

-RESEARCH ARTICLE-

## HAS COVID-19 INTENSIFIED VISITING BEHAVIORS OF ONLYFANS AND ITS ALTERNATIVES?: AN EMPIRICAL ANALYSIS

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### —Abstract—

Due to multiple COVID-19 lockdowns, individuals likely engaged in multiple activities, including viewing adult content. Even though a subscription-based pornographic content sharing (SPCS) website (e.g., OnlyFans or Fancementro) is operationally distinct from traditional sexual channels (e.g., Pornhub or Xvideos), no study has examined whether COVID-19 increased the visiting behaviors of these SPCS websites. Consequently, we attempted to address this void. The subscription to comScore services by Chulalongkorn Business School allowed us to utilize actual visitor behavior at three SPCS websites before and during COVID-19. The analysis of 17,477 visit sessions revealed that (1) pageviews and visit duration peaked before the pandemic, but (2) the average length of stay per pageview increased during the pandemic compared to before its introduction. In addition to providing theoretical insight into the relationship between COVID-19 and website-visiting behaviors of SPCS, our findings offer practical contributions.

**Keywords:** Subscription-based pornographic content sharing (SPCS) websites; OnlyFans; JustForFans, Fancementro; Pageviews; Visit duration; COVID-19

**JEL Classification:** L81, L86

### 1. INTRODUCTION

Since its first confirmed case at the end of 2019, COVID-19 has caused many fatalities and significantly impacted many lives. In March 2020, the World Health Organization (Ducharme, 2020) formally recognized the pandemic and recommended control measures. It has been exceedingly challenging for governments around the globe to address public health issues and survive an economic recession simultaneously. Numerous communities experienced multiple lockdowns, limiting residents'

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opportunities to go outside or complete duties. Residents had to wear layers of surgical masks or maintain a safe distance from others in public areas. Career-wise, employees were required to labor at home. Sadly, many of them were victims of significant layoffs or salary reductions. The number of deceased led to a significant increase in unemployment for the Vietnamese government (Dang et al., 2023). These numerous examples have confirmed the devastating nature of COVID-19.

Online conduct is not exempt, especially when offline lives are deemed hazardous. As a strategic move, Pornhub offered premium services at the beginning of 2021, and its "Touch yourself, not others" plan attracted significant public interest (Cerdán Martínez et al., 2021). Additionally, transactions on retail websites confirmed specific alterations, possibly caused by COVID-19. Using transactional data from one UK website, Boyle et al. (2020) determined that the basket value was higher during the closure than during regular periods. However, the majority of these purchases were for groceries. This was indicative of purchasing patterns during the lockdown. Lykousas et al. (2020) collected data from an online marketplace offering subscription-based explicit content and reported a significant increase in new subscribers during the pandemic. However, their conclusion's generalization raises significant concerns. The implication of Lykousas et al. (2020) might have been more applicable if they had included multiple SPCS websites. Based on these examples, however, it is plausible to assert that the intensity of online behaviors was established after the March 2020 formal recognition of COVID-19.

Reviewing previous research on online store visits about COVID-19 reveals significant research gaps. First, while a substantial amount of prior research has analyzed various types of visitor behavior on online retail websites (Tangmanee, 2022; Boyle et al., 2021), few studies have cast light on adult content-sharing services. Second, comparatively new online subscription-based marketplaces offering sexual content have emerged, such as OnlyFans, Fancentro, and JustForFans. They are unlike conventional pornographic websites such as Pornhub and Xvideos. Nonetheless, no empirical research has examined whether the visiting patterns of OnlyFans and its competitors have changed during the COVID-19 period. Consequently, this is the primary objective of this investigation. The findings contribute significantly to SPCS service proprietors' ability to manage website traffic intelligently.

## 2. LITERATURE REVIEW

### 2.1 Theoretical Foundation

This investigation is conceptually supported by the Social Influence Theory (SIT) and the Information Processing Theory. Social influence theory (SIT) is defined by Kwon et al. (2021) as an individual's beliefs, attitudes, and subsequent actions or behaviors that affect other people through the following three processes: compliance, identification, and internalization. People are believed to be persuaded when exposed to persuasion and consent to engage in persuaded behavior to acquire more positive outcomes and avoid

adverse outcomes (Yang et al., 2021). Consequently, the pleasure derived from complying with a request is caused by the social effect of acquiescent influence. Individuals engage in self-identification when they are persuaded to form or maintain a connection that is desired and beneficial to themselves, other individuals, or a group (Naeem, 2020). It is anticipated that internalization will occur when individuals are subjected to influence and then observe that the persuaded performance is appealing, with the content defining the attitudes and behaviors of others. Influencers perform their duties as third parties capable of substantially influencing the company's customers' opinions, decisions, and actions. According to Hu et al. (2019), a person is regarded as an influencer if they can convince community members to purchase local goods and services. Word-of-mouth marketing relies on individuals recommending the products or services of other individuals to potential customers. According to O'Flynn et al. (2020), the behavior of celebrities and other public figures can influence consumers by generating brand-related conversations.

