FROM VIOLENCE TO CONSUMER BEHAVIOR: A LITERATURE REVIEW OF TREND AND METHOD OF CULTIVATION THEORY AS A GUIDING FRAMEWORK IN EBSCO ELECTRONIC DATABASE FROM 1980 TO 2009

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Abstract

Not only in Indonesia, but also in other countries, watching television is a major activity. The Cultivation theory (sometimes referred to as the cultivation hypothesis or cultivation analysis) suggests that when people watch television, they are acquiring or cultivating a view of the “real world” that is shaped by the way things are portrayed on television. The objective of this study is to describe how the research using the cultivation theory as the guiding framework or theoretical base is performed in the published scientific articles. Data collected is analyzed using content analysis method. The overall findings indicate that in initial development of cultivation theory, publication articles focused more on the falsification of cultivation theory itself, cultivation theory has been confirmed in a wide array of studies across diverse fields area attests to its versatility. But in later development, the theory was also used in the analysis of the theme of non-violence, such as psychology and economy. In economy, the focus is primarily on consumer behavior; the large majority of articles were empirical research (70%), most of all collecting data in literature research used survey method (72.7%), empirical research has been used variable control (57.4%). The controlled variables were general demographics, such as age, gender, income, ethnic, and education.

Keywords: literature review, cultivation theory, television, EBSCO, and content analysis

INTRODUCTION

Lukmantoro (2008) wrote that criminal news presented by mass media, especially television, is believed to have inspired the public in committing criminal actions. This is evident in the mutilation committed by Sri Rumiati (Yati, 48 years) claiming to have imitated the way Very Idam Henyansyah (Ryan) killed one of his victims. Yati cut off the dead body of her husband, Hendra, in order to remove the track. In the headline, KOMPAS Daily of 10 November 2008 wrote that based on the record of the research and development department, since January until November 2008 there have been 13 murders followed by mutilation in Indonesia. The rate was the highest for annual period, since mutilation cases appeared in 1967. In 2007 only 7 mutilation cases were reported. Nitibaskara (2008) wrote that imitation is a form of learning to do just what other people do. By some psychologist, imitation is not congenital. It is learned social process. Mass media, especially television, plays a significant role in promoting imitation by criminals, including in mutilation cases.

Although some scholars said that media can generate effect to the public, some other scholars said that the resulting effect or impact may vary. There are 4
perspectives among the scholars about the impact of media on the audience (Severin & Tankard Jr, 2001): (1) media is thought to have full power to determine public behavior. In this regard, public is thought to be passive that uncritically respond to the stimulus provided by the media; (2) media is thought to have limited (weak) impact to influence the public. In this condition, public may have active attitude to refuse the stimulus delivered by the media; (3) media has moderate impact for public. This is because media is only one of the factors that influence the public; and (4) media has strong impact, but not like the initial idea (Figure 1).

Figure 1 shows that initially the impact of mass communication, as an initial idea, thought that the impact provided by the media to the public is strong and undeniable. After some time, this is replaced by an idea that the impact of media is only limited to the public. Therefore, as the technology advances, especially television, and also the growing number of studies, mass communication has more than just moderate impact. And finally, some studies suggested that media has strong impact. However, the impact is not like the initial idea (bullet theory).

One of the theories in the research of the impact of media is cultivation theory. The theory is introduced in the research performed by Gerbner and his colleague when he was the dean of Annenberg School of Communication in the University of Pennsylvania. Rohim (2009) wrote that one reason that underlie the emergence of this theory is that basically humans are not free to determine how they think, what they feel, and how they survive.
Taking the articles from the database of EBSCO, the objective of this study is to describe how the research using the cultivation theory as the guiding framework or theoretical base is performed in the published scientific articles. Specifically, the research questions as follow: (1) what is the trend in the articles with the topic of cultivation theory, published in EBSCO?; and (2) what is the methodology used in the articles with the topic of cultivation theory, published in EBSCO?

