

*Mental Stress in The Streaming World: Decision Fatigue in Leisure Time
Among Young Adults in Dubai*

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Abstract

The phenomenon of decision fatigue has been long explored in workplace and other task-related domains of human life. However, the studies of mental stress and negative emotions related to decision-making in leisure time are relatively recent and can provide insight on the impact of the overabundance of digital content that we experience nowadays. The current pandemic caused by Covid-19 has accelerated habits such as at-home consumption of content offered by streaming platforms and has occupied a significant part of people's lives. With so much time in our hands, we couldn't help but turn to streaming platforms like Netflix and Amazon Prime amongst many others. The researchers were able to observe that a pattern arose: an increase in mental stress in the decision-making process due to the increase of streaming content supply. This study aims to investigate the relationship between streaming services content offering and the mental stress users experience during the decision-making process. To do so, the study presents an overview of the current state of the streaming landscape in the GCC region, including both global as well as local streaming services, followed by an analysis of data collected by administering a questionnaire among 330 young adults in Dubai during the months of October and November of 2021. Significant correlations between variables such as the number of subscriptions, content catalog size and the platforms' automated recommendations are expected to increase the probability of users experiencing negative emotion and mental stress during the decision-making process.

Keywords: Media, Streaming, Decision Fatigue, Decision-Making, Mental Stress

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Introduction

This paper is the result of a research project initiated during the capstone course of the M.A. in Leadership and Innovation in Contemporary Media at the American University in Dubai. The graduate students and authors of this paper, under the guidance of the course supervisor, by utilizing a series of design thinking methodologies, identified a potential issue that hypothetically has seen a surge during the pandemic caused by Covid-19. We find ourselves looking for ways to detangle and de-stress from today's fast-paced world, where we're overbooked, overstressed and with barely any time to spare. Indulging in a series or planning for a movie marathon for many has become the highlight of the week, a new norm and something to look forward to. According to a survey done by *Healthywomen* magazine, getting lost in a scene or two has proven to be a form of escapism. Describing it as a "common stress management tool" (Feintuch, 2019). The exercise of watching finds its place in everyday life for an array of different characters, from your children coming home from school to working mums who need a moment of calm for themselves. With at-home watching becoming an integral part of our wellbeing and with an overabundance of content available on streaming channels, an unexpected phenomenon has taken place.

Times have evolved and so has the nature of content consumption. Channel-switching has become rare as on-demand watching becomes the new norm. Due to the new forms of distribution and the abundance of different streaming services, consumers have also become more aware of their freedom to choose what they want to watch when they want to watch it. New technologies and their penetration into the watching culture have created a sort of numbness to decision-making because not only is there a variance when it comes to choosing what to watch but there is also the fact that some content doesn't emerge to the surface thus, viewers are never aware of its existence.

Decision-making is already dubbed a burden in everyday life, amplifying anxiety and frustration. Our research recognizes and acknowledges indecisiveness in ordinary day-to-day life but simultaneously is looking to understand the presence of indecisiveness in the streaming world and the effect it has on viewers experiencing it. With a sea of options to choose from in today's streaming world and time being a luxury, have our binge-watching days come to a dead end? This study works towards shedding light on whether decision fatigue plays a huge role on viewers' lives and how much impact it really has on their feelings, whether it's through wasting time or not being able to maneuver in a flood of content to choose from.

This specific phenomenon is a natural unfolding of the "attention economy," a term coined in the 1990s but already articulated by Herbert Simon back in 1971 to define how cheap parallel computing and a growing penetration of technological devices in our society would bring a scarcity of attention, among other things:

"(...) in an information-rich world, the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information sources that might consume it (...)" (Simon 1971, pp. 40–41).

Since at-home watching has become such a huge part of our lives and even more so in the past few years as we stayed inside amid lockdown, it was crucial to understand if the process

of finding something to watch had a downside to it. During the pandemic, many of us became part of a culture that couldn't help but turn to platforms like Netflix and Amazon prime, amongst many others, for basic entertainment. With easy access to streaming services thus allowing viewers to go through the process almost daily, a pattern arose. There are too many OTT platforms available, yet users are not being exposed to enough related and valuable content in good time.