Information Processing Theory is centered on individuals making decisions based on how they collect, illustrate, and utilize information (Ohman, 2021). Information process theory conceptualizes how individuals respond to ecological opportunities, encode data that must be learned, relate it to what they already know, store newly acquired information in their memories, and retrieve it depending on the situation (Wang et al., 2020). According to Wickens et al. (2021), researchers have demonstrated a correlation between how individuals assimilate information and the decisions they make as consumers. According to this study, buyers' choices influence their online purchasing behavior. Information is among the most influential factors in determining the customer's purchasing behavior (Klahr et al., 2022). Customers will be motivated to purchase if they acquire information about a product or service through online reviews and celebrity endorsements.

## 2.2 Pornographic Contents and SPCS Websites

Erotic material has always been sexually alluring. The examples could be as ancient as explicit depictions of sexual positions on the walls of Pompeii or as contemporary as an intimate live-streaming session on OnlyFans (Janssen, 2002). (Janssen, 2002) These erotic details provide physical gratification and sexual excitement without imposing relationships. The adult industry has been highly profitable. Despite this, it has been criticized for gender inequality and domestic violence (Anciaux, 2019). Nevertheless, empirical evidence of objectification or social detriment is uncommon or nonexistent (Davin, 2007).

OnlyFans, founded in 2016, maybe the first SPCS website. Initially, it is an online platform where content creators (sexual and non-sexual) can share their online materials with their followers and collect membership fees in exchange. Nonetheless, sexual content has received considerably more attention than non-adult content (Hunt, 2021).

OnlyFans is followed by Fansly, Fancentro, and JustForFans. The pornographic content of these SPCS websites includes movie clips, erotic conversation sessions, and sexual streaming shows. Monthly subscriptions could average between five and twenty dollars (Hunt, 2022). Those who create and distribute content are engaged by SPCS websites (Uttarapong et al., 2022). Typically, creators have other social media accounts (such as Instagram or Twitter) where they can post previews of their created content on their profile pages to entice followers to become admirers on the SPCS marketplaces. Using other social media to promote erotic content on SPCS websites is one factor that sets them apart from other pornographic websites (Hansen, 2022).

Three aspects distinguish the operations of SPCS websites from those of other erotic content-sharing websites, such as Pornhub and XNXX (Uttarapong et al., 2022; Ryan et al., 2019). First, the SPCS websites provide various pornographic options, such as intimate movie clips, erotic chat, or a live sexual streaming show. In contrast, the content on typical sexual tubes consists primarily of movie clips categorized in various ways (e.g., amateur or gang bang) so that visitors can search for what they are interested in (Crosby & McKenzie, 2021).

It also pertains to content creators and providers of explicit materials. These SPCS creators may establish a unique monthly subscription fee for their accounts or offer free trials and discounts. In a few instances, they are permitted to accept tips from spectators (Uttarapong et al., 2022; Vallina et al., 2019; Miller, 2023). SPCS services employ the creators as independent contractors, and their incomes are guaranteed by the subscription charge (Sanchez, 2022; Bonifacio & Wohn, 2020). According to Litam (2022), creators can earn substantial recommendations through exclusive services that provide more explicit content or more personal conversations. In addition, OnlyFans allows creators to retain 80% of their earnings, including subscription fees and gratuities (Sanchez, 2022; Van der Weigel, 2022). This means the website retains the remaining 20% as a service fee to its creators. On the other hand, the creators of typical adult online channels will provide their erotic content to the websites along with keyword suggestions so that it can be categorized and searched. The terms of service for SPCS marketplaces appear to be more favorable to the content creators (or suppliers) than those of traditional pornographic websites (Uttarapong et al., 2022; Bosworth, 2022).

