



Key Factors for Unsubscribing from YouTube Channels: A Study of YouTubers in Taiwan

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Abstract. YouTube has become a major advertisement media for industries. People watch TV shows, movie trailers, news and episodes, on-line shows streaming as well. When people want to purchase something, they can find some unboxing reviews, experiences shares, using instructions and services introductions on YouTube before making orders. Traveling guides and educational tutorials are also can be found on YouTube. Thousands of YouTube channels need channel's subscribers directly or indirectly affect the revenue of channel owners. In addition to YouTube's own profit from watching, the subscribers are also an important reference when manufacturers want to choose key opinion leaders (KOL) or internet celebrities to promote their products or services. Since, maintaining a stable growth of channel subscribers and reducing the occurrence of unsubscribing are the key issue that every YouTuber needs to understand urgently. In this study, we used a survey to understand subscribers and YouTubers on unsubscribing, and analyzed some key factors for unsubscribing. The data analyses include descriptive analysis, factor analysis, reliability analysis, t-test, one-way ANOVA, and Pearson's correlation analysis. Through this study, people can understand key factors for unsubscribing reasons on YouTube platform and the priority of these factors. Whether there is special unsubscribe factors for different channel types and attributes. The key contribution of this study is: a questionnaire on key factors for unsubscribing on the YouTube platform was designed, and it could be utilized for further use in related studies in the future. We also summarize the responses and suggestions of we-media channel owners on the factors for unsubscribing.

Keywords: We-media · YouTuber · Unsubscribe

1 Introduction

With the impact of Web 2.0 and the socialization of the internet, internet has gradually replaced traditional media such as television, radio, and newspapers, which were the dominant media in the past. The current mainstream media has gradually evolved from a top-down business model of content-centered, top-down information dissemination to

today's decentralized, bottom-up content sources, with emphasis on sharing, collaboration and community relations among people [1–3]. YouTube is now a day the leading video-sharing platform in the world, with over two billion monthly active users in internet era [4, 5]. YouTube was founded in 2005, and started out as a platform for broadcasting people's life among friends. After its acquisition by Google in 2006 for US\$1.65 billion, YouTube has become a multipurposed videos platform for users [6]. According to the annual report from We Are Social (<https://wearesocial.com>), which is an advertising agency in the United Kingdom that focuses on the use of online communities around the world. The report shows that the total population in Taiwan was 23.87 million in January 2022, and 21.72 million people used internet. The internet penetration rate stood at 91% in Taiwan [7, 8]. The social media users in Taiwan at the start of 2022 was equivalent to 89.4% of total population, about 21.35 million population. People spent around 8 h and 7 min using the internet each day. Social media was accessed for 2 h and 4 min in one day [8]. The ranking of the most visited websites according to Alexa Internet, (which was acquired by Amazon and discontinued on May 1, 2022). [YouTube.com](https://www.youtube.com) is the second most visited site in Taiwan behind [Google.com](https://www.google.com), with 13 h and 31 min a day and 9.64 daily pageviews per visitor [9].

YouTube Economics is a subfield of the economics that focuses on the study of the economic aspects of the YouTube platform. YouTube provides a unique environment for content creators, advertisers, and consumers to interact with one another. Some of the specific areas of study in YouTube Economics include the effects of ad revenue on content creation, the impact of algorithm changes on viewership and engagement, and the role of YouTube in shaping online culture. We call people who owned YouTube channels and created video contents YouTubers. Nowadays, those videos creators gradually evolved into key opinion leaders (KOLs) in cyber world. YouTube provide the revenue sharing business model, which encourage YouTubers to generate and upload videos. When people watch the advertisements provided by YouTube during watching videos, the channel owners earned the advertising revenue, which was shared from YouTube. Besides advertising revenue, YouTube also provide several ways for creators gaining revenue, including channel members, which can watch special contents prepared by channel owners. When YouTubers live streaming in channel, the audiences are also able to donate in chat room.

