



Fragmentation and Audience Activity on Video-on-Demand Platform: Netflix and the 'Binge-watching'

Steffiani Reisa, Irwansyah

Pascasarjana Magister Ilmu Komunikasi Universitas Indonesia, Salemba, Jakarta

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E-mail: irwansyah09@ui.ac.id

A B S T R A K

One of digital transformation of television systems is an interactive service called video-on-demand (VOD). VOD provides full control to its users, by allowing viewers to enjoy, choose, store, and even download the desired audio-visual content anytime and through any electronic communication device. The presence of Netflix and other VOD service providers is transforming people's behavior patterns in watching television. People are beginning to switch to watching audiovisual content and episodes the same televisions or programs known as binge-watching through online streaming. This study focused on the concept of audiences' activities based on Levy and Windahl's typology model. The study also explored the motivation that was a part of uses and gratification theory. This new audience habit and motivation were explored by qualitative approach. The interview was conducted to the Netflix subscribers in Jakarta to discover the behavior activities and motivation of binge-watching. The thematic analysis was applied to analyze the process of fragmentation and audience activity that occurs in a very active new media society.

INTRODUCTION

Along with the thrive of society needs in communicating and gathering information, the role and influence of audio-visual communication is significantly increasing in people's lives. Audio-visual media is closely related to the needs of the society in obtaining information. Audio-visual media utilizes two crucial human senses to interpret a social reality, namely the eye as the sense of sight and the ear as the sense of hearing. A deep immersive experience can be built by activating the two senses so that the audience feels surrounded by multisensory stimuli

(Agrawal, Gans, and Goldfarb, 2019). Through immersive experiences, people will feel a part of an event. Immersive experience is not entirely created by technological devices (Shin and Biocca, 2018) since the role of technology is limited to merge into a reality.

Technology transformation is believed to be a necessity and will continue to drive the industry to innovate. One example is when the invention of television technology began. The beginning of the way conventional television works is by converting electromagnetic waves in the form of analog signals into visual content

(Spielmann, 2006). Technology encourages industry to innovate which then establish digital audio-visual transmissions which create digital signals that can be captured by digital terrestrial television (DTT) antennas, digital cables, and digital satellites. The digitalization of television signals enables the quality of picture and sound received by television sets to be clearer (El-Hajjar & Hanzo, 2013). Both using analog and signals digital, television has a nature of continuity or liveness, which allows people to watch the same program so that they collectively share the same reality (Couldry, 2004).

The development of television history is divided into several periods by Jimmie Reeves, Mark Rodgers, and Michael Epstein (2002). The first period, namely TV I (1948-1975), was associated with the era of network and broadcasting where there was a scarcity in television channels and network hegemony. The second period, TV II (1975-1995), was associated with the cable era where the number of channels began to increase so as the quality of the network. These two periods are often associated with the development of video cassette recorder (VCR) technology, remote control, cable systems, and satellite technology. The third period, TV III (1990-present) is associated with the digital era, the era of the development of digital distribution devices and audience fragmentation (Webster and Ksiazek, 2012). The presence of streaming service providers such as Netflix, Hulu, and Amazon have made the addition of periodization categories made based on changes in marketing strategies targeting the smaller audience segment, which is categorized as TV IV period. During this period, Netflix is at the forefront by breaking through existing traditional broadcasting and scheduling systems. Netflix comes with the concept of a subscription video-on-demand (SVOD) service that sets a monthly administration fee for users to be able to enjoy the available content. VOD is an interactive system that provides full control to its users, by allowing viewers to enjoy, choose, store, and even download the desired audio-visual content at any time and through any electronic communication device. Such audio-visual content can be in the form of films, television series, reality shows, video streaming, or other programs (Mirabito and Morgenstern, 2004). The disadvantage of VOD that was a part of consumer

frustration was favorite content disappearing because rights have expired (57%); amount of content available make it hard to choose what to watch (49%); give up searching for content if cannot find it in a few minutes (49%); content is hard to find across multiple service (48%); need more and more subscription/service to watch what I want (47%); and including the error (Statika, 2020).

The concept of VOD services was first introduced in the 1990s by Cambridge Digital Interactive Television. This service provided video and data for 250 homes and various schools. In 1998, the first commercial VOD was developed in Hong Kong. But at that time, the price of video CDs per chip was cheaper than the cost of subscribing to the service, so it did not get much interest. In the United States itself, its development began in 2000 beginning with Hawaii by Oceanic Cable. Quite short after that, Netflix, which was originally a DVD rental service provider, established an innovation by launching an internet-based video library that resembled a previously existing VOD concept. Globally, Netflix has managed to dominate the SVOD market, both in terms of the number of subscribers and revenue generated. Based on Figure 1 below, in 2020 the number of Netflix subscribers was 186,551,000, which was then followed by its competitors namely Amazon Prime Video, Disney +, and Apple TV +. The number of Netflix users is expected to increase by 27% in the following five years (Murray, 2020)

The presence of Netflix, HBO Max, Apple TV+, and other VOD service providers has slowly changed the pattern of television watching behavior. In the past, people used to watch television with conventional television. Now with the advancement of the internet, the emergence of various smartphones at affordable prices and the ease of getting networks, people tend to access audio-visual content through smartphones or other portable devices. This further changes the pattern of smartphones consumption. In average, a previous study (Rafaeli, Ashtar, and Altman, 2019) showed that currently people spent more than three hours 18 minutes using a smartphone, where more than one hour is used to watch online streaming. On the other hand, in average, people spent less than two hours to watch shows through conventional television (Rafaeli, Ashtar, and Altman, 2019). As of 2014, the average use of

conventional television continued to decline, while the use of online streaming services continued to increase (Hadida, Lampel, Walls, and Joshi, 2020).