Literature Review

In this literature review, we thoroughly explore past and current work on this issue. This helps further define the problem. From our research we can see that trying to look for something to watch can really be distressing for the viewer. The search not only takes a toll on the person emotionally, but also socially as viewers waste so much of their valuable time trying to find the right content for them.

According to an article written by Digital Content Next's (DCN) Vice President of Research, Rande Price, "Consumers have an appetite for new content. Half of consumers (55%) report they are looking for a new TV show or movie to watch at least once per week; 83%, a few times per month". Price also highlights the major frustration that naturally accompanies the searching process. In her article, she mentions very significant figures on how the process can sometimes make users feel discouraged. "Nearly two-thirds (62%) of consumers agree that they often struggle to find something to watch, despite there being many choices available to them. Further, the findings show that half of consumers (50%) are frustrated when they search for content to watch compared to finding content to read (37%) or music to listen to (32%)". Furthermore, Price's article explains how consumers find it difficult to trust a platform's recommendations, describing it as "not the go-to source". Instead, consumers prefer to have more clarity on the context of these recommendations, or they simply look for other ways to get suggestions (Price, 2018).

According to an article by *The Independent*, Odeon cinemas conducted a study on Britain's viewing habits. According to their research, British people alone have spent around 187 hours a year looking for something to watch. That's around eight days of browsing through content on OTT platforms ("Brits spend 187 hours browsing Netflix in a year, study claims | The Independent").

As stated by the software company *Reelgood*, there is an infinite amount of content floating around on different channels and OTT platforms. The list only gets longer as new content is produced and released almost daily. *Reelgood* shed some light on the difficulties consumers' face when trying to keep up with the amount of content coming their way. "How do consumers keep track of all these shows and movies that keep getting bounced around?" They proceed to try and answer this question and through doing so they come across the point that because data on this matter is scattered, consumers find it hard to trust the platforms' recommendations "without a central source of truth for this data" ("48% of users don't know where to watch their movies and shows online").

Author and Opinion Writer, Jill Stark defines the paradox of choice in an opinion piece for WA Today. In this piece, she expresses the uneasy feelings she gets and how scrolling through content has quite the toll on her. "I kept scrolling, scrolling, scrolling — searching for the 'right' viewing option. Nothing felt satisfying. I was like a junk food addict who had

binged so heavily on cheeseburgers and ice cream; I could no longer enjoy the taste. It all felt so bland and disappointing” (Stark, 2019).

In this article, we are introduced to the terms “Cord-cutting” and “Paradox of Choice”. Cord-cutting is the growing trend of a great portion of the population no longer subscribing to traditional cable TV, and instead subscribe to newer OTT platforms like Netflix, HBO, and Amazon Prime etc. The Paradox of Choice is defined as the result of now being presented with so many choices and options that consumers are less likely to choose a satisfactory outcome (“Why do we spend 20 minutes browsing Netflix and fail to watch anything?”).

This article discusses the concept behind the OTT recommendations and explains that this is a two-way road concept. It is important for viewers to understand that AI requires as much information as possible to be more accurate, and that giving up personal data will harvest better suggestions (Griffiths, 2020).

According to a survey carried out by PwC, consumers can choose to stick with a streaming service if it provides them with specific features. For example, if the service has “a clean, intuitive user interface (UI) that understands consumers even better than they know themselves”. Additionally, this survey highlights that many consumers want to go beyond the personalization feature on streaming services. What they’re really longing for is “viewing recommendations based on factors such as mood, length of content, who they are with, and what content they are currently watching”. Throughout the whole study, we keep coming back to how finding something suitable to watch is a major factor consumer struggle with and constantly look for in new services (“Consumer survey of on video streaming preferences and attitudes”).

This article explains in depth what the Paradox of Choice is, and how it is becoming a major concern in the modern world where we are being exposed to more and more options. The theory behind the Paradox of Choice is that while it is believed that having multiple choices makes it easier to choose an option that the consumer will be happy with. However, having an abundance of choices causes the buyer to make more effort in the decision process, and most likely will leave the buyer unsatisfied with the choice. As a result, this theory suggests that being offered too many choices limits the consumer's freedom (Ward).