Channel subscribers are crucial to YouTubers because subscribers represent a loyal audience that regularly watches their videos and engages with their content. When viewers subscribe to channels, they receive notifications when new videos are uploaded, and these notifications can prompt them to watch and engage with the content. Having a large number of subscribers also help YouTubers attract new viewers and build their brand. When potential viewers see that a channel has a substantial subscriber base, they may be more likely to check out the content and subscribe themselves. Additionally, subscribers play a significant role in determining the success of a YouTube channel. YouTube's algorithm takes into account the number of subscribers a channel has, as well as how frequently they engage with the content, when recommending videos to users. This means that channels with more subscribers and higher engagement rates are more likely to appear in search results and be recommended to viewers, leading to increase views and revenue for YouTubers.

On the other hand, when viewers unsubscribe from channels can have several negative effects on YouTubers. Losing subscribers can be discouraging for creators, as it indicates that some viewers are no longer interested in their content or have found other channels new to watch. From a practical standpoint, a loss of subscribers can also lead to a decrease in views and revenue. When subscribers unsubscribe, they are less likely to receive notifications about new videos, which means they may not watch and engage with as much content. This can result in a decrease in views and ad revenue, as well as a decrease in engagement metrics like likes and comments. In addition, YouTube's algorithm takes into account the number of subscribers and their engagement when recommending videos to viewers. If a channel loses a significant number of subscribers, this can signal to the algorithm that the content is not as engaging or relevant, and may lead to a decrease in visibility and recommended videos. Furthermore, a loss of subscribers can also affect the perception of the channel among advertisers and potential sponsors. Brands often look for channels with a large and engaged audience when considering sponsorship opportunities, so a drop in subscribers can make a channel less attractive to potential partners.

As we mentioned above, it is not difficult to find that subscribers are not only a necessary requirement to become a YouTube partner, but the number of subscribers is also a key factor in the latter sources of revenue [1]. In today's we-media inception, producing new content and topics, improving filming and editing techniques is certainly a concern for creators, but maintaining and expanding the number of subscribers is also a growing concern for YouTubers. In this study, the term unsubscribing refers to subscribers of a YouTube channel who have unsubscribed from channels for one reason or others and no longer follow any videos or messages posted by subscribed channels. This study intends to conduct questionnaire to understand subscribers and YouTubers on unsubscribing, and then summarize key factors for unsubscribing.

2 Relevant Research

We-media marketing is a marketing strategy that leverages social media platforms and user-generated content to promote products, services, or brands. In this approach, the emphasis is on creating content that is shared among users and encouraging the creation of user-generated content to promote a brand or product. We-media refers to a group of individuals or entities that produce and distribute content through social media platforms like Facebook, Instagram, Twitter, and YouTube. In 2018, 92% of small and medium-sized enterprises increased their investment in social media. Multi-platform operation can expand the brand of enterprises to multiple social platforms [10, 11] The Swedish creator PewDiePie, whose channel [12] is divided into gaming and entertainment, initially focused on producing unboxing videos for games. Later, he gradually shifted his focus to videos about proving internet rumors, internet memes, and even producing a single [13]. On August 25, 2019, he became the world's first YouTuber with over 100 million subscribers and the first to receive the Red Diamond Creator Award. Although higher subscription numbers do not necessarily equal higher view counts and incomes, the number of YouTube channel subscribers directly affects the channel's rating. vidIQ (<https://vidiq.com/>) is an online tutorial website that mainly provides video tutorials on

how to grow a YouTube channel. vidIQ also offers a Chrome browser extension that allows users to analyze related data of YouTube channels. According to vidIQ's report, it takes time and effort to establish a stable loyalty between the YouTuber and the audience, so YouTubers often ask their audience to give likes, comments, and subscribe and hope viewers will not miss new videos uploaded on the channel. The website also points out six factors that can cause fans to unsubscribe from YouTube channels [14]:

1. YouTube's review team actively detects whether there are fake or bot accounts, and will stop the subscription function or even delete the account if such accounts are found.
2. Posting content that is always the same can make subscribers feel tired and unsubscribe.
3. If the audience's interests and preferences grow beyond what the channel offers, they may unsubscribe and find another channel that meets their needs.
4. Posting outdated content that is no longer popular can cause subscribers to leave.
5. YouTube is a highly competitive platform with thousands of related channels with similar content and themes. Subscribers may choose to unsubscribe to watch channels that are more suitable for their interests.
6. When a YouTuber does not focus on a particular niche market and the content is all over the place without a central theme or unique features, viewers may choose to leave the channel.

