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What is diverse?: A study of media diversity perceptions in the era of OTT services in South Korea

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1. Introduction

Global internet streaming services, or over-the-top (OTT) services, such as Netflix and Disney+, are becoming ubiquitous media platforms in society. The global OTT service market is expected to reach 4.9 billion users by 2029 (Statista, 2024), and in South Korea, the OTT service usage rate was 69.5% in 2021 and reached 77.0% in 2023 (KCC, 2024). While OTT service penetration continues to grow, the number of pay-TV subscribers declined in the second half of 2023 for the first time since the survey began. In South Korea, the phenomenon of cord-cutting is also becoming evident, with OTT services replacing traditional mainstream TV broadcasting services.

The advent of OTT services has been credited with breaking down the boundaries of the media industry, opening up new distribution channels, and ushering in the fourth era of television (Jenner, 2018). The breakdown of geographical boundaries has made it easier to access cultural content from disparate cultures, allowing for a different media experience. Furthermore, the value chain of media production, distribution, and consumption has been consolidated onto a single platform, creating a content-driven competitive environment in the media market. It can be argued that consumers will utilize an OTT service regardless of the cost, provided that it offers high-quality(killer) content. This content is therefore a key factor in determining the success or failure of an OTT platform (Kim & Lee, 2023).

The broadcasting industry in South Korea is

subject to a considerable degree of regulation, particularly in comparison to other countries. The advent of global over-the-top (OTT) services has led to a significant increase in the range of available viewing content. For example, content with LGBTQ-related themes or characters could not be produced in Korea due to the conservative social atmosphere. However, OTT services have been praised for challenging these norms and providing a wide array of high-quality content that explores challenging themes, new genres, and formats (Korea Development Institute, 2022). Moreover, both domestic and foreign OTT services are promoting content differentiation by emphasizing 'original' programming, thereby fueling discourse that the era of high-quality and diverse content is more accessible than ever before.

The concept of media diversity has traditionally been regarded as a representative of the public value that media should uphold and a fundamental principle for expressing policy outcomes and goals (Owen, 1977). By incorporating a multitude of voices, rather than a select few, into public discourse, media diversity fosters a free marketplace of ideas that facilitates the communication of diverse opinions and perspectives. This is fundamental to democracy as it provides the foundation for a vibrant democratic public sphere. As over-the-top (OTT) services become ubiquitous media platforms, influencing audiences and transforming the entire production, distribution, and consumption landscape, it is crucial to evaluate and discuss the implications for media diversity.

The impetus behind this research is the

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uncertainty regarding whether the OTT-driven media landscape is truly fostering media diversity. The debate over whether the competition spurred by the rise of new media increases or decreases diversity remains inconclusive. Moreover, OTT services have fundamentally transformed the way diversity is realized. The concept of diversity has traditionally been treated as an abstract, all-encompassing mega-concept. The term 'diverse' is typically defined indirectly through the classification of sub-concepts, including media supply, content, and exposure (Napoli, 2001). In an OTT-driven media landscape, however, diversity is influenced not by the linear, one-sided curation of programming but by the non-linear content libraries and discoverability across platform interfaces. To access diverse content, users may need to subscribe to multiple OTT services. Furthermore, access to content is controlled by recommendation algorithms, which poses challenges for traditional diversity models. In this era of global internet television, defining the value of diversity is more complex than ever before. While previous studies on OTT services have identified diversity as an important variable and found significant effects, few have explored users' micro-level perceptions and understandings of diversity.

The objective of this study is to examine users' perceptions and satisfaction levels regarding the diversity they expect and experience through over-the-top (OTT) services in the transformed media landscape. Additionally, this study aims to analyze which diversity values are more important and prioritized by users. To achieve this, the Expectancy Value Theory was employed as a theoretical framework, and t-test and Analytic Hierarchy Process (AHP) analyses were conducted.

The findings of this study are of academic significance in redefining and expanding the diversity debate as the media landscape evolves. The findings can serve as a foundation for the formulation of policy centered on media diversity, as the pervasiveness of overthe-top (OTT) services in the media landscape necessitates institutional discussions. From a practical standpoint, as diversity emerges as a crucial strategy for media operators, this study can provide valuable insights for practitioners seeking to understand audience needs for

diversity in today's fragmented media environment. This understanding can inform the development of future business strategies.

