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Party Identification and YouTube Usage Patterns: An Exploratory Analysis

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Taiwan Politics

The influence of YouTube on political behavior and attitudes is increasing. During the 2020 presidential election, candidates' appearing with YouTube influencers underscored the impact of YouTube. However, related studies in Taiwan have had conflicting research outcomes. This may have resulted from our comprehension of YouTube usage patterns among Taiwanese not being holistic. In this study, we delve into Taiwanese YouTube usage patterns in finer detail. Findings revealed that Taiwanese spend almost two hours daily on YouTube, with Pan-Green and TPP supporters more inclined towards accessing videos via keyword searches. TPP supporters also tend towards YouTube-recommended videos. This might imply a higher level of proactivity in information retrieval among these parties' supporters. Based on algorithmic logic, TPP supporters are also more likely confined to content aligning with their existing preferences. Regarding video types, almost a quarter get news from YouTube, underlining the importance of YouTube as a news source.

Due to limitations in the survey, this study refrains from extensive causal inference. Nevertheless, we unveil that there are differences in YouTube usage patterns among users with different political identification. Future research can build upon these results, integrating these disparities into YouTube-related research, to further explore the relationship between information environment and political attitudes.

Introduction

Nowadays, YouTube has become a channel of information dissemination between politicians and voters. Previous studies have indicated that YouTube has been applied to political campaigns (Vesnic-Alujevic and Van Bauwel 2014) as well as government policy communication (Bonsón and Bednárová 2018).

In Taiwan, the importance of YouTube should not be underestimated. For instance, President Tsai Ing-wen has over 400,000 subscribers, while former Taipei City Mayor Ko Wen-je has over 700,000. Mainstream media such as SET and TVBS also have subscribers exceeding 1.5 million. During the 2020 presidential election period, it was common for candidates to appear with YouTube influencers. That indicated a significant impact of YouTube on elections.

Studies in Taiwan have found that YouTube is related to political participation. For example, Hong (2016) found that YouTube usage increased political efficacy, while C.-H. Wang and Tsai (2023) discovered that more frequent use of YouTube was associated with lower voter turnout in the 2018 elections.

Other studies have indicated that there is no difference in citizens' media literacy among supporters of different partisan groups on YouTube (A. H.-E. Wang et al. 2022). A. H.-E. Wang (2021) revealed that the proportion of the voters using YouTube to receive political information surpassed that of radio. However, that study analyzed data prior to 2020 and did not differentiate between different methods of YouTube usage.

Why do previous studies in Taiwan have conflicting results? One possible reason is that our comprehension of YouTube usage patterns among Taiwanese is not holistic. Although there have been large-scale surveys, such as that of the Taiwan Network Information Center (TWNIC), they have not delved into the finer details of YouTube usage habits. Individuals may have varying ways of using YouTube, leading to heterogeneity in the impact of YouTube usage on political behavior.

In this article, we employ a phone survey to investigate Taiwanese YouTube usage patterns, ways of accessing videos, and the content consumed. We further analyze whether there are variations in YouTube usage patterns among supporters of different partisan groups. The next section will introduce the data collection method, followed by descriptive statistics outlining the YouTube usage patterns among Taiwanese. Finally, we will provide a conclusion of our findings and suggestions for future research.

Data Collection

We conducted the phone survey on a population of Taiwanese aged 20 and above by random sampling from February 13 to 20, 2023. To achieve a better coverage rate, we employed both landline and mobile phone surveys simultaneously. In the end, the landline survey obtained 1,122 valid responses, while the mobile phone survey obtained 1,141, resulting in a total of 2,263 completed survey responses. With a 95% confidence level, the maximum sampling errors for the combined surveys was within 2.9%.

After completing the surveys, we merged the two sets of survey data. To align the sample with the demographics of the population, we applied a raking weighting method to these variables based on the population. After weighting, the sample distribution of the selected demographic characteristics matched that of the population (Table 1). All subsequent analyses in this study are based on the weighted results.

Regarding party identification, we asked the respondents, "Among the political parties such as the Democratic Progressive Party (DPP), Kuomintang (KMT), Taiwan People's Party (TPP), and New Power Party, which party do you feel closest to?" If the respondent was unable to answer a specific party, we further inquired whether they leaned towards "Pan-blue" or "Pan-green." If the respondent still could not provide a clear response, they were classified as "None." In this study, we recode party identification into the following categories: "Pan-Green" (including DPP, New Power Party, and Pan-green

Table 1. Demographics and sample weighting.