Along with the increasing time spent by the public to use online streaming services, addictive behaviors that can damage the welfare of the audience emerge. In addition, the discretion of the audience in determining their own schedule of shows to be watched also triggers the emergence of a new habit to watch multiple episodes of the same television series in a period (Hirsen, 2015). This behavior came to be known as the binge-watching trend. Binge-watching is formed due to the changing habituation of digital media consumption (Steiners, 2014). By watching television shows, the audience becomes relaxed and passive, so that they can show a little mental stimulation during the watching process (Nakamura and Csikzentmihalyi, 2002). Feeling relaxed will end and cause a feeling of stress after the process of watching ends. Thus, to avoid these feelings, the audience tends to continue the process of watching to control the feelings arisen (Nakamura and Csikzentmihalyi, 2002).

This trend is then benefitted by Netflix to grab longer audience attention. The strategy of Netflix is to personalize large amounts of user data, which is generated through the process of monitoring and interpreting the Netflix user interactions when viewing content (Arnold, 2016). These data are then processed with an algorithm that produces a structured flow. This flow is known as entrance flow and insulated flow (Perks, 2015). The entrance flow aims to make the audience start watching a serial content. This flow applies the concept of fragmentation in which the focus of audience consumption on a digital media is narrowed down to certain content choices to pursue individual needs (Sunstein, 2001). As a result of this narrowed focus, people tend to ignore other content that conflicts with preferences formed from previous experience. Meanwhile, the insulated flow aims to direct the audience to binge-watching behavior by utilizing the existing features. This strategy is proven to be able to grab audience attention for longer period. Based on a study conducted by Nielsen, 88% of Netflix subscribers watched at least three episodes on the same television series in one day (Panda and Pandey, 2017).

Fragmentation is related to a process wherein the audience finds answers to individual needs in certain media content segments. If related to the uses and gratification theory, in this process the audience has found gratification obtained. Media works by highlighting a part of the social world at a time (Lippmann, 1965). Since the audience is selective about their exposure to information (Katz, Gurevitch, and Hass, 1973), the audience will selectively choose highlighted parts of the world they want to see. The more the audience develops specific habits in choosing media, the more likely they are exposed to certain groups of information (Tewksbury, 2005). In the assumptions of the uses and gratification theory, if an audience does not find his preferred content, then the person will continue to search until finding content that suits his individual preferences. This logic has a conflict with the concept of fragmentation which states that when an audience likes a content contained in a media platform, then the person will focus on becoming an audience of that media platform. Therefore, the objective of this study was to analyze the typology, the fragmentation process and activity of new media audiences.

THEORETICAL FRAMEWORK

New Media and Fragmentation

New media carried by the internet refers to emerging communication technologies along with their applications (Tomasselo, 2010). The elements of new media are the combination of computer, communication, and content (Flew, 2010). Other new media elements include: (1) digitalization and convergence of all aspects of media; (2) increased network interactivity and connectivity; (3) mobility and delocation in sending and receiving; (4) adaptation of publication and the audience roles, and (5) appearance of diverse new forms of media gateway (McQuail, 2010). Other new media characteristics are interactivity, demassification, and asynchronous (Roger, 1986). Interactivity means interactive communication through web 2.0 technology. Meanwhile, demassification means the exchange of messages individually among participants involved in large numbers. Asynchronous refers to the ability to send and receive messages at the times desired by each participant. In addition, the other characteristics

of new media are the fragmentation and escape of media institutions (Rinekso and Muslim, 2020).

Cultural, social, and technological viewpoints of new media environment have addressed social dispersion, individual and mobile use of devices which lead to fragmentation in the new media. Fragmentation is described as a potential relationship between audience and information (Tewksbury, 2005). Work lives, everyday lives and media use are said to be fragmented (Christensen and Røpke, 2010), meaning that people's lives are built of smaller and even smaller pieces (Tammi, 2016). For this fragmentation to be effective, both parties rely heavily on media measurement to arrange audience consumption. The media environment is built together from the interaction of structure and agent, which is then known as the concept of duality (Giddens, 1984). Fragmentation enables and encourages people to narrow the focus of media consumption with the aim of pursuing individual interests and needs (Sunstein and Ullmann-Margalit, 2001), consequently the individual will ignore other messages. Fragmented audiences are unlikely to consume general content, which has the potential to make them uninformed about their needs (Tewksbury, 2005).

The fragmentation has three factors (Sunstein and Ullmann-Margalit, 2001). The first factor is the media providers wherein the most - visible cause is competition between various media products in getting public attention. This attention is monetized into a lucrative industry, by selling content to consumers and selling intermediary tools to advertisers. Competition occurs because public attention is limited in number, while demand continues to grow (Tewksbury, 2005). The second factor is media users who resemble the concept of selective exposure where users have their own preferences as the reflection of their needs, feelings, behavior, and tastes, which they consider to be rational. Users will have difficulty in choosing which media can fulfil their satisfaction, except by directly feeling what is offered. This difficulty is overcome by users in various ways, namely by the media repertoire and recommendations. The presence of the media has introduced a new way to shape both aspects (Sunstein and Ullmann-Margalit, 2001). The third factor is media

measurement. Media measurement allows media providers to analyze the audience, set strategy, and monetize the results. One well-known media measurement institution is the Nielsen Company. Now media users are increasingly dependent on the measurement of the media they have. Social media offers measurements that provide information about what consumers have done or said, which will lead to the next choice (Tewksbury, 2005). When discussing the concept of fragmentation, it is closely related to the Long Tail curve. In the digital age where the audience becomes more demanding, audiences are fragmented in hyper-fragmentation (Anderson, 2006). On the Long Tail curve, this audience group is in the 'tail' section that extends where niche markets are commonly found. This fragmented audience is in the 'tail' section where the audience has specific needs and preferences and feels that they need to be treated differently from one another (Anderson, 2006). They expect the relevance of the preferences they have in the media they choose.