The shift to streaming video services has been inevitable, and the media and entertainment industry has had to adjust and adapt to the changing needs and habits of consumers. According to a survey ran by Deloitte, it was found that in the US, at the start of 2020, consumers subscribed to an average of three paid streaming video services. However, by the end of that year, consumers were subscribed to an average of five paid video streaming services. Although this may seem like a positive statement for providers, consumers were also cutting services more frequently and switching from one platform to another. Although consumers are subscribed to more platforms than ever, they are most likely to not keep the same service subscription for a long period of time (Deloitte, 2021).

Research Methodology

The authors have developed an online survey and distributed it in two rounds: October/November 2021 and May/June 2022. The survey was shared with university students in Dubai.

The online survey aimed to understand and study our targeted group by knowing their needs and temperaments and how OTT platforms might affect their overall emotional state. This survey was crucial to conduct, especially given the fact that the number of OTT platforms available in the market is increasingly higher by time. Within our survey, we made sure to also identify the age group, gender, and financial situation of the OTT platform subscribers to help us recognize and point out any correlations with decision-making and good watching experiences. We targeted university students (graduate, undergraduate and fresh-graduates) located in the emirate of Dubai since they represent the audience that possesses enough purchase power to pay for their own subscriptions and at the same time, they are more adapted to the streaming culture and usually don't subscribe to cable network services (also known as the "cord-cutters").

Survey Description

The research group put together a survey of 22 questions that was shared among university students and fresh graduates. 330 responses were received in both rounds, which have been analyzed in the section below. The purpose of the survey is to identify how the respondents feel regarding OTT platforms and the decision-making process when choosing something new to watch.

The survey's first couple of questions were designed to understand the demographics of the respondents. It was found that 77% of the participants were females, whereas 70% of them were aged between 16 and 25 years old.

Survey Results

The next set of questions in the survey were intended to understand how the respondents feel about subscribing to several OTT platforms at the same time. *Netflix* is by far the most consumed streaming service (92.9% of the surveyed; *YouTube* is the second most consumed streaming service (91%); 36% of the surveyed subscribe to the region's main streaming service, *Shahid*; 23% of the surveyed subscribe to *Amazon Prime* streaming service.

The survey's following questions looked at understanding how much time the respondents spent watching movies or series per day. Results showed that almost half of the respondents (49%) spent between 1 to 3 hours a day watching movies or series. The remaining respondents were divided between 21% spending 45 minutes or less consuming video content while 13% watched movies or series for 3 hours or more, and 15% said they do not watch movies or series every day. Following this question, it was important to understand how much time the respondents spent searching for new content to watch. The authors identified that 49.2% of the respondents 1 said that it takes them between 5 to 10 minutes to find something to watch.

The next question in the survey was added to help identify where people get their recommendations from when looking for something new to watch. The responses for this question included friends and family, social media, forums, Google search, the platform's recommendations feature as well as the option to choose 'other'. For this question, respondents had the ability to choose multiple responses. The response which was selected the most with 88% was friends and family followed by social media with 62%, then the platform recommendation feature with 42%, then followed by Google search with 12%, and finally 7% found their recommendations through other sources and 2% from forums.

Keeping in mind that every OTT platform has a ‘recommended for you’ feature, it was important to understand whether the respondents made use of these personalization features, for example the like and dislike a movie or series feature that can be found on Netflix. Responses for this question came back relatively evenly split with 51% responding ‘Yes’ and 49% responding ‘No’.

The next question was aimed at understanding the number of negative emotions those participants felt when struggling to find something to watch or binge on. 77.5% identified their emotion as “frustrated” and 47% felt that they were wasting their time during the browsing process.

To tag along their viewing journey and understand what our participants did when they couldn’t find something of interest to them to watch on these OTT Platforms, we asked one more question, also providing them multiple options to select from. Participants had the option to select one or more of these responses. We discovered that switching to social media was the ultimate option for them.

Here is the list of options they had to choose from along with the number of responses we received.

- **Switch to social media** (61%)
- **Go to sleep** (27%)
- 20% of the respondents stated to **read a book** instead
- The remaining 14% responded that they switched to traditional TV, listened to a podcast or just gave up.

