

The Documentary Analysis of Meta-Analysis Research in Violence of Media

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Abstract—The part of “future direction” in the findings of meta-analysis could provide the great direction to conduct the future studies. This study, “The Documentary Analysis of Meta-Analysis Research in Violence of Media” would conclude “future directions” out of 10 meta-analysis papers. The purposes of this research are to find an appropriate research design or an appropriate methodology for the future research related to the topic, “violence of media”. Further research needs to explore by longitudinal and experimental design, and also needs to have a careful consideration about age effects, time spent effects, enjoyment effects and ordinary lifestyle of each media consumer.

Keywords—Aggressive, future direction, meta-analysis, media, violence.

I. INTRODUCTION

VIOLENCE of media is one of most influential topics in worldwide research. Its various variables were often investigated by quantitative methods, which yield to meta-analysis studying. Meta-analysis allows the researchers to compare and digest the results of the same topic [1], [2]. Normally, the methodologically strong study would cause a high effect size [3]. Since meta-analysis could provide the summarization and integration of the past findings [2], Anderson [3] stated that future research can benefit by the identification of problems uncovered by past work.

The aggression in television and films viewers had been the controversial topic since this topic was explored in two classic studies which are Imitation of film-mediated aggressive models, and Effects of film violence on inhibitions against subsequent aggression in 1963 [4]. After the birth of television, other communication technology and media were created, and now they seem like a non-stop trip of train with a high competition between many brands. The violence of media will be continuously studied. The themes of research would vary depending on the trends of communication technology and popular media in each period. Meta-analysis could also help to reduce the time spent on literature reviews of the future research. If a researcher had a limit amount of time, meta-analysis research would offer wider and more accurate results comparing with an individual quantitative study.

This study is the documentary analysis about the findings of meta-analysis papers in the area of media violence. The results of this study could direct the way to choose issues for future

studies. For example, Anderson [3] found the small numbers of longitudinal studies in the research papers about violent video game. This would lead future research to examine the topic with longitudinal studies.

II. CONCERNMENT ON MEDIA

Media were considered as aggressive behaviors activator in period of “Information Era,” defined by Toffler [5], [6]. Internet is one of information technology, and it has been commonly used since late 2000s. The influence of online media was increased on both business and individual person [7]. The online information was not filtered or proved [8]. Everyone could be the message sender, even to create one own variety show and upload it on Youtube [8]. To classify the online information becomes the main task that the online users should do [8], [9].

The function or platform of technology itself could also harm its users. For the educational media, animation-based learning might overload the memory and the process of thinking of the students [10]. The online class and online learning activities also cause the lack of interaction between students and teachers, and also between the classmates [11]. Moreover, technology addiction [6] in students affects their short-term concentration in class, [12] which could be the primary cause of lower grade in students who used social networking sites [13]. Outside the area of education, in 2006, the effect of hate symbols on website was studied. This study mentioned about a group of users who expressed their unsatisfied emotion on website [14].

A good practice of message transferring is the way to make the receiver understand the message clearly [8]. However, business and individual person never say or write everything they know, but they will choose only parts of message which could benefit them [9]. Especially for the business organizations, they need to impress their customers or their audiences [15]. The show needs to engage the audiences, since the high numbers of audiences bring the sponsors, and the high numbers of sponsors would concretely show the achievement among the rival organizations. The marketing system did not cause only the competition between the organizations, but also cause the conflict within the family [6].

The financial goal of the mass media organizations might disregard the morality, so codes of ethics were written to lead them to work or perform in the right direction. This type of organizations needs to cooperate with its customers, its audiences and also the government to conduct a moral and appropriate media, especially on radio and television [16]. The laws also included the codes to control the reliability of

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messages sent to the consumers. For example, the advertising about food and drink which contains health information or physical quality information need to pass an inspection before broadcasting or publishing. Hangsapuk [16] suggested that advertising needs to be acceptable for wide range of consumers. Its message must not decrease the value of moral and the society.