Audience Activity

Previously the audience was considered passive. Only in 1940, Herta Herzog, Paul Lazarsfeld and Frank Stanton created the concept of an active audience and audience satisfaction (Barran and Davis, 2003). The concept of an active audience then became the basic assumption of the uses and gratification theory approach. The concept of active audience emphasizes the nature of selective and voluntary interactions between the audience and the media (Bauer, 1964). The typology of audience activity is divided into two dimensions, namely the qualitative orientation of the audience towards the communication process and the temporal dimension that explains the audience's activities seen before, during, and after exposure (Levy, 1983). Levy and Windahl (1984) defines audience orientation into three aspects: selectivity, involvement, and utility. Selectivity is the behavior of making choices. Involvement is defined as a psychological process of interpreting, evaluating, or decoding information and providing messages which have meanings. Meanwhile, utility is defined as participation which has social or psychological utility for participants.

Audiences in new media are increasingly active and selective, self-directed, and have multiple roles as recipients and senders of information (Livingstone, 2004). This occurs because the use of new media needs special skills (van Dijck and van Deursen, 2014). In the era of new digital media, the audience is required to meet different literacy requirements. The first requirement is digital literacy requires the audience to understand and use information in a variety of forms and a very wide variety of sources (Bawden, 2001) and use it wisely. Furthermore, the second requirement is basic literacy prerequisites for accessing digital media. Both conditions must be met since they are in the same set of systems.

Video-on-demand

Video on Demand (VOD) services were born as a development of the television landscape in the early 2000s. Like Digital Versatile Disc or Digital Video Disc (DVD), no schedule is needed in enjoying VOD content. This is what distinguishes it from time-shifting technologies such as VHS, DVR, but the VOD service does not allow users to record content that they want to watch. This service comes with three business models that are divided based on the fees charged to enjoy the service, namely transactional-VOD (TVOD) where fees are charged for each event watched, subscription-VOD (SVOD) where fees are charged for subscription, and digital purchase through download or permanent cloud storage. Video-on-demand subscriptions are one of the major subjects of study wherein Netflix is the market leader. SVOD, and other types of VOD services are new technologies that offer the concept of watching television without interruption due to advertisement. SVOD offers a customer-centered philosophy, where subscribers exclusively determine what, when, and how the content is watched (Elkawy, Lekov, Adhikari, and Portela, 2015).

SVOD is a monthly subscription service. Therefore, the main goal is to prevent subscribers from cancelling subscription fees. The main strategy is with personalized content recommendations to offer more content to the audience. Binge-watching is also one of the strategies carried out, namely by offering

prolonged serial content that makes the audience subscribe for a longer period (Jenner, 2015).

Binge-watching

The term "binge-watching" began to be known around 2000, when sales of DVD box sets increased dramatically (Lotz, 2014). This slowly led to a decline in the number of conventional television and cable television viewers. At that time the community began to be able to access unlimited internet connections at affordable prices. This condition caused the public to have the opportunity to watch several episodes of the show at one time or watch all episodes in the same season (Hirsen, 2015). It is difficult to determine how many episodes are watched to be categorized as binge-watching, since it is relative depending on the amount of individual media consumption. The majority (73%) define binge-watching as watching 2-6 episodes of the same television series in a period (West, 2013)

In popular media, binge-watching and Netflix have become two identical concepts (Matrix, 2014). It cannot be denied that the presence of Netflix is not only as a VOD service provider, but also as a producer of content which in general has led to "Netflix effect" (Roxborough, 2014), which has changed the way television shows are produced, and consumed. Netflix does not just pass up the "binge-watching" phenomenon. This phenomenon is used to facilitate and encourage consumptive activities, one of them is by producing their first original television series, House of Cards and Arrested Development (Pittman, 2015).

Uses and Gratification

The basic assumption used in this theoretical approach is that media users play an active role in selecting and using media in the communication process (Katz, Blumler and Gurevitch, 1974). Media users will differentiate sources and messages based on their needs. Users will look for alternative media sources they have to meet individual needs. This means that they can easily change channels (Katz, Blumler and Gurevitch, 1974).

A study that applies the uses and gratification theory is concerned with (1) social and psychological origins (2) of needs, which results in (3) expectations of (5) different patterns

of media exposure (or media involvement in other activities), which results in (6) gratification needs and (7) other consequences that are largely unintentional (Katz, Blumler and Gurevitch, 1974). Meanwhile, according to Baran & Davis (2003) the uses and gratification theory relates to active audiences who have a purpose in choosing the media. These active audiences are free to interact with the media and interpret messages they receive (Abercombie and Longhurst, 2007). This theory has several basic scopes, namely the origin of needs, social and psychological needs, expectations arising from those needs, mass media or other sources used, patterns of media exposure due to involvement in other activities, the emergence of fulfilling needs and the emergence of other consequences unplanned. The main objective of the study which applies this theory is to understand the interaction between the origin of the needs and the context of media users (Palmgreen & Rayburn II, 1985).

