

## Blurred world view: A study on the relationship between television viewing and the perception of the justice system

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### ABSTRACT

Previous studies suggest that distorted representations of reality on television can lead to distorted perceptions of reality among viewers. In this study, 322 individuals in Austria reported their weekly television consumption and whether they believe that there is active practice of capital punishment in Austria, which has been abolished since 1968. The more television participants watched, the more likely they mistakenly believed that there is, or recently was, capital punishment in Austria, even when controlling for participants' age and education. It seems that television has the potential to influence viewers' perception and knowledge of core aspects of society.

According to a survey of the Organisation for Economic Co-operation and Development (OECD) nations (OECD, 2009), watching television is the number one leisure activity in most Western societies. People spend more time watching television than doing any other activity. As a result, television is the source of the most broadly shared images and messages in history (Gerbner, Gross, Morgan, & Signorielli, 1986). Television programs play an important social role as they not only depict modern societal norms, but also help to define them (Sargent et al., 2004). Over time, exposure to television programs can subtly influence peoples' perception of reality (Gerbner, Gross, Morgan, & Signorielli, 1980). According to cultivation theory (Gerbner et al., 1980, 1986), our expectations and judgments about the world can be influenced by the conventions of television programs, with the stereotyped plots and characters of television coming to be viewed as representative of the real world. Television provides a constant flow of stories that show what things are, how they work, and what to do about them, making it a common socializer for our times (Gerbner et al., 1980, 1986). As a result, it is easy for fiction to be misconstrued as fact, with people easily forgetting where they originally learned something (i.e., due to source confusion; Mares, 1996). People frequently use information gathered from exposure to fiction on television to make judgments or assumptions about the real world (O'Guinn & Shrum, 1997; Shrum & O'Guinn, 1993). As a

result, our assumptions about the real world have been cultivated over decades by the images displayed in fictional television programs. Heuristic reception and processing of messages has been identified as the cognitive mechanism underlying cultivation effects (Morgan & Shanahan, 2010). The information provided in television messages are remembered by television viewers and enable an easy accessible mental shortcut to rely on when constructing judgments about the world (Morgan & Shanahan, 2010; Shrum, 1996).

It should go without saying that television does not provide an accurate and realistic portrayal of our world. Many aspects of society are often exaggerated or incorrect in television. For example, the world presented on television contains more police officers (DeFleur, 1964; Gerbner et al., 1986; Potter, 2014), criminals (Head, 1954; Hetsroni & Tukachinsky, 2006), lawyers (DeFleur, 1964; Gerbner et al., 1986; Potter, 2014), and doctors than in reality (DeFleur, 1964; Potter, 2014). The world of television also contains more danger and crime (Gerbner, Gross, Jackson-Beek, Jeffries-Fox, & Signorielli, 1978; Eschholz, Mallard, & Flynn, 2004; Potter, 2008) along with greater affluence than the real world (O'Guinn & Shrum, 1997). In particular, the portrayal of death, including murder and suicide, is a common theme on television, but it is often unrealistic and does not reflect the actual incidence of these acts (Corr, Nabe, & Corr, 2009; Niemiec & Schulenberg, 2011; Schultz & Huet, 2000; Stack & Bowman, 2012).

For example, villains are far more likely to die than heroes or heroines, violent deaths are more frequent than natural deaths, and portrayals of suffering and grief are mostly absent (Corr et al., 2009).

Television viewers come to perceive the real world in ways that reflect the most common and recurrent messages of the mediated reality presented on television (Morgan, Shanahan, & Signorielli, 2009). This leads to the emergence of common misconceptions and public myths (Niemiec & Schulenberg, 2011), demonstrating that the borders of the television world and the real world can easily become blurred (O'Guinn & Shrum, 1997; Shrum & O'Guinn, 1993). With this blurred boundary, a distorted perception of reality can emerge among viewers, one that mirrors the distorted representation of reality on television. In turn, this distortion of reality can affect judgments about the world (e.g., overestimation of certain occupations in the population), including attitudes and beliefs about society (e.g., fear of crime) (Morgan & Shanahan, 2010). For example, several studies have shown that fictional television programs on capital punishment can increase either support or rejection of the death penalty, depending on how capital punishment and the criminal justice system are portrayed in the story (Mutz & Nir, 2010; Slater, Rouner, & Long, 2006; Till & Vitouch, 2012). Stories highlighting the potential for errors in the justice system and focusing on the conviction of innocent people tend to increase rejection of the death penalty among viewers, whereas stories emphasizing the anguish caused by criminals foster a higher approval for capital punishment. Furthermore, frequent portrayals of violent death on television are associated with short-term and long-term increases in real-world aggression and violence (Corr et al., 2009; Huesmann & Taylor, 2006). There is also evidence that portrayals of suicide in films have the potential to increase suicidal ideation (Till, Strauss, Sonneck, & Niederkrotenthaler, 2015) and trigger imitational suicides (Gould & Shaffer, 1986).