2. Literature review

2.1. OTT service and Media diversity

Diversity is a normative mega-concept that is closely intertwined with many other concepts (McLeod, Pan, Dunwoody, & Becker, 2005). Consequently, different scholars have defined diversity in slightly varying ways. Stirling (2007), adapting a diversity model from ecology, categorized diversity into variety, balance, and disparity. Van der Wurff and Van Cuilenburg (2001) divided diversity into open diversity and relation diversity, and Siøvaag (2016) classified it as organizational, structural, production, output and reception diversity. Hendrickx et al (2020) structured media diversity as ownership, brand, production, content, and consumption diversity. Napoli's model is the most widely cited diversity classification academic literature in (Loecherbach et al, 2020). Napoli classified media diversity into three categories: source, content, and exposure diversity. He then outlined the subcomponents that each category encompasses. Napoli's model is notable for extending the supply-centered diversity demand-centered discussion to a perspective. Consequently, the concept of diversity is dynamic and the specific elements that are prioritized may vary according to the prevailing media environment.

As OTT services become mainstream media platforms, it is a pivotal time to shift the focus of research on diversity. The diversity of OTT services extends to the diversity of content placement, i.e., the concept of discoverability. This is because OTT services are characterized as complex socio-technological software systems (Lobato, 2019). The front page of an OTT service serves as a gatekeeper, determining which content is delivered to the user. In recent years, OTT service strategies have shifted toward FAST (Free Adsupported Streaming TV), and the issue of placement has gained more attention. The primary concern is how CTV devices, such as smart TVs and connected TVs, place

OTT applications and content within their own interfaces, enabling users to easily discover and consume them. The discoverability of digital interfaces embodied in this system space is central to new media circulation power, as it has the potential to direct audiences towards certain kinds of experiences and content, and therefore away from others (Hesmondhalgh & Lotz, 2020). In this context, Lobato and Scarlata (2022) refer to discoverability and interface design as 'the politics of visibility' in media distribution.

OTT services have also sparked discussions about algorithmic recommendation systems that utilize big data from users. Academically, algorithmic diversity has been discussed mainly in the context of news diversity in online environments. In the context of OTT services, diversity has been indirectly examined through studies that trace algorithmic systems using reverse engineering methods. For instance, Česálková (2023) designed a study to reverse-engineer the algorithms of Netflix. Česálková assigned three participants the following roles: an active cinephile, a passive cinephile, and a casual cinephile. The active cinephile was defined as someone who searches for classic films on a daily basis and is therefore considered an "active" user. The passive cinephile was defined as someone who watches classic films on a regular basis but also selects content from the system's recommendations. The casual cinephile was defined as someone who occasionally watches classic films alongside contemporary films. The study found that only the active cinephiles had their own genre tags generated, while for other types of cinephiles, the Netflix algorithm recommended more popular content such as original content and new releases. These findings indicate that the technological mechanisms of OTT services are hindering diversity and homogenizing it with popular productions, primarily their own original content. This represents a form of diversity that has not had to be discussed in the traditional TV broadcast media environment.

In the current era of OTT services, the concept of media diversity needs to be expanded to encompass the technological dimensions of interface placement and algorithmic systems, in addition to traditional considerations.

2.2. User expectancy value of media diversity in OTT

Despite the emergence of new diverse OTT services, an increase in the number of available viewing channels, and the resulting expansion of viewers' exposure diversity, this does not necessarily translate into heightened viewer satisfaction with overall diversity (Song, 2017). In fact, if there is no change in the level of media diversity perceived by the audience, or if it is rated as insufficient, this can be regarded as a social issue. This is because diversity not only has social value, but also plays a pivotal role in the positive diffusion of services (Lee, 2018). In this context, this study adopts an individual-autonomy perspective, utilizing user satisfaction as a benchmark for diversity.

In their systematic literature review on media diversity, Loecherbach et al. (2020) emphasized the critical importance of perceived diversity. They argued that the question of who has access to what content and how they perceive it is becoming increasingly important. Hoffman et al. (2015) also argue that more attention should be paid to perceived or experienced diversity. This study is in alignment with this argument, and it is believed that it is necessary to examine users' perceived media diversity.

