How do Media Shape Perceptions of Social Reality? A Review on Cultivation Theory

Wing Tung LAI
Online Communication Research Centre, Department of Journalism and Communication,
Hong Kong Shue Yan University, Hong Kong, China
wingtung1260@gmail.com

Cheuk Wun CHUNG
Online Communication Research Centre, Department of Journalism and Communication,
Hong Kong Shue Yan University, Hong Kong, China
virginachung@gmail.com

Nga Sze PO
Online Communication Research Centre, Department of Journalism and Communication,
Hong Kong Shue Yan University, Hong Kong, China
nga19930207@gmail.com

Abstract: While the cultivation theory seems to be outdated and less influential due to the rise of the Internet and the increasing education level of citizens, numerous scholarly journals’ investigations indicate that the strong cultivation effect on audiences still exists. This paper studies how mass media and television viewership place influence on viewers in shaping concepts of social reality, as well as their beliefs, behavior and mindset. A search of the literature was performed across EBSCO: Academic Search Complete database. A total of 18 articles were selected and reviewed. Results show that different media like video games and music videos also exert influence on individuals’ perceptions of real world. Possible factors other than television viewing, such as individual differences like gender, age or race are observed.

Keywords: Cultivation theory, Mass communication, Television viewing

1. Introduction

Cultivation theory is a mass communication theory developed by George Gerbner and Larry Gross (1976) to examine the media effects. The main idea is that heavy television viewers see the real world as more dangerous and are more fearful of the real world. It implies that television shapes concepts of social reality.

Despite a rapidly changing media environment, cultivation researchers still argue for the importance of television as a medium affecting perception of social reality (e.g. Reizer & Hestroni, 2014). And some scholars even explore the cultivation effects of different media other than television (e.g. Beullens, Roe, & Van den Bulcke, 2011a; 2012) in view of the rise of different media. There is also a heuristic processing model proposed by Shrum (2002) investigating the cognitive process which underlies cultivation effect. Mounting evidence is found to suggest the exposure to media messages increases the accessibility of related images in memory. With respect to these studies concerning the existing

Note: This paper was earlier presented at and published in the proceedings of the HKAECT International Conference 2014 held in Hong Kong, in December 2014.
influence of cultivation theory, media still play an important role in shaping individuals’ views on real world.

The purpose of this study is to examine the existing determination of cultivation theory, with the quick advancement of online technology. To inscribe the issue already outlined, the present study was designed to address the following research questions:

1) Does cultivation theory still apply today to address how people form social reality?
2) What are the factors which determine how people perceive the real world?

This paper is organized as follows. It begins with a brief explanation of literature review and the strategy used for identifying relevant source of materials. The section on the analysis of research findings follows. Then, the last sections provide discussion and conclusion.

2. Methodology

2.1 Source of Data

This search of study was done within the online database EBSCO: Academic Search Complete database. Academic Search Complete is widely utilized by different universities. It offers more than 10,100 article abstracts and indexing in total. This database was searched for articles published from 2005 to 2014, the last ten years. The search terms exploited for examining the database are listed as in Table 1. Eighteen relevant articles were selected and further reviewed. Selected articles were analysed into the factors of how the cultivation theory affected social reality.

2.2 Filtering Process

During the research process, 26 articles were selected in the basic research where 8 articles were removed after a filtering procedure. The reasons of their removal are as follows:

Abstracts of the articles were reviewed. Articles of Cheung & Chan (1996), Kwak et al. (2002), Van Mierlo & Van den Bulck (2004) were removed for their early finished date. While this paper focus to review the authority of cultivation theory in today’s society, the articles of Cheung & Chan, Kwan et al. and Van Mierlo & Van den Bulck are outside the last ten years’ range and were excluded from further review. Hestroni’s article (2012) was excluded as well because the paper did not show a significant association between television viewing and with Storge, Mania and Agape love styles. As for Phang and Schaefer’s studies (2009), although the theory was applied to show awareness of media literacy, the technology used to conduct the research was not specified. Similar reason goes with Prieler and Centeno’s report (2013). Even though it provided a detail research findings reflecting heavy stereotypical gender portrayals in Philippine’s television advertisements, it did not come up with a result of whether they manifested the change in citizens’ perceptions or beliefs. Whereas in Hammermeister et al.’s article (2005), there was no sampling data displayed, which made the paper less persuasive and credible. Ultimately, Nabi’s article (2009) was removed as it only focus on the media use factor and television technology. Since it duplicates with other articles and provide relatively less insights, removal of the article is decided.

