just.

The assumption of justice on the screen is further supported by theories that address psychological experiences during the reception of entertaining media. In both, the *structural affect theory* by Brewer and colleagues (Brewer & Lichtenstein, 1981; Jose & Brewer, 1984), and the *affective disposition theory* by Zillmann and colleagues (Zillmann & Cantor, 1976; Zillmann, 1991), the liking (appreciation or enjoyment) of a story depends on whether the outcome is perceived as just or unjust (see also Raney, 2005, and Raney & Bryant, 2002, for a recent conception). People appreciate a story if a positively evaluated protagonist (the hero) is rewarded and/or a negatively evaluated protagonist (the villain) is penalized. An unjust, (which often means negative) ending will in contrast frustrate the recipient and may lead to a negative attitude towards the media product itself, thus reducing the probability of choosing similar fare in the future. As the entertainment industry is depending on its audience, from this perspective it may be argued that just outcomes can be considered the default (sub-)plotline for televised narrative fiction. Or, as Raney and Bryant (2002, p. 404) put it in the case of crime drama, “the macrostory of all drama seems to be that all injustice necessarily results in some restoration of justice.” In a recent overview about equity and justice in entertainment media products, Schmitt and Maes (2006) accumulate case-based evidence for fictional narratives which contain a ‘good defeats bad’-plotline (even if the scenery is as complex and colourful as in the *Lord of the Rings*-trilogy).

Both, the contingency convention of fictional narratives and the disposition-based theories of media enjoyment underline the notion of a just world in fictional narratives. In the real world, however, individuals have to deal with fortunes and misfortunes that are unforeseeable and not a consequence of our previous behavior. Although individuals tend to overestimate their

influence on incidents (cf. Langer, 1975) still they are often confronted with unpredictable and unexplainable events that appear to be beyond individual control (e.g., accidents, diseases).

Apart from fictional narratives there are other genres that deal with the notion of justice as well, most notably non-fiction, including news, local and national news broadcasts, news magazines, talk-interview programs, etc. There is no evidence that non-fictional TV entails the justice meta-story outlined above. Newsmakers and other producers of non-fictional TV content may be tempted to produce just worlds because viewers appreciate ‘good news’ (Schmitt & Maes, 2006; Zillmann, Taylor & Lewis, 1998), but content analyses point in a different direction. Research indicates that non-fictional programming contains a lot of immoral, antisocial behavior that has no negative consequences. In a majority of cases, those immoral acts have no consequences at all, and sometimes even positive ones (Potter, Warren, Vaughan, Howley, Land & Hagemeyer, 1997; Stone, Hartung & Jensen, 1987). Potter et al. state that the low rates for punishment of antisocial acts in non-fictional programming correspond to the lack of punishment in the real world (as represented in criminology statistics). But, in contrast to real world statistics, people do believe that antisocial acts have serious consequences (as for example indicated by people’s evaluations of police records). Since non-fictional TV as well as real-life statistics cannot account for this widespread belief in fair consequences, it may be the entertaining fare of fictional narratives that cultivate just world beliefs.

The Belief in a Just World as a Crucial Individual Difference Variable

Fictional narratives are a powerful means of changing beliefs and they deliver a just-world message. Starting from cultivation theory, we assume that heavy use of fictional narratives goes hand in hand with the belief that the real world is a just place. In addition to mass communication research, this assumption relates to the psychology of individual differences. Since Lerner (1965) first introduced the concept of the belief in a just world, it has become one of

the well-established variables in the individual differences literature. The BJW is a tendency to see our world as a place where people generally get what they deserve. It is the belief that “good things tend to happen to good people and bad things to bad people despite the fact that this is patently not the case” (Furnham, 2003, p. 795, who provides a recent review). The research on the BJW is guided by the assumptions that people differ in the endorsement of this belief, that this variation is quite stable, and that this trait can be measured through self-report scales.

A big part of (early) studies related the BJW to the evaluation of victims of undesirable incidents, like rape, accidents, cancer, or HIV-infection. People high in the BJW tend to look down on victims and attribute the reasons for their misfortunes to the victims themselves (cf., Montada, 1998). People high in the BJW have the positive illusion (cf. Lerner, 1980) that social situations are under one’s own control or that they are at least predictable (Lipkus, Dalbert, & Siegler, 1996). This aspect has led researchers to consider this belief as a buffer for emotional stress. It is positively related to life satisfaction for both, people with and without recent experiences of victimization (Dalbert, 2001). While the impact of the BJW as an independent factor and potential mediating and moderating processes have been of steady interest in recent years, few studies have focused on the origins of individual differences concerning this trait (for family influences see Dalbert & Radant, 2004, Sallay & Dalbert, 2004, and Schönplflug & Bilz, 2004). Although media socialization has been acknowledged as a main source of the belief in a just world (Lerner, 1980; Rubin & Peplau, 1975), we found no study coming from this research tradition which investigates the relationship between the BJW and media use (see Schmitt & Maes, 2006, for a similar conclusion).

