An Explorative Study on Constructing Indices for Web Television Viewing

Yu-Chi Chen, Hai-Xiang He

Zhejiang Yuexiu University of Foreign Languages, College of Network Communication, China
chenyc17@gmail.com, hhx1176@163.com

Abstract

Quantitative method has dominated television audience survey in the past few decades. However, criticism over the method increases in tandem with the unprecedented change of television technology and the rise of multichannel viewing environment. In supplement to the quantitative method, the qualitative approach to audience survey has widely adopted across countries to evaluate viewing behaviors recently. Unfortunately, scholars are still searching for a doable qualitative framework that will fulfill the practical needs of contemporary television producers. To the regard, this study aims at constructing a qualitative index to measure television viewing behaviors in the muti-channel environment.

Firstly, this study emphasizes that the main character of Internet users is interactivity. Secondly, this study argues that the use of Internet television should be focus on the concept of intertextuality. Thirdly, this study proposes that the qualitative index of television viewing has to be structured on the interconnection between the user and the content. Fourthly, this study borrows the concept "appreciation" from art as the core of the qualitative index. Lastly, this study will proceed by integrating different empirical methods and data to test the practicality of the qualitative index.

In short, this research is not only measure the "appreciation", but all so measuremen what "appreciation" contains. Hope to provide a more objective measurement method of Internet viewing.

Keywords: Internet TV, Media usage behavior, Quality rating, Appreciation index

1 Introduction

Due to propagation environment in changing, not only the concept of studying the audience alters, the using behavior of the audience is different from ever. Meanwhile, due to this change, one of the most important knots of study- viewing behavior that drives audience's user behavior is facing upon many discussions and disputes. In the study of traditional viewing behavior, the "audience rating" is always the mainstream. However, it has always been criticized. Thus, there come with many scholars who proposed the concept of "viewing quality" to replace that of the "audience rating" [1-2].

Many discussions of "audience rating" and "viewing quality" have also appeared in related document as well. However, Most of them were focused on the explanation of why using "viewing quality" instead by stating the defects of "audience rating" [3] method or, considered the measurement of "viewing quality" as being based on the standpoint of "users" in seeing how they "enjoy", "satisfy" or "influence" the TV [4]. In general, in the foreign study of TV program in quality, the British "enjoyment index" and U.S. TVO are more lasting and accepted by the TV industry; particularly, the "enjoyment index" influenced deeper that other countries adopted it one after another or implemented it and revised later [5]. On the other hand, in viewing of the above mentioned study and experience of "viewing quality", "viewing quality" [6] comes with stability in having rather potentiality in developing into a fixed and comparable index. It is found, when in measuring the similar common program or series, the "enjoyment index" of the different episodes in the same series are more or less the same, which indicates "enjoyment index" is a rather stable tool [7].

Besides, Su [8] also thought the level of "audience rating" was easy to be influenced by many factors in the past, such as, if the program is interesting, broadcasts in which time section, if it is feasible for most people, competition coming from other program in the same time section etc.; [9] where, the broadcasting time in arrangement particularly influence the "audience rating" much. However, "enjoyment index" is less related to the broadcasting time in arrangement; even a certain fine program was arranged in a fair time section in broadcasting, it will only influence "audience rating", but won't drop "enjoyment index" greatly; apparently, "enjoyment index" comes with better stability. Just as the "viewing quality" of the "enjoyment index" comes with the advantages of both conformity and stability [10] that the "viewing quality" mentioned in this study is developed by taking

"enjoyment index" as the object.

Although, many scholars in the broadcasting field for the purpose of compensating the deficit of "audience rating", they implemented the concept of "enjoyment" as the referential index in assessing the program. Unfortunately, the so called "enjoyment" is often un-specifically defined, not to say how to measure the "enjoyment", as well as what it contains in measurement. In the past, RTHK defined the "appreciation" as "If it is worthy of viewing" [11] British BBC has also defined "appreciation" equivalent to "interest" and "enjoyment" [12-13] and based on this in assessing how the audience like the program. But, "if it is worthy of viewing" is a rather vague idea; further, "how to measure it?" [14] This two were not mentioned in the related document as well. On the other hand, as "appreciation" and "enjoyment" are complete different idea, which should be separated in survey. In order to clarify the definition of "appreciation" [15-16] that the result of survey be awkward, the study decided to rearrange the attribution of "appreciation" and clarify it, then propose the necessary aspects should be included in measuring the "appreciation" [17-18].