NoxInfluencer (NoxInfluencer.com) is a marketing platform based in Beijing, they collect KOLs worldwide. It was created in 2017. The NoxInfluencer tool supports ten different languages globally and can be used on both PCs and smartphones. Its primary coverage includes countries in Asia, like Singapore, Malaysia, Thailand, Myanmar, Vietnam, as well as Japan, Korea, Hong Kong, Macau, Taiwan, Russia, the Middle East, and Europe. They target the YouTube, Instagram, TikTok, and Twitch social platforms. Its purpose is to address the challenges encountered in influencer marketing processes, such as influencer screening, fake follower identification, influencer promotion tracking, and influencer pricing, etc. They use their marketing experience, big data and AI technologies combining them with smartphone advertising and application alliance programs. Users can log in via a Google account to use the platform.

In the YouTube "Influencer Rankings" disclosed by NoxInfluencer, six rankings were included. Such as Top 100 Influencers with the most followers, Top 100 Influencers with the fastest growth of followers, Top 100 Influencers with the highest average views, Top 100 Influencers with the highest Nox rating, Top 100 Influencers with the fastest drop in followers, and Top 100 Influencers with the highest views in 30 days. Among them, the top 100 influencers in Taiwan with the fastest drop in followers were the main research target in our study.

According to the data obtained on February 2, 2021, the top 100 YouTubers in Taiwan with the fastest losing fans, in order of the number of channel types, are: Vlogs, with 25 channels; Gaming, with 23 channels; Entertainment, with 17 channels; Movies and Animations, with 7 channels; Tips & Knowledge and Comedy, with 6 channels each; Music, with 4 channels; News and Politics, with 3 channels; Sciences & Skills and Educations, with 2 channels each; and finally, there are 1 channel each for Welfare

Issues, Cars & Transportation, Traveling, and Pets. We compiled Fig. 1 to show the above data for the top 100 YouTube channels in Taiwan who have lost the most fans.

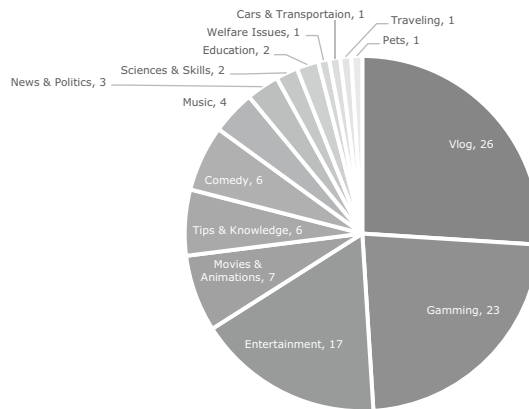


Fig. 1. YouTube channel unsubscribe top 100 category distribution

In the study on the influence of YouTubers on followers' use intention, the authors used the Stimulus-Organism-Response (S-O-R) model to investigate how buzz affects business performance [15]. The results of the study showed that an increase in the frequency of posting videos on YouTube channels would have two adverse effects on YouTube channel buzz:

1. Dilution: The more videos a YouTube channel publishes each month, the more each video's buzz will be diluted by many videos, resulting in lower viewership, comments and likes.
2. Decrease in quality: With the increase in the number of videos posted each month, the increase in the number of videos posted will decrease the quality of a single video when the YouTuber's body, mind, strength and energy are fixed.