Distorted probability judgments about the world are generally referred to as *first-order effects* and formed by a heuristic recall of memorized information, whereas the impact on perceptions and attitudes, often labeled as *second-order effects*, is considered to involve the processing of new information to update current judgments or construct new ones (Shrum & Lee, 2012). In both these cases, judgments about real-world events are biased. The likelihood of being the victim of a violent crime, for example, is viewed as more probable (a first-order effect) resulting in more fear about walking the streets at night (a second

order effect). What is not yet known, however, is whether media can cultivate beliefs that not only shift the probability of actual events, but create beliefs that are entirely false: that something exists or is true when this is not the case in reality. Such an effect might be more likely to be observed when media is consumed from other countries, where confusion can occur about what is true in other nations (as communicated by their media) and what is true in one's own country.

Europe is the most important foreign market for American films and television programs (Elsaesser, 2005), and German-speaking television, including Austrian television, is known to contain a high volume of American television programs (Bouchehri, 2010). Because Austrian television contains a great deal of American television programs, Austrian television viewers are exposed to a reality that may more accurately reflect certain aspects of American society but does not apply at all to the Austrian reality. Information gathered from these American television programs may become a substitute for vague information about Austria or may confuse Austrian viewers as to which information applies to Austria and which to America. Based on the fact that television contains a high volume of crime thrillers and detective series (Gerbner et al., 1978, 1980, 1986), it seems safe to assume that television-induced misconceptions should be most pronounced with respect to how the justice system is perceived. Previous research has shown that frequent television viewing increases the viewers' perception of the world as a dangerous and scary place (Gerbner et al., 1986), inducing unrealistic expectations of the police (Perlmutter, 2000) and accentuating stereotypes regarding gender (Gerbner et al., 1980; Morgan, 1982) and race (Greenberg & Brand, 1994). People use television, including fictional programs, as a source of information about events that are not witnessed or experienced directly (Surette, 2007). However, separate from the question of whether estimates and attitudes toward real events in one's own society can be shifted or biased by media, the question remains as to whether television can influence people's basic knowledge about what could be considered foundational aspects of the justice system and society in their own nation.

Austrians frequently exposed to television, and subsequently to American crime shows, may perceive the Austrian justice system to be similar to the American justice system that is frequently portrayed on television. One clear distinction between the two systems is the use of the death penalty. In Austria, the death penalty was abolished in 1950 for civil law and in

1968 for military justice (Leder, 1986). It is also banned from the European Union based on the Charter of Fundamental Rights (European Parliament, 2000). As a result, being free of the death penalty is a rather foundational component of society for most European nations. In contrast, the United States remains the only Western industrialized nation to continue to routinely sentence capital offenders to death, making it a rather striking and unusual minority in the world (Bohm, Clark, & Aveni, 1991). If individuals were to make assumptions about the Austrian justice system based on the societal norms portrayed in American television programs, they would incorrectly perceive Austria as currently possessing some form of the death penalty.

The present study aimed to investigate whether an association exists between television-viewing and accuracy in perception of the Austrian justice system, with respect to the death penalty. We decided to focus on the perception of the death penalty based on the observation that capital punishment is frequently portrayed in fictional movies, books, and television series (Giles, 1995; Till & Vitouch, 2012) and represents a very distinct discrepancy between Austrian and American society (and indeed, between most of Europe and America). We hypothesized that the more television that Austrians watch, the more likely they are to inaccurately assume that capital punishment exists within Austria.

## Method

### Participants

A total of 332 participants (180 females and 152 males) currently living in Austria with mean age of 34.82 years ( $SD = 15.12$ ) were recruited by undergraduate students enrolled in a psychology course at the University of Vienna, using a snowball sampling method. In terms of highest completed school level, 7.5% ( $n = 25$ ) of the participants had compulsory education, 11.1% ( $n = 37$ ) completed apprenticeship training, 11.4% ( $n = 38$ ) completed intermediate technical and vocational school, 48.5% ( $n = 161$ ) were secondary/high school graduates, and 21.4% ( $n = 71$ ) completed college or university. As a result of our sampling methodology, individuals with college and high school education were over-represented in our sample (Austrian population: 23.2% compulsory education, 27.7% apprenticeship, 18.1% intermediate technical and vocational school, 15.0% high school, and 16.0% college; Statistik Austria, 2011). As such, our sample was more educated than the general population.

## Measures

### Television consumption

To assess the amount of television that participants watched, we asked them to report the average number of hours of television they watch per week using an open-ended question.