2 The Building and Testing of Appreciation Index

In the aspect of constructing the "appreciation index", the "professional interview", "online questionnaires & survey" and "target group interview" were adopted, and which were taken in assessing the reliability and efficiency of the "appreciation index" as developed in this study. The measuring process as adopted in this study is to proceed the open-questionnaire on web and via test exploration technology in obtaining the reception of viewing the program by audiences. After collected the data, the initial professional and receptors target group interview was performed, which formed the initial structure of index. Secondary, proceed the assessment of reliability in data content as discussed and obtained by the professional so as to improve the reliability and efficiency of the study. Then, interview again the professional with the data as assessed in its reliability and formed the final questionnaires of this study. The questionnaires have been tested twice and finally prevailed on website for official test.

The first data collection. The sampling condition was targeted to those who viewed the TV program within one month during 10/2009 and 11/2009, and who could specify the most favorable program name. Finally, 3,301 effective samples were collected. The first professional interview was held on 04/07/2010. There are total 6 professionals accepted for the interview; where, they were request to rip off or combine the extra letters, same concept of words and obtained 74 dramatic vocabularies and 61 variety

show"'s vocabularies. Afterwards, we divided the measuring table, according to the professional's suggestion, into two aspects: factors related to personal affections, and the assessment of program content. In order to classify in consistence, the professionals suggested in assessing the interactive reliability. Via 3 encoded personnel, the interactive reliability as agreed was assessed; where, the interactive agreement was 0.77, 0.73 and 0.83; the complex reliability was 0.91. Then, the secondary professional interview was performed. The corresponded relationship of two measuring related vocabularies as discussed by the professionals is as shown in Figure 1 and Figure 2.
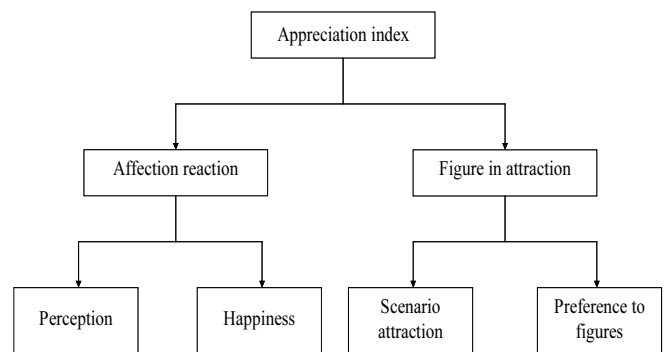

Figure 1. The result of secondary professional interview concerning "drama category"
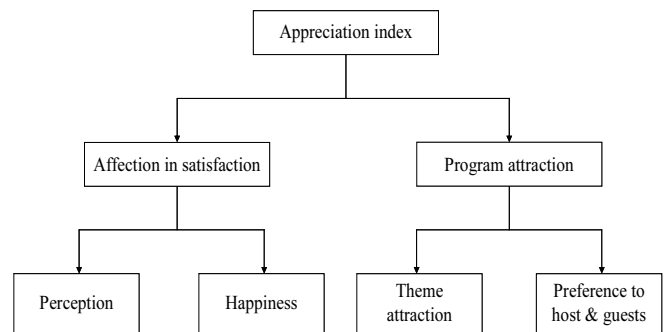

Figure 2. The result of secondary professional interview concerning "variety show category"

As the discussion by the professionals and the analysis of study result as shown in Figure 1, the structure of dramatic category in this study has divided the "appreciation index" into two types: "emotional reaction" and "figure attraction"; where, the "emotion reaction" was further divided into two index: "reception", "happiness"; the "figure attraction" has also divided into two index: "scenario attraction" and "figure preference".

As the discussion by the professionals and the analysis of study result as shown in Figure 2, the structure of dramatic category in this study has divided the "appreciation index" into two types: "affection in satisfaction" and "program attraction"; where, the "affection in satisfaction" was further divided into two index: "reception", "happiness" [19]; the "figure attraction" has also divided into two index: "theme

attraction" and "host, guest preference".

3 Testing and Verification

There were 250 questionnaires issued at the first preliminary test; where, 26 effective samples were returned. Where, the content of questionnaires was primarily focused on the test of drama and variety shows programs. Where, the scoring was designed on the questionnaires in taking 0 to 10 levels. The content of questionnaires was narrated from the document, the initial professional interview and the reliability test; where, it realized in two aspects: affection factor and program factor. Where, the affection factor is measured in "high" or "low" by the receptors; "high" scored 10, and "low" scored 0.