According to an article published by Han [16], the number of messages and comments watched affects YouTuber revenue, but the length of time the channel has been around does not have a positive effect on revenue. Viewers' desire for new and topical content may be a factor in this result. In Jin-Chia Chang's master's thesis, he used the Analytic Hierarchy Process (AHP) to explore the needs of the top social media fans using YouTube as an example. The results of the study showed that the importance of the components and attributes were stress relief, emotional, cognitive, social integration, and personal integration in order [17].

3 Experiment Design

In this study, we designed a questionnaire based on the literature and determined the content of the questionnaire through pre-test and exploratory factor analysis for reliability and validity analysis to achieve the purpose of the study. The structure of the study is shown in Fig. 2. There are two hypotheses in the study, namely:

- (1) Individuals’ characteristic variables have significant differences on “Channel types and Behaviors”.
- (2) There is a significant difference or correlation between individual characteristics and “Unsubscribe Factors”.

A total of 450 questionnaires were randomly distributed and 445 copies were returned, of which 420 were valid, with a valid return rate of 93.3%. The first part of the questionnaire is basic information, second part is channel types and behaviors and the third part is the analysis of the factors for unsubscribing.

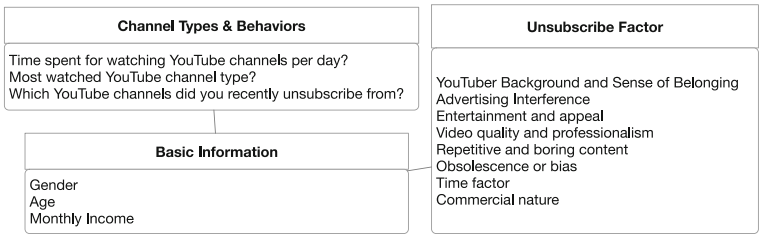


Fig. 2. Research Structure

4 Experiment and Analysis

After experiment, the data analyses include descriptive analysis, factor analysis, reliability analysis, t-test, one-way ANOVA, and Pearson’s correlation analysis. We collect some interesting result as follow.

4.1 Basic Information

The number distribution and percentage of gender, age, and monthly incomes are shown in Table 1.

Table 1. Times and percentage of gender, age and monthly incomes

Items	Options	Times	%	Items	Options	Times	%
Gender	Male	152	36.2	Monthly Incomes (\$NT)	Below 5000	44.0	10.5
	Female	268	63.8		5,001–10,000	40.0	9.5
Total		420	100.0		10,001–15,000	52.0	12.4
Age	15–24	260	10.5		15,001–20,000	20.0	4.8
	20–24	216	51.4		20,001–25,000	60.0	14.3
	25–29	56	13.3		25,001–30,000	68.0	16.2
	30–34	56	13.3		30,001–35,000	56.0	13.3
	35–39	4	1.0		35,001–40,000	32.0	7.6
	40–44	8	1.9		40,001–45,000	20.0	4.8
	45–49	12	2.9		45,001–50,000	4.0	1
	50–54	16	3.8		50,001–55,000	8.0	1.9
	55–59	4	1.0	65,001–70,000	8.0	1.9	
	60–64	4	1.0	Above 80,000	8.0	1.9	
Total		420	100.0	Total		420	100.0

4.2 Channel Types and Behaviors

Time Spent for Watching YouTube Channels per Day

Among respondents, 94 (44.8%) watched clips for less than 1 h per day, 78 (37.1%) spent 2–3 h per day, and the rest are shown in Table 2.

Table 2. Time spent for watching YouTube Channels per Day

Options	Times	%	Options	Times	%
Less than 1 h	188	44.8	5–6 h	12	2.9
2–3 h	156	37.1	Over 6 h	4	0.9
3–4 h	48	11.4	Total	420	100.0
4–5 h	12	2.9			

Most Watched YouTube Channel Type

Among respondents, 112 (26.7%) watched YouTube most channel often for “Entertainment”, and 56 (13.3%) each for “Music” and “Movies & Animation”, as shown in Table 3.