Based on Social Cognition Theory, Hoffman (2015) explained that to understand how media diversity is perceived, it is necessary to understand the recipient's motivation to seek diversity, perception of diversity, and ability to access diversity. Of the concepts mentioned, this study will focus on the motivation to seek and perception of diversity, which can be explained through Expectancy Value Theory (EVT).

The EVT model sought to systematically reveal the motivation for using media based on psychological thinking and to uncover the relationship between motivation, behavior, and satisfaction (Fong, Kremer, Troglin-Cox, & Lawson, 2021). In response, Palmgreen and Rayburn (1984) termed the individual's motivation before using the media as Gratification Sought (GS), and conceptualized the satisfaction obtained after use as Gratification Obtained (GO). In other words, the gratification sought (GS) and gratification obtained (GO)

by users of the media form a continuous, cyclical relationship, and this relationship strengthens over time.

Shin and Park (2021) applied EVT and found that users' expectations and satisfaction with OTT services' content diversity had the most significant discrepancy. However, it is unclear what kind of diversity Shin and Park (2021) referred to in their study. This study aims to follow up on the findings of these previous studies by examining the specific types of diversity users seek and their perceptions of diversity based on their satisfaction.

This study examines the current assessment of media diversity in OTT services through users' expectations and values of diversity in OTT services and the relative importance of the components of media diversity as perceived by users. In doing so, we discuss areas for future media diversity research to focus on. Based on the discussion so far, the research questions for this study are as follows.

RQ 1. How are audiences' perceptions of media diversity in OTT service structured?

RQ 1-1. How are the factors of Gratification Sought (GS) and Gratification Obtained (GO) for diversity in OTT services organized?

RQ 1-2. What is the difference between Gratification Sought (GS) and Gratification Obtained (GO) for OTT services?

RQ 2. What is the relative importance and prioritization of media diversity components?

3. Methods

3.1. Samples and data

This study conducted an online survey to explore the perceptions of media diversity among OTT service users in South Korea. We commissioned the Internet research agency 'Macromille Embrain' to collect data and conduct an online survey of adult men and women aged 20 to 69 who were currently using paid subscription-based OTT services from 20–23 May, 2024. The survey was emailed to 8,165 individuals between the ages of 20 and 69. A total of 438 responses were collected,

of which 400 were used for analysis, with 38 responses excluded due to being unusable. The survey respondents were individuals who use OTT services. To ensure the accuracy of the findings, the survey was conducted among individuals who have used OTT services for at least three months.

3.2. Measurement of variables for EVT

This study is based on previous literature on the Expectancy-Value Model (Rayburn & Palmgreen, 1984; Rubin, Palmgreen, & Sypher, 2004), which defines the user's expectations for the service before using the OTT service as GS (Gratification Sought) and the satisfaction after using the service as GO (Gratification Obtained). Although the definitions of GS and GO are distinct, the measures of both concepts are composed of the same items. The variables are defined as follows. This study adopts Napoli's diversity model as a framework for analyzing diversity in OTT media environments in terms of source, content, and exposure. Napoli's diversity model is regarded as a comprehensive summary of traditional diversity discussions (Loecherbach et al, 2020). However, in consideration of the media environment based on OTT services, we have incorporated technological diversity in terms of discoverability and algorithms.

The concept of supply diversity is divided into two categories: ownership diversity and workforce diversity. In the existing model, workforce diversity refers to the diversity of employees at media companies. However, since users cannot be aware of this diversity, we have replaced it with the concept of off-screen diversity. Accordingly, we measured three questions: 'Diversity of media companies providing content to OTT services' and 'Diversity of key workforce (directors, producers, writers, etc.) involved in content creation for OTT services'.

Content diversity was classified into three distinct dimensions: program format diversity, character demographic diversity, and idea/perspective diversity. The combined measure of content diversity was assessed through 11 questions, including 'Access to content of various genres through OTT services', 'Access to content

with diverse gender of characters through OTT services', and 'Access to content with opinions of various social groups through OTT services'.

Exposure diversity is classified into two categories: vertical and horizontal. Borrowing from the literature, we considered OTT services as a channel and measured it with two questions each: 'Access to diverse content within one OTT service' and 'Access to diverse content through multiple available OTT services'.