### Perception of justice system

To determine participants' perception of the justice system, we measured perceptions of the practice of capital punishment in Austria. The measure consisted of five questions and concerned participants' beliefs and knowledge of capital punishment in Austria. These questions were adopted from a previous study on how television viewing predicts perceptions of capital punishment (Truong, 2011). They were as follows: (a) How many inmates in Austria do you think are currently sitting on death row (i.e., the number of inmates awaiting execution)?; (b) How many inmates in Austria do you think were executed by lethal injection over the past 5 years (2009 to 2013)?; (c) How many inmates in Austria do you think were executed by lethal injection over the past 25 years (1989 to 2013)?; (d) How many inmates in Austria do you think were executed by electric chair over the past 5 years (2009 to 2013)?; and (e) How many inmates in Austria do you think were executed by electric chair over the past 25 years (1989 to 2013)? For each question, participants were asked to provide a single number constituting their estimate. Since the death penalty was abolished in Austria in 1968 (Leder, 1986), the correct answer for all five questions is 0. For each question, answers indicating the number 0 were classified as correct, all answers other than 0 were classified as incorrect. We also calculated a total score indicating whether a respondent answered all five questions correctly or gave an incorrect answer to any of the five questions. The total score was coded 0, if all five questions were answered correctly, and 1, if any of the questions were answered incorrectly.

### Data analysis

We conducted six binary logistic regression analyses (one for each individual question and one for the total score indicating whether all five questions were answered correctly or not) using the entry method to estimate associations between television viewing habits and perception of the justice system. Answers to the five individual questions on capital punishment, along with the total score, were used as dependent variables. Hours of television viewing per week served as the

predictor. All regression analyses controlled for participant age and education, using standardized scores.

## Results

The average duration of weekly television consumption was 5.11 hours ( $SD = 3.52$ ). Approximately one in 10 people answered any one of the five capital punishment questions incorrectly. See Table 1 for an overview of the answers provided for each of the capital punishment questions along with the descriptives for television viewing.

Our binary logistic regression analyses revealed that television viewing predicted answers to all five questions on capital punishment along with the total score. Table 2 provides a matrix of raw bivariate correlations between all variables included in the binary logistic regression. The more hours of television participants reported viewing per week, the higher the probability of an incorrect answer overestimating one or more of the following: that there are inmates awaiting execution in Austria, that inmates were executed by lethal injection in Austria in the last 5 years or 25 years, and that inmates were executed by electric chair in Austria in the last 5 years or 25 years. This demonstrates that the association generalized across the various operationalizations of our dependent variable. Moreover, these associations were found to be robust, independent of individual differences in age and education, which were controlled for in the regression analyses. Age and education were not consistent unique predictors of responses on the capital punishment items, although for two out of the five questions

**Table 1.** Descriptive statistics of perception of justice system and television consumption among study participants ( $n = 332$ ).

Question	Answer	<i>n</i>	%	TV viewing	
				<i>M</i>	<i>SD</i>
Anyone on death row	Correct	308	93.3	4.89	3.28
	Incorrect	22	6.7	7.86	5.02
Lethal injection past 5 yr	Correct	311	94.2	4.92	3.27
	Incorrect	19	5.8	7.83	5.50
Lethal injection past 25 yr	Correct	294	89.1	4.88	3.27
	Incorrect	36	10.9	7.09	4.82
Electric chair past 5 yr	Correct	322	97.3	5.04	3.42
	Incorrect	9	2.7	8.13	5.96
Electric chair past 25 yr	Correct	309	93.4	4.99	3.34
	Incorrect	22	6.6	6.95	5.33
All five questions combined <sup>1</sup>	Correct	291	88.4	4.85	3.23
	Incorrect	38	11.6	6.95	4.72

Note. Values are absolute (*n*) and relative (%) frequencies of participants answering the five questions on the justice system correctly or incorrectly as well as their means (*M*) and standard deviations (*SD*) in terms of weekly television consumption.

<sup>1</sup>This parameter was coded as correct, if all five questions on the death penalty were answered correctly, and as incorrect, if any of the five questions were answered incorrectly.

**Table 2.** Correlation matrix: Pearson correlations between perception of the justice system, television consumption, age, and education ( $n = 332$ ).

Variable	1	2	3	4	5	6	7	8	9
1. Television consumption (X)	1.00								
2. Age (Y1)	.05 (-.06, .17)	1.00							
3. Education (Y2)	-.20*** (-.30, -.10)	-.01 (-.12, .10)	1.00						
4. Anyone on death row (Z1)	.21*** (.06, .35)	-.01 (-.15, .14)	-.08 (-.21, .03)	1.00					
5. Lethal injection past 5 yr (Z2)	.19** (.03, .35)	-.03 (-.17, .12)	-.09 (-.22, .03)	.87*** (.73, .97)	1.00				
6. Lethal injection past 25 yr (Z3)	.20*** (.07, .33)	-.15** (-.26, -.03)	-.09 (-.21, .01)	.68*** (.52, .80)	.70*** (.56, .81)	1.00			
7. Electric chair past 5 yr (Z4)	.14* (-.04, .32)	.07 (-.10, .26)	-.02 (-.11, .06)	.60*** (.41, .79)	.66*** (.46, .83)	.46*** (.30, .59)	1.00		
8. Electric chair past 25 yr (Z5)	.14* (-.01, .29)	-.14* (-.24, -.02)	-.11* (-.25, .00)	.49*** (.28, .69)	.54*** (.32, .73)	.76*** (.64, .86)	.52*** (.30, .72)	1.00	
9. All five questions combined (Z6)	.19** (.06, .32)	-.12* (-.24, .00)	-.09 (-.21, .01)	.73*** (.62, .84)	.68*** (.54, .79)	.97*** (.92, 1.00)	.44*** (.29, .58)	.73*** (.62, .84)	1.00

Note. Values are Pearson correlation coefficients for all continuous variables and point biserial correlations for all binomial variables (i.e., correct/incorrect responses on capital punishment items) with bootstrapped confidence intervals given in parentheses.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$  (two-tailed).