Television May Cultivate Both – Mean World Beliefs and Just World Beliefs

With respect to the focal relationship between media use and the BJW, one line of critique on cultivation research seems highly relevant and has produced empirical data.

Researchers have argued that watching television does not induce fear but is instead related to public trust (Gunter & Wober, 1983; Zillmann, 1980; Zillmann & Wakshlag, 1985). These authors implicitly assume that public trust (a term employed synonymously for ‘belief in a just world’) is negatively correlated with the belief in a mean world. Gunter and Wober (1983) compiled four ad-hoc scales to measure personal fearfulness, mean world beliefs, anomia, and just world beliefs. The latter scale consisted of two items from the *Just World Scale* by Rubin and Peplau (1975). Internal consistencies for these measures were not reported. In this British study, action-adventure viewing (but not viewing British soap operas or news) was found to be positively related to the ‘belief in a just world.’ The relationships with the mean and scary world measures did not reach statistical significance.

The results tentatively support the notion of a covariation between the use of fictional narratives and just world beliefs. However, we are reluctant to embrace this study wholeheartedly. The method (i.e., an ad hoc two-item measure for the just world belief, with no reliability scores for the cultivation indicators provided) as well as the conclusion may be the target of serious criticism. In contrast to Gunter and Wober (1983) who conclude that the relationship between the action/adventure use and the belief in a just world is “the reverse of that proposed by Gerbner,” it may be the case that television viewing goes along with both, a belief in a just world and a belief in a mean world. While we have argued that fictional narratives portray the world as a just place and cultivate just world beliefs, we do not think that this meta-story affects mean world beliefs.

Other genres have been identified as more violence-laden, and they covary with mean world beliefs. It has been shown in the US that reality-based crime shows (like *Cops*, *L.A.P.D.*) are related to fear in the audience (Dowler, 2003; Oliver & Armstrong, 1995). Until recently, this kind of programming has not been available in major German language TV stations. Concerning

genre-based cultivation processes, interviews with German adolescents imply that the tabloid television news (*Boulevardmagazine*) which may be labeled as infotainment (containing a mixture of celebrity gossip, animal stories, and crime news), cultivate a mean and scary world view (Eggert, 2001).

Rationale and Predictions of the Present Studies

A huge part of our daily media fare consists of fictional narratives that portray the world as a more predictable and just place than it really is. Cultivation theory claims that media content diffuses into our real world belief system, leading to a linear correlation between television exposure and corresponding beliefs. Hence, those who watch a lot of fiction should have a stronger belief in the world as a just place. Although Gunter and Wober (1983) and Zillmann and Wakshlag (1985) may have shared part of this rationale, a systematic investigation of this covariation is lacking.

H1: The amount of viewing fictional narrations on television is positively related to the general belief in a just world

This notion, however, does not contradict the basic cultivation message, i.e. that watching television leads to a belief in a mean and scary world where distrust and safety precautions are necessary. Just world research does not indicate that just world believers fear victimization to a lesser extent. We therefore address the relationship between just world and mean world beliefs in form of a research question.

RQ1: Is there a covariation between fear-related beliefs and the belief in a just world?

Based on classical cultivation research, we posit that the central assumption of traditional cultivation research is unaffected by the fiction-just world-relationship. Heavy television viewers believe in a mean and scary world.

H2: The amount of television viewing is positively related to the belief in a mean and scary world

In recent years, genre-specific cultivation processes received a lot of attention. In Germany, qualitative data suggest a significant influence of televised tabloid news (*Boulevardmagazine*) on the cultivation process (Eggert, 2001). This leads to the following hypothesis:

H3: The amount of watching tabloid news on television (infotainment) is positively related to the belief in a mean and scary world, even if the general amount of television viewing is controlled

Study 1

Method

Participants. One-hundred and forty people volunteered to take part in the study, either after reading a newspaper advertisement or seeing a posted notice of the study at the Psychology Department of the University of Cologne, Germany. Those participants received a stamped envelope along with the survey. We received 128 properly filled-out questionnaires (91.4%). This sample consists of 73 females and 55 males with a mean age of 33 years ($SD = 12.71$). Each respondent earned € 20 for his or her participation.

Television use measures. People should indicate how many hours they watch television on an average workday and how many hours they watch television on an average day at the weekend. A blank was provided for their answers which were then transferred into a measure of weekly television use (Sparks & Ogles, 1990). To assess the participants' viewing of specific genres, 19 television-genres were listed, each with two typical examples of the German television fare. Genre viewing was rated on a five-point scale, indicating how often people watch programs that belong to each genre (*never, seldom, sometimes, often, very often*). This list includes four

fictional genres. These genres are *feature films, detective shows/crime drama, soap operas, and other TV-series and serials*. Viewing ratings for the four fictional genres were averaged. This composite measure of viewing fictional narratives was employed for hypothesis testing. The list further includes the genre of *infotainment news (Boulevardmagazine)*, which was used as a stand-alone measure. In order to provide evidence for the discriminant validity of our results, a measure of watching serious non-fiction was calculated. This variable is the average of viewing *evening news, news magazines, political talk, art documentary, and science documentary*. Please note that no hypotheses were formulated for the additional genres. They were included to contrast our critical genres more clearly from other programs.