Technological diversity is classified into two categories: the diversity of content placement on the library screen of the OTT service and the diversity of algorithms for the recommendation system. Technological diversity was measured by three questions: 'The first screen of the OTT service shows content of different genres and perspectives' and 'The algorithm of the OTT service recommends content of different genres and perspectives'. All of the above questions were asked as "How much diversity did you expect from OTT services before you first used them?" for GS, and "How satisfied are you with the diversity of OTT services after actually using them?" for GO. All measurement items were assessed on a seven-point Likert scale.

3.3. Media diversity criteria for AHP analysis

To effectively apply the Analytic Hierarchy Process (AHP) in modeling a problem, it is necessary to construct a hierarchical or network-based structure that accurately represents the problem at hand (Saaty, 1987). In addition, pairwise comparisons must be conducted to establish the relationships and priorities within the structured model. In general, a hierarchical model for a given social problem consists of a focus (overall goal), criteria, and sub-criteria, which are further subdivisions of the criteria. In addition to evaluating the value that users place on OTT services, the overarching objective of this study is to determine the relative importance of media diversity factors in the OTT environment.

The criteria for measuring media diversity were established as source diversity, content diversity, and exposure diversity, in accordance with the concept of diversity as outlined by Napoli(2001). In addition, technological diversity was added to measure the

diversity required in the environment where OTT is used as a socio-technological software service (Lobato, 2019). Accordingly, criteria of the media diversity consist of four diversity components.

The four diversity criteria are divided into nine sub-criteria. Specifically, source diversity is divided into 'ownership diversity' and 'workforce diversity'; content diversity is divided into content 'type/genre diversity', 'demographic diversity of characters', and 'idea/viewpoint diversity'. Exposure diversity consists of 'horizontal diversity' and 'vertical diversity', and technological diversity is categorized into 'placement diversity' and 'algorithm diversity'. The components and structure of the measurement model are shown in Figure 1. It is essential to clarify that workforce diversity does not refer to the workforce of a media company, such as employees, but rather to off-screen diversity. Workforce diversity in this study refers to the demographic diversity of the individuals involved in the creation of content, including directors, producers, and writers.

The AHP analysis was conducted using the pairwise comparison method, which compares two factors at a time. If there are n factors in the same hierarchy, a total of n(n-1)/2 comparisons should be made. Pairwise comparisons in AHP analysis typically use a ratio scale from 1 to 9. The numbers on the scale indicate how many times more important a factor of greater importance is for a given criterion than a factor of lesser importance. The value of the less important factors is inversely proportional to that of the more important factors. The survey asked: 'What do you think is the value of media diversity in a media environment centered around OTT services?'.

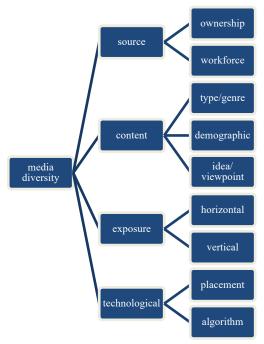


Figure 1. AHP hierarchical structure model

4. Findings

4.1. Demographic of Participants

Of the 400 respondents, 200 were male (50.0%) and 200 were female (50.0%). By age group, 100 people (25.0%) were in their 20s, 100 in their 30s (25.0%), 100 in their 40s (25.0%), and 100 in their 50s (25.0%). The largest number of respondents, 109 (27.3%), earned more than \$2,000 but less than \$3,000 per month, followed by 96 (24.0%) who earned more than \$3,000 but less than \$4,000, 67 (16.8%) who earned more than \$5,000 per month, and 57 (14.3%) who earned more than \$4,000 but less than \$5,000 per month. The majority of respondents have a four-year college degree (58.8%).

Since we surveyed OTT service users, we examined their usage patterns. The mean time spent on OTT services per day was 96.44 minutes (SD=83.79), while the mean expenditure on OTT subscriptions per month was KRW 17,942. When asked to select multiple OTT services they use, 291 respondents (27.66%) reported using Netflix, followed by 214 respondents (20.34%) who use Coupang Play, and 167 respondents (15.87%) who use Tving.