**Table 3.** Results of binary logistic regression analyses to predict perception of justice system among study participants ( $n = 332$ ).

Questions		TV viewing	Age	Education
Anyone on death row $\chi^2(3, 332) = 12.48, p < .01$ Nagelkerkes $R^2 = .10$	$\beta$	0.63**	-0.04	-0.20
	SE	0.19	0.22	0.22
	CI	1.297 to 2.724	0.625 to 1.484	0.536 to 1.254
Lethal injection past 5 year $\chi^2(3, 332) = 11.09, p < .05$ , Nagelkerkes $R^2 = .10$	$\beta$	0.60**	-0.13	-0.25
	SE	0.20	0.25	0.23
	CI	1.237 to 2.695	0.540 to 1.419	0.496 to 1.215
Lethal injection past 25 year $\chi^2(3, 332) = 20.33, p < .001$ , Nagelkerkes $R^2 = .12$	$\beta$	0.50**	-0.61**	-0.18
	SE	0.16	0.23	0.18
	CI	1.208 to 2.247	0.345 to 0.585	0.590 to 1.173
Electric chair past 5 year $\chi^2(3, 332) = 6.06, p = .11$ , Nagelkerkes $R^2 = .09$	$\beta$	0.64*	0.36	0.03
	SE	0.28	0.30	0.37
	CI	1.102 to 3.234	0.800 to 2.591	0.498 to 2.125
Electric chair past 25 year $\chi^2(3, 332) = 15.15, p < .01$ , Nagelkerkes $R^2 = .12$	$\beta$	0.41*	-0.74*	-0.34
	SE	0.19	0.32	0.21
	CI	1.039 to 2.170	0.256 to 0.890	0.475 to 1.074
Any error among these five questions $\chi^2(3, 332) = 17.07, p < .01$ , Nagelkerkes $R^2 = .10$	$\beta$	0.48**	-0.45*	-0.19
	SE	0.16	0.21	0.17
	CI	1.192 to 2.208	0.423 to 0.958	0.596 to 1.159

Note. Values are standardized regression coefficients ( $\beta$ ), standard errors (SE), and confidence intervals (CI) estimated with SPSS.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$  (two-tailed).

(and the total score) older individuals were less likely to make an error on these items. For additional details regarding these binary logistic regression analyses, please see Table 3.

## Discussion

In our study, the greater the amount of weekly television Austrians viewed on average predicted a greater likelihood of possessing mistaken opinions on whether capital punishments exists (or recently existed) within the Austrian judicial system. This held true even when age and education were statistically controlled. In other words, television consumption predicted greater perceived similarity (or confusion) between the justice system in America and in Austria. The findings of the present study are consistent with evidence from a previous study in Canada demonstrating that Canadians who held misconceptions regarding the practice of capital punishment in Canada watched more television than those who did not (Truong, 2011). However, the effect found in this previous study (Truong, 2011) became statistically nonsignificant once sociodemographic variables were taken into account. The findings of the present study are also in line with cultivation theory (Gerbner et al., 1980, 1986; Morgan & Shanahan, 2010), which suggests that people's beliefs and assumptions about the world are cultivated over time by the images portrayed on television. Heavy television viewing seems to create a heuristic bias that affects real-world frequency estimates of things often portrayed on television (Shrum & O'Guinn, 1993). The present study shows that not only can estimates of real-world events be biased, but the presence or absence of core societal norms and governmental

bodies are more likely to be mistaken by those who watch more television.

It is important for us to point out that relatively few people expressed any confusion about capital punishment within Austria. About 11.6% of the sample made any errors when answering our five questions, and the reported television viewing habits accounted for about 10% of the variance in these scores. To put this effect into context, however, the average effect size for most psychology research is equivalent to an  $r$  of .25 (Hemphill, 2003; Meyer et al., 2001; Richard, Bond, & Stokes-Zoota, 2003), which is equivalent to accounting for 6% of the variance in a variable. Moreover, our sample was more educated than the general population in Austria, which means that our study may serve to underestimate effects within the general population as education is likely to decrease the likelihood of these errors. In our data, education is negatively correlated with television-viewing, and negatively correlated with errors on the capital punishment items (although statistically nonsignificantly; Table 2). The number of individuals in our study with misconceptions about the Austrian justice system may appear small, but this effect is actually as large as or larger than most effects observed within psychology. Moreover, when interpreting the meaningfulness of any effect it is important to consider the context and outcome: mistaking something so fundamental as whether one's society approves of the death penalty would seem to us to be surprising and important to study. It is also interesting to note that cultivation effects are, for the most part, generally small (Morgan & Shanahan, 1996; Shrum & Lee, 2012).