Table 3. Most Watched YouTube Channels

Channel Types	times	%	Channel Types	times	%
Entertainment	112	26.7	News & Politics	16	3.8
Movies & Animations	56	13.3	Cars & Transportations	16	3.8
Music	56	13.3	Educations	12	2.9
Vlog	36	8.6	Pets	12	2.9
Comedy	36	8.6	Traveling	8	1.9
Gamming	32	7.6	Sciences & Skills	4	1.0
Tips & Knowledge	24	5.7	Total	420	100

Latest YouTube Channel Type of Unsubscribing from

The top 5 channel types of unsubscribing from are: Vlog; Entertainment; Gamming; News & Politics; and Tips & Knowledge. And the others are listed in Table 4.

Table 4. Which YouTube channels did you recently unsubscribe from?

Channel Types	times	%	Channel Types	times	%
Vlog	120	28.6	Educations	12	2.9
Entertainment	80	19.0	Movies & Animations	8	1.9
Gamming	64	15.2	Cars & Transportations	8	1.9
News & Politics	60	14.3	Traveling	8	1.9
Tips & Knowledge	20	4.8	Pets	8	1.9
Comedy	16	3.8	Music	4	1.0
Sciences & Skills	12	2.9	Total	420	100

4.3 Unsubscribe Factors

We used factor analysis to obtain the factor load values, which were summarized into eight dimensions, and these eight dimensions are shown in Table 5. The original 32 questions were eliminated due to the low factor load of questions: 2, 13, 17, and 22, and others were organized into eight dimensions: Background and Sense of Belonging; Advertising Interference; Entertainment and Appeal; Videos Quality and professionalism; Repetitive and Boring Content; Obsolescence or Bias; Time Factor, and Commercial Nature. The overall Cronbach’s alpha (α) was .923, and the eight dimensions were all above .7. Based on Ong Choon Hee’s [18] suggestion, the acceptable range of Cronbach’s alpha was .7 or higher. Our study would show the reliability.

Table 5. Cronbach's alpha of eight dimensions in questionnaire

Factors		#	Items	Load	Variance %
Factor 1 ($\alpha = .836$)	YouTubers' Background & Sense of Belonging (F1)	14	YouTuber's social role change. For example, marriage or childbirth	.749	12.388
		23	No like-minded people in the comments section	.694	
		26	The original recommended friends have unsubscribed	.674	
		32	No longer share situation with outsiders	.574	
		06	The video content no longer has the function of cultivating the body and soul	.553	
		24	Many differences in cultural backgrounds	.545	
Factor 2 ($\alpha = .861$)	Advertising Interference (F2)	18	Too much advertising leads to dislike	.861	12.288
		20	Advertising time is too long	.855	
		16	Comments from other audiences full of vulgar and indecent content	.648	
		19	Advertising cannot be ignored to cause displeasure	.614	
Factor 3 ($\alpha = .774$)	Entertainment and appeal (F3)	15	The content of the channel is no longer entertaining	.685	8.776
		11	Other channels could to be more interesting with similar videos	.666	
		09	Scandalous rumors about channel owners are offensive	.579	

(continued)

Table 5. (continued)

Factors		#	Items	Load	Variance %
		10	The image of the channel owner has changed, causing it to not meet its own expectations	.515	
		08	Channel owners' realistic social performance is no longer attractive	.483	
Factor 4 ($\alpha = .728$)	Video quality and professionalism (F4)	07	Decline in film quality	.768	8.074
		12	Gradually lacking of professional	.655	
		31	Changes in personal preferences and interests	.606	
		21	Other channels provide more interesting content	.466	
Factor 5 ($\alpha = .749$)	Repetitive and boring content (F5)	01	Repetitive and boring contents	.749	7.910
		04	Just tried it originally, but sure not interested in now	.665	
		30	Minority channels	.563	
Factor 6 ($\alpha = .713$)	Obsolescence or bias (F6)	03	Cannot learn new knowledge any more	.752	7.577
		05	Increasingly biased content and position	.660	
Factor 7 ($\alpha = .705$)	Time factor (F7)	28	No time to stay tune	.779	6.114
		27	Changes in lifestyle or work	.655	