Belief measures. The tendency to see the world in general as a just place was assessed using the German version of the *General Belief in a Just World Scale* (Dalbert et al., 1987). This assessment tool consists of six statements (e.g., “I feel that people get what they deserve”) with a six-point scale (extremes: *strongly agree, strongly disagree*). Previous studies report satisfactory scale statistics for the German version as well as its translations, including the English language translation (e.g., Furnham, 1995; items of the English version in Dalbert, 1999). In the present sample, its reliability as indicated by Cronbach’s $\alpha = .74$ was satisfactory. Included in the study was also the German version of the *Personal Belief in a Just World Scale* (Dalbert, 1999). The seven items (“I feel that I get what I deserve”) are presented with the same six-point scale. In this study, the reliability was very good (Cronbach’s $\alpha = .94$). Based on Rotter’s *Interpersonal Trust Scale* (Rotter, 1967), eleven items were created to measure interpersonal *trust* (or, as the items were recoded, *interpersonal distrust*). Five of these items originate from a pre-tested German language questionnaire (Amelang, Gold, & Külbel, 1984). The questions (item example: “Most people only care about themselves”) went with a four point scale (from *strongly disagree* to *strongly agree*). In our sample, Cronbach’s α was .87. *Scary World Beliefs* were measured with

ten items. The same four-point scale was provided. Items were adapted from a previous study on the cultivation of mean world views (Taschler-Polacek & Lukesch, 1990). Cronbach's α amounted to .77 (item example: "It is dangerous to walk alone in the dark"). Finally, we included a short instrument on *Fear-Related Behavior* introduced by Bilsky, Pfeiffer, and Wetzels (1992). Eight items (e.g., "I try to avoid using public transport during the evening") were to be rated on a five-point scale ranging from *never* to *always* (Cronbach's $\alpha = .75$).²

Procedure. The questionnaires were part of a larger survey on media socialization and media literacy that contained a section for determining age, sex, and school education. People filled out the survey at home. Pre-tests indicated that this took an average time of about two hours for the whole survey, including about 15 minutes for the media use items and the belief scales.

Results and Discussion

Interrelation of the belief measures. For all significance tests reported in this article, type-I-error probability was set to .05 (two-tailed, unless indicated otherwise). Our research included the question of whether or not the belief in a just world is connected with fear-related beliefs (Research Question 1). Zero-order correlations indicate that the belief in a just world is virtually independent from distrust ($r = -.06$), scary world views ($r = .01$), and from fear-related behavior ($r = .08$, all $ps > .37$). As expected, positive interrelations were revealed for the fear measures, i.e., for distrust / scary world ($r = .41$; $p < .001$), for distrust / fear behavior ($r = .21$; $p < .02$) and for scary world / fear behavior ($r = .49$; $p < .001$).

Use of fiction and the belief in a just world. Hypothesis 1 assumed that there is a positive covariation between the amount of fiction watched on television and the BJW. This key hypothesis of the present study was tested by means of a hierarchical regression analysis.

As indicated in table 1, none of the demographic control measures had an impact on the BJW. Also, the amount of weekly television use did not predict just world beliefs. Watching

fiction on television was integrated last in the regression. As postulated in the central hypothesis, the use of fiction is significantly related to the BJW. People who watch fictional stories on television, stories that portray a just world, tend to believe that the real world is a just place. But no such relationship was found when the personal belief in a just world is taken as a criterion variable and the fictional narrative measure is entered in the third step, $\Delta R^2 = .00$ for Step 3, $F_{change}(1, 105) < 1$, $p = .74$, $\beta = -.04$. Also, neither scary world views, distrust, nor fear-related behavior are predicted by the use of fiction (see details in table 2). These supplementary analyses bolster the assumption that the use of fiction is specifically related to the general belief in a just world, but not related to other beliefs, like for example the belief that the world treats you right (personal belief in a just world). In order to strengthen discriminant validity, viewing infotainment news and viewing serious non-fiction was integrated in the third step to show its influence as an alternative predictor. Both alternative regressions reveal no significant relationship between viewing this kind of programming and the BJW.