When television turns online, the potential for satisfaction (gratification) increases (Pittman & Sheehan, 2015), for this reason it is necessary to develop further theories to explain the potential problems and realities that exist. Previous study that was focused on the trend of binge-watching as mindless recreation or restorative experience (Pang, 2014). Restorative experience is the way where people mentally recharge themselves. This experience attracts attention in such a way that it can bring someone come out from the normal world. Binge-watching has all the features found in a restorative experience (Pang, 2014), which are complicated story plots that are presented during one season, and the characters are very different from the original characters in the real world.

A study conducted by Stafford, Stafford, and Schkade (2004) divides the audience into two segments, namely *Lone Wolves* and *Social Animals*. *Lone Wolves* is a segment of audiences who do binge-watching to relieve loneliness and bad friendly relations. Meanwhile, *Social Animals* do 'binge-watching' to enjoy shows with others, both physically and digitally (Pittman & Tefertiller, 2015). Most of the audience will feel something positive by doing binge-watching (Shannon-Missal, 2013). This positive feeling is associated as a gift that has been awaited after hard work by planning this binge-watching in

advance (Feeney, 2014). This can also be associated with hedonic consumption (Stafford, Stafford & Schkade, 2004). Hedonic consumption is a behavior in which the user gains satisfaction from feelings of pleasure and fantasy, where fantasy itself is associated with restorative experience (Holbrook and Hirschman, 1982).

A study noted that a media will serve different gratification for regular and periodic audiences (Papachirissi and Mendelson, 2007). The time aspect of media use is becoming increasingly considered as more and more technology influences in everyday life. Other study was conducted to observe the impact of the time spent in the media with its users. A study showed that binge-watching could form loyalty towards a program (Jurgensen, 2012). This study noted that there were 73% of the audiences did binge-watching of the first season of *Breaking Bad* show, and the percentage increased in every season.

METHODS

The study was a qualitative study in which the results are presented descriptively. This study aimed to get an in-depth description of the subject under study and to show how social reality is understood according to the perception and experience of the subject (Irwansyah, 2005). Meanwhile, the paradigm in this study was constructivist, in which the truth regarding social reality used in this study needs to be ascertained. The method used here was case study and this study is considered to interpret a case in detail and depth (Yin, 1994) by using several data collection techniques. The cases in question can be in the form of people, groups, organizations, issues, processes, and so on (Daymon and Holloway, 2002).

Data collection techniques used in this study were in-depth interview, literature study, and observation. Interview technique was used to obtain accurate data about behavior in watching television series and audience activity. The in-depth interview technique used here was a semi-structured interview with open-ended questions to obtain broad opinions of the participants that were adjusted to the data needed (Neuman, 2014). This study prepared a framework of

questions, but during the interview, there was a reserved the right of freedom to explore the reasons with non-rigid probing, so that the direction of the interview remained in the control of the researcher (Daymon and Holloway, 2002).

Due to covid-19, the limited access to informants was occurred. The informants were six Netflix subscribers located in Jakarta, aged 29 and 31 years. The informants had been a Netflix subscriber for more than one year with an average intensity of watching of more than five days a week with more than four hours per day. The selection of informants was based on knowledge on the content of Netflix service and the ability to use the service. There is no need to interview the Netflix representative or officer in order to respect from viewer behavior's perspective or audience study. The literature review technique was carried out to obtain information about the concepts and models of fragmentation that existed on Netflix services from scientific sources such as books, journals, and research publications like the concepts of this study. This technique is based on the idea that knowledge bodies are collected and developed, and researchers can learn and build things from what have been previously conducted by other researchers (Neuman, 2014). Meanwhile, the observation technique was carried out through observation of the interface and features presented using the researchers' Netflix account. This technique was used to provide additional information on the topic under study. In addition, this study observed audience activity by using the Levy and Windahl's typology model (1984) using two types of activities, namely before and after binge-watching. Activity during exposure was not observed since its measurement was not too significant to compare. Activity before exposure occurs in the selectivity orientation which is indicated by the presence of satisfaction seeking activities.

RESULT AND DISCUSSION

This study showed informants had become subscribers for more than one year and had a high intensity in watching shows on Netflix. All informants met the requirements of digital literacy, namely the ability to understand and use information in a variety of forms and a very wide variety of sources (Bawden, 2001).

This digital literacy will later encourage audience activeness. The informants were able to define their specific genre preferences of the shows. Their preferences reflected the needs, feelings, or desires obtained from past experience by directly feeling what is offered. This experience shapes preferences and helps in decision making. The informants expected the relevance of the preferences they had with the content offered in the media they chose. Decision making made by the audience is formed because of the results of a series of structured flow, namely entrance flow and insulated flow (Perks, 2015).

Entrance flow aims to get the attention of the audience by making the audience consistently watches content in accordance with the structure of their individual preferences. This flow applies the concept of fragmentation in which the focus of audience consumption on a digital media is narrowed down to certain content choices to pursue individual needs (Sunstein, 2001). Fragmentation is designed using complex algorithm data and in-depth analysis. The results showed that fragmentation was proven successful in narrowing the focus of consumption owned by the audience and succeeded in directing the audience to a specific content.

Along with the advancement of film industry, the number of movies and television series that can be watched on Netflix is difficult to determine. The number of titles available on Netflix varies by country. This is related to the registered license in each country. Plus, market extension is consistently done by continuing to add new contents. With so many television series and movie titles that can be watched, it is not possible for Netflix to offer all these titles to millions of their customers who have different cultures and languages. As a data-driven company, Netflix personalizes movie recommendations based on a series of algorithms that accurately retrieve data from massive sources and are processed with human input to make sure the recommendations are given as closely as possible to the preferences of individual customers (Figure 1).