Lastly, the consumers of these two websites are distinct. Viewers (or admirers) of SPCS are required to subscribe to their chosen creators. Fans must pay subscription fees to obtain access to the collection of adult content after viewing teasers or observing details on the creator's homepage (Evans, 2021). Frequently, creators offer discounts or promotions to attract many subscribers. SPCS websites permit creators to determine their fees. In other words, their content creator policy is flexible (Brooks-Gordon & Vickers, 2022). The viewers of typical online adult tubes can access fundamental features, such as extensive collections of sexual items that are searchable. Viewers can pay extra to access premium services customized by the websites, not the content

providers (Guthrie, 2022). However, some premium products were criticized for their subpar quality (Litam et al., 2022). Due to the significant difference between the SPCS and other pornographic content-sharing sites, research findings on the latter (Cerdán Martnez et al., 2021) may not apply to the former. Consequently, there is an urgent need for empirical research on the SPCS markets.

### 2.3 COVID-19 and its Effects on Online Visiting Behavior

Since its official recognition in March 2020, COVID-19 has drastically altered our way of life. The situation has improved since June 2022, as the number of new cases and fatalities has decreased. Until early 2023, when China abruptly lifted the zero-COVID policy and permitted people to travel without proof of vaccination, the situation had been under control. The impact of COVID-19 on online behavior has been enormous. Due to the instruction that required individuals to maintain social distance from others, online visits increased dramatically (Gu et al., 2021; Dang et al., 2023). For instance, the number of online meetings using a variety of applications increased dramatically (Pratama et al., 2020). During the pandemic, the demand for some electronic commerce products was comparatively high, while the demand for others decreased (Gu et al., 2021). During the closure in Taiwan, online food and grocery purchases increased (Chang & Meyerhoefer, 2020; Nguyen et al., 2021). However, the online purchase of airline tickets and other travel-related items dropped significantly.

Additionally, COVID-19 affected access to explicit sexual websites. Given the confinement and social isolation, it is unsurprising that the number of visits to pornographic websites increased significantly (Lykousas et al., 2020; Stadler, 2020). In 2021, while the world awaited a COVID-19 solution, the number of OnlyFans viewers increased from 7.5 million to 85 million (Hunt, 2022). Similar growth was observed in 2020 (Litam, 2022). According to Stadler (2021), the content of SPCS services is more appealing than that of traditional pornographic tubes because it provides more intimate sentiments with the creators and is not mass-produced. Instead, the amateurish quality of their content makes them more appealing. Using data from Pornhub insights and Google trend services, Cerdán Martnez et al. (2021) confirmed an increase in sexual content in 2020-2021, when the pandemic was most severe. Also, using Google site traffic, Lau et al. (2002) found that pornographic content consumption was positively associated with COVID-19 severity. After the pandemic recognition, the number of new registrations at Fancentro increased (Lykousas et al., 2020). Given that erotic content is also the primary offering on SPCS websites, the increase in website traffic is speculative. Because these marketplaces are distinct from other websites for sharing explicit content, the hypothesis requires solid empirical support.

A review of the literature identifies two research deficits. First, a substantial quantity of prior research has confirmed that COVID-19 significantly impacts online behavior. In 2020, when the pandemic was officially recognized, the basket value of online grocery

purchases was substantially higher than in 2019, when the world was still free of it (Tangmanee, 2022). However, there are relatively fewer reports on the behavior of visitors to pornographic content-sharing channels (Cerdán Martínez et al., 2021; Lau et al., 2021). The taboo nature of sexual behavior may account for this small quantity. A survey that uses questionnaires to ask a large group of samples may not yield accurate information because many participants would be uncomfortable sharing such information, even if the responses were anonymous. Therefore, researchers urgently need credible sources of SPCS website visitor behavior.

Second, among the few projects addressing the effects of COVID-19 on the behavior of visitors to erotic content-sharing websites, no comparable publication is found on the SPCS websites. Given the operational differences between the SPCS and conventional adult content-sharing websites, it seems inappropriate to generalize from the latter to the former. Consequently, the primary objective of our study was to investigate the SPCS service-seeking behaviors and, if feasible, identify any pandemic-related effects.

### **3. RESEARCH METHODOLOGY**

#### **3.1 Research Approach and Data Preparation**

Our data was gathered utilizing the secondary data collection method to determine whether the advent of COVID-19 altered the website-visiting behavior of SPCS members. In other words, we collect data regarding genuine visits to SPCS websites from reputable services. Before describing how we obtained the contacts, we can describe three primary visiting behaviors. They are (1) the pageview (PV), which is the number of web pages visited by one visitor on SPCS websites during one visit session, (2) the visit duration (VD) (minutes), which is the length of a visitor's stay on the website during one visit session, and (3) the average visit duration per page view (DPP) (minutes per visited page or pageview), which is the average length of stay per page the visitor views during one session.