Conclusion

The authors could not identify a direct correlation between the number of subscriptions to streaming services and negative emotion. Instead, negative emotions, specifically feelings of frustration, boredom, tiredness are prevalent among 88.7% of the respondents. The authors identify a correlation between browsing for streaming content and negative emotions experienced by the users. This might lead to higher churn of subscribers and take users to other platforms, since humans tend to avoid negative emotions by nature. In user experience language, this is understood as “friction” between the system and the user, and may lead eventually to the user giving up on the platform or service for another one that provides less friction during the user journey. Another important thing to consider: mental stress has been connected until now with work-related issues, not with leisure activities. Even though our modern times offer us many convenient solutions, those solution sometimes can add stress to other dimensions of our lives that had not been affected by it up until now.

Potential Solution: A Content Recommendation Platform

For these reasons and given the insightful data provided by the surveys, the authors identify an opportunity for developing a recommendation platform that simplifies and gamifies the search process. that the solution consists of creating an AI-programmed engine that generates recommendations based on one’s moods and personal preferences. Our recommendation engine, called *Spectar*, (from the Latin word *spectare* which means “to watch”) would facilitate finding new content to watch across all platforms available. Since the respondents are not able to find new content to watch on the platforms they are currently subscribed to, we thought an AI generator and recommendation engine would help generate a distinctive

scope of new content to watch. The idea is that the AI would learn and understand the different habits of a specific consumer and depending on how he/she is feeling on a certain day, would recommend a list of movies or series to watch across all platforms.

The thought behind this solution is not to limit the suggested content to a certain video streaming service platform. Instead, the aim is to consolidate all the content across all possible platforms and suggest content that would be valuable and interesting to a specific person individually. Additionally, *Spectar* comes with another feature that allows users to link their social media platforms to the generator. By doing so, it feeds off more information from the user to pinpoint a better recommendation stack. The reason this solution was sought out and thought of is because consumers can easily switch from one video streaming service to another with little to no cancellation fees. Furthermore, the results from this survey already showed that many respondents were already subscribed to several video streaming services while also willing to subscribe to more. This indicated that there is room to offer a paid solution that would facilitate the decision-making process when searching for something new to watch.

Spectar's design allows for a seamless and very much interactive experience that resonates with each user differently. This allows our product to have a more humane approach rather than it being too stiff and robotic for users to see or even interact with. The flow of our product would be clean and easy-to-use. The dialogue itself is light-hearted and quick to digest.

This solution would not only benefit the user to form a stress-free searching process but it would also expose various video streaming services and platforms to users which would in return also generate more subscriptions and revenue for them, all while staying conscious of time.

Despite the success that OTT platforms have witnessed in the past few years, there are still areas of improvements and technologies that these platforms can invest in to improve the viewing experience and gain customer loyalty.

Most of the available recommendation systems are focused on suggesting content for viewers to watch but not the platforms that offer the content. The purpose of this study was to identify whether decision fatigue was an issue in the video streaming services industry. The results of the survey ran for this study in fact showed that there was a significant issue. Respondents did claim that they were often not able to find new content to watch even after spending over 10 minutes searching. The surveyed also did mention that not finding content to watch often led them to give up the search and turn to social media or another occupation. In addition to this, video streaming providers are also facing the issues of either not being able to retain their customers, or of simply losing subscribers because they are unable to find things to watch. The research has also shown that consumers have gotten into the habit of switching from one platform to another to simply watch the content they are interested in, rather than remaining subscribed to all platforms at the same time. To reduce decision fatigue our study also aims to point out to a potential a solution (still at an early stage) for choosing the appropriate content on multiple OTT platforms that fits one's personal preferences.

The results from this study have allowed us to come up with a sketch product called *Spectar* which would be an AI-based recommendation engine that will learn the preferences and watching habits of an individual and recommend accurate suggestions. Our AI

recommendation engine will consider each users mood, overall preferences, as well as factors like weather outside and how the user's day went. We want our users to feel like they are being understood and thought of. Unlike any other OTT platform or recommendation service, *Spectar* is designed purely to satisfy the needs of our subscribers. To conclude, the authors expect to make a positive contribution to the scientific community by providing more clarity to the issue of overabundance of content on streaming platforms, as well as by pointing out to a potential solution that aims to minimize the overall frustration during the browsing process.

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