From the aforementioned description and research questions, the hypotheses of this study are:
H1: There is a change in the trend of research published.
H2: There is a different frequency of empirical research articles and non-research articles in the publication.
H3: For empirical research articles, there is a different frequency of qualitative, quantitative, and combined approach of research in the publication.
H4: For empirical research articles, there is a different frequency of the types of unit of analysis in the publication.
H5: For empirical research articles, there are a different number of data collection methods in the publication.
H6: For experimental research article, there is difference in frequency between the researchers performing validity and reliability testing and those whose do not.
H7: For empirical research articles, there is different frequency between the research either controlling or not-controlling demographic variables.

Different from hypotheses two to seven, hypothesis one is not binding hypothesis, it is only a guideline to perform analysis.

**METHODOLOGY**

There are 2 types of content analysis: conceptual analysis and relational analysis. Siregar et al., (2009) wrote that while relational analysis deals with examining relationships among concepts in texts, conceptual analysis further by quantifying the presence frequency of concepts represented by words of phrase. Titscher et al. (2000) informed that the main core and tool in content analysis is the categorization system: each unit of analysis has to be coded or, in other words, allocated in one of more categories. Although Weber (1990) informed that there is not any single best method to perform content analysis, this study carefully attempted to use the aforementioned procedure suggested by many researchers. Graphically, the procedure performed is presented in Figure 2.

**Population and Sampling**

Although it is not meant to generalize, the population of this study is all articles found in the database of EBSCO, while the scope of the study is all articles meeting the criteria: (1) they are obtained by using the key phrase of “cultivation theory and television”; (2) the articles are downloadable or in other words they have the extension of pdf; and (3) the articles are published until 2009. To select the sample, saturation sampling method is used. Saturation sampling is defined as the acquisition of all element of samples in a population having the characteristics required by the researchers (Black and Champion, 1976).
Operational Definition of Variable

Research variables are the variables stated in statements of study. The operational definition of this variable is as follow:

a. EBSCO is the database of paid on line scientific article, accessible on subscription.

b. Cultivation theory is a theory developed to explain the impact of watching television on people’s perception, attitude, and value (Severin and Tankard Jr, 2001).

c. Articles are the manuscript written by an author or more on a particular subject. This article may result from empirical research, or review of previous articles.

d. Trend of research is a general tendency in the way a research is changing.

e. Scope of research is the range of research that a subject, activity deals with.

f. Approach of research is the paradigm used in the research including: (1) positivism, using quantitative and experimental methods to test the generalization of hypothetiko-deductive; and (2) phenomenological, using qualitative and naturalistic approach, which holistically understands human experiences in special context (Idrus, 2007).

g. Unit of analysis is the single member of the sample, which is the element of the population member having single or multiple treatments.

h. Data collection is the method in which data of research is obtained. Adam et al. (2007) wrote that there are some methods to collect data, including observation, experiment, survey, interview, diary methods, case studies, data storage, and triangulation.

i. Validity represents the extent of which a measurement measures what it wants to measure (Ancok, 1999). Meanwhile reliability is defined as the ability of a measure to measure consistently (Black and Champion, 1976).

j. Control variable is any variable beyond the main variable, potentially confounding the results of analysis, unless it is controlled.
Data Collection

Data collection is performed by using the computer at the Faculty of Economics and Business, Master and Doctoral Program of UGM. The data needed in the study is secondary data, that is the articles published in the database of EBSCO. The use of database of EBSCO is based on the results of research performed by Blessinger and Olle (2004). They compared 3 online database of EBSCO, ASAP and ProQuest collected in November 2002. The comparison, that includes scope of subject; title of article; accessibility; and article trend, showed that EBSCO is the “deepest” database and presents the largest number of articles, has the longest duration, and has the best peer review. In addition, EBSCO is also the most aggressive online database in adding new titles of article in the recent.

Data Analysis

Berelson (1952) wrote that in content analysis, validity is not a big deal. In careful operational definition and correct and good indicator selection, coding sheet is assumed to measure what it should measure. In other words, it is enough to measure the validity by using face validity. Meanwhile reliability testing in this study is performed by inter coder reliability. This testing is performed to ensure the objectivity of data that will be analyzed and also to ensure the reliability of the used analysis technique. In this study reliability is tested by Holsti’s coefficient of realibility (1963).

\[ R = \frac{2(C_{1,2})}{C_1 + C_2} \]

In which:
\( C_{1,2} = \) The number of catagory assignments on which all coder agree
\( C_1, C_2 = \) The sum of all catagory assignments by all coder

After validity and reliability testing, the data is analyzed by statistical program of SPSS, the results of which are descriptively analysed.