Although the laws about mass media exist, the consumers and the audiences also need to classify the messages before trusting them. To perceive the news or customer reviews on one side causes a bias [17], especially in children and those who have no confidence [8]. The negative influences of media on children were often debated, such as aggressiveness caused by television, films, games and online media which are over-controlled by the parents. In 2014, many mass media organizations in Thailand will launch their bidden digital television channels. Foreign media would overwhelm the children points of view, and found a wall hiding traditional cultures. This situation would occur according to inadequate numbers of made-in-Thailand media. Only Thai organization could not produce enough contents to serve these new digital television channels [8].

For the online media, Oumanachai [18] mentioned about how Klout [19] indicated the online influencers in her paper. Online influencers' messages got transferred to people by their fans. The topic of online influencers was inspected, because social network has established the viral marketing. This means "social network" was one kind of words of mouth channels, which has the highest effect on people's determination among all online media [7]. Furthermore, people in the real-time world who were interested in entertainment would always mimic the behaviors of their idols. These idols could easily change their fans' views though the world [8]. The results of a lady-cosmetic study proved that women always accepted cosmetic advertising performed by celebrities better than other types of cosmetic advertising [20]. In other groups of audiences, the attraction of celebrities on their fans affected the fans' shopping behaviors [18]. How celebrities influenced on fans' behaviors, children and teenagers were easily affected, because of their low level of consideration. Drama and television show often presented inappropriate behaviors which children and teenager would imitate [21]. The concernment of aggressiveness, refractory and illegality in children caused by entertainment media have been argued since late 1950s [4].

Game is one of entertainment media which increased aggressive behaviors in children and young adults [3]. Some groups of game players imitate the dressing style of the game characters, which is called, "cosplay." The visible expression in cosplay shows that game players are not only male. Eastin [22] found in his study about female game players, that aggressive thoughts were greater when the player and avatar gender matched. Moreover, the aggression of violent-game players who used a big monitor screen was greater than those who used a small monitor screen [23].

In conclusion, the more channels of communication, the more various users use them. The various groups of audiences

and media consumers were studied individually in research papers. Because media have been developed continuously in terms of functions, platforms and technology, the researchers could not stop studying to improve their usage and to solve problems about them. The new researchers need to spend their time reviewing the literature of whole bunches of past research, unless they study the results and discussions of meta-analysis research papers. To analyze the meta-analysis research would direct the future studies to examine this topic deeper and to narrow the gap of knowledge in media violence.

III. OBJECTIVES

This study focused to find the answers how the future research in the area of media violence should be conducted. The purposes of this research are to conclude the results of meta-analysis research papers in past 10 years, and to suggest the overall future directions from the future directions written in each study.

IV. RESEARCH QUESTIONS

RQ1: What are the findings of selected meta-analytical papers?

RQ2: How could these findings in meta-analytical studies benefit the future research?

V. METHODS

The ten meta-analysis studies were chosen because their samples contained violence and negative effects of media among the users with different ages. These ten meta-analysis papers were conducted during ten years from 2004 to 2013. One paper of each year was selected to see the progress in terms of media violence during the 10-year period. The way to select these papers could provide the information about changing and development of research trends in this period. Mostly the studies examined about negative effects of mass media such as television, movies/films, advertising and online media. One of the most popular topics was the aggressiveness caused by video games. Some of these studies were the review of many meta-analysis studies which also contained the section of future directions. The rare variables were not included in this study, so person, radio, and print media were not related to this study.

Inclusion criteria:

- 1) Violence of media or negative effect of media was the main idea of selected studies.
- 2) Selected papers were meta-analysis studies or review of meta-analysis studies.
- 3) Selected papers provided future directions.
- 4) Selected papers were published during 2004 to 2013.
- 5) One paper was selected from each year.
- 6) Selected studies did not examine the violence of person, radio and print media.

VI. FINDINGS

Anderson's paper [3], Hausenblas' paper [24] and DeLisi's

paper [25] suggested for the future research that longitudinal design should have been used to examine the topic of media violence. This is because longitudinal design could explain the changing behaviors which might relate to ages of samples or duration of media consuming. In fact, longitudinal design has been commonly used in this research area, but the list of longitudinal studies in Savage and Yancey's paper [26] mostly showed the results of each gender separately, and lack of overall results of both genders. This was similar to the Anderson et al.'s paper [27], that male game players usually spent more time on video games comparing with female players which could cause different rates of aggression.