The session-level household panel data was obtained from comScore services. Under a partnership with the Wharton Business School of the University of Pennsylvania, Chulalongkorn Business School has subscribed to the service and acquired permission to record members' behavior on numerous websites, including SPCS websites. Since the comScore data is a household measure, it is conceivable that they came from a single household with multiple members; therefore, it is unclear whose behavior is being observed. As a consequence, we selected data from single-member households.

From January 1, 2018, to December 31, 2021, our data acquisition covered all visits to three SPCS websites: OnlyFans, JustForFans, and Fancentro. They were chosen because, according to multiple statistics, they were the most-visited SPCS websites from 2018 to 2021, and their services operated normally. The visits in 2018 and 2019 occurred before the official confirmation of COVID-19, while those in 2020 and 2021 occurred

during its outbreak. Based on the agreement between Chulalongkorn Business School and comScore, the most recent period to which we have access at the time of manuscript preparation is 2021. In addition, only sessions with a visit duration of at least one minute or a pageview of more than one page were retained, so accidental encounters were eliminated. This generated 17,477 visit sessions, of which 93% were visits to OnlyFans, 6% to JustForFans, and 1% to Fancentro. The visitor identifiers were used to aggregate session-level data into visitor-level data based on the session-level data we collected.

Consequently, there are two datasets in this investigation. At the session level, the primary set contains the data predominantly used to investigate visiting behavior during the pandemic. Consequently, the primary unit of analysis in our research is the visit session. The supplemental dataset provides, at the broadest level (visitor level), the demographic background of visitors who visited the three SPCS websites between 2018 and 2021.

According to their demographics, all 1,432 visitors reside in the United States. 5 of 10 people reside in the nation's south. 68% possess bachelor's or associate's degrees, and 75% earn less than \$60,000 annually. The majority of participants are over the age of 50. We can use the aggregated data to determine the frequency of their visits to these SPCS websites. During the four years of data acquisition (2018-2021), one visitor made an average of 12.20 visits to the SPCS websites. On average, they viewed 1.82 pages per visit, which lasted 2.35 minutes. Regarding their preferred SPCS websites, 8% of our sample visited multiple channels, whereas the remaining 92% appeared loyal to a single service. 93% of loyal visitors exclusively visited OnlyFans, while 5% and 2% visited erotic content on JustForFans and Fancentro, respectively.