Table 1. Searching strategy for the EBSCO: Academic search complete

<table>
<thead>
<tr>
<th>Sequence</th>
<th>Keyword</th>
<th>Search Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cultivation Theory (AB)</td>
<td>335</td>
</tr>
<tr>
<td>2</td>
<td>Cultivation Theory (SU)</td>
<td>53</td>
</tr>
<tr>
<td>3</td>
<td>Cultivation Theory (AB) and Gender (AB)</td>
<td>11</td>
</tr>
<tr>
<td>4</td>
<td>Cultivation Theory (AB) and Games (AB)</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>Cultivation Theory (AB) and Children (AB)</td>
<td>23</td>
</tr>
</tbody>
</table>
3. Findings

According to the articles reviewed, four types of factors on what and how media consumption affects people are being identified.

3.1 Media Use

Media use is undoubtedly the most fundamental factor in the cultivation theory, and its means and technological development is evolving in a rapid pace. There are different media affecting the concepts of real world. For examples, television, video game, music video, etc.

One study by Reizer and Hestsroni (2014) examined the impact of media consumption measured by assessing the time dedicated to TV viewing in general, watching specific genres, using Internet, and reading newspaper. They surveyed 188 college students who were engaged in romantic relationships to predict their relationship quality. The respondents assessed their commitment, satisfaction and tendency to have in conflicts within the relationship. The result has shown that the total television consumption predicted a lower commitment to the relationship. Viewing of programming mainly focuses on romantic relationships predicted lower satisfaction and greater chances to engage in conflicts. Comparatively, consumption of other media besides television and the control factors did not show any indicator of relationship quality.

Television viewing also causes one’s poor habit. A study by Gutschoven and Van den Bulck (2005) indicated that heavier television viewing will result in earlier start of smoking behavior. 909 students who had ever smoked participated in the research. The research found that there is positive relationship between television viewing and smoking commencement, which means higher level of television viewing results in earlier onset of smoking behavior. When applied to cultivation theory, the result explained that television viewing might give positive messages to smoking and thus affect smoking attitude of the viewers.

Custers and Van den Bulck (2013) pointed out that there is an association between television viewing and fear of sexual violence. 546 Flemish women involved in the research process. In speculating the perceived risk, control and seriousness, the level of fear towards sexual violence is predicted. Results found that if one watched more crime drama, he or she would have a higher level of perceived risk. News viewing, however, causes a lower level of perceived risk.

Apart from traditional medium such as television broadcasting, video game is also a medium rising in popularity in recent years. With its unique characteristics, video game is indeed the most influential medium among teenagers. Studies and researches reveal how video games, such as software artefacts, are cultivating teenagers’ mindset over the real world.

Tanes and Cemalcilar (2010) suggested that through playing video games, one’s mindset and expectation over the real world could be altered. The study surveyed 248 13-year-old Turkish adolescents attending 7th grade, in order to examine whether playing SimCity would change their expectations of an ideal city. The results showed by playing such settlements building video games, students’ expectation of an ideal city changed according to SimCity. Those students started to question and expected city authorities to pay more attention to current city issues. Moreover, higher level of distrust to city authorities was reported after the test among those students. Their study argued that playing video game, in some sense, is not necessarily a bad thing. But in some other cases, playing video games could impose a negative effect on one’s mind and beliefs.

Beullens, Roe and Van den Bulck (2011a) examined 354 adolescent boys and girls and found strong connections between video game playing in adolescence and risky driving behavior in the later age. Although this relationship varies according to game contents, the strong correlation is still in existence and could be an adversity to public traffic.
The result presented that video game playing in adolescence will contribute to a higher intentions to exhibit risky driving in the future, which means drivers tend to be reckless and dangerous on the road if they played car racing video games in their young age. The study clearly expressed worries about children playing video games that involve illegal car races, car chases and other sorts of reckless driving behavior will drive them to be a reckless driver in the future and cause more car accidents. Besides, their study also analysed video games shape one’s mind to what degree. It revealed through examining video game playing patterns in the young age, we can highly predict one’s behavior in the later age, which means that video game plays a crucial role in cultivating one’s mind in the young age.

Except from altering one’s mindset and behavior, video games should also take the blame of preserving an unrealistic ideal of thin body as femininity and attractiveness. The way video games portray women is now perpetuating the long-existing eating disorder and internationalizing the idea of unhealthy body shape of women.

Martins et al. (2009) examined female body imagery in 150 top-selling video games sold in the U.S. across nine platforms to identify differences in females’ portrayal in video games in terms of differing levels of photorealism and game rating and compare them to 3,000 samples of women in the United States. They found that in video games, female had smaller waists, hips and chest sizes than the average American woman. His finding supported the idea that video games are presenting female body shapes and conform to thin ideals.