Figure 1. Netflix's Serial Recommendations
Source: Netflix.com

Netflix achieved 80% stream time through personalization and the title recommendations (Chong, 2020). For this reason, the title recommendation is a very important part of the effort carried out by Netflix. The recommendation system not only marks established mainstream genres, but also more subtle genres, such as humor, speech tone, and narrative structure. This system is known as a micro-tag (Madrigal, 2014). The result of this personalized recommendation is very detailed since it is a combination of movie attribute analysis conducted with human intelligence by several workers and a series of algorithmic processes that use machine intelligence (Figure 1).

Netflix did not publish genre categorization results with micro-tags, but Madrigal (2014) found the fact that each genre had a URL link with a different sequence number, and there were 91,300 url links. The more specific the recommended genre, the more it is placed on the main page. Madrigal also found patterns in vocabulary selection where several adjectives continued to emerge. Genres with country-of-origin marker also often appeared and where the movies were made (i.e. Chinese Romantic Drama, Biographical Set in Edwardian Era). Other markers were time periods and age references (i.e., Teen TV from the 1990s). The micro-tag data that have been generated are not

only used to create genres, but also to increase the level of personalization in all movies shown. This recommendation feature also helps customers discover movie genres that they had never imagined before through the category "Because you watched".

Netflix applied a rating system that is slightly different from other VOD service rating systems. Such rating system is done in a simpler way by giving thumbs up or thumbs down. This model gets good feedback as evidenced by the increasing number of ratings given. This additional input can create additional personal experience and improve personal recommendations, by making the main display more relevant. Maybe not so many users realize that Netflix even also personalizes thumbnails to attract audience's attention through a series of complex processes known as Aesthetic Visual Analysis (AVA). AVA is a set of tools and algorithms that search Netflix videos for the best images and pull them out into thumbnails. The process uses image recognition algorithm to create metadata. The data are categorized based on visual, contextual, and compositional aspects to determine "good" thumbnails. Visual category focuses on brightness, color, contrast, and motion blur. Contextual category focuses on face and object detection, motion, and shot angles. Meanwhile, compositional category focuses on visual principles in cinematography, photography, and design. Then the algorithm creates levels to determine which images are the most interesting and clickable to be used as thumbnails.

When the features of the entrance flow have succeeded in directing the audience to content, insulated flow begins to take a role by directing the audience to continue watching the content simultaneously. This insulated flow directs the audience to binge-watching behavior by utilizing all available features. One feature utilized is the post-play function. By using this function, Netflix will automatically play the next episode, without requiring any interaction from the audience. Every two episodes played, the audience will be asked to confirm whether they are still watching the show or not. This feature takes the main role in directing the audience to do binge-watching. Another feature contained in the insulated flow is the *Skip Intro* feature that allows the audience to pass the credit intro available for

each episode of the show. When an episode runs out and the next episode will start, the audience will find this Skip Intro option. This feature makes it easy for the audience to eliminate things that are considered a distraction when doing binge watching. All the above features work to perform their basic functions, namely, to create a personal experience. This strategy is proven to be able to grab audience attention for longer. Based on a study conducted by Nielsen, 88% of Netflix subscribers watched at least three episodes on the same television series in one day (Panda and Pandey, 2017).

On conventional television, various channels will form consensus regarding broadcast scheduling to get a wider audience. Unlike what Netflix and other VOD services do, they are very dependent on the structure of the interface, which is generally categorized by genre. For customers with new accounts where more detailed knowledge of viewing behavior has not been created, Netflix will conduct a survey to assess the audience's interest in a genre and assess a number of shows that might have been watched. Users must sign up to be able to enjoy the service. The first question is about the device used. Then users are asked to choose three movies from 40 shows, sorted according to a certain pattern. Only then can users access the main interface. The "further personalizing" section was deliberately created in a separate section. This stage is voluntarily and optional. At this stage users are asked questions about the intensity of watching several movie genres with the answer choices of never, sometimes, and often.

In this study, audience activity was investigated using the Levy and Windahl's typology model (1984) using two types of activities, namely before and after binge-watching. Activity during exposure was not observed since its measurement was not too significant to compare. Activity before exposure occurs in the selectivity orientation which is indicated by the presence of satisfaction seeking activities. This activity is carried out externally and internally. Internal activities are carried out first through reviewing show recommendations, story synopsis, and display cover on the main interface. Only then will the satisfaction-seeking activities be carried out externally, by asking for

recommendations from other parties and considering ratings given by outsiders.

The results of the study showed that all participants had preferences from the experiences they had before. Audiences that already have a preference will easily choose and determine the media that can meet their gratification. The fragmentation carried out by Netflix comes with the concept of recommendations, which is present to support efforts to meet the needs of the audience. Furthermore, Levy and Windahl (1984) tried to link the engagement variable during exposure to the pre-exposure selectivity variable. The result showed that there were four subtypes of audience activity. Audience involvement that occurred during binge-watching was highly valued, which can be seen from the audience's effort to use information about the things they watched and integrated that information into social behavior. The audience also evaluated the quality of the content and shaped expectations and reflected those expectations on subsequent shows (fantasizing).