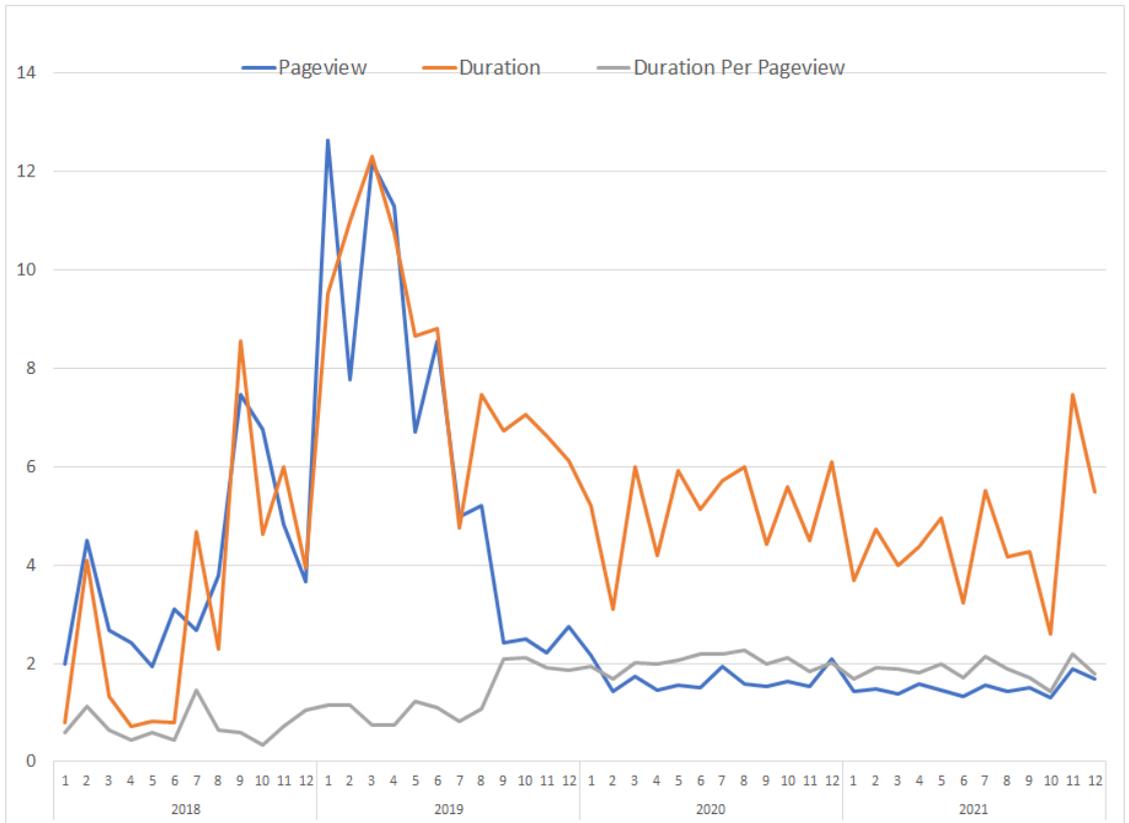
### 3.2 Data Analysis

The analysis consists of two sections. Initially, we employed visuals to investigate the three visiting behaviors. The first graphic depicts the monthly numbers of the behaviors over the four-year data collection period. The following two charts illustrate the average quantities of the behaviors (1) during 24 hours and (2) during seven days of the week. Second, we reported the descriptive statistics of the three behaviors and conducted mean comparisons to identify any potential associations between the behaviors and COVID-19.

## 4. RESULTS

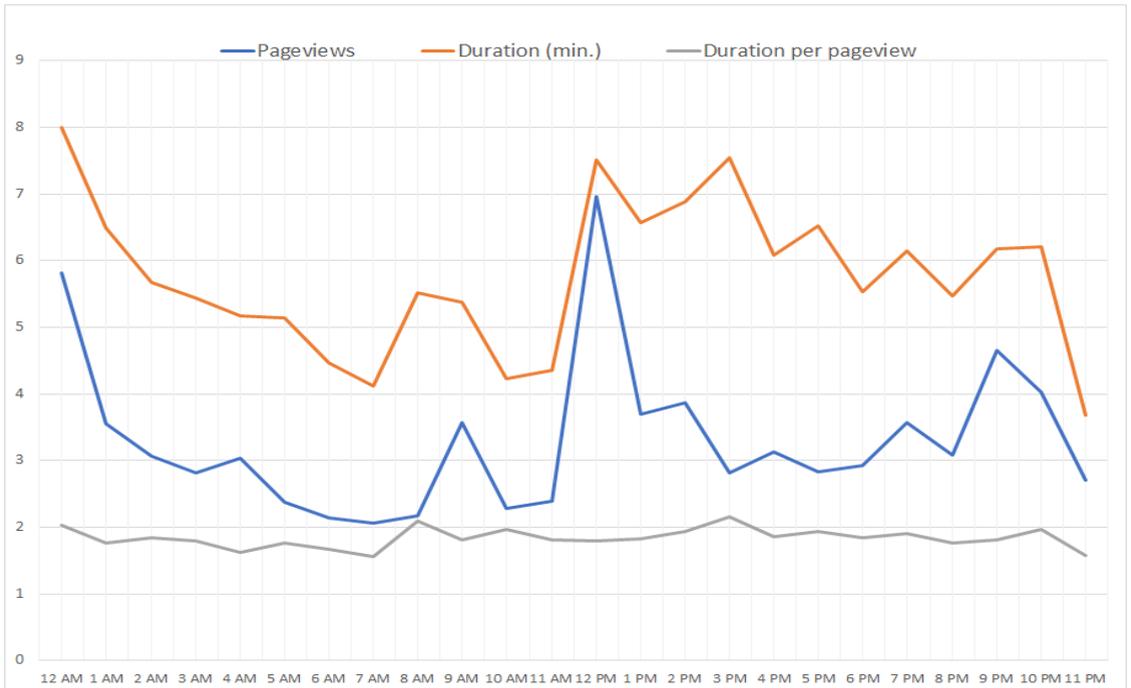
Based on the 17,477 sessions of visits to the three SPCS websites in 2018 and 2019 (i.e., the two years preceding COVID-19) and in 2020 and 2021 (i.e., the two years during COVID-19), we were able to investigate three visualizations of the three visiting behaviors. [Figure 1](#) depicts the monthly totals for the three behaviors. Pageviews are represented by the blue line, visit duration by the orange line and duration per pageview by the grey line. [Figure 1's](#) visual investigation reveals two observations. Before the

advent of COVID-19, the number of page views and duration of visits were relatively higher than they are now. Second, whereas the duration of stay per pageview was less than two minutes per page before the COVID-19 pandemic, it was approximately two minutes per page during the pandemic.