Media use and fear-related beliefs. Hypothesis 2 assumed that the classical cultivation relationship is found in the same sample, i.e., the amount of television consumption as positively related to mean world beliefs. Table 2 shows the results of regression analyses with the three fear-related measures employed as criterion variables. Of the demographic measures in the first step, most notably women (as opposed to men) have a stronger impression that they live in a scary world and they act accordingly. Consistent with our second prediction, weekly television use is connected with all three fear-related measures. People who often watch television see the world as a dangerous place, where distrust and safety behaviors are highly adaptive. This result is in line with a small number of studies which have taken place in Germany, and many more worldwide. They indicate that the amount of watching television is associated with fear-related beliefs – and that the effect size of this correlation is rather small.

Hypothesis 3 assumed that beyond the general cultivation effect of television use, watching tabloid news on TV is related to the fear measures. In line with this hypothesis, feelings of distrust, scary world beliefs, and fear-related behavior are predicted by the use of tabloid news when the general amount of watching television is controlled. Those who frequently expose themselves to exemplified information with crime as a dominant topic perceive the world as mean and scary. As reported above, watching fictional narratives does not predict any of the three mean world indicators. Likewise, serious non-fiction as an alternative does not predict the belief in a mean world.

In summary, Study 1 confirmed our hypotheses. Most importantly, we found the assumed relationship between watching fiction on television and the belief in a just world. The frequent viewing of narratives, containing a just world that often includes the triumph of good over evil, goes hand in hand with the feeling of living in a just world. For the same sample, however, we found that the general amount of watching television is related to a fearful world view. Over and above this effect, the exposure to infotainment programming (*Boulevardmagazine*) is related to a mean world view. In contrast to earlier ideas on this matter, which seemed to conceive a substantial negative correlation between just world beliefs and scary world beliefs, empirically those concepts are virtually unrelated. As posited, excessive media use on the one hand reinforces people's belief in a just world, and on the other perpetuates a mean and scary world view. Fictional narratives support the adaptive feeling of a foreseeable world, while infotainment (*Boulevardmagazine*) is associated with a mean world view. Results within the framework of cultivation research have often been criticized for not being consistent across studies. As study 1 is the first empirical investigation that relates the BJW systematically with media use, a replication of the findings seems warranted. In order to reinforce the results of Study 1, a replica study was conceived in a slightly different context.

Study 2

While the first study was located in the metropolitan area of Cologne, Germany, the second study took place in rural Austria. The media options in Austria and Germany have a certain overlap, i.e., German television channels and magazines are received or bought in Austria as well. However, there are three Austria-only television channels, and in the news sector, Austrians generally prefer their own, Austria-focused newscasts and newspapers (Melischek, Seethaler, & Skodacsek, 2005). As there are no Austrian infotainment news (*Boulevardmagazine*) broadcasted, hypothesis three cannot be tested. With this limitation, still, the slightly altered setting is a good background to investigate the robustness of the reported findings above.

Method

Participants. Three hundred and eighty-seven people were tested by students who served as research assistants for partial course credit. They recruited a mixed group of respondents based on a quota sample procedure. This quota aimed at an equal proportion of male and female participants, of higher and lower school education, and an equal proportion of younger and middle aged persons (18-34) to older persons (35+). The 194 females and 192 males that participated (plus one person with unidentified sex) had a mean age of 25.96 years ($SD = 13.00$), and 205 (53 %) had obtained a higher school education degree.

Media use measures. The media use measures were the same as in Study 1, with two exceptions. First, a few specifically Austrian television programs (e.g., the Austrian news or a famous Austria-only talk-show) served as examples, substituting their German counterparts. Second, the list of genres was extended by two genres which were irrelevant back in 2002 (when Study 1 was conducted), but were part of the media fare in 2006 (Study 2), namely *reality-based*

murder mysteries and *police documentaries* (similar to *Cops*). However, watching those programs was very rare, therefore an analysis of relationships with these genres was suspended.

Belief measures. The same *just world* and *fear* measures as in Study 1 were used. Reliability scores for the *just world scales* were satisfactory, with a Cronbach's α of .77 (*General Belief in a Just World*) and a Cronbach's α of .92 (*Personal Belief in a Just World*), respectively. The measurement of the fear components was reliable for *Interpersonal Distrust* (Cronbach's $\alpha = .83$), *Scary World Beliefs* (Cronbach's $\alpha = .74$) as well as for *Fear-Related Behavior* (Cronbach's $\alpha = .74$).³

Procedure. A booklet was prepared that contained (in the following order) the just world scales, the fear-related scales, the media use measures, and a brief demographic section. The participants filled out the survey individually or in small groups of two to five people. The research assistant was mostly present or within easy reach. The whole study took on average of no more than 15 minutes.

Results and Discussion

Interrelation of the belief measures. The relationships between just and mean world beliefs (Research Question 1) are expressed by zero-order correlations which indicate that the belief in a just world is independent from scary world views ($r = .01$), and from fear-related behavior ($r = .10$, all $ps > .05$). There is, however, a small but significant relationship with distrust ($r = -.17$, $p < .01$). We found positive correlations among the fear measures, i.e., for distrust / mean world ($r = .40$; $p < .001$), for distrust / fear behavior ($r = .15$; $p < .01$), and for mean world / fear behavior ($r = .35$; $p < .001$).