Another recommended research design was experimental design. Huesmann's study [28], and Paik and Comstock's study [4] found that laboratory experiments offered a higher number of effect sizes comparing with a single survey data collection. Experimental research design could also combine with the longitudinal design to see both subsequences of increasing duration of media consumption, and to compare the results obviously in the experimental design. This mixing of both suggestions would give a stronger research design for future study.

Not only research design was suggested in the results of selected papers, the researchers also commented about the methodologies of their selected quantitative studies. Firstly, the study about violence of game should consider about the results of each type of games separately. This is because each type of games would attract different groups of players [26]. Secondly, the quantitative findings of violence of media in children/teenagers with different ages were not consistent [29]. If the studies were longitudinal design, they would be able to explain the outcome over a period of time. Anderson et al. [27] also found a similar gap that the further study should examine more about age effects using the longitudinal design. Likewise, the study could compare the subsequent-media-viewer aggression of a sample when he was a young child, and when he was older. Thirdly, the selected quantitative studies should carefully test the relationship between enjoyment of entertainment media and the linking violence.

Relating to the concernment of previous three comments from the selected papers, their researchers agreed that the studies that involve wide-ranging explainable variables would be able to reduce the error or the effect that could not be described. This could concur with the first summary about the future directions of research design.

The findings of meta-analysis studies also point what should be explored, and what were enough to explore within a next few years. A research papers showed the equal effect of media violence between genders [4], however another study discussed that gender differences should be examined [26]. Moreover, Weaver's study [30] also concerned about genders, which males and females performed the aggression differently.

A number of researchers have found a similar conclusion that, their main research topic gave a similar result across countries, cultures and times. Some papers showed the similarity of effect sizes of selected quantitative studies every

year in 10-year period. This similar outcome might be a sign telling the future researchers that they may not need to explore the similar topic with the same variable anymore, especially in these few years. However, to explore the repeating topic in violence of media is still done around the world. Although the results could easily be predicted, to hammer down the reality among a difference society is to compass the path for people to manage the problem of media violence.

VII. DISCUSSION AND SUGGESTION

Since the findings of this study were composed from the future directions of selected meta-analysis papers, the future study should not have any gap that other researchers might criticize. This recommendation is truly hard to be done, but we should keep in mind that it is the goal. This is because violence of media is a serious persisting problem. The results of the studies should be reliable best. All the quantitative data should be from a particular and reasonable indicator. These all suggestions reflected one of the selected papers, which found that their studied quantitative papers contained too small effect sizes, and they could not offer a good conclusion.

Concerning the results of each sample, results of most selected meta-analysis papers associate with the general assumptions of their topics. Only some papers concluded that their selected studies did not have a strong tool for measurement or strong methodology, which caused an unrelated numbers shown in the table of effect sizes comparison. The high numbers of associated conclusion show how many studies all around the world led to the similar findings. That is an alarm for the governors or the media producer organizations to solve the problem of violence in media. For example, traditional introduction of television shows in Thailand did not contain motion picture rating system, but now at the beginning of the introduction needs to have it. Other media should have done the same way, such as video game and online media.

Meta-analysis research about violence of media should be continually studied. This is because meta-analysis gave the future directions, which are not easily found in other type of research design. Meta-analysis could suggest the research approach to full fill the knowledge of its topic. Violence of media is one of the most important issues which could decrease moral value [31]. Harmful behaviors are begun with the imitation of bad behaviors in the media such smoking, over-weight loss or harming people [32], [33], [3]. These behaviors could ruin the one own life and also others' lives. Since meta-analysis method is the particular numerical analysis of quantitative results, this method is the measurement of the measurable findings. When the results are clear, people would worry that the problems have been occurs, and that could lead them to the solutions.