When examining the frequency of consumption by type of content consumed through OTT services, it

was found that TV series were consumed the most frequently (M=5.16, SD=1.35), followed by movies (M=4.93, SD=1.32) and entertainment (M=4.62, SD=1.54).

4.2. Gratification Sought and Gratification Obtained Factor Analysis

In order to address Research Question 1-1, we analyzed the GS and GO factors of media diversity perceived by OTT service users. To this end, we conducted an exploratory factor analysis.

First, we examined how users' GS of media diversity in OTT services was organized. The factor analysis was conducted using principal component analysis and analyzed using the Varimax orthogonal rotation method. As a result of the analysis, GS was extracted into four factors, which explained 74.82% of the total variance. Specifically, factor 1 was loaded with eight items representing the demographic diversity of characters, and factor 2 was loaded with three items representing the diversity of program types and genres. Factor 3 was loaded with three items representing the diversity of supply sources, and factor 4 was loaded with three items representing the diversity of technology bases such as algorithms (Table 1).

The reliability of the four GS variables derived from the factor analysis showed that demographic diversity (α =0.822), type/genre diversity (α =0.887), source diversity (α =0.923), and technological diversity (α =0.877) all had Cronbach's alpha values above 0.8.

Table 1. Factor analysis of Gratification Sought (n=400)

	Factor			
	1	2	3	4
Demographic				
1. Religion	.84			
2. LGBTQ	.84			
3. Race/Ethnicity	.76			
4. Social groups	.73			
5. Geography	.68			
6. Gender	.66			
7. Social class	.60			
8. Taste	.59			
Type/genre				
1. Format		.82		
2. Genres		.72		
3. Type		.72		
Source				
1. Ownership			.80	
2. Service types			.73	
3. Workforce			.61	
Technological				
1. Algorithms				.81
2. Serendipity				.80
3. Placement				.72
Eigenvalues	9.09	1.89	.99	.76
Variance explained	27.41	18.29	14.58	14.55
Cronbach's alpha	.822	.887	.923	.877

Next, we conducted an exploratory factor analysis to examine how users' GO for media diversity in OTT services was organized. As with GS, four factors emerged from the analysis, explaining 77.43% of the total variance. Specifically, Factor 1 was loaded with eight items representing demographic diversity of characters, factor 2 was loaded with three items representing source diversity. Factor 3 was loaded with three items representing program type and genre diversity, and factor 4 was loaded with three items representing technological diversity (Table 2).

The reliability of the four GO variables derived from the factor analysis showed that demographic diversity (α =0.939), source diversity (α =0.876), type/genre diversity (α =0.890), and technological diversity (α =0.896) all had Cronbach's alpha values

above 0.8.

Upon the inclusion of all items, the two exposure diversity items did not cluster together in both the GS and GO factor analyses, and thus were removed.

Table 2. Factor analysis of Gratification Obtained (n=400)

	Factor			
•	1	2	3	4
Demographic				
1. LGBTQ	.86			
2. Religion	.84			
3. Race/Ethnicity	.78			
4. Geography	.76			
5. Social groups	.70			
6. Gender	.67			
7. Taste	.65			
8. Social class	.63			
Source				
1. Workforce		.79		
2. Services type		.77		
3. Ownership		.76		
Type/Genre				
1. Type			.77	
2. Genre			.73	
3. Format			.71	
Technological				
1. Algorithms				.80
2. Serendipity				.78
3. Placement				.74
Eigenvalues	10.01	1.62	.86	.66
Variance explained	26.70	16.61	15.63	15.50
Cronbach's alpha	.939	.876	.890	.896

4.3. Comparative Analysis of Gratification Sought and Obtained

To address research questions 1-2, a paired sample t-test was conducted to compare the diversity of OTT services between users' GS and GO. The results indicate a significant discrepancy between users' pre-use expectations and post-use satisfaction with OTT services (Table 3).

When examining the mean values of all variables, it was found that the mean of GO was lower than that of

GS overall, indicating that the level of diversity that OTT service users actually experienced was lower than the level of diversity they expected. Specifically, the factor with the largest mean difference is type/genre diversity (M=0.21, SD=0.80), followed by technological diversity (M=0.16, SD=0.90), source diversity (M=0.10, SD=0.83), and character demographic diversity (M=0.03, SD=0.81). Among these factors, source, type/genre, and technological diversity were lower in GO than GS at statistically significant levels.