(continued)

Table 5. (continued)

Factors		#	Items	Load	Variance %
Factor 8 ($\alpha = .700$)	Commercial nature (F8)	25	Film is full of commercial sales and not interested	.587	6.078
		29	No desire to subscribe, only to be influenced by the recommendations of others	.532	

4.4 Variance and Correlation Analysis

The results of collating the variables with significant variances and correlations are listed as follows (Table 6):

Table 6. Analysis of gender in individual variables

	Male (n = 152)	Female (n = 152)	F-test	p-value
Most Watched Channel Type	u = 5.500	u = 4.850	25.344	.000***
Which YouTube channels did you recently unsubscribe from?	u = 4.631	u = 3.950	31.864	.000***
Entertainment and appeal (F3)	u = 3.173	u = 3.268	11.907	.01**
Commercial nature (F8)	u = 3.013	u = 3.238	10.726	.01**

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

A significant difference between gender and channel types and behaviors ($F = 25.344$; $p = .000$). There were differences in the channel types and behaviors among respondents of different genders. The most watched channel type among females were entertainment (29.9%), followed by movies and animations (16.4%). The entertainment (21.1%) and gaming (13.2%) for males, as shown in Table 7.

A significant difference between gender and latest channel unsubscribing from ($F = 31.864$; $p = .000$). The top two types of latest channel unsubscribing from for females were vlog at 29.9% and entertainment at 19.4%. For males, 26.3% were also vlog and 21.1% were gaming. And the rest are also shown in Table 7.

Table 7. Cross Table between genders and Most watched Channels and Latest channel unsubscribing from

		Vlog	Gamming	Entertainment	Movies & Animations	Tips & Knowledge	Comedy	Music	News & Politics	Sciences & Skills	Educations	Cars & Transportation	Traveling	Pets	Total
Most Watched Channel Type	M	n 16	20	32	12	4	12	16	8	4	8	12	4	4	152
		% 10.5	13.2	21.1	7.9	2.6	7.9	10.5	5.3	2.6	5.3	7.9	2.6	2.6	100.0
	F	n 20	12	80	44	20	24	40	8	0	4	4	4	8	268
		% 7.5	4.5	29.9	16.4	7.5	9.0	14.9	3.0	0.0	1.5	1.5	1.5	3.0	100.0
Which YouTube channels did you recently unsubscribe from?	M	n 40	32	28	0	8	0	0	8	4	12	8	8	4	152
		% 26.3	21.1	18.4	0.0	5.3	0.0	0.0	5.3	2.6	7.9	5.3	5.3	2.6	100.0
	F	n 80	32	52	8	12	16	4	52	8	0	0	0	4	268
		% 29.9	11.9	19.4	3.0	4.5	6.0	1.5	19.4	3.0	0.0	0.0	0.0	1.5	100.0

A significant difference ($p = .001$) between gender and entertainment and appeal in factor 3 of the unsubscribe factors, with females ($u = 3.268$) being higher than males ($u = 3.173$), indicating that females place more importance on this issue. There is also a significant difference between females ($u = 3.238$) and males ($u = 3.013$) on the commercial nature factor.

Elder audiences had a positive relation with unsubscribe factor ($F = 5.482$; $p = .000$). The four factors that were significantly correlated were YouTubers' Background & Sense of Be-longing (F1); Advertising Interference (F2); Repetitive and boring content (F5), and Obsolescence or bias (F6). Detailed information is shown in Table 8.