Levy and Windahl (1984) stated that there is a significant positive correlation between audience activity measurement and satisfaction search indicators and satisfaction acquisition. Audiences, especially towards new media, are increasingly active and selective, self-directed in the choice of media consumption. This study showed that individuals use Netflix as new media, and binge-watching became a new trend in media consumption to gain social and psychological satisfaction. Meanwhile, the relationship between audience activity and the acquisition of gratification showed that the experiences of individuals that were more active would lead to a higher level of satisfaction, and activity had to be an independent variable (Levy and Windahl, 1984).

The main motivation for the audience in binge-watching is using it as a means of relaxation and entertainment. It can be found in the statements of the informant IS below:

"Since covid-19, I give more attention on Netflix's movies both on specific films or television series. My motivation is to relax my mind and body. I got more entertainment time because I could not really go outside because of the lockdown (PSBB). At least, I could enjoy the program to balance my emotional and my

thinking (interview via zoom, 29 November 2020).”

The audience uses the media to gain a balance between positive and negative emotional states and to maintain balance by seeking sensation and novelty (Zillmann & Bryant, 1994; Miron, 2003). Engagement towards external parties is also a motivation. Media use provides an intrinsically rewarding experience that leads individuals into a more enjoyable and engaging state of flow (Sherry, 2004). This becomes a factor that distinguishes the motivation of binge-watching behavior with other behaviors (Papacharissi and Mendelson, 2007).

Since the audience are more selective and active in the exposure of information, the more active they are in choosing the products (shows) they watch. The more active the audience are in seeking satisfaction, the greater the specialization of the content they will consume. It can be assumed that audience in the digital age are very active in choosing media. when there are stimuli in the form of fragmentation as performed by Netflix, then the audience will become more active (Panda and Pandey, 2017). These 'very' active audience will automatically specialize in certain types of shows and produce their own fragmentation without realizing it. Fragmented audience during the search for satisfaction tend to watch the shows continuously without realizing it (Papacharissi and Mendelson, 2007).

It is difficult to determine and to correlate the two concepts if they are not seen from the same point of view. Fragmentation is a process in which the audience finds answers to needs and expectations in a form of media and its content (Madrigal, 2014). Audiences who have a certain preference for a television show will tend to choose media with the same shows or resembles the preferences they have. There are many factors which influence the audience in interpreting their preferences for content. If the inter-media are interconnected, and there is intertextuality, regardless of whether the media is popular or not, the audience will still follow through the media.

CONCLUSION

This study showed that the fragmentation process facilitates new media audience to consume the content based on their interests and needs. The audiences become more active, more selective, and more self-directed to

use new media. Media provider could give specific attention the audience and direct them to a special final decision. The new habit known as binge watching rises based on their selective exposure. The flexibility of audience habit has been limited by rational consideration of their own preferences.

This study has limited to exploration of a few informants on the fragmentation process of media and binge-watching habit of audience. There is a need to enhance the exploration on the behavior of audience based on their limitation of space due to pandemic covid-19. Moreover, there is an increasing number of watching and the dependence toward media. Therefore, this study recommends to further research on the sharing of expression of audience while they post the experience of binge-watching in social media.

REFERENCES

- Abercrombie, N., Longhurst, B.J. (2007) *The Penguin Dictionary of Media Studies*, London: Penguin Books
- Agrawal, A, Gans, J.S. & Goldfarb, A. (2019). Artificial Intelligence: The Ambiguous Labor Market Impact of Automating Prediction. *Journal of Economic Perspectives*, 33 (2): 31-50.
- Anderson, C. (2008). *The long tail*. New York: Hyperion.
- Arnold, S. (2016). Netflix and the Myth of Choice / Participation / Autonomy. In D. Smith-Rowsey (Eds.). *The Netflix Effect: Technology and Entertainment in the 21st Century* (pp. 49–62). New York: Bloomsbury Academic. Retrieved November 8, 2020, from <http://dx.doi.org/10.5040/9781501309410.ch-004>
- Baran, S. J. & Davis, D. K. (2003). *Mass Communication Theory: Foundations, Ferment, and Future*. Belmont: Thompson Wadsworth
- Bauer, R. A. (1964). The obstinate audience: The influence process from the point of view of social communication. *American Psychologist*, 19(5), 319–328. <https://doi.org/10.1037/h0042851>
- Bawden, D. (2001), Information and digital literacies: a review of concepts, *Journal of Documentation*, Vol. 57 No. 2, pp. 218-259

