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The relationship between binge-watching and the personality-trait extraversion

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Abstract

The relationship between binge-watching and the personality-trait extraversion

Binge-watching is a relatively new phenomenon that a lot of people are vulnerable to. Many predictors of binge-watching are also tied to an aspect of "extraversion", namely on either being introverted or on being extraverted. However, these indicated relationships are not yet fully explored and the influencing factors for binge-watching are not yet clear. Hence, this research aims to find out what the relationship between "extraversion" and binge-watching is.

A cross-sectional online survey design was used and 127 university-students participated. The independent variable "extraversion" (derived from the BFI-questionnaire) and the dependent variable "level of binge-watching" consisting of a measurement of "hours spend using streaming services per day" as well a measurement of "Number of Episodes watched in one sitting" were measured. Afterwards, a two-tailed Pearson`s correlation analysis was used to analyse the relationship.

The analysis showed that there was no significant correlation between "extraversion" (M= 3.43 SD= 0.58) and the binge-watching variables "Hours spend using streaming services per day" (M= 1.84 SD= 1.04), r = -.58, p = .515. Furthermore, no significant correlation could be found between "extraversion" and "Episodes watched in one sitting" (M= 2.74 SD= 1.65), r = -.101, p = .213.

In conclusion, there is no correlation between "extraversion" and binge-watching. However, there might be other factors that could explain the phenomenon such as "neuroticism" which has been related to some behaviours of binge-watchers such as sensation-seeking. Factors like that are outlined in the study and recommended as topics for future research. Another influence was the population that consisted of only 127 participants which very similar in their occupations as university students and their age. Future research could focus on a more diverse population with a wider age and occupation range.

Introduction

The current usage of streaming services

In the entertainment industry, a new trend of on-demand content has been on the rise in the last years. Especially streaming services that offer on-demand access to series and movies for a paid monthly subscription are common. While there are a lot of companies, the example of Netflix, one of the biggest, can underline their involvement in the industry. Netflix reported over 167 million subscribers worldwide in the last quarter of 2019, that paid a monthly fee for their services (Watson, 2020).

The concept of on-demand content also had an impact on viewing preferences and behaviours of customers due to permanent availability and increasing popularity. Furthermore, on-demand services are a new phenomenon that draws audiences from regular television to online services (Ahmed, 2017). This can also be seen in European countries like Germany, as experts went as far as proclaiming that television would be unnecessary in the future, while that is not yet the case, it is apparent that more people deviate away to other media providers (Mikos, 2016). In 2015 it was found that 98% of Germans between 14 to 29 years use online services to watch videos, series or movies (Mikos, 2016). Overall, it is expected that this trend grows stronger among younger users between 14 to 29 years but also in general (Mikos, 2016).

In conclusion, binge-watching is a very common behaviour among many of the people

using streaming services and was a recent subject of many studies. It is a shift in the consumption of media and television and is present in many age groups but predominantly in younger people.

Defining binge-watching

Even though binge-watching was part of research lately, finding a clear definition is difficult as different studies are defining it differently. Most definitions are constructed similarly, as they include two components. One clear component that scientists take into account is the quantity of the episodes watched such as "2 consecutive episodes watched" (Flayelle, Maurage, Di Lorenzo, Vögele, Gainsbury, & Billieux, 2020). The other component that is often used in a definition is time or a watch pattern. This often happens instead of a number of episodes watched. An example of a definition with a time component could be that binge-watching is "watching a show for more than 2 hours" (Flayelle et al., 2020). For this study, the definition that binge-watching is characterized by "watching between 2 or more episodes of the same TV show in one sitting" is used, while also using a variable that focuses on another possible definition that is based on the hours spent watching (De Feijter, Khan & Van Gisbergen, 2016).

   A literature overview showed that the prevalence of binge-watching in twelve different studies ranges between 44.6% and 98% of the participants. However, the average prevalence of binge-watching in the reviewed literature is 77.14% (Flayelle et al., 2020). This is an indication of how common binge-watching is in our daily life, especially for younger people but also generally across all age groups (Flayelle et al., 2020). This underlines the importance, as the presented information shows that there are a lot of people who have experienced the behaviour of binge-watching already. That makes research on possible consequences of binge-watching very important as it can show in different aspects of people's lives and as binge-watching can also be harmful.