	n	Pop.%		Weighted n	
Sex					
Male	1168 (51.6%)	49%	$\chi^2 = 6.14$ $p < 0.05$	1085 (47.9%)	χ^2 = 1.03 $p > 0.05$
Female	1095 (48.4%)	51%		1178 (52.1%)	
Age					
20-29	298 (13.2%)	15.5%	$\chi^2 = 24.7$ $p < 0.001$	333 (14.7%)	$\chi^2 = 6.28$ $p > 0.05$
30-39	382 (16.9%)	17.3%		371 (16.4%)	
40-49	473 (20.9%)	19.6%		421 (18.6%)	
50-59	437 (19.3%)	18.5%		397 (17.5%)	
60 and up	562 (24.8%)	29%		622 (27.5%)	
Non-response	111 (4.9%)			119 (5.3%)	
Education					
Elementary or None	118 (5.2%)	12.6%	χ ² = 432.6 p < 0.001	260 (11.5%)	$\chi^2 = 5.1$ $p > 0.05$
Middle School	157 (6.9%)	14.2%		299 (13.2%)	
Senior High	550 (24.3%)	30.6%		686 (30.3%)	
College	1158 (51.2%)	35.8%		833 (36.8%)	
Master's and up	260 (11.5%)	6.8%		165 (7.3%)	
Non-response	20 (0.9%)			20 (0.9%)	
Area					
North	1022 (45.2%)	45.6%	$\chi^2 = 9.11$ $p < 0.05$	1021 (45.1%)	$\chi^2 = 0.64$ $p > 0.05$
Middle	524 (23.2%)	24.6%		549 (24.2%)	
South	647 (28.6%)	27.5%		607 (26.8%)	
East	35 (1.5%)	2.3%		51 (2.3%)	
Non-response	35 (1.5%)			36 (1.6%)	

Note. Population data source: Population statistics (December 2022) from the Ministry of the Interior, Taiwan.

supporters), "Pan-Blue" (including KMT and Pan-blue supporters), "TPP" and "Neutral" (including those with no specific party identification or who answered "don't know" or "decline to answer"). The distribution of political party identification is shown in <u>Figure 1</u>.

YouTube Usage Patterns among Taiwanese

1. Usage rates and time

As Figure 2 shows, 70.6% of respondents were YouTube users. On average, they used YouTube 5.1 days per week and spent an average of 1.7 hours per day on YouTube. Please note that the usage time mentioned here includes the time when YouTube is used as background music. Past research has shown that the average time per day using the internet among Taiwanese in 2022 was 7 hours and 14 minutes (Kepios 2023). This means that when people are using the internet, they spend on average over 20% of their time on YouTube.

Furthermore, when comparing the usage patterns among different political parties, there were significant differences in the proportion of YouTube users among the parties ($\chi^2 = 51.3$, df = 3, p < 0.001). The TPP supporters had a significantly higher proportion of YouTube users compared to supporters of other parties, while the neutral supporters had a significantly lower proportion

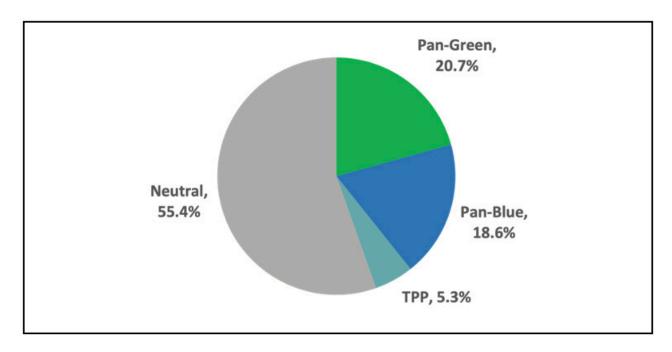
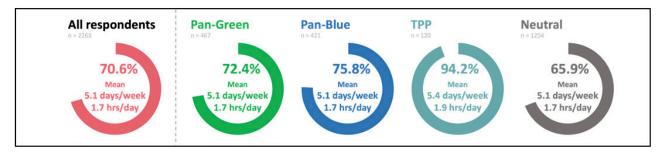


Figure 1. Distribution of party identification in the sample.

Note. The results exclude nonresponses such as "don't know" or "decline to answer."



 $Figure\ 2.\ You Tube\ usage\ rates\ and\ time\ among\ all\ respondents\ and\ supporters\ of\ different\ parties.$

Note. The results exclude nonresponses such as "don't know" or "decline to answer."

of YouTube users compared to those who had party affiliations. However, there were no significant differences in usage time among the different groups of partisans.

Concerning that such differences might be related to the profiles of party supporters, we examined the composition of each party. According to <u>Table 2</u>, the age distribution of TPP supporters is younger than that of other parties (only 8% above 60), and the education level is higher (with over 20% having Master's and above degrees). Therefore, it can be inferred that these differences are correlated with age and education. However, note that there may be complex potential interrelationships among age, education, and party identification—such as educational opportunities having been less and other life experiences shaping party affiliation. Constrained by space limitations, we cannot delve further into causal inferences here.

Table 2. Party identification and demographic characteristics.