Table 8. The correlation analysis between unsubscribe factors and age

	R ²	F	p-value	Beta	Correlation
F(Unsubscribe factors)	0.079	5.482	0.000***	3.080	+
YouTubers' Background & Sense of Belonging (F1)	0.036	16.619	0.000***	2.841	+
Advertising Interference (F2)	0.02	9.600	0.002**	3.042	+
Entertainment and appeal (F3)	0.002	0.929	0.336	3.613	-
Video quality and professionalism (F4)	0.001	0.001	0.973	3.904	-
Repetitive and boring content (F5)	0.017	7.336	0.007**	3.096	+
Obsolescence or bias (F6)	0.025	3.113	0.000**	10.936	+
Time factor (F7)	0.001	3.988	0.079	0.779	-
Commercial nature (F8)	0.009	1.794	0.182	0.092	-

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

More monthly incomes had a positive correlation with unsubscribe factor ($F = 5.507$; $p = .000$). The five factors that were significantly correlated were YouTubers' background and sense of belonging (F1), advertising interference (F2), entertainment and appeal (F3), repetitive and boring content (F5), and time factor (F7). Detailed information will be shown in Table 9.

Table 9. Regression Correlation Analysis between unsubscribe factors and monthly incomes

	R ²	F	p-value	Beta	Correlation
F (Unsubscribe factors)	0.072	5.074	0.000***	2.764	+
YouTubers' Background & Sense of Belonging (F1)	0.057	25.173	0.000***	3.125	+
Advertising Interference (F2)	0.029	12.449	0.000**	3.712	+
Entertainment and appeal (F3)	0.011	5.617	0.018*	4.145	–
Video quality and professionalism (F4)	0.004	3.167	0.076	4.463	–
Repetitive and boring content (F5)	0.034	15.525	0.000***	3.387	+
Obsolescence or bias (F6)	0.001	.524	0.469	5.105	+
Time factor (F7)	0.015	6.375	0.012*	4.285	–
Commercial nature (F8)	0.017	7.101	0.008**	4.219	–

*p < 0.05, **p < 0.01, ***p < 0.001

5 Conclusions and Discussion

YouTube has become an important part of people's daily lives and has become a huge influence in we-media. Many people watch clips in YouTube every day, and many YouTubers become KOLs in our daily live. This study found that the most watched channel types in Taiwan were: entertainment; music; and movies and animations. While the channels of unsubscribing from in order were: vlogs; entertainment and gaming. In this study, we used factor analysis to classify the factors for unsubscribing into eight major dimensions: YouTubers' background and sense of belonging; advertising interference; entertainment and appeal; video quality and professionalism; repetitive and boring content; Obsolescence or bias; time factor and commercial nature. In the following, we discuss and suggest some important findings that are significantly related to the study.

According to our study, there were differences in channel types and behaviors across gender respondents. Women accounted for 29.9% of the most watched channels in entertainment compared to 21.1% for men, indicating that women have a greater preference for entertainment channels, while men have a greater interest in gaming channels, with a higher percentage of 13.2% compared to 4.5% for women. This shows that there is a significant difference between men and women in terms of channel preferences. This can be used as a reference for YouTubers to promote or give it a try in their channels.

There was also a significant difference between gender and "Which YouTube channels did you recently unsubscribe from?" ($F = 31.864$; $p = .000$). It was found that the percentage of vlogs that were unsubscribed was slightly higher among females than males at 29.9% and 26.3% respectively. The results of the factor analysis showed that the change of Youtuber's social role was one of important factors. As for the second place, the type of female unsubscribe from is entertainment, which accounts for 19.4%. From the results of the study, it is inferred that the content of the channel is no longer

entertaining or other channels could to be more interesting with similar videos. As for the second type of male unsubscribe, gaming accounted for 21.1%. We found that advertising interference and commercial nature had a certain influence on unsubscribing. It would be a matter of choice for all channel owners. There was also a significant difference ($p = .001$) between genders and entertainment and appeal (F3), with females ($u = 3.268$) caring more about this issue than males ($u = 3.178$). Women ($u = 3.238$) were also more likely than men ($u = 3.013$) to have a greater interest in the commercial nature (F8) factor. It was found that there was a positive correlation between age and unsubscribe factor ($F = 5.482$; $p = .000$). In other words, the elder audiences have higher demand for every key factor, especially for the four factors including: YouTubers' background & sense of belonging (F1); advertising interference (F2); repetitive and boring content (F5) and obsolescence or bias (F6). Elder audiences have higher expectations of the social role of YouTuber and do not want to be distracted by ads that are not related to the video content. Elder audiences also do not like repetitive and boring contents. They care about learning something new from watching clips as well. More monthly incomes had a positive correlation with unsubscribe factor ($F = 5.507$; $p = .000$). The findings revealed that audiences with higher income were similar to those of older in three factors including: YouTubers' background & sense of belonging (F1), advertising interference (F2), and repetitive and boring content (F5), it demanded more from YouTubers. They are also more demanding in terms of entertainment and appeal (F3) and time factor (F7), and are quick to unsubscribe from channels that are no more entertaining in their limited time after their working.