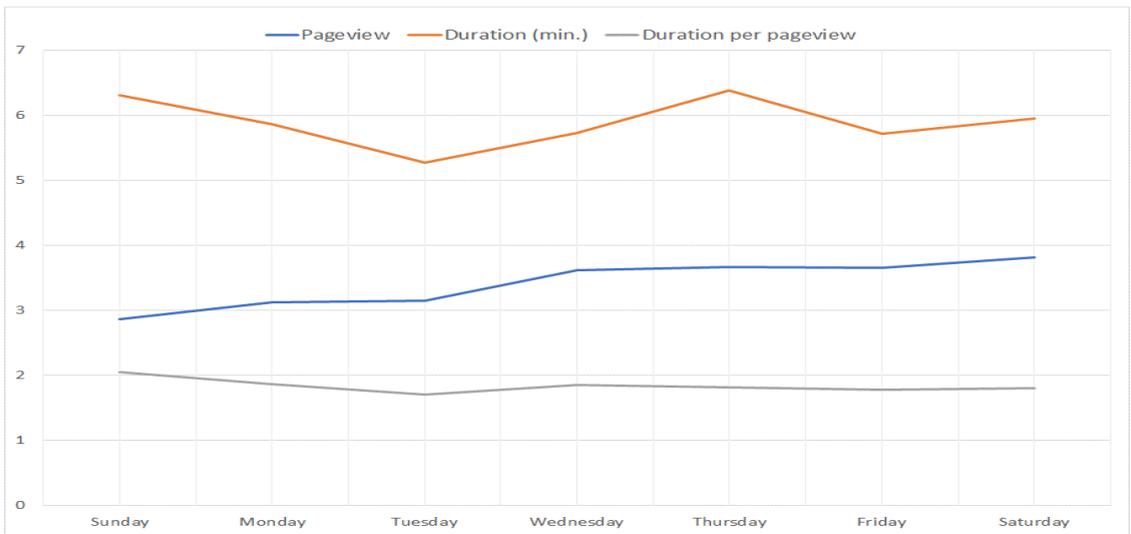


**Figure 1.** Line graph showing the monthly figures of pageviews, visit duration, and the duration per pageview at OnlyFans, JustForFans, and Fancentro during 2018-2021

In addition to [Figure 1](#), which examines the monthly values of three visitor behaviors from 2018 to 2021, [Figures 2](#) and [3](#) classify visitor behaviors by day of the week and hour of the day, respectively. Numerous bumps are depicted in [Figure 2](#) to represent numerous peaks in pageviews and visit duration. Nonetheless, during the four years of data capture, the average duration per pageview per day was approximately two minutes. [Figure 2](#) depicts two comparable peaks of pageviews and visit duration between 11 p.m. and midnight and 11 a.m. and noon. Surprisingly, it is a twelve-hour cycle, and the increases during the former appeared more pronounced than during the latter. Additionally, nighttime visits and visit duration were both greater than daytime levels.



**Figure 2.** Line graph showing the average figures of three visiting behaviors over 24 hours.



**Figure 3.** Line graph showing the average quantities of three visiting behaviors during seven days of the week

Three observations can be made based on [Figure 3](#). First, the duration of visits was shortest on Tuesday and longest on Thursday, relative to the other days of the week. Second, pageviews began on Sunday at their lowest point and rose marginally by the

following Saturday. Lastly, the duration per pageview in [Figure 3](#) followed the same pattern as in [Figure 2](#), averaging roughly two minutes per pageview.

[Table 1](#)'s descriptive statistics also illustrate an observation conveyed in [Figure 1](#). We used mean comparisons to determine if the visiting behaviors before and during the pandemic were significantly different. Nonetheless, all visiting behaviors' skewness and kurtosis statistics are generally not distributed because their absolute values in [Table 1](#) exceed one ([Zhao et al., 2022](#)). Consequently, the natural logarithm function was applied to all three variables, after which their distributions appeared regular and parametric analyses could be applied. According to [Table 2](#), the three visiting behaviors before COVID-19 differed significantly from those during its period. Two other results were validated. Before the pandemic recognition, page views and visit duration were significantly more incredible than during its outbreak. This may contradict the common belief that visitors to SPCS websites should have viewed more pages or spent more time on the site during the COVID-19 outbreak compared to the pre-outbreak period. Second, the average time spent per pageview was longer during the pandemic than before its arrival. Such findings will be discussed in greater detail in the following section.