	Pan-Green	Pan-Blue	TPP	Neutral
Sex				
Male	44.1% (149)	46.1% (147)	61.9% (70)	47.3% (391)
Female	55.9% (189)	53.9% (172)	38.1% (43)	52.7% (435)
Age				
20-29	23.9% (80)	9.1% (28)	20.5% (23)	23.6% (187)
30-39	23.3% (78)	9.1% (28)	26.8% (30)	26% (206)
40-49	20.3% (68)	23.5% (72)	29.5% (33)	21.9% (173)
50-59	15.2% (51)	27% (83)	15.2% (17)	15.7% (124)
60 and up	17.3% (58)	31.3% (96)	8% (9)	12.8% (101)
Education				
Elementary or None	2.7% (9)	8.8% (28)	0	2.8% (23)
Middle School	7.7% (26)	12.3% (39)	10.8% (2)	7.4% (61)
Senior High	29.3% (99)	35.3% (112)	20.4% (23)	33.1% (271)
College	50.9% (172)	35.3% (112)	57.5% (65)	48% (393)
Master's and up	9.5% (32)	8.2% (26)	20.4% (23)	8.7% (71)

Note. The results exclude nonresponses such as "don't know" or "decline to answer." Numbers in brackets are sample numbers.

2. Ways of accessing videos

The ways videos are accessed may reflect users' agency and preferences in information retrieval, yet there is limited research on this topic. Therefore, this study employed four questions to inquire about the frequency of different video access methods:

"How often do you click on YouTube through links from other websites (such as Facebook, Google, LINE)?"

"How often do you search for videos on YouTube using keywords?"

"How often do you watch videos recommended by YouTube?"

"How often do you watch Shorts on YouTube?"

These four questions utilized a Likert scale, with response options ranging from "never" (1 point), "seldom" (2 points), "sometimes" (3 points), to "often" (4 points), to measure the frequency of respondents' engagement with different selection methods.

Regarding the significance of these four video access methods, we assume that those who more frequently use keyword searches may have a higher degree of agency in information retrieval. Conversely, accessing videos through external links more often may indicate a more passive attitude.

Based on the logic of algorithms, a higher frequency of watching videos recommended by YouTube means that individuals are more likely to be confined to content aligned with their past usage patterns. Lastly, the

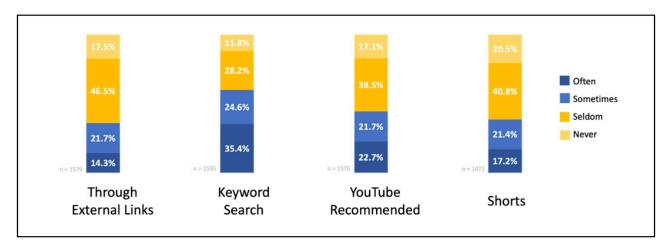


Figure 3. Ways of accessing videos among all respondents.

Note. The results exclude nonresponses such as "don't know" or "decline to answer."

characteristic of Shorts is their brevity, which may reflect individuals' preference for fast-paced content, potentially indicating their expectation of expeditiously acquiring information or emotional stimulation.

As Figure 3 shows, the most prevalent way employed by Taiwanese to access videos was through keyword search (60%), followed by recommendations by YouTube (44.4%). Notably, 38.6% of the respondents reported frequently watching Shorts, surpassing the proportion of users accessing videos through external links (36%). This suggests that short videos may possess greater dissemination capabilities.

Further examining the video selection methods among different political parties, Figure 4 reveals no significant differences in the frequency of accessing videos through external links² and Shorts.³ Supporters of the Pan-Green and the TPP are more inclined to use keyword searches compared to supporters of the Pan-Blue and Neutral.⁴ TPP supporters also exhibit a higher frequency of watching videos recommended by YouTube.⁵

Subtle differences indeed exist among supporters of different parties in their ways of accessing videos. The behaviors of TPP and Pan-Green supporters on YouTube may lean towards proactive searches for the content they desire to view. Simultaneously, supporters of TPP also tend to watch content that aligns with their existing preferences. However, whether these differences interact with political attitudes, such as exacerbating political polarization due to usage patterns, requires further study to explore.

² The results of the ANOVA test: F(3, 1574) = 1.384, p > 0.05

³ The results of the ANOVA test: F(3, 1468) = 2.229, p > 0.05

⁴ The results of the ANOVA test: F(3, 1590) = 14.145, p < 0.001

⁵ The results of the ANOVA test: F(3, 1571) = 6.368, p < 0.001

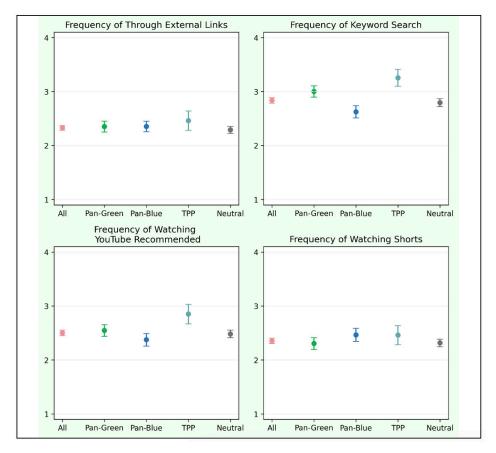


Figure 4. Ways of accessing videos among different parties.