While Martins et al. confirmed that the prevalence of the thin ideal is being reinforced by modern video games, the recent rise of video game play among females has also aggravated the problem. The effect of reinforced thin ideal could be devastating as the issue of future body dissatisfaction may be larger due to the rising popularity of video games. Martins et al. even suggested that parents should pay more attention to children in order not to let them fall victim to the thin ideal.

Television and video games are not the only factors affecting people’s view to the real world. Music video, as one of the most viewed media, can also shape the concepts to the real world and change people’s behavior.

Beullens, Roe and Van den Bulck (2012) examined the impact of music video. The study had two main purposes. First, to find is there a relationship between the frequent exposure to music video and driving after alcohol consumption. Second, to examine which theoretical framework, a combination of cultivation theory and the theory of planned behavior or the problem behavior theory, is the best to explain the relationship. Beullens et al. surveyed 426 Flemish teenagers. They took part in a two-wave panel survey about media use, risk-taking standpoints, intention, and action. The results has shown that music video viewing of teenagers is a significant evidence of later risky driving behavior and this relationship is settled through their attitudes and intentions under the cultivation theory and the theory of planned behavior.

Riddle (2010) investigated the association of construction accessibility and social reality beliefs. 213 students took part in the research experiment and it is found that higher vividness of brutal media, higher commonness of crime and police unethical in the social reality is resulted.

3.2 Programme Type

To inculcate specific beliefs or values in targeted or general citizens, programme type too has a significant ascendancy. Different themes of television programmes are available to fabricate perceptions on citizens that might not parallel to the real world situation in actual.

In response to the existence of the “CSI effect”, Mancini (2013) examined the impact of heavy forensic television programmes to real jurors on their decision making. Mancini surveyed 79 actual jurors after watching an episode which was the summary of an actual murder trial and beyond measure of forensic television programmes with verdict preferences and reasons, and the understanding of presented evidence that were similar to the real world. It was found that the fiction and even the
documentary-style crime shows were related to the decision making of jurors. Heavy fiction viewers tended more acquittals. Moreover, they were no more likely to talk about DNA evidence as verdict logic or report a highest preference for either the prosecution’s or defense’s evidence.

Beullens, Roe and Van den Bulck (2011b) analysed the influence of television news and action movies on adolescents’ risky driving behavior. They conducted a survey among 426 adolescents aged 17 to 19. Results showed that young adults’ action movie viewing predicted later joyriding and speeding behavior, since action movie viewing was associated with positive attitudes towards risk-taking behavior. However, when it comes to television news viewing, the opposite occurred. In view of the overemphasis on teenagers involving in traffic collisions in news media, it was suggested that frequent exposure to television news would result in more negative feelings towards joyriding and speeding. Therefore, a positive relationship can be seen between action movie viewing and adolescents’ risky driving behavior, while a negative relationship was found between television news viewing and adolescents’ dangerous driving behavior.

Another study by Osborn (2012) collected data from 392 married individual. Osborn thought the past studies on the relationship between television consumption and romantic relationships are not clear enough because of the differences in theoretical grounding, methodology and findings. Also, previous research has been directed mainly toward general relational attitudes and hypothetical relational action neglecting the potential effects of viewing on existing, long-term relationship. In Osborn’s study, he tried to use the theoretical traditions of cultivation, uses and gratifications and social exchange theory to analyse the link among relationship variables and measures of television viewing and television portrayals’ belief.

The result of Osborn’s study showed that both heavier viewing of romantic dramas and greater belief in television’s portrayals of romantic relationships were link with lower commitment of marriage, higher expected and perceived marriage costs, and more favorable understanding of choices to one’s existing relationship.

Vu and Lee (2013) also look into the association between the South Korean soap opera consumption and Vietnamese women’s behavior. The article exemplified the linkage by conducting a survey based on 439 female viewers. From the outcome displayed, there is a positive relationship between soap operas consumption and transnational marriage. As Vietnamese women avail themselves of more South Korean soap operas, surging of transnational marriage between Vietnamese women and South Korean men is observed. This result signifies a powerful real world implication of the cultivation theory, that programme type affects people’s perceptions and even actual performances.

Fictional television programmes are sometimes deceptive and able to adjust views over the real world. Appel (2008) suggested even false fictional information can change our perceptions of the real world. The study surveyed 128 German and 387 Austrian. It aimed to find out whether televised fictional narratives tend to portray the world as a just world. The study found that self-reported frequency of watching fiction on television was positively related to the belief in a just world. The study also showed that the belief of a just world could be compatible with television use stated in cultivation theory. The work clearly demonstrated that the idea of cultivation theory changes over time, depending on the social context of a certain group of people. The complexity of modern society challenges some of the ideas in traditional mass media theories, but the claim of reality cultivation is still valid.