Table 3. T-test results for GS-GO (n=400)

variable	GS	GO	4	Cia
	M(S.D.)	M(S.D.)	t	Sig.
Source	5.08(.90)	4.97(.93)	2.435	.015
Type/Genre	5.36(.90)	5.15(.87)	5.279	.000
Demographic	4.84(1.0)	4.81(.96)	.679	.497
Technological	5.07(.95)	4.91(.99)	3.493	.001

4.4. AHP analysis

To address research question 3, we conducted an AHP analysis. The AHP criteria are the components of media diversity. In general, consistency ratio (CR) values less than 0.1 are considered to be consistent individual responses (Satty, 1985). The CR value for the six responses in Tier 2 was 0.02, indicating consistency. The CR value for the sub-criteria of source, exposure, and technological diversity in Tier 3 was 0.00, indicating full consistency, and the CR value for the three responses to the sub-criteria of content diversity was 0.01, indicating consistency.

The weight of each criterion for media diversity in OTT services is analyzed in Table 4. The results show that content diversity (0.302) is the most important factor, followed by exposure diversity (0.291) and technological diversity (0.291). The weights of exposure diversity and technological diversity were found to be very close, with differences occurring at the fifth decimal place. The findings indicate that users of OTT services prioritize content diversity above all other diversity components. This outcome seems to be a logical, given that users consume content directly.

Table 4. AHP criteria weights and ranks (n=400)

Criteria	Weight(W ₁)	Rank
Content diversity	.302	1
Exposure diversity	.291	2
Technological diversity	.291	3
Source diversity	.115	4

Global weights symbolize the relative importance of each sub-criterion. The value was calculated by multiplying the weights of the first-level criteria with the local score of each sub-criterion (Table 5). The global weighting of the nine variables revealed that algorithmic diversity (0.177) is the most important media diversity factor for OTT service users. The diversity of vertical exposure (0.167) and the diversity of ideas/viewpoints in content (0.132) are also influential factors. The criterion with the lowest importance was ownership diversity (0.032).

Table 5. AHP Sub-criteria and rank (n=400)

Criteria	Sub-criteria	Local Weight (W ₂)	Global Weight (W1*W2)	Rank
Source	Workforce	.721	.083	7
	Ownership	.279	.032	9
Content	Idea/ Viewpoint	.437	.132	3
	Type/Genre	.304	.092	6
	Demographic	.259	.078	8
Exposure	Vertical	.574	.167	2
	Horizontal	.426	.124	4
Technolo	Algorithm	.607	.177	1
-gical	Placement	.393	.114	5

5. Discussion and Conclusions

This study aimed to analyze users' perceptions of media diversity in the context of media consumption centered on OTT services. To this end, we applied the Expectancy Value Theory as a theoretical framework to examine the satisfaction level of diversity in OTT services and used the Analytic Hierarchy Process (AHP) approach to prioritize the media diversity that users perceive as important.

The media diversity model used in this study is

based on Napoli's diversity model, but it was extended to include technological diversity by adding discoverability (or placement) and algorithmic recommendation systems, which are highly discussed in the context of OTT services.

The findings are as follows. First, the Gratification Sought (GS) and Gratification Obtained (GO) of media diversity for OTT service users consisted of source diversity, program type/genre diversity, demographic diversity of characters, and technological diversity. A t-test of the GS and GO of the four diversity components showed that the GO of all components was lower than the GS and was statistically significant for all factors except demographic diversity. This can be interpreted as OTT service users' post-use satisfaction not being high compared to their pre-use expectations. Previous studies have also shown that users' GO for diversity of OTT services is lower than GS (Shin & Park, 2021). However, while previous studies dealt with diversity in the abstract, this study is significant in that it identifies which aspects of diversity users are not satisfied with in detail. The largest gaps between users' gratification sought and obtained with diversity are program type/genre diversity and technological diversity. In the South Korean context, the emergence of global OTT services, increased competition among OTT services, and aggressive original content creation and supply strategies have led users to anticipate a wide variety of content genres. However, the low level of gratification obtained with type/genre diversity on OTT services in practice indicates that competition among OTT services has not increased the diversity of content, at least as perceived by OTT service users.