RESULT AND DISCUSSION

The preparation of the coding sheet is consulted to researchers at Faculty of Mathematic and Natural Science, Gadjah Mada University. The objective of the consultation was to have validity test in the coding sheet. In order to assess the face validity of the coding sheet, we submitted the coding sheet and a letter introducing my research objectives. These respondents provided feedback and qualitative comments about coding sheet in general. As a result of this procedure, we reworded some operational definition and indicator to integrate terminologies currently used by professionals. After that, with the assistance from a researcher from Institute of Social Study, reliability is tested. There is a difference in determining the threshold score of acceptance of reliability coefficient. Krippendorf (1980) reports that the lower limit of acceptance of reliability coefficient is 0.80; Scott in Hasrullah (2001) put it over 0.75; while Barelson (1952) put the coefficient score between 0.79 and 0.96. The calculation of reliability at this study is 0.88 or above the score proposed by Krippendorf and Scott, and between the range suggested by Barelson.

General Description of Article Samples

Cultivation theory argues that heavy viewers of television develop the reality image inconsistent with the reality (DeVito, 1996). Nurudin (2007) wrote that according to the cultivation theory, television is a primary media or tool from which the viewers learn about the society and cultural environment. This means that through the contact of the viewers with the television, he or she learn about the world, the people, the values, and the
habits. Severin and Tankard Jr (2001) wrote that some initial studies supporting the theory were based on the comparison between the heavy viewer of television and light viewer. Gerbner and his colleague analyzed the answer obtained from the survey results and found that heavy viewer and light viewer gave different answers. Heavy viewers frequently gave answers closely related with the world described in television. It was exemplified in DeVito (1996) that heavy viewers of television thought that the probability of becoming a criminal victim is 1 to 10. In reality, the ratio is 1 to 50. Heavy viewers thought that 20% of total world’s population live in the USA. In reality it was only 6%. Heavy viewers believed that the percentage of employees in managerial or professional position is 25% while actually it is only 5%.

The articles collected based on the years of publication are presented in Figure 3. It shows that cultivation theory as the guiding framework or theoretical base is mostly used in the publication in 2002 (5 articles) and in 1982-1986, 1990-1992, 1994-1998, and 2006 no article was published in EBSCO.

Hypothesis 1 Testing
Trend of Research in Publication

To see the trend of research, it is necessary to identify the main objective and scope of research in the published article samples. The trend is classified in the range of 10 years, starting from the first year of publication to the end of observation. The use of interval of 10 years is identical with the research performed by Severin and Tankard Jr (2001). Another reason is that the interval of 10 years is a medium range of time in the theories development.

![Figure 3. Sample Article Collected from 1980 to 2009](Figure3.png)
Table 1. Authors, Main Objective, and Scope of Research in the Period of 1980-1990