After measured by Cronbach α value, it is found the α value of drama category was 0.789; and that of the variety show was 0.798; while, in order to obtain the reliability between the two aspects, we combined the questionnaires of variety show and drama category and inspected its Cronbach α value again and obtained α value was 0.858.

After the first preliminary test, 7 of the receptors from it were selected in target discussion, the test method and questionnaires content were partially adjusted accordingly. After revision made, the second preliminary test was performed afterwards. There were 600 questionnaires were issued in the second preliminary test. The α value of the program "Next station, happiness" in drama category was 0.818; while, that of the program "the happy hour in that year"was 0.926. The α value of "Kon-shi is coming" in 5728 variety show category was measured 0.934; while that of the program "the happy hour in that year"was 0.965.

The returned effective samples in official survey were 793, males were 299, about 37.7% of the total samples; females were 494, about 62.3% of the total samples. After the program "Next station, the happiness" its KMO value is 0.847, which the primary factor can explain 85.4% of the total variance. "That year, the happy time" its. KMO value is 0.872, which the primary factor can explain 84.6% of the total variance. "Kon-shi is coming" its KMO value is 0.894, by which the primary factor can explain 78.6% of the total variance. "Kuo-Kuang gang help!" its KMO value is 0.902, which the primary factor can explain 85.4% of the total variance.

In this study, the score as measured for every program would be divided into "direct measurement" [1] and "indirect measurement" [2]. The so called "direct measurement" (Overall assessment) indicates the score as directly given by the receptor who measured his preference to a certain program. For instance: "If you are requested to give an overall score to the program "Kon-shi is coming!" how much would you give?" In another word, it is an overall score of the receptor who prefers the program by answering "one question item", which is called the "direct measurement". While, the so called "indirect measurement" (separated assessment) indicates the receptor evaluates according to the "individual question item" in the questionnaires. Such as, by using 4 questions in understanding the receptors' preference in assessment to the program: 1. How much "resonance" do you feel about the program content? 2. How do you feel the "happiness" from viewing this program? 3. Do you watch this program due to its"theme attraction"? 4. Do you watch this program for the sake of the "host"? It is to say, via more than one question item in knowing the receptors whose preference and assessment to the web-TV, which is called the "indirect measurement".

4 Analysis and Discussion

(1) The type of "separated assessment" can further understand the viewers' demand.

The "overall assessment score" mentioned in this article means the direct perception of viewers to the program in overall. There is only one question appeared in the questionnaire: Please give an overall score to "XXXXX" program! in measuring the "overall" preference of the viewer to a certain program. While, the "separate assessment score" means: resonance, happiness, scenario (theme) attraction, preference to major role (host) or supporting roles (guests), 5 questions in measuring the viewers' individual preference to a program's "emotion" and "work (program content)"; then, compare the factor score as obtained from the "overall assessment" and "separated assessment".

In the aspect of "overall assessment" in scoring, the overall average score of 4 programs in 2 types (variety show, drama) are: "next station, happiness" (8.8), "that year, the happy time" (8.8), "Kon-shi is coming" (8.6), and "Kuo-Kuang gang help!" (7.7). In the aspect of "separate assessment" in scoring, the overall average score of 4 programs in 2 types (variety show, drama) are: "next station, happiness" (7.9), "that year, the happy time" (7.3), "Kon-shi is coming" (7.7), and "Kuo-Kuang gang help!" (7.1). From the above data, it is found there exists a difference of 1. to 1.7 in scoring between "overall assessment" and "separate assessment". Which represents: if different measuring criteria has been used in assessing the program, the preference shall be varied.

While most foreign countries tend to adopt "overall assessment" in assessing the viewing quality so as to understand the preference of viewers to the program;

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[1] "direct measurement" (overall assessment) measuring method is a common way to measure the receptors in the traditional "viewing quality".

[2] "indirect measurement" (separate assessment) is a kind of measuring tool as developed by this study based on web-TV users' characteristics.

such as, BBC's "appreciation index" [20], Mainland China's "satisfaction", as well as Canada's "enjoyment index" which is scored directly by the viewers [21-23]. But the direct and overall scoring does not response exactly how the preference of viewers to the program, is it because of the program content? Or, is it influenced by the viewers' affection factor? In another word, the direct and overall scoring can only be the reference in judging if the viewers like to watch the program; but as to which program the viewers really like, it is not able to provide a clear answer. Thus, it can only be the reference which is not helpful in improving the quality of the program directly and practically. However, the "separate assessment" not only can understand how much the viewers prefer to a program, but also can get to know what the program content the viewers like.