In addition, a t-test of exposure diversity, which was not grouped into a factor analysis, revealed that the value for gratification obtained (M = 4.97, SD = 1.02) was statistically significantly lower (M = 0.22, SD = 0.97, p < .000) than for gratification sought (M = 5.20, SD = 0.91), suggesting that users did not experience as much diversity as they expected from OTT services.

Next, we used an Analytic Hierarchy Process (AHP) approach to understand the relative importance and prioritization of media diversity in the OTT-driven media landscape. The findings indicated that content

diversity was perceived as the most crucial aspect, while source diversity was perceived as the least important. Upon examination of the sub-criteria, it was found that among content diversity, diversity of idea/viewpoints is the most important factor, followed by program types/genre diversity. With regard to exposure diversity, users perceive it as more important to have access to a variety of content on a single platform than to have access to a variety of content across multiple platforms. In the context of OTT services, the majority of high-quality premium content is distributed through paid subscription OTT services. As a result, if users want to access content from a variety of genres, subjects, and perspectives, they will have to pay more for it. In light of these considerations, it is evident that exposure diversity in the OTT media landscape requires greater emphasis on a vertical rather than horizontal scale. In the past, the measurement of exposure diversity was primarily conducted in terms of horizontal diversity. Many studies have measured cross-channel diversity (horizontal exposure diversity) primarily through viewership or audience share. However, unlike TV broadcast services, OTT services cannot collect objective viewership data. Consequently, the measurement of media exposure is frequently based on either individual catalogue analysis or user perception. This implies a shift in focus from horizontal diversity to vertical diversity. It should be noted that this is also reflected in the second-ranked priority of vertical exposure diversity. In terms of technological diversity, algorithmic diversity was considered more important than content placement diversity.

In considering the overall(global) priorities, users perceive algorithmic diversity in OTT services as the most important. This is noteworthy because algorithmic diversity is a factor that has not been previously discussed in the traditional media landscape, which is centered around TV broadcast services. In this regard, Sjøvaag (2016) posits that the global digital media ecosystem influences the level of reception, or the diversity of content to which audiences are exposed. In other words, technological affordances such as recommendation systems within media platforms have shaped a new discourse on the diversity of exposure, which cannot be

encompassed by traditional notions of exposure diversity. This study empirically sheds light on Sjøvaag's (2016) theoretical discussion through the lens of user perceptions. OTT service users perceive the need for algorithmic diversity, rather than intrinsic or extrinsic diversity, as a direct consequence of using the service. However, a series of prior studies have found that OTT providers apply technical mechanisms that undermine diversity for their own commercial benefit (Česálková, 2023; Pajkovic, 2022). In light of the aforementioned findings, it can be concluded that OTT services must demonstrate adequate algorithmic diversity performance.

Another noteworthy result of the AHP analysis is that source diversity was given a relatively low priority. This may seem unsurprising, given that this is not an area of direct experience for users. It should be considered in the context of previous research showing that media professionals are also skeptical about the impact of source diversity (Bae, 2019). Historically, government regulation aimed at achieving the policy goal of media diversity has been implemented through source diversity. However, Bae's (2019) study and our findings indicate that both professionals and users, who are key participants in the policy-making process, increasingly view source diversity as less important. This can be interpreted as an indication that there is a diminishing rationale for source-level regulation to ensure diversity.

This study is significant in that it examines the perceptions of media diversity held by Korean OTT service users in the context of the global media ecosystem of OTT services. It is also of academic significance in that it highlights the necessity for a shift in the focus of media diversity in the future, with a particular emphasis on vertical exposure diversity and technological diversity.

Despite its academic significance, there are limitations to this study. Firstly, this study does not examined diversity from the supply side of current OTT services. Exploring supply diversity through a methodology such as content analysis prior to examining user perceptions of diversity would have provided richer results. In addition, exploring the perceived diversity levels and priorities of academics and industry experts on OTT services would have provided a more comprehensive picture of the current media diversity

landscape. We anticipate further research that will address these limitations and contribute to the ongoing discussion on media diversity.

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