APPENDIX

List of selected papers:

2004: An update on the effects of playing violent video games, by Craig A. Anderson

2005: The influence of violent media on children and adolescents: a public-health approach, by Kevin D Browne, Catherine Hamilton-Giachritsis

2006: The Extent to Which Tobacco Marketing and Tobacco Use in Films Contribute to Children's Use of Tobacco, by Robert J. Wellman, David B. Sugarman, Joseph R. DiFranza, and Jonathan P. Winickoff

2007: The Impact of Electronic Media Violence: Scientific Theory and Research, by L. Rowell Huesmann

2008: The Effects of Media Violence Exposure on Criminal Aggression: A Meta-Analysis, by Joanne Savage, and Christina Yancey

2009: The Public Health Risks of Media Violence: A Meta-Analytic Review, by Christopher J. Ferguson, and John Kilburn

2010: Violent Video Game Effects on Aggression, Empathy, and Prosocial Behavior in Eastern and Western Countries: A Meta-Analytic Review, by Craig A. Anderson, Akiko Shibuya, Nobuko Iori, Edward L. Swing, Brad J. Bushman, Akira Sakamoto, Hannah R. Rothstein and Muniba Saleem

2011: A Meta-Analytical Review of Selective Exposure to and the Enjoyment of Media Violence, by Andrew J. Weaver

2012: Violent Video Games, Delinquency, and Youth Violence: New Evidence, by Matt DeLisi, Michael G. Vaughn, Douglas A. Gentile, Craig A. Anderson, and Jeffrey J. Shook

2013: Media effects of experimental presentation of the ideal physique on eating disorder symptoms: A meta-analysis of laboratory studies, by Heather A. Hausenblas, Anna Campbell, Jessie E. Menzel, Jessica Doughty, Michael Levine, and J. Kevin Thompson.