References

1. Cheng, M., Qiu, X.: Research on We-media marketing in Web3.0 environment. *Manage. Eng.* **29**, 8 (2017). <https://doi.org/10.5503/J.ME.2017.29.003>
2. Murugesan, S.: Understanding Web 2.0. *IT Prof.* **9**, 34–41 (2007). <https://doi.org/10.1109/MITP.2007.78>
3. O'Reilly, T.: *What is Web 2.0*. O'Reilly Media, Inc., Sebastopol (2009)
4. McAnany, E.G.: *Saving the World: A Brief History of Communication for Development and Social Change*. University of Illinois Press (2012)
5. Crowley, D., Heyer, P.: *Communication in History: Technology, Culture, Society*. Routledge, London (2015)
6. Richards, J.: Google: we don't know how to make money from YouTube (2008). https://web.archive.org/web/20080821152232/http://technology.timesonline.co.uk/tol/news/tech_and_web/article4120860.ece
7. McMullan, J.: A new understanding of 'New Media': online platforms as digital mediums. *Convergence* **26**, 287–301 (2020). <https://doi.org/10.1177/1354856517738159>
8. Kemp, S.: *Digital 2022: Taiwan*. <https://datareportal.com/reports/digital-2022-taiwan>. Accessed 18 Apr 2022
9. Alexa: Top Sites in Taiwan. <https://www.alexa.com/topsites/countries/TW>. Accessed 18 Apr 2022
10. Heinig, I.: 5 Steps to Create a Multi-Platform Social Media Strategy|The Manifest. <https://themanifest.com/digital-marketing/5-steps-create-multi-platform-social-media-strategy>. Accessed 2 Feb 2022

11. Brown, N.: Why Multi-Platform Content Is Key for Marketing to Younger Generations. <https://www.skyword.com/contentstandard/multi-platform-content-key-marketing-younger-generations/>. Accessed 2 Feb 2021
12. PewDiePie: PewDiePie – YouTube. <https://www.youtube.com/user/PewDiePie>. Accessed 28 Jan 2021
13. PewDiePie: Unboxing 100 MIL YouTube AWARD!! <https://www.youtube.com/watch?v=DYlesHOaPkY>. Accessed 7 May 2023
14. Sweatt, L.: 6 Honest Reasons You Might Be Losing YouTube Subscribers. <https://vidiq.com/blog/post/losing-youtube-subscribers/>. Accessed 25 Jan 2021
15. Corrêa, S.C.H., Soares, J.L., Christino, J.M.M., de Sevilha Gosling, M., Gonçalves, C.A.: The influence of YouTubers on followers' use intention. *JRIM* **14**, 173–194 (2020). <https://doi.org/10.1108/JRIM-09-2019-0154>
16. Han, B.: How do YouTubers make money a lesson learned from the most subscribed YouTuber channels. *IJBIS*. **33**, 132 (2020). <https://doi.org/10.1504/IJBIS.2020.104807>
17. Chang, C.-C.: Demands of Top Fans in Social Media - A Study of Youtube (2020). <https://www.airitilibrary.com/Publication/alDetailedMesh?docid=U0002-0107202013210400>
18. Hee, O.C.: Validity and reliability of the customer-oriented behaviour scale in the health tourism hospitals in Malaysia. *Int. J. Caring Sci.* **7**, 771–775 (2014)