- Chong, D., (2020) *Deep Dive into Netflix's Recommender System*, retrieved on 30 April 2020 from <https://towardsdatascience.com/deep-dive-into-netflixs-recommender-system-341806ae3b48>
- Christensen, T. H., & Røpke, I. (2010). Can Practice Theory Inspire Studies of ICTs in Everyday Life? In J. Postill & B. Bräuchler (Eds.), *Theorising Media and Practice* (pp. 233–256). New York, Oxford: Berghahn Books
- Couldry, N. (2004) *Theorising media as practice*, *Social Semiotics*, 14:2, 115-132, DOI: 10.1080/1035033042000238295
- Daymon, C. & Holloway, I. (2002). *Qualitative research methods in public relations and marketing communications*. Routledge, London.
- El-Hajjar, M. and Hanzo, L. (2013) A Survey of Digital Television Broadcast Transmission Techniques, *IEEE Commun. Surv. TUTORIALS*, vol. 15, no. 4, pp. 1924–1949
- Elkawy, A.A, Lekov, A., Adhikari, K.R., Portela, M. (2015) Netflix – the new face of the TV industry, Unpublished thesis, Denmark: Aalborg University
- Feeney, N. (2014). When, exactly, does watching a lot of Netflix become a ‘binge’? *Atlantic* (18 February), at <http://www.theatlantic.com/entertainment/archive/2014/02/when-exactly-does-watching-a-lot-of-netflix-become-a-binge/283844/>, accessed 18 September 2020.
- Flew, T. (2010) Cultural Economic Geography and Global Media Studies: The Rise of Asian Media Capitals? *Journal of the Oriental Society of Australia*, 42, pp. 35-49.
- Giddens, Anthony (1984) *The Constitution of Society: Outline of the Theory of Structuration*. Cambridge: Polity Press
- Hadida, A.L., Lampel, J., Walls, W.D., Joshi, A. (2020) Hollywood studio filmmaking in the age of Netflix: a tale of two institutional logics. *Journal of Cultural Economics*. <https://doi.org/10.1007/s10824-020-09379-z>
- Hirsen, J. (2015). *Cable in trouble over streaming*, *Newsmax* (16 March), at <http://www.newsmax.com/Hirsen/Cable-Streaming-HBO-ratings/2015/03/16/id/630328/>, accessed 28 January 2020
- Hirsen, J. (2015, March 16). *Cable in trouble over streaming*. *Newsmax*. Retrieved from <http://www.newsmax.com/Hirsen/Cable-Streaming-HBO-ratings/2015/03/16/id/630328>
- Holbrook, M.B., & Hirschman, and E.C. (1982) The experiential aspects of consumption: Consumer fantasies, feelings, and fun, *Journal of Consumer Research*, volume 9, number 2, pp. 132–140. doi: <http://dx.doi.org/10.1086/208906>
- Irwansyah, (2005) *Internet Uses, Gratifications, Addiction, and Loneliness Among International Students*, Unpublished master's thesis, Honolulu: University of Hawaii
- Jenner, M. (2017). Binge-watching: Video-on-demand, quality TV and mainstreaming fandom. *International Journal of Cultural Studies*, 20(3), 304–320. <https://doi.org/10.1177/1367877915606485>
- Jurgensen, J. (2012). Binge viewing: TV's lost weekends, *Wall Street Journal* (13 July), at <http://www.wsj.com/articles/SB10001424052702303740704577521300806686174>, accessed 18 September 2020.
- Katz, E., Blumler, J.G., & Gurevitch, M. (1974). *Uses and gratifications research*. *Public Opinion Quarterly*, 37(4), 509-524
- Katz, E., Gurevitch, M., & Haas, H. (1973). On the use of the mass media for important things. *American Sociological Review*, 38(2), 164–181. <https://doi.org/10.2307/2094393>
- Levy, M. R., & Windahl, S. (1984). Audience activity and gratifications: A conceptual clarification and exploration. *Communication Research*, 11(1), 51–78
- Levy, R.I. (1983), Introduction: *Self and Emotion*. *Ethos*, 11: 128-134. doi:10.1525/eth.1983.11.3.02a00020
- Lippmann, W. (1965). *Public opinion*. New York, Free Press
- Livingstone, S. (2004). The Challenge of Changing Audiences: or, What is the Audience Researcher to Do in the Age of the Internet? *European Journal of Communication*, 19(1), 75–86. <https://doi.org/10.1177/0267323104040695>

- Lotz A (2000) Assessing qualitative television audience research: Incorporating feminist and anthropological theoretical innovation. *Communication Theory* 10: 447–467.
- Madgrigal, A.C. (2014) How Netflix Reverse-Engineered Hollywood, retrieved from on 9 November 2020 at <https://www.theatlantic.com/technology/archive/2014/01/how-netflix-reverse-engineered-hollywood/282679/>
- Matrix, S. (2014). The Netflix effect: Teens, binge watching, and on-demand digital media trends. *Jeunesse* 6:199–38
- McQuail, D. (2010). *McQuail's mass communication theory*. CA: Sage publications.
- Mirabito, M. & Morgenstern, B. (2004) *The New Communications Technologies*, 5th Edition, London: Routledge
- Miron, D. (2003). Enjoyment of Violence. In J. Bryant, D. Roskos-Ewoldsen, & J. Cantor (Eds.), *LEA's communication series. Communication and emotion: Essays in honor of Dolf Zillmann* (pp. 445–472). Lawrence Erlbaum Associates Publishers.
- Murray, S. (2020) *North America SVOD Forecasts Report*, available in <https://www.digitaltvresearch.com/ugc/press/254.pdf>
- Nakamura, J., & Csikszentmihalyi, M. (2002). The concept of flow. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (p. 89–105). Oxford University Press.
- Neuman, W. (2014) *Social Research Methods Qualitative and Quantitative Approaches*. Essex, UK: Pearson
- Palmgreen, P. & Rayburn II, J. D. (1985) A Comparison of Gratification Models Of Media Satisfaction, *Communication Monographs*, 52:4, 334-346, DOI: 10.1080/03637758509376116
- Panda, S., & Pandey, S. C. (2017). Binge watching and college students: Motivations and outcomes. *Young Consumers*, 18(4), 425–438. <https://doi.org/10.1108/YC-07-2017-00707>
- Pang, A.S. (2014) *In Defense of Binge Watching*, retrieved from <https://slate.com/technology/2014/02/is-binge-watching-the-new-season-of-house-of-cards-bad-for-you.html>
- Papacharissi, Z., & Mendelson, A.L. (2007) An exploratory study of reality appeal: Uses and gratifications of reality TV shows, *Journal of Broadcasting & Electronic Media*, volume 51, number 2, pp. 355–370. doi: <http://dx.doi.org/10.1080/08838150701307152>
- Perks, L.G. (2015). *Media Marathoning: Immersions in Morality*. Lanham, MD: Lexington Books.
- Pittman, M., & Tefertiller, A. (2015). With or Without You: Connected Viewing and co-viewing Twitter activity for traditional appointment and asynchronous broadcast models. *First Monday*, 20(7).
- Pittman, M. & Sheehan, K. (2015) Sprinting a media marathon: Uses and gratifications of binge-watching television through Netflix, *First Monday*, Volume 20, Number 10, doi: <http://dx.doi.org/10.5210/fm.v20i10.6138>
- Rafaeli, A., Ashtar, S., & Altman, D. (2019). Digital Traces: New Data, Resources, and Tools for Psychological-Science Research. *Current Directions in Psychological Science*, 28(6), 560–566. <https://doi.org/10.1177/0963721419861410>
- Reeves, J.L., Rodgers, M.C., & Epstein, M., (1996) Rewriting Popularity: The Cult Files, in *Deny All Knowledge: Reading The X-Files*, ed. David Lavery, Angela 134 *Cinema Journal* 47, No. 3, Spring 2008 rHague, and Marla Cartwright (London: Faber and Faber), 22–35.
- Rinekso, A. B., & Muslim, A. B. (2020). Synchronous Online Discussion: Teaching English in Higher Education Amidst the Covid-19 Pandemic. *JEES (Journal of English Educators Society)*, 5(2), 155-162.
- Rogers, E. (1986). *Communication technology: The new media*. New York: Free Press
- Roxborough, S. (2014). *Despite Netflix effect, foreign networks prefer to wait for series*, *Hollywood Reporter* (20 February), at <http://www.hollywoodreporter.com/news/netflix-effect-foreign-networks-prefer-681928>, accessed 18 September 2020.
- Shannon-Missal, H. (2013). Americans taking advantage of ability to watch TV on their own schedules, *Harris Interactive* (8 April), at <http://www.harrisinteractive.com/NewsRoo>