<table>
<thead>
<tr>
<th>No.</th>
<th>Authors</th>
<th>Main Objective</th>
<th>Scope of Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hughes (1980)</td>
<td>(1) Reanalyzing with similar data as used in the study of Gerbner and his colleague while incorporating relevant analysis and controlling the disturbing variables; (2) Evaluating the position (falsification) of cultivation theory in relation with the cultivation effect and criticizing “television answer” proposed by Gerbner and his colleague.</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>2.</td>
<td>Gerbner et al. (1980)</td>
<td>Affirming and providing phenomena of “mainstreaming” in which TV viewing does not give similar impact to different persons</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>3.</td>
<td>Hirsch (1980)</td>
<td>Falsification what has been written by Hughes (in articles-1) aforementioned and stressing the disagreement with Gerbner and his colleague.</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>4.</td>
<td>Gerbner et al. (1981a)</td>
<td>Re-falsification (affirming) the correction from Hughes and stressing the disagreement with what has been written by Hughes.</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>5.</td>
<td>Heath &amp; Petraitis (1987)</td>
<td>In 2 separate studies, they want to identify the impact of TV viewing on perception of crime occurring in the neighboring environment and in distant environment, in urban setting.</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>6.</td>
<td>Rahtz (1988)</td>
<td>Testing the relation of the intensity of TV viewing among the elderly (aged more than 60 years) and dissatisfaction with their elder life.</td>
<td>Economics</td>
</tr>
<tr>
<td>7.</td>
<td>Meyer (1989)</td>
<td>Describing what the researchers face up in cultivation analysis, partly or fully, in researching human behavior.</td>
<td>Economics</td>
</tr>
<tr>
<td>8.</td>
<td>Lee (1989)</td>
<td>Testing the influence of relation between exposure of mass media and perception of consumption reality in 3 groups of respondent (people of Taiwan in Taiwan, people of Taiwan in USA, and people of USA).</td>
<td>Economics</td>
</tr>
<tr>
<td>9.</td>
<td>Rahtz et al. (1989)</td>
<td>Testing the relation between social psychology among the elderly (aged more than 60 years) and their orientation to what have been displayed on TV.</td>
<td>Economics</td>
</tr>
</tbody>
</table>

Cultivation theory was proposed by Gerbner and his colleague in 1977 on the article of “TV Violence Profile No 8: The Highlights” (Kwak et al. 2002). In the initial period of 1980-1990, it was apparent that the publication by Hughes (1980) criticized this theory. He reanalyzed the theory using similar data as used by Gerbner and his colleague. By controlling the variables of age, gender, and education, the results showed different from the ones proposed by Gerbner and his colleague. Similarly, in Hirsch (1980), although he did not agree with the method used by Hughes, principally he criticized cultivation theory proposed by Gerbner and his colleague. Hirsch and Hughes suggested that viewers of TV, either heavy or light viewers, did not have different perception of real world.

This criticism made Gerbner et al. (1981a; 1981b; and 1981c) revised cultivation theory and incorporated the concept of “mainstreaming” and “resonance”. Severin and Tankard Jr (2001) wrote that the additional concept of “mainstreaming” and “resonance” is a substantive modification of cultivation theory. They also stated that mainstreaming and resonance transformed cultivation theory in which TV viewing interacts with other variables in such a way that TV viewing has strong impact on a sub-group of people but not to another sub-group. In the period of 1980-1990 it was apparent that cultivation theory was not only used in communi-
cation science but also in psychology and economy.

In the period of 1991-2000, only 2 publication samples, 1 publication of which was a feature of a magazine and another publication was the review of 3 empirical research articles.

In the period of 2001-2009, there were 19 samples of publication. In that period, the unit of analysis was students and common people as well as advertisement in mass media (TV and non-TV).

Table 2. Authors, Main Objective, and Scope of Research in the Period of 1991-2000

<table>
<thead>
<tr>
<th>No.</th>
<th>Authors</th>
<th>Main Objective</th>
<th>Scope of Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Freeman &amp; Brucks (1999).</td>
<td>Explaining the process and way mass media serves as the social agent and the implication to social consideration / decision and social behavior. This is performed by reviewing the articles written by Shrum &amp; Darmanin (The Socializing Effect of Mass Media: The Interactive Influence of Direct and Indirect (Mass-Mediated) Experience on Risk Perceptions); Pechmann &amp; Goldberg (Should Anti-smoking Ads Attempt to Denormalize Tobacco Use? Alternative Perspectives and Theoretical Frameworks); and Brucks (The Impact of Advertising on Young Children’s Beliefs about Alcohol and Tobacco Use/ Users: What’s Lurking at the Headwaters?)</td>
<td>Economics</td>
</tr>
</tbody>
</table>

Table 3. Authors, Main Objective, and Scope of Research in the Period of 2001-2009