Possible consequences of binge-watching

Previous research has shown that binge-watching can have a negative impact on people's lives, as it influences several aspects such as physical and mental health, real-life relationships and possible addiction. While explaining these consequences, it is important to always consider that individual factors such as age can also play a role.

   Regarding physical health, it was found that binge-watching is associated with reduced sleep or being restless and resulting fatigue the day after. Other related findings are that binge-watching can play a role in experiencing insomnia as well as in maintaining an unhealthy diet (Flayelle et al., 2020). Further findings suggest that binge-watchers can also experience strong exhaustion in unexpected situations with no clear reasoning (Gangadharbatla et al., 2019). Lastly, pain in different body parts such as the back is experienced by some binge-watchers, who related this to a lack of movement while watching (Gangadharbatla et al., 2019).

   In terms of mental health, binge-watching is related to a loss of feelings, as literature explains that binge-watchers often lack positive feelings after finishing a series and describe themselves as feeling empty. They further experience guilt or regret about their behaviour and the time they spend watching a series. However, they also recognised their behaviour as "wrong" during a self-evaluation (Flayelle et al., 2020). After realising that the binge-watching behaviour had negative impacts on the participants, such as less sleep, they still resorted to binge-watching in many cases afterwards to alleviate the "bad" feelings of said guilt or regret (Flayelle et al., 2020).

   Another potential consequence of binge-watching can be a negative impact on social relationships and self-worth. A study amongst college students found that the students feel sad

or like 'losers' after they binge-watched (Gangadharbatla, Ackerman & Bamford, 2019). Other students reported that their peers liked them less and that they experience problems in personal relationships when they participate in binge-watching (Gangadharbatla, Ackerman & Bamford, 2019).

In addition to that, binge-watching is associated with further personal and professional deficiencies. College students reported that they received worse grades during periods where they binge-watched. They further report that their watching behaviour interfered with the time they would usually invest in studying or working (Gangadharbatla, Ackerman & Bamford, 2019).

Another big concern is the potential of getting addicted to binge-watching. This is reconfirmed by findings that suggest that people who engage in binge-watching can show characteristics of addiction like reduced self-control, loneliness or depression (Sung, Kang & Wee, 2015). This is further supported by a study that showed that 60% of the interviewed participants are reporting on feeling addicted to a show they watched (Devasagayam, 2014). Furthermore, a majority of the participants reported that they felt pressured or reinsured by the streaming service to continue to watch (Devasagayam, 2014).

As mentioned before, these possible consequences vary strongly from person to person, but they show that the viewer can be impacted considerably in their daily, social and professional life. Hence research of possible causes for these consequences will be needed.

Binge-watching and personality

During previous research, several factors have been established that can be related to binge-watching. These factors can offer more insight into what could predict binge-watching behaviour.

Starting with "sensation-seeking behaviour", people engage in activities or behaviour that is new and engaging to them but includes the option to risk, for example, one's health (Shim & Kim, 2018). This behaviour was found to be a predictor of binge-watching as watching a series would be seen as new and exciting in this context (Shim & Kim, 2018). Furthermore, the personality trait "neuroticism" has to be considered for sensation-seeking behaviour, as a neurotic person who is quickly aroused has a higher probability of partaking in seeking new experiences. The personality trait is also linked to impulsivity, being extroverted and problems with self-control that are often experienced by binge-watchers (Flayelle et al., 2020).

Another factor that affects binge-watching is the "need for gratification". It was found that people could start to binge-watch, despite having a negative attitude towards it, if they are looking for small rewards that give them immediate gratification (Shim, Lim, Jung & Shin, 2018). Individuals can have different interpretations of rewards, such as being entertained by a show or getting educated through a documentary (Flayelle et al., 2020).

Regarding mental health, it was found that binge-watching can be correlated with mental health problems. Binge-watchers often experience conditions such as depression and anxiety (Kotov, Gamez, Schmidt & Watson, 2010). Furthermore, depression and anxiety show a correlation to the big five personality trait of "extraversion", more specifically to being introverted (Kotov, Gamez, Schmidt & Watson, 2010). This shows that mental health problems have to be considered while explaining and researching binge-watching due to the found correlation.