(2) In web-TV, "program (scenario) theme" and "roles" are the most important factors for viewers in assessing the program.

From the result of this study, it is found, in 4 different programs of 2 types of categories, the viewers' preference to a programs varies. The ave. ranking of "next station, happiness" in drama category is like this: "preference to major role" (8.764), "preference to supporting roles" (8.723), "scenario attraction" (8.618), "resonance" (8.128), "happiness" (7.991); while, "that year, the happy time" comes with: "preference to major role" (8.767), "preference to supporting roles" (8.712), "scenario attraction" (8.510), "resonance" (8.458) and "happiness" (8.401). In Variety shows, the ave. ranking is: "happiness" (8.795), "preference to the host" (8.585), "theme attraction" (8.379), "preference to the guests" (8.019), "resonance" (7.995); while, "Kuo-Kuang gang help!" comes with: "preference to the host" (7.909), "happiness" (7.824), "theme attraction" (7.513), "resonance" (7.501) and "preference to the guests" (7.474).

From the data stated above, it is found the viewers' preference varies to the different program type. For example: the preference to the drama is different from that of the Variety shows. In drama category, viewers put their focus on the factor of "major or supporting roles"; while, what the Variety show emphasizes is "happiness" and "host. Thus, if viewers come with higher "appreciation assessment" in drama category, the factor of "role" should be paid more attention on; while, if higher "appreciation assessment" should be obtained in Variety shows, then it is a must to let viewers feel the "happiness".

As to how to realize the factors so as to raise the viewers in assessment, the open-questionnaire published on web as provided by this study should be available for reference. for example, the receptor mentioned concerning the drama: "actors/actress pretty with excellent performance", "male major role attracts me in performance", "exciting, actors peculiar as well", "female major role is my favorite, excellent

performance", "actors' performance is natural and vivid", "some of the content exaggerated and varied to the individual role in character", "role in magnificent figuring, roles in vivid character".

That is to say, the roles in drama category should be: excellent performance, good to see; except figuring, owning an individual feature or the viewers' favorite is a must. Thus, the viewers would love to watch the program. On the other hand in Variety shows category, the demand of the figures, such as host or guests, have got to be interactive, humorous and interesting, amusing and come with more exaggerated or drastic body language. "the host talks funny with body language", "two hosts have implicit agreement, the topics among the hosts and guests is rather active and amusing". "the host and guests are in good match that the atmosphere is warmed up with lots of fun", "xx is humorous, xx is pretty and funny", "in the beginning, it was host, and later found it was all I want to see", "an old artist, xx is interesting".

Of course, except the "figure" is an important factor to consider, other factors are playing inevident roles. Just like the viewers would pay attention to the theme of the program or scenario, such as in drama category the viewers would expect the scenario could close to the reality, come with high frequently, clear-cut, fresh and interesting etc...

"Film was shot close to reality, add up the strong high and low in scenario which makes people in real", "story fresh and interesting", "would like to see the development of the scenario in continuity", "good scenario, having big event in each episode, close to reality, always inspires audience's curiosity", "content special and compact, no clear-cut", "scenario practical and close to reality just like the real story in occurrence, giving audience more space in reflection, as well as educated", "scenario not exaggerated, no cursing, warm and plain in proper", "would like to know if the ending is the same as thought".

But, due to the attribution of Drama is different from that of the variety show, that the topics as talked by the viewers in the variety show would be different from that of the scenario of drama. Such as, the interested topics as viewers in the variety show would mostly focused on: vivid, interesting, topics of conversation, competent with the current situation, broadening knowledge, etc...: "content abundant, exciting with informative and interesting", "the topics as talked is always vivid, interesting without boring", "the performance of the content is interesting to draw audience's sight, keeps people watching regularly and would like to know more", "as episodes vary with different topics", "always talking the contemporary prevalent topics, broaden people's knowledge", "talking multi-variate issues, full of amusement, make my life full of fun".

Except the various factors as mentioned above, sometimes viewers would pay attention to the

"production" factor of the content itself: "the animation at the beginning is cool and fun, having been inspired with hot blood", "will be singing along with its theme", "screen delicate, smooth, both director and actors are making effort on it", "perhaps I was attracted by the director in his way of expression", "great shooting of camera, in real", "trail comes with robust sound effect", "not bad, sometimes it will screen outdoors", "film cut smooth, beautiful scenery like a painting".