In the study of Igartua et al. (2012), it analysed the impact of fictional television programmes on the image of immigration. The study investigated 88 prime-time programmes from the six television channels broadcasting nationwide in Spain. Results found that immigrants are underrepresented. Compared to the native characters, foreigner-immigrant characters were defined as having a lower educational level and a more unstable job situation. The study also observed differences in psycho-social configuration between native and immigrant characters. Foreigner-immigrants were showing more violent behavior and being less effective. It was proposed that the negative stereotypes of immigrants in television programmes would increase prejudice against them.
3.3 Individual Differences

A number of factors may affect the formation of social reality identification while individual difference is one of them. The following lists out some individual differences that possibly alter perceptions and values of the citizens through the cultivation theory, they might be gender, age or race.

One study by Martins & Harrison (2012) found that gender and race are the factors affecting self-esteem. They surveyed 396 Black and White teenagers to find the chronic effects of TV viewing. The result showed that watching television makes the self-esteem of both White and Black girls and also the Black boys decrease. Only the self-esteem of White boys has increased. It meant that no matter which race the girls are, their self-esteem decreases after a long-term television exposure. Different races of the boys have different results. While the relationship between TV consumption and the self-esteem of Black boys is negative, that of White boys is positive.

Gender role portrayal is common as well in the application of the cultivation analysis, and its influence to different sexes vary at times. A study from Gerding and Signorielli (2014) demonstrated how television programmes explore and establish teenagers’ gender identity. The piece analysed 49 episodes of 40 distinct United States television programmes designed for teens aired in 2011. He discovered while teen scene reflected the sex ratio distribution in the United States, females were marginalized in the action adventure genre. In general, females are more charismatic and more concerned about their image and obtain more comments about their appearances when compared to male. The result gives us evidence that through the application of the cultivation analysis, teenage audiences could possibly construct narrow inceptions about their horizons to feasibility to the world.

Riddle et al. (2011) examined how violent television shows and movies affect individuals’ prevalence estimates real-world crime and violence. Based on a survey administered to 207 undergraduate students in the United States, Riddle’s study demonstrated gender, age, and race differences in terms of memory vividness of media violence. It was suggested that females had more vivid memories for prior media violence and higher estimates of crime and violence than males. And the study also provided evidence that violent media exerted a stronger influence on youngsters. Media violence was highly memorable among the youth as most of the participants had autobiographical memories for violent television programmes and movies. Apart from these, ethnicity was related to prevalence estimates. Higher estimates of crime and violence were given by non-Whites than Whites.

In the study of Hetsroni and Lowenstein (2013), it is found that religiosity may also affect one’s perception of social reality, apart from television viewing. A sample size of 778 respondents is applied in the research. Results found that people who are non-religious would predict a higher estimation of commonness of crime shown on television after having longer time of television viewing. Meanwhile, those religious participants would have less estimation of commonness of crime shown even they had extended time of television viewing.

3.4 Social Reality

In the review, we also found that the consequences reflecting the social reality was threefold, interpersonal relationships, harmful personal behavior, and other consequences that single out but also being influential.

Relationship: Watch more soap operas increases the chance of engaging in transnational marriage in Vietnamese women and South Korean men (Vu & Lee, 2013), a high focus in TV programme contributes to low satisfaction and high tendency to conflicts within a relationship (Reizer & Hestsroni, 2014).

Harmful Personal Behavior: Playing more video games (Beullens et al., 2011a) and music videos (Beullens et al., 2012) as well as action movies (Beullens et al., 2011b) increased risky driving behavior; watching more forensic TV programmes affects the decision making of jurors (Mancini,
2013), heavy television viewing will result in earlier start of smoking behavior (Gutschoven & Van den Bulck, 2005).

Other factors: Playing more video game increases the distrust of authorities and more attention to city issues (Tanes & Cemalcilar, 2010), more portrayal of thin women in video game increases the body dissatisfaction among females (Martins et al., 2009).

4. Discussion

4.1 Summary Review of Research Findings

With the rise of the Internet and online technology, the importance of cultivation theory appears to be decreasing in today’s society. The aim of this study is to examine the existing determination of cultivation theory through the review of prior literature. The theory originally kept focus on television viewing. The present study suggests extending the boundary of cultivation theory to a wider spectrum. The findings from the present study shed light on application of cultivation theory to different media other than television, such as video game and music video. In other words, the results of this study provide support for the existing influence and effectiveness of cultivation theory in today’s society.