Furthermore, a link was established between social media and the "extraversion" spectrum. Introverted people tend to use more social media and entertainment mediums like streaming services for various reasons. They mainly try to appeal to social groups that they would like to be a part of in their daily life. This means that they increase their use in social media and streaming services to become similar to the group they admire or to become as knowledgeable in a topic like a tv series (Brooks, 2015). Further research also

suggests that introverts have more difficulties with receiving social support from their peers and with integrating into a group of peers (Swickert, Rosentreter, Hittner & Mushrush, 2002). Overall, these findings suggest that the introverted part of the "extraversion" spectrum can lead to problems in assimilation into groups of peers which can result in more extensive use of social media and streaming services.

In conclusion, previous research showed that several factors can influence binge-watching and that personality can play an important role. The trait "extraversion" was present in several of the findings and opens a not yet fully explored field of research. This includes showing that several factors correlate with binge-watching without offering a clear explanation and without referring to clear factor such as a personality trait when explaining it. Furthermore, this knowledge gap gets further apparent as the majority of research suggests that being introverted is related to binge-watching such as the findings on mental health and social problems, while extraverts also show a tendency to binge-watch through behaviours like sensation-seeking. This seems unusual as introverted and extraverted persons represent the ends of the extraversion spectrum. This further underlines the importance of studying the relationship and the knowledge gap in binge-watching and extraversion. Lastly, it is difficult to predict an outcome for this study, as the majority of evidence would suggest a relationship between being introverted and binge-watching. However, the findings on sensation-seeking also suggest a relationship for higher levels of binge-watching. Therefore, both ends of the spectrum are expected to have a relationship with binge-watching.

Method

Design and Participants

As a design for this study, a cross-sectional online survey design with the independent variable "extraversion" and the dependent variable "level of binge-watching" was used. The participants were university students (N=196), recruited through convenience sampling. The survey was distributed through the SONA-System, which is an online environment of the University of Twente that allows students to publish or participate in studies. Other participants were found through the researchers' social media platforms (WhatsApp, Instagram, Facebook) and participation was voluntary.

Furthermore, the participants had to fulfil certain criteria, starting with an age between 18 to 28 years for them to have experienced similar situations and due to them being students. Further criteria included that only students (both Bachelor and master) could take part and lastly, all participants had to be able to understand and answer insufficient English. However, after the study was closed, 69 responses were excluded from the data due to various reasons such as being too young, too old or not finishing the questionnaire.

Table 1
Summary of Demographics (N=127)

Variables	Frequency	Percentage
Gender		
Male	44	34.6%
Female	83	65.4%
Educational degree		
Bachelor student	119	93.7%

Master student	8	6.3%

Nationality

Dutch	5	3.9%
German	119	93.7%
Other	3	2.4%

The descriptive statistics of the respondents are presented in table 1. The average respondent is female, has the German nationality and is a current bachelor student. The age of the respondents ranges from 18 to 28 years with a mean age of 21.57 years (SD= 1.55).

Materials

The online study was constructed and distributed via the platform Qualtrics and the University of Twente SONA system. The survey included questions about the demographics, the watching behaviour and the level of extraversion of the respondents.
To gain information about the demographics of the participants, four questions were asked. In the first question, the respondents were asked to indicate their gender through the answer options "male, female or other". Afterwards, they were asked to indicate their age in years through a text entry option. The third question assessed their current educational level, which was indicated through the answer options "Bachelor Student" or "Master student". Lastly, the participants were asked to indicate their nationality, they could answer either "German", "Dutch" or "other" with a text entry option to specify it.
To get an insight into the watching behaviour of the respondents, four questions were asked. The first question "How often do you use streaming services" had the answer options "Less than once a week", "Once a week", "2-3 times a week", "several times a week" and "every day". In the following, the question "On average, how many episodes do you watch in one sitting?" was asked with an open text entry box for the participants to indicate the number. Question three asked "On average, how many hours do you spend using online streaming services per day?" with nine answer options, namely: "less than once a week", "one hour", "two hours", "three hours", "four hours", "five hours", "six hours", "seven hours" and "more than seven hours". The last question "On average, how many hours do you spend watching tv?" uses the same nine answer option as the previous question.
Lastly, the respondent's level of extraversion was measured with an extraversion scale from the BFI big-five questionnaire (John & Srivastava, 1999). The scale consisted of eight statements that the respondents could agree or disagree on. The statements all started with the sentence "I see myself as someone who…" and included "Is talkative", "Is reserved", "Is full of energy", Generates a lot of enthusiasm", "Tends to be quiet", "Has an assertive personality", Is sometimes shy or inhibited" and "Is outgoing, sociable". For all statements, the respondents could answer on a five-point Likert scale starting with "strongly disagree", "disagree", "neutral", "agree" and "strongly agree". A mean score was calculated. In the scope of this study, a reliability analysis was conducted and Cronbach's alpha was calculated for the extraversion scale. It has an alpha of $\alpha = .791$ and falls in the "acceptable" category.
The complete questionnaire can be found in the appendix (Appendix A).