The results of the present study have important implications for public opinion research. Our findings show that television has the potential to shape not only

our societal norms, but also our basic knowledge and assumptions about our society. The more television the people in our sample watched, the more their reality coincided with the world on television, which primarily reflects American society. Because American television focuses quite a bit on law and order there is frequent representation of the American judicial system on Austrian television, which does not reflect the justice system of Austrian society. This frequent exposure may have shaped individuals' perception of the justice system. A possible explanation for this finding is that television exposure made our participants come to believe that capital punishment is implemented in Austria, even though it was abolished long ago (Leder, 1986) and is not practiced in any European country (European Parliament, 2000). The possibility that television has the potential to influence basic knowledge of society is alarming. However, because the cross-sectional and correlational design of this study, inferences regarding causality are not possible. Some unmeasured third variable may be responsible for the association that we have observed. For example, individuals with lower educational status may be less knowledgeable about the justice system and also more likely to frequently watch television. Although we have controlled for education in our analyses, this possible role of intelligence cannot be completely ruled out. Longitudinal experiments are necessary to evaluate the causal influence of television consumption on viewers' beliefs and knowledge. Future research may also want to measure different types of American legal crime television programs (e.g., reality crime shows) and its influence on the perception of the justice system. Previous research found cultivation effects for specific genres of television programs, such as reality dating shows (Ferris, Smith, Greenberg, & Smith, 2007) or "makeover" programs (Kubic & Chory, 2007; Nabi, 2009). So it seems plausible that television crime shows or other genres (e.g., romantic comedies) may also influence other justice perceptions such as the belief in a just world.

The present study has some further limitations. First, the study participants were not representative of the total population, with an overrepresentation of individuals who had finished secondary or higher education. As a result, these findings may not generalize to the general population or populations less educated than our sample. Moreover, with an average of 5.11 hr of weekly television viewing time, television consumption was higher in our sample than in the general Austrian population, who are estimated to watch 2 hr of television per week (Statistik Austria, 2013). In contrast, the average television viewing time in many other countries is considerably higher (de Mooij, 2014; Vereecken, Todd,

Roberts, Mulvihill, & Maes, 2005). The average American, for example, watches 5 hr of television per day (Nielsen, 2014). Cultural-bound habits in terms of media use and intercultural differences in television landscape may be reasons for these considerable differences in television viewing time (de Mooij, 2014). A further limitation is that a great share of the participants in our sample was too young to have experienced the change of laws on the death penalty in Austria in 1950 and 1968. Thus, older individuals may be more aware of the abolishment of the death penalty in Austria and may be less influenced by portrayals of the American justice system on television. Furthermore, we did not control for how long an individual was already living in Austria. The reports of recent immigrants, who may be less familiar with the justice system in Austria, may have influenced the results. However, there is currently no reason to believe that immigrants in Austria watch more television than native Austrians, although this may be true. Moreover, most immigrants in Austria come from countries that have also abolished capital punishment (e.g., Germany, Serbia, Turkey, etc.; see Bundeskanzleramt Österreich, 2014; European Parliament, 2000).

## Conclusions

It seems that societal values and norms communicated by television may not only shift estimates regarding real-world events and facts, but actually influence people's basic assumptions and knowledge about their society. Previous studies have demonstrated that television consumption is related to inaccurate assumptions about reality in terms of overestimating the number of people working in certain professions, the number of crimes in a society (Gerbner et al., 1980, 1986) or, more recently, the prevalence of substance abuse among youth (Minnebo & Eggermont, 2007) or the danger of having mental health services located in the neighborhood (Diefenbach & West, 2007). However, the fact that television appears to also have the potential to influence viewers' perception and knowledge of broad and basic norms of society, such as the legal system, is particularly interesting and new, not to mention potentially alarming. Individuals who consume large amounts of television may be unable to differentiate between the world portrayed onscreen and their societal reality, resulting in a blurred world view.

So far, cultivation was not considered to involve learning new beliefs and outlooks provided by television (Hawkins, Pingree, & Adler, 1987) or the actual change of attitudes (Shrum, 1995), but to primarily strengthen

already existing beliefs by their continuous recurrence on television (Morgan & Shanahan, 2010; Shrum, 1995). However, cultivation effects in terms of inaccurate beliefs about the fundamentals of the legal system of the society people live in, such as active practice of the death penalty, do not reflect mere strengthening of already existing beliefs, but a change of basic knowledge and an inability to differentiate fact from fiction. Our results suggest that television has the potential to create public myths and urban legends. It is safe to assume that the majority of people are not familiar with statistics on crime or certain professions. Thus television-induced overestimations of probabilities (such as the number of crimes or individuals working as police detectives in the society) are not too surprising. However, influencing beliefs on topics that are considered to be common knowledge among most people has so far not been reported in research related to cultivation theory. The present study highlights the role of television in the creation and development of public myths and misconceptions, demonstrating new aspects of cultivation effects. The findings of our study concur with previous investigations suggesting that individual perceptions of the social environment are often based on information from indirect experiences, including fictional stories portrayed on television, rather than reasoned, critically evaluated, or even elaborated thoughts (e.g., O'Guinn & Shrum, 1997).