Use of fiction and the belief in a just world. Hypothesis 1 assumed that the amount of watching fiction on television predicts the BJW. Again, this key hypothesis of the present study was tested by means of a hierarchical regression analysis. Like in study 1, the demographic

measures and television use were entered first in the equation with the composite fiction measure entered in the final step of the regression analysis.

As shown in table 3, none of the demographic control measures had an impact on the BJW. Again, the amount of weekly television use did not predict just world beliefs. The analysis of the last step in the regression analysis reveals that the belief in a just world is significantly predicted by the use of fictional genres. These findings corroborate our assumptions and the results of study 1, i.e., watching fiction goes hand in hand with the general just world belief. Neither the personal belief in a just world, $\Delta R^2 = .00$ for Step 3 Fiction, $F_{change}(1, 370) = 1.3$, $p = .26$, $\beta = .06$, nor distrust, $\Delta R^2 = .00$ for Step 3 Fiction, $F_{change}(1, 371) = 1.3$, $p = .25$, $\beta = -.06$, scary world views, $\Delta R^2 = .00$ for Step 3 Fiction, $F_{change}(1, 371) < 1$, $p = .34$, $\beta = .05$ or fear-related behavior $\Delta R^2 = .00$ for Step 3 Fiction, $F_{change}(1, 371) < 1$, $p = .86$, $\beta = .01$ as alternative criteria are predicted by viewing fictional narratives. Again, neither viewing infotainment (*Boulevardmagazine*) nor serious non-fiction serves as a similarly powerful predictor. Both alternative regressions reveal no significant relationship between viewing those kinds of programming and the BJW.

Media use and fear-related beliefs. The second hypothesis assumed that the amount of television consumption is positively connected with fear-related beliefs. Table 4 shows the results of the regression analysis for the Austrian data. Consistent with our second prediction, weekly television use is related to distrust and scary world beliefs (albeit the latter having only a very small effect). No such association can be found for fear-related behavior as the criterion. As reported above, again, watching fictional narratives does not predict any of the three mean world indicators.

In summary, study 2 corroborates the key findings of study 1. Most importantly, the assumed relationship between watching fiction on television and the belief in a just world was

replicated, albeit with a smaller effect size. For the Austrian sample, the amount of watching television is related to distrust and (to a smaller extent) to scary world beliefs.

General Discussion

The aim of the present study was to investigate the relationship between media use and beliefs about the real world, most notably the belief in a just world. In line with expectations, two studies in Germany and Austria showed that those who watch a lot of fictional stories on television tend to perceive the world as a just place, a place where people get what they deserve. Supplementary analyses bolster the assumption that the use of fiction is specifically related to the general belief in a just world, but not related to other beliefs, like the belief that the world treats you justly (personal belief in a just world) or that you live in a mean and scary world. Likewise, neither infotainment (*Boulevardmagazine*) nor a composite measure of serious news / non-fiction predict the belief in a just world, thus emphasizing the discriminant validity of the fiction-just world beliefs-relationship. Distrust, scary world beliefs, and fear-related behavior correlate positively, and are virtually all independent of the just world motive. As many cultivation studies have shown before, the amount of television use predicts a mean world view. Over and above this effect, the use of infotainment on TV (*Boulevardmagazine*) is related to fear of crime (German sample only, as no Austrian programming of this kind exists).

With the belief in a just world as a new cultivation indicator, the studies provide an extension of cultivation research. Unlike previous assumptions (Gunter & Wober, 1983; Zillmann, 1980; Zillmann & Wakshlag, 1985), we hypothesized that the cultivation of just world beliefs is compatible with the well-known mean-world cultivation, which was confirmed by our research. In theorizing and testing different relationships for different programming, we are part of a line of research that focuses on content-specific cultivation (e.g., Hawkins & Pingree, 1982; Segrin & Nabi, 2002). In the US, Germany, Austria, and many other countries, audiences are

distributed to a greater number of channels than fifteen years ago (audience fragmentation). Audience members seem to polarize around different classes of content (Webster, 2005). As Webster further notes, this steady diet may lead to an increase in cultivation effects. Based on these developments, however, interindividual differences in viewing content seem to be more important than before in order to explain relationships between TV viewing and real-world beliefs.

Due to the fact that the cultivation process may vary for different cultural backgrounds, generalizability is especially important for the results presented here. Previous research in Germany and Austria indicates that cultivation processes in both countries tend to be similar to those reported for the US and other (but not all) countries (cf. Gerbner et al., 2002): Content analyses of German-language TV illustrate that crime is overrepresented (Groebel & Gleich, 1993; Lukesch, Bauer, Eisenhauer, & Schneider, 2004) as compared to police statistics. The few studies that previously examined the TV-mean world relationship in Germany or Austria confirmed the US cultivation findings (Barth, 1988; Taschler-Pollacek & Lukesch, 1990; for fear of victimization: Bilandzic, 2002). Furthermore, there is no indication that the tendency of fictional narratives to portray the world as predictable and just is special for TV programming in Germany and Austria. Thus, we suppose that our findings are not limited to the countries in which the studies took place.