Procedure

Before the data collection, ethical approval was obtained through the Ethics Committee of the University of Twente (reference number: 200468). The data was gathered from the 14. April 2020 until 1. May 2020.

This study was conducted with two other students who were studying different research questions but also worked in the context of binge-watching. Hence, the study included questionnaires about three different topics related to binge-watching.
After the authorization, the questions were uploaded in Qualtrics and published on Test Subject Pool BMS and the SONA system of the University of Twente. Students can access different research studies here which guaranteed using opportunity sampling for this study. In the case of this study, the participants were recruited through the SONA system of the University of Twente. They received SONA system credits worth 0.25 points after finishing this study. These credits are required to collect at the university. Furthermore, participants were recruited via social media networks (e.g. Facebook and Instagram) of the researchers. They shared the link to the questionnaire directly on these platforms.

Before answering the questions, the participants were informed about the purpose of the study and that there would not be any potential harm if they participate, through an informed consent that they had to agree on. The consent further informed them that it took approximately 15 minutes to fill out the questionnaire. Furthermore, it was established that they can quit the study at any time. The participants were asked to give consent and to answer the questions sincerely by selecting the most applying statement, before filling in the questionnaire. Lastly, they were thanked for participation and their SONA credits were granted within one week.

Data analysis

To interpret the findings of this study, several analyses had to be done. To analyse the data, SPSS version 24 was used. First, the descriptive statistics in terms of frequencies, percentages and means, of the demographic variables "age", "gender", "nationality" and "educational degree" were calculated. Afterwards, frequencies were calculated for the variables "How often do you use streaming services?", "How many episodes of a series do you watch in one sitting?", "How many hours do you spend using online streaming services per day?" and "How many hours do you spend watching tv?". Furthermore, a reliability analysis was conducted to determine the Cronbach's alpha of the scale. Lastly, a two-tailed Pearson's correlation analysis was conducted to examine the relationships between the variables "How many hours do you spend using online streaming services per day?", "How many episodes of a series do you watch in one sitting" and "extraversion".

Results

Table 2
Summary of Correlations, Means, and Standard Deviations

Variables	N	M	SD	1	2	3
1. Hours spent using streaming services per day	127	1.84	1.04	–		
2. Episodes watched in one sitting	127	2.74	1.65.	.492*	–	

| 3. Extraversion | 127 | 3.43 | 0.58 | -.058 | -.101 | − |

*Correlation is significant at the 0.01 level (2-tailed)

The average score of "extraversion" is reported on a five-point Likert scale with a mean of three counting as average. The findings suggest that the typical watching behaviour of the participants consists of watching about two and a half to three episodes of a show in one sitting, over the time period of about two hours. More specifically, 87.4 % of the participants are watching more than two episodes in one sitting. However, only 22.8 % of the participants are watching more than three hours per day. Further findings of the study suggest that participants use streaming services almost every day and that they spend on average one hour per day watching tv.

The analysis showed a significant association between the binge-watching variables "Hours spent using streaming services per day" and "Episodes watched in one sitting". However, the analysis reported that there was no significant correlation between the variable "extraversion" and any of the two binge-watching variables.

Discussion

Summary of results

This study aimed to establish a possible relationship between binge-watching and the big-five trait extraversion. In this context, the results show that there is no relationship between the two variables on either side of the extraversion spectrum. This is not in line with the expectation that there will be a positive relationship between "extraversion" and binge-watching.

In more detail, the extraverted and impulsive behaviour like sensation seeking and looking for gratification suggested that extraverts could strongly participate in binge-watching (Flayelle et al., 2020). Other findings suggested that introverted behaviour is linked with binge-watching such as more extensive social media use (Brooks, 2015). However, these findings could not be confirmed with this study. For further explanation of this, it has to be taken into account that this study focussed on university students that are predominantly German, while the population in Flayelle et al. (2020) consists of several studies that represent populations from nine different countries. Furthermore, Brooks (2015) suffers from a lack of participants which could explain the unexpected differences found in this study.