**Table 1. Descriptive Statistics of Three Visiting Behaviors**

Variables	n	Average	Standard deviation	Skewness	Kurtosis
Pageviews (PV)					
2018	295	4.14	7.53	6.530	53.767
2019	2,978	11.59	41.95	12.138	221.931
2020	8,272	1.27	3.83	21.307	661.208
2021	5,932	1.61	2.49	15.355	390.511
Total	17,477	3.43	17.99	27.598	1,177.785
Visit duration (VD: minutes)					
2018	295	3.62	10.80	5.479	35.705
2019	2,978	10.41	24.16	5.809	54.865
2020	8,272	5.29	14.46	7.768	103.614
2021	5,932	4.57	12.98	6.856	67.764
Total	17,477	5.89	16.18	7.365	91.211
Duration per page view (DPP)					
2018	295	0.75	1.30	5.160	35.548
2019	2,978	1.39	2.31	4.953	38.912
2020	8,272	2.03	2.91	3.170	11.242
2021	5,932	1.89	2.67	3.679	16.082
Total	17,477	1.84	2.73	3.568	15.604

**Table 2. Comparisons of Three Behaviors before and During the COVID-19 Era**

Variables	n	Average	Standard deviation	t-statistics (df)	Significance level
Pageview					
Pre COVID-19 (2018-2019)	3,273	10.91	40.13	44.873	.000
During COVID-19 (2020-2021)	14,204	1.70	3.34	(3,576.57)	
Visit duration (minutes)					
Pre COVID-19 (2018-2019)	3,273	9.80	23.35	23.006	.000
During COVID-19 (2020-2021)	14,204	7.99	13.86	(3,435.55)	
Duration per page view (minutes per pageview)					
Pre COVID-19 (2018-2019)	3,273	1.33	2.24	-18.703	.000
During COVID-19 (2020-2021)	14,204	1.96	2.81	(3,375.91)	

## 5. DISCUSSION

To investigate the COVID-19 pandemic and the three visiting behaviors comprising pageview, visit duration, and average duration per pageview at three SPCS websites, we used the comScore service to collect 17,477 visit sessions from 1,432 visitors between 2018 and 2021. Due to the lack of a report on the demographic profile of visitors to SPCS services or pornography websites, we were forced to compare the viewer's profile in our research to that of electronic commerce website visitors from previous publications (Tangmanee et al., 2022). Based on the comparison, the demographics (e.g., age groups, annual income, and residential locations) of SPCS website visitors are comparable to those of online users in the United States. Therefore, asserting that SPCS website visitors are comparable to online store visitors is plausible.

According to our review of the literature on visits to websites sharing erotic content, Tangmanee (2019) is possibly the only source to report on three visiting behaviors to prominent pornographic websites. In his research, visitors spent an average of 11.60 minutes viewing 12.56 pages but only 0.92 minutes per pageview. However, on average, visitors to SPCS websites spent 5.89 minutes perusing 3.43 pages and 1.84 minutes per

pageview, according to our research. Free access to sexual content on pornographic websites such as Pornhub is our justification for this distinction. Therefore, visitors to these websites are more likely to view more pages or have longer sessions than visitors to SPCS websites whose services are subscription-based. For various clips on pornographic websites, observers can switch between clips more quickly than users of SPCS services.

As a consequence, the former has a shorter duration per pageview than the latter. In other words, once there is an access fee, visitors do not rapidly navigate between pages; instead, they spend more time on each page. [Tangmanee et al. \(2019\)](#) found that visitors to SPCS websites exhibit distinct behaviors compared to those of conventional adult content-sharing websites.

In our investigation from 2018 to 2021, a visitor made an average of 12.20 visits to the three SPCS websites using session-level data. They visited 1.82 pages in approximately 2.35 minutes. 9 out of 10 visitors to one of the three SPCS websites (i.e., OnlyFans, JustForFans, and Fancentro) were devoted admirers. Since we could not locate analogous information in previous publications, this profiling may be our sole contribution.