The empirical results that were presented as well as its (potential) limitations implicate further areas which could be addressed by future studies. A first limitation of the present study is the size of the effects. Correlations hardly exceeded $r = .30$. In previous cultivation studies, the effect sizes were even smaller on average (Shanahan & Morgan, 1999). Most likely, small sized effects reflect the true nature of the relationship under consideration. However, media effects may

operate indirectly and are mediated by others (parents, peers). Those indirect effects have been beyond the scope of this article.

Second, the studies do not provide any results which shed light on the direction of the covariations. Do media indeed change people's beliefs or do people choose media accordingly? For us, the relationship between beliefs and the time spent with media of differing content is necessarily conceived as a reciprocal interaction (cf. Bandura, 1999; Pervin, 1968). Experimental and longitudinal studies have shown both ways of causal influence (e.g., Morgan, 1982; Moskalkenko & Heine, 2003; Shrum, 2001). In a similar vein, Gerbner and his colleagues do not see cultivation as a one-direction "push" by the media, but rather as an interactive gravitational process (Gerbner et al., 2002; Shanahan & Morgan, 1999). However, as our argumentation (in line with cultivation theory) has a stronger focus on the 'effects side' of the equation, it seems worthwhile to further test the impact of fictional narratives on the BJW by experimental means. This could also connect the present research more to the persuasion literature, which has identified the state of *transportation* as a mediating factor for fictional belief change (Gerrig, 1993, Green & Brock, 2000; 2002).

Fourth, the present studies are limited with regard to individual differences among the audience. Methodically, sex, age, and education were treated as potential confounds and we tried to control their impact. A complementary research strategy with individual differences in focus seems reasonable. Regarding age, children and adolescents (who we excluded from our sample quota) are among those who enjoy fictional stories most. In many cultures around the world, the youngest listen to fairy tales even before they are able to read or choose themselves what to listen to, to read, or to watch. Especially in fairy tales, we find all the ingredients that make a story full of suspense. *Cinderella* or *Snow White*, *Little Red Riding Hood*, *Hansel and Gretel*, and *Sleeping Beauty* by the Brothers Grimm include a prototypical struggle of moral counterparts and the

defeat of an evil figure, usually along with an ugly revenge (see also studies on Russian folk tales by Vladimir Propp, 1958/1928). For a long time, people have argued for and against telling such stories to children – mostly without putting their predictions to an empirical test. Our research implies that children's belief in a just world is encouraged by those fairy tales.

Fifth and last, from a normative standpoint the question arises of whether a “moral education” (Schmitt & Maes, 2006) through fictional narratives, leading to an increased belief in a just world, is a desirable process for youngsters and adults. It is far beyond the scope of our article to provide an answer to this question. On the one hand, the belief in a just world connects with authoritarianism and the disregard of the unfortunate (like poor people, sick people, etc.), stemming from an inappropriate illusion of justice. On the other hand, newer research has emphasized the adaptive qualities of just world beliefs, including positive relationships with life satisfaction and emotional resources (e.g., Dalbert, 2001). In both instances, the belief in a just world relates to significant (societal) phenomena. This underlines its status as an important and rather unexplored variable in cultivation theory, and communication research in general.

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Endnotes

¹ Serial narratives, like soap operas, are fictional narratives that by convention do not provide a resolution at the end of each episode. However, ‘cliffhangers’ are narrative intermissions with the story unfolding in the subsequent episode, i.e., the plot is continued the next day or week. In many serials (e.g., Latin American telenovelas), after 200 episodes or so, the story leads to a final ending where the main plotlines are resolved (Allen, 1995). We posit that even open serials (those that do not lead to an end) need to relate events to make them plausible (in terms of the genre’s extended standard of plausibility), thus portraying the world as more just than it is in real-life.

² Originally, Study 1 included three more mean world measures. Results for these scales are not reported as there were severe floor effects and related low reliability scores. The media literacy variables had no impact on the results presented. The scales reported here comprised the following items, *Distrust*: 1. Most people only care about themselves; 2. In these competitive times you have to watch out or someone will take advantage of you; 3. You can never be careful enough when you deal with other people; 4. You can advance in life by trusting other people first; 5. In most cases it’s true when they say that it is better to be safe than sorry; 6. Most people would take advantage of me if they had the chance to do so; 7. It is easier to deal with strangers when you are careful until they prove themselves to be trustworthy; 8. I trust new people; 9. It is safer to think that, contrary to what they say, people only think about their own wellbeing; 10. There are only a few people you can depend on; 11. The people at work usually only wait for you to mess up so they can get on themselves. Items 2, 7, 9, 10, 11, are adapted from Amelang et al., 1984, items 4 and 8 reverse-scored.