Another important factor could be that the described predictors can be associated with the "extraversion" spectrum but that there are other factors that affect the relationship to binge-watching rather than "extraversion". An example of this would be that the sensation-seeking behaviour was not solely linked to "extraversion" but also to the trait "neuroticism" that could have shown a different result if studied (Flayelle et al., 2020). The already described problems in deciding for a definition of binge-watching and using unvalidated measurements for the binge-watching behaviour could also explain why the result of this study differs from its expectations.

Lastly, there are more speculative factors that could influence the relationship but are not represented by this study. Hence, one further explanation could be that binge-watching is not entirely dependent on personality and that other influences have to be taken into account. Tied to this, is the aspect of time, as this study focuses on university students who may show a higher tendency to binge-watch as they have more time to do so due to their schedules or the self-organised way of working. While that is still speculative, news outlets reported that due to the global Covid-19 pandemic, the average internet usage rose, which underlines the potential importance of time as people (and maybe participants of this study) could have had more time to binge-watch due to being in self-quarantine (Beech, 2020).

Limitations

Nonetheless, there were some limitations in this study that need to be considered. Starting with the participants, they were derived from personal contact and through the SONA system of the University of Twente. Thus, the participants were all similar in that they are students and young adults with often similar backgrounds like nationality or ethnicity. The number of participants could also be increased as only 127 participants provided usable data. Another limitation could have been the current Covid-19 pandemic, as news outlets report higher internet usage due to offerings like streaming services than before the pandemic (Beech, 2020). This could mean that the participants may change their watching behaviour after the end of for example emergency lockdowns and report a stronger watching behaviour right now but weaker behaviour after the pandemic.

Furthermore, the questions used to assess the watching behaviour of the participants were based on the definition used for this research and not tested before. Lastly, the definition used for this study was suggested by a meta-analysis of the topic, but other papers could define binge-watching differently, as there is no universal definition for the concept.

Strong points

Continuing with strong points, the questionnaire used for "extraversion" was a widely used and tested one from a big-five personality trait inventory (BFI) and hence was a reliable measurement. While one limitation was that this study focuses only on university students, a strong point is that this study gives an indication of the relationship of binge-watching and extraversion within that context. This offers a starting point for research of binge-watching and university students for future research.

Future research

One of the main points of improvements for future research is the already mentioned number of participants and the diversity between them. Hence another study should work with more participants and take into account their age, jobs or occupations to allow further comparisons between different groups of people or to allow to make a more general assumption about society. Research like that would be able to compare populations based on differences between them which could raise awareness of further attributes that influences binge-watching, like age differences, computer usage during the job or differences between countries or cultures. Furthermore, research with a general population could help in identifying people at risk of binge-watching which in turn could reduce the negative consequences that binge-watchers could experience. As already mentioned, factors like the Covid-19 pandemic could also affect viewing behaviour. Hence, environmental factors could be part of future research to identify how a population reacts to diseases or environmental problems like the current situation or changes in laws and fees such as copyright laws restricting platforms like YouTube or increases in fees for access to the streaming services. Lastly, future research could be focusing on the different definition used in the context of binge-watching. As previously mentioned, different researchers use different definitions that are sometimes more general as in this study but sometimes also tied to the specific topic of the study. Hence, research that finds a general definition allows researchers to have more comparable methods and results in the future.

Conclusion

The results of this study suggest that both extremes of the "extraversion" scale (being introverted and being extraverted) show a relationship with binge-watching in the context of

university students. This result was not originally expected but raises further questions about what predictors of binge-watching could be. Overall, the focus on students limits the generalizability of the results in terms of explaining behaviour in a country or even among older persons. However, it provided insight into the behaviour of young people who grew up with these technologies. Resulting from this, questions arose that can also be taken as suggestions for the future of research on the topic. Especially the possible involvement of other personality traits became apparent as "neuroticism" was also related to some behaviours explained in the study. However, after finding no relationship, it has to be evaluated in the future if personality plays a major role in binge-watching at all. Another factor mentioned is the influence of the environment on binge-watching behaviour such as global pandemics (like Covid-19) and the current occupation of the test population as university students, as they might have a different amount of time, that they dedicate to binge-watching compared to people with other jobs. However, these factors were not subject of this research and are open questions for further research.