The current study has taken a crucial step forward by examining different elements of cultivation effects to build on existing theory. Based on the reviews of 18 articles, the following conclusions are reported.

First, different media play an important role in shaping individuals’ views on real world. Not only television viewing but also the use of video game and music video are related to the formation of social reality beliefs. Our findings reveal that media portrayals affect people in long term - causing some harmful personal behavior and affecting interpersonal relationship. Media also cultivate individuals’ mindset over the real world, and media users may see their city as more dangerous or create dissatisfaction towards city authorities. This study suggests that vivid media contents become encoded into long-term memory, and may be used when forming social reality beliefs. It is worth exploring how television, movies and video games might result in different cultivation outcomes. Future research should continue to examine channel differences in cultivation effects.

Second, the findings from the current study provide support for proving different genres of media contents might have differential effects. For example, forensic television programmes have an influence on real jurors’ decision making, and romantic dramas affect one’s perceptions of marriage and relationship. Television news and action movies differ widely about their influence on adolescents’ risky driving behavior, as movie viewing is a predictor for risky driving behavior while the opposite occurs in news viewing. Our findings demonstrate that the direction of relationship concerning media’s influence is different for different programme types. This indicates that the content of these media may associate with the occurrence of the relationship. However, further research is necessary to confirm this assumption.

Prior studies have also stressed some individual differences affecting the formation of social reality identification, for example, gender, age and race. For instance, females’ self-esteem tends to decrease after a long-term television exposure, while there are different results for males of different races (self-esteem of Black boys decreases while that of White boys increases). In addition, females have more vivid memories for prior media violence and higher estimates of crime and violence than males. And higher estimation of commonness of crime is given by young adults. These effects on individuals’ perceptions of real world would provide additional insights to study cultivation theory. Future studies could explore the possibility of individual differences in long-term memory for media contents which form social reality judgments. Clearly, additional research is needed to investigate the potential mechanisms through which such individual differences might occur.
Moreover, the studies in the past suggest that the consequences caused by media exposure are threefold (behavior, relationship, and perception). Consumption of different media cultivates individuals’ mindset, which in turn affects people’s real life. Both personal behavior and interpersonal relationship are under the influence of media portrayals. Some typical examples of these consequences are increased risky driving behavior and a lower commitment to the relationship. Besides, media consumption shapes individuals’ perceptions of social reality, such as estimation of prevalence of crime and pursuit of thin ideal. However, the consequences are not necessarily negative; some positive results like people pay more attention to social issues are observed. The current study provides support for proving the unimaginably strong power of media in influencing social reality. Future research should examine how different aspects of people’s real life like political and technological aspects might be affected by media exposure.

In order to move forward our understanding of cultivation effects, a thorough examination of influence of cultivation theory should be conducted. The original key element of cultivation theory, television, is now facing the challenge from developing digital media like the Internet and online technology. Without doubt, television consumption appears to be decreasing, and there is a growing trend of using digital media in today’s society. However, research on application of cultivation theory to the Internet is limited. Therefore, further studies should continue to explore the possibility of applying this theory to the Internet. This may not only increase our understanding of cultivation theory, but also help make this theory more applicable to the developing digital media landscape in today’s society.

4.2 Limitations of the Study

This study has several limitations. As the findings of the research are limited to the recently published studies, this seriously limits the variation of the important points of cultivation theory. Also, the current study has focused on proving the prevalence of cultivation effects in the modern world, which means the elements of the theory explored may not be comprehensive.

5. Conclusion

In conclusion, the present study acknowledges the existing influence and effectiveness of cultivation theory in today’s society. Since the prior studies found were carried out within the recent 10 years (the decade when the Internet prevails), it is suggested that the influence of television on one’s mindset still exists. The review of literature not only supports prior cultivation research, but also explores different elements of cultivation effects. Television is not the only medium affecting one’s social reality beliefs, movies, video games and even music videos also contribute. Besides, it cannot be ignored that media use alone is not comprehensive to explain cultivation effects. Programme types of media as well as individual differences like gender, age and race also exert influence on perceptions of media users. Future studies are suggested to examine more different elements of cultivation theory and the possibility of applying this theory to the Internet.

References


About the Authors

Wing Tung LAI. Ms Lai is a student of the Journalism and Mass Communication Program at the Hong Kong Shue Yan University. Her research interests include media and social studies.

Cheuk Wun CHUNG. Ms Chung is a student at the Department of Journalism and Communication, the Hong Kong Shue Yan University. Her research interests focus on human behavior.

Nga Sze PO. Ms Po is a student at the Department of Journalism and Communication, the Hong Kong Shue Yan University. Her research interests include the use of social media.