From the above, we can see the appreciation aspect of the viewers to a program became more and more multi-variate, which from the former with only focusing on the figure or scenario to nowadays with more professional angle in assessing the program in viewing (i.e. scenery, film cut, camera shooting, sound effect and animation etc...) Although the survey was only applied on minor representative group of people (36 out of 3,031 samples in summary), it is found the viewers get more understanding to the program as viewing or the program in production, and this is what the program producer cannot ignore in future.

Besides, the result is worthy of Taiwan public TV in considering if the current survey is in deficit. Such as most of the survey by Taiwan public TV was focused on the study of the program production, which including: lighting, scenery, special effect, animation and shooting quality etc... However, if the acceptor can understand what it is all about is worthy of further discussion. Nevertheless, it is found from this study, those who can understand the professional terms are less.

5 Discussion

This study was formed and based on the web-TV group and via the open-questionnaire in retrieving the assessment of TV viewers' preference to the program, as well as the factor analysis, which is called the "appreciation index". Although, the document discussion and professional interview was performed before the official survey and preliminarily dividing the "appreciation" into: "affection" factor and "(program) work" factor in two aspects, also apply resonance, happiness, scenario attraction, preference to major role (host) and the preference to the supporting roles (guests) in measuring (separate assessment); as well as to compare with that of the "overall assessment" (only an "overall assessment" score was requested from the receptor). After being analyzed, it is found these two assessments are quite different. In probing into it reason probably is because there exist the preference between web-TV and conventional RV viewers. And the reason why it came up is probably because of the different measuring tools as applied.

We all know, a fine and effective program assessment in result is coming out from the perception and assessing tools of the acceptors in competence [24].

Under the circumstances of web-TV, the viewing behavior of the viewers has been different from that of the conventional one that web-TV comes with more choices than that of the conventional TV in preferences, it is more flexible in choosing time of viewing, even would share the perception to the program with others. In another word, if taking the early stage "appreciation index" in judging the viewers' preference to the program would definitely come up with deviation which is the un-conformity of the measuring tools with the acceptors' perception.

Take "next station, happiness" for an example, For the 5 measuring questions in measuring "next station, happiness", if the primary composition retrieving method was applied, which divided into two factors reluctantly: firstly, resonance (0.83), happiness (0.87), scenario attraction (0.88), categorized into a factor; then, preference to the major role (0.54), and preference to the supporting roles (0.65) to the another. The result of classification in analysis is quite different from what the professional interview. As in the professional interview, the resonance, happiness was categorized into "affection factor"; while, the scenario attractive, preference to the major role and supporting roles categorized into the "(program) work" factor. That is to say, the acceptors cannot distinguish clearly if the affection as caused by the scenario attraction should be put in the "affection" aspect or in the "(program) work" aspect, or even both are interactive to each other, which has responded to the saying of Trevino, Webster & Stein [25]: media attitude, choice and usage are complicated factors. Just because the audience's media attitude, choice and usage is an complicated psychological factor that the above phenomenon would occur. Thus, before the preference of the viewers to the program is being assessed, it is necessary to clear up the viewers' preference in assessment before the discussion under the premier of their demand, motive and expectation. Or, it is the affection, behavior after viewing.

Besides, more questions come up should be paid attention to by those who engaged in the study of viewing quality in future. Such as, the TV program quality in assessment in the early stage is via "producer" and "audiences" in measuring the good or bad of a program.

However, no matter via "producer" [26-27] or "audience" [28-29] in assessing the program, they are assessing index or orientation as designed by the researcher and if they are feasible in web-TV viewing environment? It is noted the web-TV viewers have more initiative. But the conventional assessment in early stage is based on the "researcher's point of view" in studying TV viewers' preference to the program instead of being based on the "viewers' view" in assessing the practical viewers' preference that there exists difference between the assessing tools as developed by the document discussion & professional interview and that of the practical survey.

Therefore, not only to the measurement of web-TV viewers' viewing behavior, the other web usage behavior (i.e. web game, friend making web, blogs) should be based on the users' point of view so that the practical users' preference can be understood.

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Biographies

 Yu-Chi Chen has served in the past: director, executive production and other positions; academic research field: film and television program production, communication industry research.

 Hai-Xiang He received his Ph.D. in Business School of Assumption University of Thailand. He is the professor at the School of Network Communication, Zhejiang Yuexiu university of Foreign Languages, His research interests include Internet public opinion, Political communication and Media education.