Considering our findings, more education on mass media effects to improve media literacy in the general population seems necessary. Media literacy and education using actual statistics may help to prevent the emergence of public myths by highlighting that television is not a reliable source of information and that a more distanced and reflective approach toward television is advisable. The inaccurate portrayal of death in the media and the impact these representations have on audiences may also be addressed in death education programs (Corr et al., 2009). Viewers should be educated about the harmful effects of television and how these can be controlled and prevented (Potter, 2008). For example, media literacy could be integrated in school curricula.

The media could also be used to educate the public on the realities of the justice system and other topics related to life and death. So long as these topics are portrayed accurately and realistically, the media itself might be used to correct common misconceptions. Many researchers have pointed out that films can be used for educational purposes, such as informing people about social issues (Russell & Kenna, 2014) or reducing death anxiety (Niemic & Schulenberg, 2011). However, the predominantly inaccurate portrayals of death and

other societal topics found in most fictional media limit their usefulness for death education (Corr et al., 2009; Niemic & Schulenberg, 2011; Schultz & Huet, 2000). Media literacy and more awareness of the impact of unrealistic media portrayals on audiences in death education programs may help to correct the distorted images on television.

The findings of the present study also add to the ongoing public debate on the lack of domestic television being produced in Austria (Austria Presse Agentur, 2009). Austrian program directors have been criticized for importing a great number of American television shows instead of investing in domestic programs, with the latter being more likely to portray events in a manner more consistent with the audience's cultural reality. Our increasingly globalized world means that we can easily come to consume cultural products that don't reflect our own cultural circumstances, possibly leading to confusion regarding quite fundamental societal tenets. Our data highlight the importance of studying this possibility in the hopes of learning how to correct it.

## References

- Austria Presse Agentur. (2009, March 24). Österreichische Fiktion eine Rarität im heimischen TV [Austrian fiction a rarity in domestic TV]. *Der Standard*. Retrieved from <http://derstandard.at/1237228230335/Oesterreichische-Fiktion-eine-Raritaet-im-heimischen-TV>
- Bohm, R. M., Clark, L. J., & Aveni, A. F. (1991). Knowledge and death penalty opinion: A test of the Marshall hypotheses. *Journal of Research in Crime and Delinquency*, 28, 360–387. doi:10.1177/0022427891028003006
- Bouchehri, R. (2010). Titel im TV-Alltag. Zur Translation der Titel amerikanischer Serien im deutschen Fernsehen [Titles in everyday life TV. On the translation of titles of American series on German television]. In H. Kalverkämper & L. Schippel (Eds.), *Translation zwischen Text und Welt: Translationswissenschaft als historische Disziplin zwischen Moderne und Zukunft* (pp. 365–388). Berlin, Germany: Frank & Timme.
- Bundeskanzleramt Österreich. (2014). *Migration und Integration in Österreich [Migration and integration in Austria]*. Retrieved from <http://www.zukunfteuropa.at/site/7216/default.aspx>
- Corr, C. A., Nabe, C. M., & Corr, D. M. (2009). *Death and dying, life and living*. Belmont, CA: Wadsworth.
- de Mooij, M. K. (2014). *Global marketing and advertising: Understanding cultural paradoxes*. Thousand Oaks, CA: Sage.
- DeFleur, M. L. (1964). Occupational roles as portrayed on television. *Public Opinion Quarterly*, 28, 54–74. doi:10.1086/267221
- Diefenbach, D. L., & West, M. D. (2007). Television and attitudes toward mental health issues: Cultivation analysis and the third-person effect. *Journal of Community Psychology*, 35, 181–195. doi:10.1002/jcop.20142