<table>
<thead>
<tr>
<th>No</th>
<th>Authors</th>
<th>Main Objective</th>
<th>Scope of Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Keenan &amp; Shoreh (2000).</td>
<td>Testing whether attitude to advertisement, people in Egypt, is influenced by exposure of advertisement in printed media.</td>
<td>Economics</td>
</tr>
<tr>
<td>2</td>
<td>Applebaum (2001).</td>
<td>Describing how a program, Farscape, can rank the highest rating in prime time.</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>3</td>
<td>Diefenbach &amp; West (2002).</td>
<td>Testing whether TV viewing (TV Viewer) has effect people’s estimation about the average crime in real world.</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>4</td>
<td>Woo &amp; Dominick (2002).</td>
<td>Testing whether there is any different perception between the students in USA and those outside USA (interpersonally), that talk show program broadcast every day can result in negative attitude and perception.</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>5</td>
<td>Burroughs et al. (2002).</td>
<td>Testing whether there is any relation between the impact of TV viewing and materialism.</td>
<td>Economics</td>
</tr>
<tr>
<td>6</td>
<td>Zhang &amp; Harwood (2002).</td>
<td>Testing whether cultivation gives effect on perception of Chinese traditional values (harmony of interpersonal and hierarchical relation) among the people (Students in China) TV viewing.</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>No</td>
<td>Authors</td>
<td>Main Objective</td>
<td>Scope of Research</td>
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<tr>
<td>7</td>
<td>Kwak et al. (2002).</td>
<td>1) Investigating whether personal traits (for example, compulsive purchase) have effect on attitude to advertisement; (2) Investigating whether the effect of TV programs or advertisement in TV moderates the relation between personal trait (for example, compulsive purchase) and attitude to advertisement; and (3) Investigating whether the result will be different when this is applied in different culture, especially between USA and Korea.</td>
<td>Economics</td>
</tr>
<tr>
<td>8</td>
<td>Bulck (2003).</td>
<td>Investigating whether what has been said by Gerbner about “mainstream” is different or similar with what is popularly known as “regression to the mean.”</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>9</td>
<td>Holbert (2003).</td>
<td>Identifying whether there is relation between concern to environment, 5 (five) types of TV viewing, and pro-environment behavior.</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>10</td>
<td>Shrum (2004).</td>
<td>Testing whether the impact of TV viewing can improve social perception.</td>
<td>Economics</td>
</tr>
<tr>
<td>11</td>
<td>Kwon (2005).</td>
<td>Describing the exposure of subscribed TV (cable TV) in the form of feature.</td>
<td>Economics</td>
</tr>
<tr>
<td>12</td>
<td>Shrum et al. (2005).</td>
<td>Testing how cultivation affects materialism. Testing whether materialism is processed heuristically.</td>
<td>Economics</td>
</tr>
<tr>
<td>14</td>
<td>Grabe &amp; Drew (2007).</td>
<td>Testing whether types of program (crime drama, real work of police in eradicating crime, news) and channel (TV and Newspaper) have different potentials in affecting perception, fear, and behavior related with the exposure and attention to criminal content.</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>15</td>
<td>Glynn et al. (2007).</td>
<td>Testing the effect of talk show displayed every day (Oprah Winfrey Show) on the establishment of public opinion.</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>16</td>
<td>Spilski &amp; Klein (2008).</td>
<td>Testing whether the congruence of advertisement media and starring celebrity can create better impression (more effective attention and processing) than those of incongruence.</td>
<td>Ekonomi</td>
</tr>
<tr>
<td>17</td>
<td>Yang et al. (2008).</td>
<td>Testing whether viewing television programs in USA will result in a feeling of relative loss in life among the people in Asia (South Korea and India).</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>18</td>
<td>Nabi &amp; Riddle (2008).</td>
<td>Identifying whether personal trait (anxiety, sensation seeking and psychoticism) moderated by TV Viewing has effect on perception of violence.</td>
<td>Social Humanities / Communication</td>
</tr>
<tr>
<td>19</td>
<td>Chu et al. (2009).</td>
<td>Describing how advertisement of African and Anglo American models in prime time advertisement in television ABC, CBS and NBC use different speech, frequency, and types of food products, attractiveness, and image.</td>
<td>Economics</td>
</tr>
</tbody>
</table>
Hypothesis 2 to 7 Testing

Hypothesis 2 to 7 testing is performed by using chi-square analysis. Siegel and Castellan (1988); Cooper & Schindler (2006) wrote that chi-square analysis is used in the testing that uses nominal data. This technique tests the difference between the distribution of sample data and the expected distribution. At the confidence level of α= 5%, alternative hypotheses 3 and 5, were not supported by the collected data.