Regarding COVID-19 and SPCS website visits, we classified visitors into two categories based on COVID-19 recognition. During the pre-COVID-19 era, 2018 and 2019 comprised the first category, while 2020 and 2021 represented the second stage during COVID-19. The results of the mean comparisons in [Table 2](#) revealed a statistically significant difference between the behaviors before the pandemic was identified and those during its spread. This leads to two important conclusions. First, based on the statistically significant differences, page views and visit duration before COVID-19 were more significant than during COVID-19. As a result of multiple lockdowns and official directives instructing people to isolate themselves and maintain social distance, it was anticipated that pageviews and visit durations during the pandemic would have been greater than those before the outbreak. However, our findings confirmed the contrary. Our explanation for this finding is that people may have been so preoccupied with other activities during the COVID-19 outbreak (i.e., adjusting to working from home and monitoring the constant changes in official instructions for a vaccine or lockdown policy) that their visits to SPCS websites inevitably decreased during the spread. Previous research has reported (1) a sharp increase in the online purchase of groceries and medical supplies ([Boyle et al., 2020](#)) and (2) a considerable increase in online work-related meetings during COVID-19 ([Pratama et al., 2020](#)). Therefore, our hypothesis is plausible. In addition, individuals were required to closely monitor pandemic-related situations, such as whether a new lockdown had been implemented, how to purchase supplies if all supermarkets were closed offline and online, and what to do if their ATK tests were positive. Even though they were at home, such demanding responsibilities may have severely demanded their time. In other words, they may have

been so exhausted by arduous duties that their visits to SPCS services may not have been as enjoyable as before COVID-19.

Second, the visit durations per pageview before and during the pandemic are substantially different, but in the opposite direction, compared to the pageviews and visit duration in this study. The duration of stay per pageview was shorter pre-COVID-19 than during the pandemic. Earlier, we discussed how, during the pandemic, people were preoccupied with adjusting to the new normal, which included spending considerable time online. Consequently, they visited fewer pages and spent less time on SPCS websites during the pandemic than before. Because access to these SPCS websites depends on subscription fees that must be paid in advance, supporters may intend to spend more time per pageview during the COVID-19 due to economic considerations. However, this is merely our speculation, which awaits empirical validation.

## 6. CONCLUSION AND IMPLICATIONS

In recent years, only a handful of studies have shed light on adult content-sharing services, even though a substantial quantity of prior research has been devoted to analyzing various visiting behaviors on online retail websites (Tangmanee, 2022; Boyle et al., 2021). In addition, relatively new online subscription-based marketplaces selling sexual content have emerged in recent years. These marketplaces include OnlyFans, Fancentro, and JustForFans, among others. The primary objective of this investigation was to determine whether the visiting patterns of OnlyFans and comparable websites have changed during the period covered by COVID-19. The results contribute to rational website traffic management, particularly for SPCS service proprietors. Using actual visits to OnlyFans, JustForFans, and Fancentro, we confirmed that the number of visitors to these SPCS websites was significantly lower during the spread of COVID-19 than before its introduction. In other words, the average time spent per pageview was shorter during the pandemic than before its official recognition. This may be due to the visitors' time allocation before and throughout COVID-19.

## 7. THEORETICAL IMPLICATIONS

Consequently, our study has both theoretical and practical implications. Theoretically, our study is one of the first to examine visitors' actual behavior on SPCS websites. While there are numerous websites for sharing erotic content, SPCS services operate differently, necessitating specialized research. Not only did we cast new light on popular SPCS websites' visitor patterns, but we also linked them to COVID-19. Our distinctive contribution is that visitors spent more time per pageview during the pandemic than in the past. This indicates that other researchers should examine this type of visitor behavior in addition to page views and duration of the visit.

## 8. PRACTICAL IMPLICATIONS

Our findings suggest two practical recommendations for practitioners. Initially, we discovered that visitor behavior was distinct before and during the COVID-19 outbreak. Therefore, SPCS service executives must remember that visitors during the pandemic viewed fewer pages in a shortened visit session but stayed longer per pageview than pre-COVID-19. Therefore, practitioners should be prepared for such behavioral adjustments. Second, we hypothesize that the pandemic appears to have kept people's minds occupied and engaged in various demanding duties. This may have contributed to the unanticipated shift in visitor behavior. For example, page views and visit durations were substantially lower during COVID-19 than before its arrival. As a result, content creators for SPCS websites should not immediately conclude that the number of visits to sexual content during the lockdown must be drastically increased, and a substantial quantity of resources must be allocated to creating new erotic content for their fans. Before implementing business decisions, administrators of subscription-based adult content-sharing websites require empirical data to validate their perceptions.

## 9. RESEARCH LIMITATIONS

This study has significantly contributed to the theory and practice discussed in the preceding sections. However, similar to other studies, our research has limitations. This issue samples visitors' actual behavior on three SPCS websites. Although cross-sectional data may illuminate specific evidence, they may not provide a complete picture of the situation. Therefore, replication of the research is strongly recommended. In addition, it suggested to potential researchers that longitudinal cross-cultural studies be conducted to evaluate the change in consumer behavior by time and country to evaluate cross-cultural differences.

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