Scary World: 1. It is dangerous to walk alone in the dark; 2. Crime protection right now is a pressing political challenge; 3. Using public transportation endangers your personal safety; 4. It is prudential to always secure the doors to your house or your apartment as good as possible; 5. It is easy to become the victim of a crime when you are in a strange neighborhood; 6. Some parts of German cities are almost life-threatening; 7. Back alleys can be dangerous; 8. Cities in Germany are safe during daytime; 9. There are plenty of issues that are more important in our society than crime and “homeland security”; 10. Big crowds often invite theft (in Study 2 items 6 and 8 “European” instead of “German”, items 8 and 9 reverse-scored).

Fear-Related Behavior (items as translated by Bilsky et al., 1993, reprinted with permission): 1. I only leave the house after nightfall when it is absolutely necessary; 2. I avoid certain streets, squares or parks; 3. I try to avoid contact with strangers whom I meet after nightfall where possible; 4. I try to avoid using public transport during the evening; 5. I refrain from carrying a lot of money on me; 6. I carry something on me with which I can defend myself; 7. I ask my neighbors to make sure everything is alright in my home when I am away; 8. I take care to ensure that my home is never unoccupied, or never appears to be unoccupied, when I am away.

³ Originally, Study 2 included two scales aimed at measuring two facets of critical *media literacy*. Moderated regression analyses indicate that these literacy aspects have no impact on the results presented.

Table 1

Summary of Hierarchical Regression Analysis with Use of Fiction as the Predictor of the Just World Belief plus Infotainment and News/Non-Fiction Use as Alternative Predictors (German Sample)

Predictor	B	SE B	β
<i>Step one</i>			
Age	.00	.01	.06
Sex	-.30	.16	-.19
C1 (education)	.16	.14	.11
C2 (education)	-.06	.11	-.05
C3 (education)	-.01	.05	-.02
C4 (education)	-.07	.08	-.08
C5 (education)	-.02	.10	-.02
<i>Step two</i>			
Weekly television	.00	.01	-.05
<i>Step three^a</i>			
Fiction	.24	.12	.22*
<i>Step three - alternatives</i>			
Infotainment	-.03	.08	-.04
News / Non-Fiction	.06	.10	.07

Note. C1 to C5: Contrast codes for education.

^a Belief in a just world as criterion. $R^2 = .07$ for Step 1, $F(7, 114) = 1.2$, $p =$

.32; $\Delta R^2 = .00$ for Step 2, $F_{change}(1, 113) < 1$, $p = .66$; $\Delta R^2 = .03$ for step 3

Fiction, $F_{change}(1, 112) = 4.8$, $p = .03$; $\Delta R^2 = .00$ for alternative step 3

Infotainment $F_{change}(1, 112) < 1$, $p = .82$; $\Delta R^2 = .00$ for alternative step 3 News

/ Non-Fiction, $F_{change}(1, 112) < 1$, $p = .47$. * $p < .05$

Table 2

Summary of Hierarchical Regression Analysis with Weekly Television Use and Infotainment TV-Use as Predictors plus Fiction and News/Non-Fiction Use as Alternative Predictors (German sample)

Predictor	Criterion								
	Distrust			Scary world			Fear-related behavior		
	B	SE B	β	B	SE B	β	B	SE B	β
<i>Step one</i>									
Age	-.02	.00	-.04	-.00	.00	-.04	.01	.05	.23*
Sex	-.02	.10	-.02	-.35	.08	-.39***	-.64	.13	-.42***
C1 (education)	.05	.09	.05	-.00	.07	-.01	-.16	.11	-.12
C2 (education)	.06	.07	.08	.15	.06	.22*	.19	.09	.16*
C3 (education)	.07	.03	.19*	.03	.03	.10	.10	.04	.21*
C4 (education)	.10	.05	.17	.12	.04	.26**	.03	.07	.03
C5 (education)	-.12	.07	-.19	-.01	.05	-.01	-.09	.08	-.10
<i>Step two</i>									
Weekly television	.01	.01	.19*	.01	.04	.21*	.02	.01	.20*
<i>Step three^a</i>									
Infotainment	.11	.05	.21*	.13	.04	.30**	.14	.06	.19*
<i>Step three - alternatives</i>									
Fiction	.03	.08	.04	.02	.06	.04	.02	.10	.02
News/Non-Fiction	-.01	.07	-.01	.01	.05	.02	-.08	.08	-.09

Note. C1 to C5: Contrast codes for education.