Note. The results exclude nonresponses such as "don't know" or "decline to answer." The vertical ranges around the data points represent 95% confidence intervals.

Furthermore, apart from the aforementioned differences in age and education structures across party affiliation (<u>Table 2</u>) possibly playing a role in YouTube usage patterns, as discussed in the previous section, the differences in the method of accessing videos might also be associated with these factors. Younger respondents might better know how to actively search for information and utilize YouTube as a tool to get specific information.

3. Video type

In this study, we also investigated the most frequently watched video types by the respondents (assessed via a multiple-choice question). The top five video types most frequently watched by Taiwanese were music (including music videos), news and current affairs, series or dramas, tutorials (such as language learning), and funny videos or comedies (Figure 5).

There were minor differences in video type preferences among supporters of different parties, and those with political affiliations showed a higher preference for watching news videos (Figure 6).

Overall, YouTube has become an important source of news for Taiwanese. Particularly among those with political affiliations, over a quarter of respondents get news from YouTube. Due to the limitations of the phone

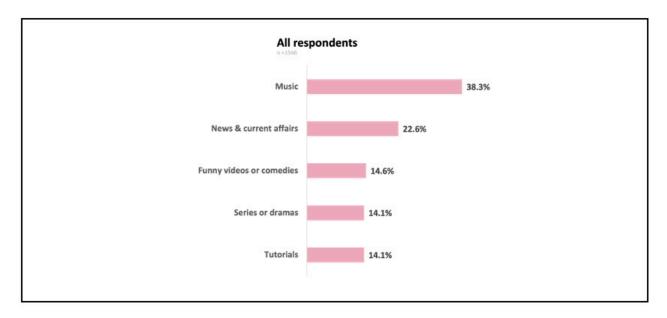


Figure 5. The most frequently watched video types across all respondents.

Note. The results exclude nonresponses such as "don't know" or "decline to answer."

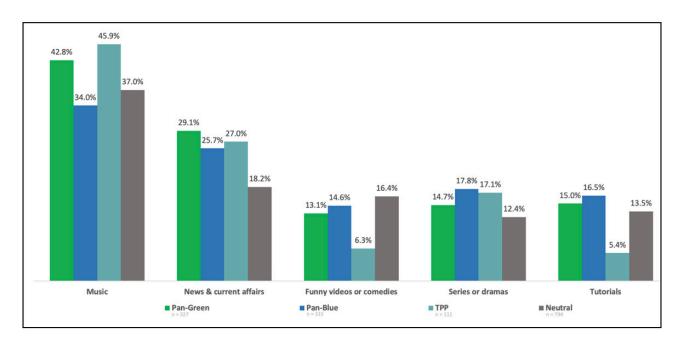


Figure 6. The most frequently watched video types by party identification.

Note. The results exclude nonresponses such as "don't know" or "decline to answer."

survey, we're unable to know the content they actually watch. However, considering the difficulty of regulating misinformation on the internet, the influence of YouTube on political attitudes remains noteworthy, especially as related to issues like information operations and echo chamber effects on YouTube.

Conclusion

The importance of YouTube in Taiwan's information environment is increasingly pronounced. In comparison with traditional media like television and newspapers, YouTube provides users with a higher degree of agency in content selection. However, this autonomy is influenced by algorithm, potentially impacting the content users are exposed to. Given the interplay between user agency and algorithms, the information content encountered by the public on YouTube is notably diverse. Consequently, research on YouTube needs finer measurements of usage pattern.

According to our survey, Taiwanese dedicate a considerable amount of time to YouTube daily (nearly two hours on average), and different political affiliations exhibit varied way of accessing videos. Previous research has largely overlooked differences in the method of accessing videos, but disaggregating it is pivotal. Accessing videos more frequently through external links versus keyword searches implies differences in agency during information searching, while watching recommended videos is tied to algorithmic logic. This gives rise to a novel issue: if the way of accessing videos affects the information content people receive, these disparities could potentially influence their political attitudes.

However, due to the limitations of phone surveys, we lack detailed insights into the specific video content the respondents watched. Moreover, as this is a cross-sectional study, causal relationships between party identification and YouTube usage patterns are still unclear. Addressing these issues, we hope future research builds upon the descriptive statistical results of this study to further explore the relationship between YouTube and political attitudes.

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