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REFERENCES

- [1] M.W. Lipsey and D.B. Wilson, *Practical meta-analysis*. Beverly Hills, CA: Sage, 2000.
- [2] G. V. Glass, "Primary, secondary, and meta-analysis of research," *Educational Researcher*, vol. 5, pp. 3-8, 1976.
- [3] C. Anderson, "An update on the effects of playing violent video games," *Journal of Adolescence*, pp. 113-122, 2004.
- [4] H. Paik and G. Comstock, "The Effects of Television Violence on Antisocial Behavior: A Meta-Analysis," 1994.
- [5] A. Toffler, *The Third Wave*, United State: Bantam Books, 1980.
- [6] S. Somsert, "Human Alienation in Modern Society," *Executive Journal*, vol. 3, pp. 66-74, 2013.
- [7] P. Arunangsiwed, "The Effects of Websites for Temples in Bangyai and Bangrauy Districts on Thai Tourist Attractions," *The Proceeding of 5th International Science, Social Science, Engineering and Energy Conference*, 2013.
- [8] S. Usin, N. Sukkasot, O. Pankao and T. Potisuwan, *Reporter in Television and Radio: Medium Level Handbook*. Bangkok: Sor Jarean Printing, 2013.
- [9] K. Nimmalo, October 2013.
- [10] R.E. Mayer and R. Moreno, "Aids to computer-based multimedia learning," *Learning and Instruction*, vol. 12, pp. 107-119, 2002.
- [11] I. Hansen and M. Shlesinger, "The silver lining: Technology and self-study in the interpreting classroom," *Interpreting*, Vol. 9, no. 1, pp. 95-118, 2007.
- [12] A. Karpinski, P. Kirscher, I. Ozer, J. Mellott and P. Ochwo, "An exploration of social networking site use, multitasking, and academic performance among United States and European university students," *Computers in Human Behavior*, vol. 29, pp. 1182-1192, 2013.
- [13] L. Rosen, L. Carrier and N. Cheever, "Facebook and texting made me do it: Media-induced task-switching while studying," *Computers in Human Behavior*, vol. 29, pp. 948-958, 2013.
- [14] D. Aikat, "Images of Bigotry and Violence: Analyses of Extremist Iconography and Visuals in Hate Group Web Sites," *Conference Papers - International Communication Association*, pp. 1-13, 2006.
- [15] T. Pantawee Wongtanaanek, "The creativities in TV shows," 2013.
- [16] P. Ramasoot, K. Hangsapuk and T. Potisuwan, *Reporter in Television and Radio: Basic Level Handbook*. Bangkok: Sor Jarean Printing, 2013.
- [17] N. Duangwiset, 2553 อำนข่าว อำนสังคม. Bangkok: The Princess Maha Chakri Sirindhorn Anthropology Centre, 2012.
- [18] N. Oumanachai, "Online Influencer and the Power of Word-of-Mouth," *Executive Journal*, vol. 3, pp. 47-51, 2013.
- [19] Klout. (n.d.). from <http://klout.com/crop/how-it-work>.
- [20] K. Udommongkon and P. Chomngam, "Relationship between Media Exposure and Attitude towards Advertorials in Women Magazines amongst Women," *BU Academic Review*, vol. 12, no. 1, pp. 98-112, 2013.
- [21] P. Thelor, "A Case Study of Virtue and Sins Reflected through Thai Dramas," *Executive Journal*, vol. 3, pp. 59-65, 2013.
- [22] M. Eastin, "Video Game Violence and the Female Game Player: Self- and Opponent Gender Effects on Presence and Aggressive Thoughts," *Human Communication Research*, vol.32, pp. 351-372, 2006.
- [23] K. Farrar, M. Krcmar and K. Nowak, "Contextual Features of Violent Video Games, Mental Models, and Aggression," *Journal of Communication*, vol. 56, pp. 387-405, 2006.
- [24] H.A. Hausenblas, A. Campbell, J.E. Menzel, J. Doughty, M. Levine and J.K. Thompson, "Media effects of experimental presentation of the ideal physique on eating disorder symptoms: A meta-analysis of laboratory studies," *Clinical Psychology Review*, vol. 33, no. 1, pp. 168-181, 2013.
- [25] M. DeLisi, M. Vaughn, D. Gentile, C. Anderson and J. Shook, "Violent Video Games, Delinquency, and Youth Violence: New Evidence," *Youth Violence and Juvenile Justice*, 11(2), pp. 132-142, 2012.
- [26] J. Savage and C. Yancey, "The effects of media violence exposure on criminal aggression. A meta-analysis," *Criminal Justice and Behavior*, vol. 35, pp. 772-791, 2008.
- [27] C. Anderson, A. Shibuya, N. Iori, E. Swing, B. Bushman, A. Sakamoto, H. Rothstein and M. Saleem, "Violent Video Game Effects on Aggression, Empathy, and Prosocial Behavior in Eastern and Western Countries: A Meta-Analytic Review," *Psychological Bulletin*, vol.136, no.2, pp. 151-173, 2010.
- [28] L. Huesmann, "The Impact of Electronic Media Violence: Scientific Theory and Research," *Journal of Adolescent Health*, vol. 41, no. 6, pp. S6-S13, 2007.
- [29] K. Browne and C. Hamilton-Giachritsis, "The influence of violent media on children and adolescents: a public-health approach," *THE LANCET*, vol. 365 no.9460, pp. 702-710, 2005.
- [30] A. Weaver, "A Meta-Analytical Review of Selective Exposure to and the Enjoyment of Media Violence," *Journal of Broadcasting & Electronic Media*, vol. 55, no. 2, pp. 232-250, 2011.
- [31] C. Ferguson, *Violent Crime: Clinical and Social Implications*. Los Angeles: SAGE, 2010.
- [32] R. Wellman, D. Sugarman, J. DiFranza and J. Winickoff, "The Extent to Which Tobacco Marketing and Tobacco Use in Films Contribute to Children's Use of Tobacco," *Arch Pediatr Adolesc Med*. vol. 160, pp.1285-1296, 2006.
- [33] S. Grabe, L. Ward, J. Hyde, "The Role of the Media in Body Image Concerns Among Women: A Meta-Analysis of Experimental and Correlational Studies," *Psychological Bulletin*, vol. 134, no. 3, pp. 460-476, 2008.