Hypothesis 2 Testing

H₂: There is a different frequency of empirical research articles and review articles in the publication

\( \chi^2 = 18.600 ; \ d.f. = 2 ; \ n = 30; \ \text{Asymp.Sig} = 0.000 \)

Of the total 30 articles, 21 articles were empirical research articles, and 9 articles were non-research articles. Of the non-research articles, 6 articles were reviews (the articles written by Bulck, 2003; Freeman & Brucks, 1999; Meyer, 1989; Gerbner et al. 1981; Hirsch, 1980; and Gerbner et al. 1980); 2 articles were from magazines or feature (the articles by Kwon, 2005; and Applebaum, 2001); 1 article was a book reference (the article by Cox and Sirola, 1993).

In addition, not all sample articles were full text article. One article only consists of an abstract (the article written by Chu et al. 2009) which was the proceeding of a conference (American Academy of Advertising Conference, March 26-29, Cincinnati, Ohio), 2 articles were extended abstracts (the articles written by Spilski & Klein, 2008; and Freeman & Bruck, 1999) and the remaining articles were full text articles.

Hypothesis 3 Testing

H₃: For empirical research articles, there is a different frequency of qualitative, quantitative, and combined approach of research in the publication

\( \chi^2 = 10.714; \ d.f. = 1 ; \ n = 21; \ \text{Asymp.Sig} = 0.001 \)

Of 21 empirical research articles, no article purely used qualitative approach. Mix methods (quantitative followed by qualitative) was adopted in 3 articles (the articles written by: Shrum et al. 2005; Diefenbach & West, 2002; and Heath & Petratis, 1987).

Hypothesis 4 Testing

H₄: For empirical research articles, there is a different frequency of the types of unit of analysis in the publication.

\( \chi^2 = 2.818 ; \ d.f. = 2 ; \ n = 21; \ \text{Asymp.Sig} = 0.244 \)

The unit of analysis is a single member of sample, which is the element of population members. In general, there were 3 unit of analysis used in the research. They were people (students or common people or public), character of the victim displayed in TV, and advertisement (TV and printed media). Of each unit of analysis used in the research, 4 articles did not mention explicitly the number of unit of analysis (the articles written by Chu, 2009; Spilski & Klein, 2008; Shrum, 2004; Holbert, 2003), while other articles mentioned the number of unit of analysis from which the data was taken. In general, the unit of analysis used in the articles is students, common people (public), and combination of students and public. In the unit of analysis of the public, because the data was collected in survey by telephone or mail, then it would be more appropriate to say that the unit of analysis is the house having the telephone line or the house to which the mail is sent.
**Hypothesis 5 Testing**

H₅: For empirical research articles, there is a different number of data collection methods in the publication

\( \chi^2 = 24.524; \ d.f. = 3; \ n = 21; \ Asymp.\ Sig = 0.000 \)

The data used in the research articles was primary data. Adam et al. (2007) wrote there are some methods of data collection. They are observation, experiment, survey, interview, diary methods, case studies, data storage, and triangulation. Meanwhile, Jogiyanto (2004) wrote that the methods of data collection include observation, interview, experiment, survey via computer, and archives. In general, in empirical research articles, 16 articles collected the data by survey (72.7%), 1 article (4.5%) collected the data by experiment (the article written by Spilski & Klein, 2008), 3 empirical research articles (13.6%) collected the data by observation (the articles written by Chu et al. 2009; Keenan & Shoreh, 2000; and Hughes, 1980), and 2 article collected the data by mix methods (survey and experiment, the articles written by Shrum et al. 2005; observation and survey, the articles written by Diefenbach & West, 2002).

Churchill (2001) wrote that primary data can be collected by observation and communication. When using such division base, 3 articles collected the data by observation, 1 article collected the data by combined method of observation and communication, and the remaining 17 articles collected the data by communication. Of the articles using communication in the data collection, 4 articles used mail survey, 5 articles used telephone interviews, and the remaining 7 articles used questionnaire survey.