The goal of this research was to explore the field of binge-watching and personality that is not yet studied in depth. The main contributions are to show that the specific trait of "extraversion" has no relationship to binge-watching and to confirm that there are other factors (or personality traits) that could show a stronger relationship. Despite these implications for the gap of knowledge, further questions had to be raised for future researcher to explore.

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Appendix

Appendix A

Binge-watching

Information letter

Dear Participant:
We are third-year students in the Department of Psychology at the University of Twente conducting research under the supervision of Nadine Köhle and Erik Taal on the relationship between binge-watching and three different outcome variables namely academic achievement, physical health and extraversion. Online streaming services like Netflix and Amazon Prime Video have gained and are still gaining more users each year all over the world. Watching movies and series online has become a weekly or daily routine for a lot of people. Sometimes, people tend to watch more than two episodes in one setting which is called binge-watching and with our research, we are trying to find out how binge-watching is related to the three variables named above. We would appreciate if you would complete the attached brief survey. Completion of the survey is expected to take about 15 minutes of your time. However, you can withdraw from the survey at any time, without providing a reason. There are no known or anticipated risks to participation in this study. Participation in this project is voluntary and anonymous. Further, all information you provide will be considered confidential.

This study has been reviewed and received ethics clearance through theUniversity of Twente Research Ethics Committee. If you have any complaints about this research, please direct them to the secretary of the Ethics Committee of the Faculty of Behavioural Sciences at the University of Twente (Drs. L.Kamphuis-Blikman P.O. Box 217, 7500 AE Enschede (NL), telephone: +31 (0)53 489 3399; email: l.j.m.blikman@utwente.nl).
For all other questions, please contact:
Esta Terbrack (e.terbrack@student.utwente.nl)
Niklas Hirte (n.j.p.hirte@student.utwente.nl)
Franziska Hanefeld (f.hanefeld@student.utwente.nl)

Yours sincerely,
Esta Terbrack
Franziska Hanefeld
Nicklas Hirte

Informed Consent   I hereby declare that I have been informed in a manner which is clear to me about the nature and method of the study as mentioned before. My questions have been answered to my satisfaction. I agree with my own free will to participate in this research. I reserve the right to withdraw this consent without the need to give any reason and I am aware that I may withdraw from the survey at any time. If my research results are to be used in scientific publications or made public in any other manner, then they will be completely anonymous as no personal identifying information is collected in the survey. My data will not be disclosed to third parties without my express permission. If I request further information about the research, now or in the future, I may contact
 Esta Terbrack (e.terbrack@student.utwente.nl)
 Franziska Hanefeld (f.hanefeld@student.utwente.nl)
 Nicklas Hirte (n.j.p.hirte@student.utwente.nl)   If you have any complaints about this research, please direct them to the secretary of the Ethics Committee of the Faculty of Behavioural Sciences at the University of Twente, Drs. L.Kamphuis-Blikman P.O. Box 217, 7500 AE Enschede (NL), telephone: +31 (0)53 489 3399; email: l.j.m.blikman@utwente.nl).

I read and understood all the above mentioned and agree to participate in the study. Further, I participate out of my own free will and I am informed that I can withdraw from the study at any time without providing a reason.

○ Yes (1)

○ No (2)

Skip To: End of Survey If I read and understood all the above mentioned and agree to participate in the study. Further, I p... = No

End of Block: Intro text

Start of Block: Demographic information

Please indicate your gender

○ Male (1)

○ Female (2)

○ Other (3)

Please indicate your age in years

_____

Please indicate your current educational level

○ Bachelor student (1)

○ Master student (2)

Please indicate your nationality

○ Dutch (1)

○ German (2)

○ Other (3) _____

The following questions are about your usage of streaming services. Please answer them as accurate as possible.

How often do you use streaming services? (e.g. Netflix, Amazon Prime, etc.)

○ Less than once a week. (1)

○ Once a week. (2)

○ 2-3 times a week (6)

○ Several times a week. (3)

○ Everyday. (4)

On average, how many episodes of a series do you watch in one sitting?

_____

On average, how many hours do you spend using online streaming services per day?

○ less than one hour (4)

○ one hour (5)

○ two hours (6)

○ three hours (7)

○ four hours (8)

○ five hours (9)

○ six hours (10)

○ seven hours (11)

○ more than seven hours (12)

On average, how many hours do you spend per day watching TV?