^a Distrust as criterion: $R^2 = .14$ for Step 1, $F(7, 115) = 2.7, p = .01$; $\Delta R^2 = .03$ for Step 2, $F_{change}(1, 114) = 3.7, p = .03$, one-sided test; $\Delta R^2 = .03$ for Step 3, $F_{change}(1, 113) = 4.5, p = .02$, one-sided test; $\Delta R^2 = .00$ for alternative step 3 Fiction, $F_{change}(1, 113) < 1, p = .70$; $\Delta R^2 = .00$ for alternative step 3 News/Non-Fiction, $F_{change}(1, 113) < 1, p = .91$.

Scary world beliefs as criterion: $R^2 = .22$ for Step 1, $F(7, 115) = 2.7, p < .001$; $\Delta R^2 = .03$ for Step 2, $F_{change}(1, 114) = 5.1, p = .01$, one-sided test; $\Delta R^2 = .06$ for Step 3 $F_{change}(1, 113) = 10.6, p < .001$, one-sided test; $\Delta R^2 = .00$ for alternative step 3 Fiction, $F_{change}(1, 113) < 1, p = .73$; $\Delta R^2 = .00$ for alternative step 3 News/Non-Fiction, $F_{change}(1, 113) < 1, p = .88$.

Fear-related behavior as criterion: $R^2 = .32$ for Step 1, $F(7, 115) = 7.7, p < .001$; $\Delta R^2 = .03$ for Step 2, $F_{change}(1, 114) = 5.1, p = .01$, one-sided test; $\Delta R^2 = .03$ for Step 3, $F_{change}(1, 114) = 4.5, p = .02$, one-sided test; $\Delta R^2 = .00$ for alternative step 3 Fiction, $F_{change}(1, 113) < 1, p = .85$; $\Delta R^2 = .00$ for alternative step 3 News/Non-Fiction, $F_{change}(1, 113) < 1, p = .35$.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3

Summary of Hierarchical Regression Analysis with Use of Fiction as the Predictor of the Just World Belief plus Infotainment and News/Non-Fiction Use as Alternative Predictors (Austrian Sample)

Predictor	B	SE B	β
<i>Step one</i>			
Age	.00	.00	.04
Sex	-.13	.09	-.07
C1 (education)	.04	.03	.09
C2 (education)	.03	.04	.04
C3 (education)	-.06	.08	-.04
<i>Step two</i>			
Weekly television	.00	.01	-.01
<i>Step three^a</i>			
Fiction	.11	.06	.10*
<i>Step three - alternatives</i>			
Infotainment	.02	.04	.03
News/Non-Fiction	-.03	.06	-.03

Note. C1 to C3: Contrast codes for education.

^a Belief in a just world as criterion. $R^2 = .02$ for Step 1, $F(5, 373) = 1.5$, $p = .18$; $\Delta R^2 = .00$ for Step 2, $F_{change}(1, 372) < 1$, $p = .85$; $\Delta R^2 = .01$ for step 3 Fiction, $F_{change}(1, 372) = 3.8$, $p = .03$, one-sided test; $\Delta R^2 = .00$ for alternative step 3 Infotainment $F_{change}(1, 369) < 1$, $p = .84$; $\Delta R^2 = .00$ for alternative step 3 News/Non-Fiction, $F_{change}(1, 371) < 1$, $p = .64$.

* $p < .05$

Table 4

Summary of Hierarchical Regression Analysis with Weekly Television Use as Predictor (Austrian sample)

Predictor	Criterion								
	Distrust			Scary world			Fear-related behavior		
	B	SE B	β	B	SE B	β	B	SE B	β
<i>Step one</i>									
Age	.00	.00	.09	.00	.00	.05	.02	.00	.26***
Sex	.01	.05	.02	-.19	.04	-.22***	-.58	.07	-.38***
C1 (education)	.03	.01	.13*	.05	.01	.21***	.02	.02	.05
C2 (education)	.02	.02	.05	.01	.02	.03	.07	.03	.11*
C3 (education)	.10	.04	.15*	.04	.04	.05	-.01	.06	-.01
<i>Step two</i>									
Weekly television ^a	.01	.00	.19***	.01	.00	.11*	.00	.00	.03

Note. C1 to C3: Contrast codes for education.

^a Distrust as criterion: $R^2 = .04$ for Step 1, $F(5, 374) = 3.2$, $p = .01$; $\Delta R^2 = .04$ for Step 2, $F_{change}(1, 373) = 14.7$, $p < .001$.

Scary world as criterion: $R^2 = .10$ for Step 1, $F(5, 374) = 7.9$, $p < .001$; $\Delta R^2 = .01$ for Step 2, $F_{change}(1, 373) = 4.6$, $p = .02$, one-sided test.

Fear-related behavior as criterion: $R^2 = .22$ for Step 1, $F(5, 374) = 20.9$, $p < .001$; $\Delta R^2 = .00$ for Step 2, $F_{change}(1, 373) < 1$, $p = .56$.

* $p < .05$. ** $p < .01$. *** $p < .001$.