**Hypothesis 6 Testing**

H₆: For experimental research article, there is difference in frequency between the researchers performing validity and reliability testing and those whose do not

\( \chi^2 = 5.762; \ d.f. = 1; \ n = 21; \ Asymp.\ Sig = 0.016 \)

In general validity includes two aspects: validity of measures and validity of research. Validity of measures deals with the extent to which a measure can measure what it wants to measure, while validity of research deals with the control of secondary variable. Reliability put more emphasis on the consistency of measure in measuring phenomena. Burroughs et al. (2002) wrote the limitation of previous studies in the use of cultivation theory, is that they did not use adequate reliability (and also validity) testing. Of 21 empirical research articles, 16 articles performed reliability test and 9 articles performed validity test, while the remaining 5 articles did not specifically mentioned the use of measure test. Reliability testing was performed in 2 ways: inter-rater reliability; and internal reliability using Cronbach’s alpha/ α.

**Hypothesis 7 Testing**

H₇: For empirical research articles, there is different frequency between the research either controlling and not controlling demographic variables

\( \chi^2 = 0.429; \ d.f. = 1; \ n = 21; \ Asymp.\ Sig = 0.513 \)

Control variables are some variables beyond the primary variables that potentially contaminate the results of analysis, unless they are controlled. Or it can be formulated that the confounding variables in general are all variables unless
they are controlled will contaminate the purity of primary variables. Hadi (1995) wrote that “… the question that theoretically may appear in relation with the attempt to control the confounding variables is what variables that need to be controlled and how to control them? The next question is how to identify the variables with such potential?” The answer is the theoretical base that has to be put forward in theoretical analysis. The deeper the analysis, the longer the list of variables expected to influence dependent variable that become the focus of the research. In publication, of 21 empirical studies nearly half demographic variables were controlled (Table 4).

Table 4. Validity and Realibility of Measurement and Control Variable

<table>
<thead>
<tr>
<th>No.</th>
<th>Article</th>
<th>Validity and Realibility of Measurement</th>
<th>Control Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Article-1</td>
<td>n.a</td>
<td>Age, sex, education</td>
</tr>
<tr>
<td>2.</td>
<td>Article-5</td>
<td>Validity &amp; Reliability (α)</td>
<td>Age, sex, education, race, neighborhood crime rate</td>
</tr>
<tr>
<td>3.</td>
<td>Article-6</td>
<td>Validity &amp; Reliability (α)</td>
<td>n.a</td>
</tr>
<tr>
<td>4.</td>
<td>Article-8</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>5.</td>
<td>Article-9</td>
<td>Validity &amp; Reliability (α)</td>
<td>n.a</td>
</tr>
<tr>
<td>6.</td>
<td>Article-12</td>
<td>Reliability (inter-rater)</td>
<td>n.a</td>
</tr>
<tr>
<td>7.</td>
<td>Article-14</td>
<td>Reliability (inter-rater &amp; α)</td>
<td>Age, sex, education</td>
</tr>
<tr>
<td>8.</td>
<td>Article-15</td>
<td>Validity &amp; Reliability (α)</td>
<td>Sex, duration in collage, age</td>
</tr>
<tr>
<td>9.</td>
<td>Article-16</td>
<td>Reliability (α)</td>
<td>n.a</td>
</tr>
<tr>
<td>10.</td>
<td>Article-17</td>
<td>Validity &amp; Reliability (α)</td>
<td>Sex, age, respondent’ urban or rural background</td>
</tr>
<tr>
<td>11.</td>
<td>Article-18</td>
<td>Validity &amp; Reliability (α)</td>
<td>n.a</td>
</tr>
<tr>
<td>12.</td>
<td>Article-20</td>
<td>Validity &amp; Reliability (α)</td>
<td>Age, sex, education, income</td>
</tr>
<tr>
<td>13.</td>
<td>Article-21</td>
<td>Validity &amp; Reliability (α)</td>
<td>n.a</td>
</tr>
<tr>
<td>14.</td>
<td>Article-23</td>
<td>Validity &amp; Reliability (α)</td>
<td>Age, gender, education, income, use of other media (radio, newspapers, magazines, internet, and socially desirable responding)</td>
</tr>
<tr>
<td>15.</td>
<td>Article-24</td>
<td>Reliability (α)</td>
<td>Participants’ sex, age, grade point average, perceived realism of TV, professional experiences with beauty-related jobs, and importance of media conversation with friends.</td>
</tr>
<tr>
<td>16.</td>
<td>Article-25</td>
<td>n.a</td>
<td>Age, education, gender, race, income, locating of residence, and living alone or with other people.</td>
</tr>
<tr>
<td>17.</td>
<td>Article-26</td>
<td>Validity &amp; Reliability (α)</td>
<td>Respondents’ gender, age, education, years of education completed, household income, and race</td>
</tr>
<tr>
<td>18.</td>
<td>Article-27</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>19.</td>
<td>Article-28</td>
<td>Reliability (α)</td>
<td>Income, education, gender, age, viewing domestic TV</td>
</tr>
<tr>
<td>20.</td>
<td>Article-29</td>
<td>Reliability (α)</td>
<td>Age, race, gender, past victimization experience, perceived TV realism</td>
</tr>
<tr>
<td>21.</td>
<td>Article-30</td>
<td>n.a</td>
<td>n.a</td>
</tr>
</tbody>
</table>