- Elsaesser, T. (2005). *European cinema: Face to face with Hollywood*. Amsterdam, the Netherlands: Amsterdam University Press.
- Eschholz, S., Mallard, M., & Flynn, S. (2004). Images of prime time justice: A content analysis of "NYPD blue" and "law & order". *Journal of Criminal Justice and Popular Culture*, 10, 161–180.
- European Parliament. (2000). *Charter of fundamental rights of the European Union*. Retrieved from [http://www.europarl.europa.eu/charter/pdf/text\\_en.pdf](http://www.europarl.europa.eu/charter/pdf/text_en.pdf)
- Ferris, A. L., Smith, S., Greenberg, B. S., & Smith, S. L. (2007). The content of reality dating shows and viewer perceptions of dating. *Journal of Communication*, 57, 490–510. doi:10.1111/j.1460-2466.2007.00354.x
- Gerbner, G., Gross, L., Jackson-Beek, M., Jeffries-Fox, S., & Signorielli, N. (1978). Violence on the screen. Cultural indicators: Violence profile No. 9. *Journal of Communication*, 28, 176–208. doi:10.1111/j.1460-2466.1978.tb01646.x
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1980). The "mainstreaming" of America: Violence profile No. 11. *Journal of Communication*, 30, 10–29. doi:10.1111/j.1460-2466.1980.tb01987.x
- Gerbner, G., Gross, L., Morgan, M., & Signorielli, N. (1986). Living with television: The dynamics of the cultivation process. In J. Bryant & D. Zillmann (Eds.), *Perspectives on media effects* (pp. 17–40). Hillsdale, NJ: Lawrence Erlbaum.
- Giles, J. E. (1995). Pop culture portrayals of capital punishment: A review of dead man walking and among the lowest of the dead. *American Journal of Criminal Justice*, 20(1), 137–146. doi:10.1007/bf02886122
- Greenberg, B. S., & Brand, J. E. (1994). Minorities and the mass media: 1970s to 1990s. In J. Bryant & D. Zillman (Eds.), *Media effects: Advances in theory and research* (pp. 273–314). Hillsdale, NJ: Lawrence Erlbaum.
- Gould, M. S., & Shaffer, D. (1986). The impact of suicide in television movies: Evidence of imitation. *New England Journal of Medicine*, 315, 690–694. doi:10.1056/nejm198609113151107
- Hawkins, R., Pingree, S., & Adler, I. (1987). Searching for cognitive processes in the cultivation effect. *Human Communication Research*, 13, 553–577. doi:10.1111/j.1468-2958.1987.tb00118.x
- Head, S. W. (1954). Content analysis of television drama programs. *Quarterly of Film, Radio, and Television*, 9, 175–194. doi:10.2307/1209974
- Hemphill, J. F. (2003). Interpreting the magnitudes of correlation coefficients. *American Psychologist*, 58, 78–80. doi:10.1037/0003-066X.58.1.78
- Hetsroni, A., & Tukachinsky, R. H. (2006). Television-world estimates, real-world estimates, and television viewing: A new scheme for cultivation. *Journal of Communication*, 56, 133–156. doi:10.1111/j.1460-2466.2006.00007.x
- Huesmann, L. R., & Taylor, L. D. (2006). The role of media violence in violent behavior. *Annual Review of Public Health*, 27, 393–415. doi:10.1146/annurev.publhealth.26.021304.144640
- Kubic, K. N., & Chory, R. M. (2007). Exposure to television makeover programs and perceptions of self. *Communication Research Reports*, 24, 283–291. doi:10.1080/08824090701624155
- Leder, K. B. (1986). *Die Todesstrafe. Ursprung, Geschichte, Opfer [Capital punishment. Origin, history, victims]*. Munich, Germany: Deutscher Taschenbuch Verlag.
- Mares, M. L. (1996). The role of source confusions in television's cultivation of social reality judgments. *Human Communication Research*, 23, 278–297. doi:10.1177/009365092019004004
- Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Moreland, K. L., Dies, R. R., ... Reed, G. M. (2001). Psychological testing and psychological assessment: A review of evidence and issues. *American Psychologist*, 56, 128–165. doi:10.1037/0003-066x.56.2.128
- Minnebo, J., & Eggermont, S. (2007). Watching the young use illicit drugs: Direct experience, exposure to television and the stereotyping of adolescents' substance use. *Young*, 15, 129–144. doi:10.1177/110330880701500202
- Morgan, M. (1982). Television and adolescent's sex-role stereotypes: A longitudinal study. *Journal of Personality and Social Psychology*, 43, 947–955. doi:10.1037/0022-3514.43.5.947
- Morgan, M., & Shanahan, J. (1996). Two decades of cultivation research: An appraisal and meta-analysis. In B. R. Burleson (Ed.), *Communication yearbook 20* (pp. 1–45). Newbury Park, CA: Sage.
- Morgan, M., & Shanahan, J. (2010). The state of cultivation. *Journal of Broadcasting & Electronic Media*, 54, 337–355. doi:10.1080/08838151003735018
- Morgan, M., Shanahan, J., & Signorielli, N. (2009). Growing up with television: Cultivation processes. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (pp. 34–49). New York, NY: Taylor & Francis.
- Mutz, D. C., & Nir, L. (2010). Not necessarily the news: Does fictional television influence real-world policy preferences? *Mass Communication and Society*, 13, 196–217. doi:10.1080/15205430902813856
- Nabi, R. L. (2009). Cosmetic surgery makeover programs and intentions to undergo cosmetic enhancements: A consideration of three models of media effects. *Human Communication Research*, 35, 1–27. doi:10.1111/j.1468-2958.2008.01336.x
- Nielsen. (2014). *More of what we want: The cross-platform report, June 2014*. New York, NY: Nielsen.
- Niemiec, R. M., & Schulenberg, S. E. (2011). Understanding death attitudes: The integration of movies, positive psychology, and meaning management. *Death Studies*, 35, 387–407. doi:10.1080/07481187.2010.544517
- O'Guinn, T. C., & Shrum, L. J. (1997). The role of television in the construction of consumer reality. *Journal of Consumer Research*, 23, 278–294. doi:10.1086/209483
- Organisation for Economic Co-operation and Development. (2009). *Society at a glance 2009: OECD social indicators*. Paris, France: Author.
- Perlmutter, D. (2000). *Policing the media: Street cops and public perceptions of law enforcement*. Thousand Oaks, CA: Sage.
- Potter, W. J. (2008). Adolescents and television violence. In P. E. Jamieson & D. Romer (Eds.), *The changing portrayal of adolescents in the media since 1950* (pp. 221–249). New York, NY: Oxford University Press.
- Potter, W. J. (2014). *Media literacy*. Thousand Oaks, CA: Sage.
- Richard, F. D., Bond, C. F., Jr., & Stokes-Zoota, J. J. (2003). One hundred years of social psychology quantitatively described. *Review of General Psychology*, 7, 331–363. doi:10.1037/1089-2680.7.4.331