- m/HarrisPolls/tabid/447/ctl/ReadCustom%20Default/mid/1508/ArticleId/1176/Default.aspx, accessed 28 September 2020.
- Sherry, J.L. (2004), Flow and Media Enjoyment. *Communication Theory*, 14: 328-347. doi:10.1111/j.1468-2885.2004.tb00318.x
- Shin, D., & Biocca, F. (2018). Exploring immersive experience in journalism. *New Media & Society*, 20(8), 2800–2823. <https://doi.org/10.1177/1461444817733133>
- Spielmann, Y. (2006) Video: From Technology to Medium, *Art Journal*, 65:3, 54-69, <https://doi.org/10.1080/00043249.2006.10791215>
- Stafford, T.F., Stafford, M.R. and Schkade, L.L. (2004), Determining Uses and Gratifications for the Internet. *Decision Sciences*, 35: 259-288. doi:10.1111/j.00117315.2004.02524.x
- Statika (2020) Leading consumer frustrations when watching content on subscription video on demand (SVOD) services in the United States as of February 2019, available at <https://www.statista.com/statistics/238942/disadvantages-of-watching-video-content-on-the-internet/>
- Steiner, E. (2014) Binge-Watching Framed: Textual and Content Analyses of the Media Coverage and Rebranding of Habitual Video Consumption. *Unpublished manuscript*. Philadelphia, PA: Temple University.
- Sunstein, C.R. & Ullmann-Margalit, E. (2001), Solidarity Goods. *Journal of Political Philosophy*, 9: 129-149. doi:10.1111/1467-9760.00121
- Sunstein, C.R., (May 2001) Social and Economic Rights? Lessons from South Africa. Available at SSRN: <https://ssrn.com/abstract=269657> or <http://dx.doi.org/10.2139/ssrn.269657>
- Tammi, R. (2016) *Engaging with media in the fragmented media environment*, Unpublished dissertation, Aalto University publication series
- Tewksbury, R. (2005). Collateral Consequences of Sex Offender Registration. *Journal of Contemporary Criminal Justice*, 21(1), 67–81. <https://doi.org/10.1177/1043986204271704>
- Tyler, A. (2010). Usage-Based Approaches to Language and Their Applications to Second Language Learning. *Annual Review of Applied Linguistics*, 30, 270-291. doi:10.1017/S0267190510000140
- van Dijk J.A.G.M., van Deursen A.J.A.M. (2014) Defining Internet Skills. In: *Digital Skills*. Palgrave Macmillan's Digital Education and Learning. Palgrave Macmillan, New York. https://doi.org/10.1057/9781137437037_2
- Webster, J.G. & Ksiazek, Thomas B. (2012). The Dynamics of Audience Fragmentation: Public Attention in an Age of Digital Media. *Journal of Communication*. 62. 39 - 56. 10.1111/j.1460-2466.2011.01616.x.
- West, K. (December 13, 2013). "Unsurprising: Netflix Survey Indicates People Like to Binge-Watch TV". *Cinema Blend*. Retrieved February 11, 2020.
- Yin, R. K. (1994). Discovering the Future of the Case Study. *Method in Evaluation Research*. *Evaluation Practice*, 15(3), 283–290. <https://doi.org/10.1177/109821409401500309>
- Zillmann, D., & Bryant, J. (1994). Entertainment as media effect. In J. Bryant & D. Zillmann (Eds.), LEA's communication series. *Media effects: Advances in theory and research* (pp. 437–461). Lawrence Erlbaum Associates, Inc.