*) n.a = not available
CONCLUSION, LIMITATION AND SUGGESTION

Conclusion

As mentioned, the objective of this study was to answer the questions: (1) what is the trend in the articles with the topic of cultivation theory, published in EBSCO?; and (2) what is the methodology used in the articles with the topic of cultivation theory, published in EBSCO? From the results of analysis, it can be concluded that in initial development of cultivation theory, publication articles focused more on the falsification of cultivation theory itself. The analysis in the research about television and audience specifically focused on the theme of violence in television. But in later development, the theory was also used in the analysis of the theme of non-violence, such as social psychology and economy. In economy, the focus is primarily on consumer behavior.

The articles consisted of empirical research articles, review articles, book review, and news from magazine (feature). In the published empirical research articles, the unit of analysis was students, common people, and advertisement both in TV and non-TV. The range of unit of analysis was between 101 and 4149. Nearly all empirical studies were survey research. The results of the analysis suggested that not all empirical research articles performed analysis of validity and reliability. Analysis of reliability was performed in empirical research articles in two ways: interrater reliability; and internal consistency reliability using Cronbach’s alpha. To ensure that the results of the analysis were not contaminated by confounding variables, some variables were controlled. The controlled variables were in general demographics, such as variables of age, gender, income, ethnic, and education.

Limitation and Suggestion

Stokes (2006) said that the limitations of the content analysis are: (1) insensitivity; sometimes content analysis becomes a rather ineffective instrument. For example, in the content analysis of violence in television, researchers sometimes only calculate violence without differentiating between the revenge, justice, or action performed wild animals to domesticated animals; (2) content analysis sometimes is criticized to be too descriptive; (3) content analysis is sometimes less credible; and (4) using content analysis is a tiring and time-consuming activity. The weaknesses, in this paper, are minimized by: (1) the insensitivity can be minimized by making categories (operational definition) of the analysis units; (2) the criticized model of being too descriptive can be minimized in the nearly same way as the first disadvantage, that is by making suitable operational definitions and using simple statistical analysis; (3) the third disadvantage can be minimized by inter-coder reliability test, in order to reduce inter-coder bias. Krippendorf (1980) wrote that the method usually used is asking other two researchers to coding similar data, and then comparing the results; and (4) the last disadvantage can be minimized by using computer, and by analyzing constantly “what is to be analyzed” and excluding the unnecessary analysis. However, although this paper tried to overcome the weaknesses, other analysis method (such as bibliography and meta-analysis) may be used to measure the consistency of this study. Despite the limitations, the most important is that articles used in the study were merely taken from the EBSCO. Further it will be more beneficial when incorporating other electronic databases such as ASAP, ScienceDirect, JSTOR, and others.

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REFERENCES