- Russell, W. B., & Kenna, J. L. (2014). Using films to address social issues in the classroom. In S. Totten & J. E. Pedersen (Eds.), *Educating about social issues in the 20th and 21st centuries, Vol. 3: A critical annotated bibliography* (pp. 177–196). Charlotte, NC: IAP Information Age Publishing.
- Sargent, J. D., Beach, M. L., Dalton, M. A., Titus-Ernstoff, L., Gibson, J. J., Tickle, J. J., & Heatherton, T. F. (2004). Effect of parental R-rated movie restriction on adolescent smoking initiation: A prospective study. *Pediatrics*, *114*, 149–156. doi:10.1542/peds.114.1.149
- Schultz, N. W., & Huet, L. M. (2000). Sensational! Violent! Popular! Death in American movies. *Omega: The Journal of Death and Dying*, *42*, 137–149. doi:10.2190/6gdx-4w40-5B94-mx0g
- Shrum, L. J. (1995). Assessing the social influence of television: A social cognition perspective. *Communication Research*, *22*, 402–429. doi:10.1177/009365095022004002
- Shrum, L. J. (1996). Psychological processes underlying cultivation effects: Further tests of construct accessibility. *Human Communication Research*, *22*, 482–509.
- Shrum, L. J., & Lee, J. (2012). Television's persuasive narratives: How television influences values, attitudes, and beliefs. In L. J. Shrum (Ed.), *The psychology of entertainment media: Blurring the lines between entertainment and persuasion* (pp. 147–167). New York, NY: Taylor and Francis.
- Shrum, L. J., & O'Guinn, T. C. (1993). Processes and effects in the construction of social reality: Construct accessibility as an explanatory variable. *Communication Research*, *20*, 436–471. doi:10.1177/009365093020003005
- Slater, M. D., Rouner, D., & Long, M. (2006). Television dramas and support for controversial public policies: Effects and mechanisms. *Journal of Communication*, *56*, 235–252. doi:10.1111/j.1460-2466.2006.00017.x
- Stack, S., & Bowman, B. (2012). *Suicide movies: Social patterns 1900–2009*. Cambridge, MA: Hogrefe.
- Statistik Austria. (2011). *Educational attainment of the Austrian population between 25 and 64 years, from 1971 to 2012* [Data file]. Retrieved from [http://www.statistik.at/web\\_de/statistiken/bildung\\_und\\_kultur/bildungsstand\\_der\\_bevoelkerung/020912.html](http://www.statistik.at/web_de/statistiken/bildung_und_kultur/bildungsstand_der_bevoelkerung/020912.html)
- Statistik Austria. (2013). *Time use survey 2008/09*. Retrieved from [http://www.statistik.at/web\\_en/statistics/social\\_statistics/time\\_use/time\\_use\\_survey/index.html#index4](http://www.statistik.at/web_en/statistics/social_statistics/time_use/time_use_survey/index.html#index4)
- Surette, R. (2007). *Media, crime and criminal justice: Images and realities*. Belmont, CA: Wadsworth.
- Till, B., Strauss, M., Sonneck, G., & Niederkrotenthaler, T. (2015). Determining the effects of films with suicidal content: a laboratory experiment. *British Journal of Psychiatry*, *207*, 72–78. doi:10.1192/bjp.bp.114.152827
- Till, B., & Vitouch, P. (2012). Capital punishment in films: The impact of death penalty portrayals on viewers' mood and attitude towards capital punishment. *International Journal of Public Opinion Research*, *24*, 387–399. doi:10.1093/ijpor/edr051
- Truong, F. (2011). *Blurring reality: The relationship between American legal crime television viewing and perception of Canadian justice system* (Unpublished honors thesis). York University, Toronto, Canada.
- Vereecken, C. A., Todd, J., Roberts, C., Mulvihill, C., & Maes, L. (2005). Television viewing behaviour and associations with food habits in different countries. *Public Health Nutrition*, *9*, 244–250. doi:10.1079/phn2005847