○ less than one hour (4)

○ one hour (5)

○ two hours (6)

○ three hours (7)

○ four hours (8)

○ five yours (9)

○ six hours (10)

○ seven hours (11)

○ more than seven hours (12)

End of Block: Binge-watching

Start of Block: Self-Control

Please indicate how much each of the following statements reflects how you typically are.

	Not at all like me (1)	Not like me (4)	Neutral (5)	Like me (6)	Very much like me (7)
I am good at resisting temptations. (1)	○	○	○	○	○
I have a hard time breaking bad habits. (2)	○	○	○	○	○
I am lazy. (3)	○	○	○	○	○
I say inappropriate things. (4)			myself from		
I do certain things that are bad for me, if they are fun. (6)					
I refuse things that are bad for me. (7)					
I wish I had more self-discipline. (8)					
People would say that I have iron self-discipline. (9)					
Pleasure and fun sometimes keep me from getting work done. (10)					
I have trouble concentrating. (11)					
I am able to work effectively toward long-term goals. (12)					
Sometimes I can't stop					

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| doing something, even if I know it was wrong. (13) | ○ | ○ | ○ | ○ | ○ |
| I often act without thinking through all alternatives. (14) | ○ | ○ | ○ | ○ | ○ |

Please select the option that is most suitable for you.

	Never (1)	Almost never (2)	Rarely (3)	Sometimes (4)	Often (5)	Most of the time (6)	Always (7)
I can effectively solve the problems that arise in my studies. (1)	○	○	○	○	○	○	○
I believe that I make an effecitve contribution to the classes that I attend. (2)	○	○	○	○	○	○	○
In my opinion, I am a good student. (3)	○	○	○	○	○	○	○
I feel stimulated when I achieve my study goals. (4)	○	○	○	○	○	○	○
I have learned many interesting things during the course of my studies. (5)	○	○	○	○	○	○	○
During class, I feel confident that I am effective in getting things done. (6)	○	○	○	○	○	○	○

End of Block: Professional Efficacy

Here are a number of characteristics that may or may not apply to you. Please indicate for each statement, the extent to which you agree or disagree with that statement.   I see myself as someone who...

	strongly disagree (1)	disagree (2)	neutral (3)	agree (4)	strongly agree (5)
Is talkative. (1)	○	○	○	○	○
Is reserved. (3)	○	○	○	○	○
Is full of energy. (4)	○	○	○	○	○
Generates a lot of enthusiasm. (5)	○	○	○	○	○
Tends to be quiet. (6)	○	○	○	○	○
Has an assertive personality. (7)	○	○	○	○	○
Is sometimes shy or inhibited. (8)	○	○	○	○	○
Is outgoing, sociable. (9)	○	○	○	○	○

End of Block: Big Five (BFI)

Start of Block: Physical Health

During the past seven days how much have you been bothered by the following?

	Not bothered at all (1)	Bothered a little (2)	Bothered a lot (3)
Stomach pain (1)	○	○	○
Back pain (2)	○	○	○
Pain in your arms, legs, or joints (knees, hips, etc.) (3)	○	○	○
Menstrual cramps or other problems with your periods WOMEN ONLY (4)	○	○	○
Headaches (5)	○	○	○
Chest pain (6)	○	○	○
Dizziness (7)	○	○	○
Fainting spells (8)	○	○	○
Feeling your heart pound or race (10)	○	○	○
Shortness of breath (11)	○	○	○
Pain or problems during sexual intercourse (12)	○	○	○
Constipation, loose bowels, or diarrhea (13)	○	○	○
Nausea, gas, or indigestion (14)	○	○	○
Feeling tired or having low energy (15)	○	○	○
Trouble sleeping (16)	○	○	○

During a typical 7-Day period (a week), how many times on the average do you do the following kinds of exercise for more than 15 minutes during your free time? (write in each text field the appropriate number)

	Times per week (1)
STRENUOUS EXERCISE (HEART BEATS RAPIDLY) (e.g., running, jogging, hockey, football, soccer, squash, basketball, cross country skiing, judo, roller skating, vigorous swimming, vigorous long distance bicycling) (1)	
MODERATE EXERCISE (NOT EXHAUSTING) (e.g., fast walking, baseball, tennis, easy bicycling, volleyball, badminton, easy swimming, alpine skiing, popular and folk dancing) (2)	
MILD/LIGHT EXERCISE (MINIMAL EFFORT) (e.g., yoga, archery, fishing from river bank, bowling, horseshoes, golf, snow-mobiling, easy walking) (3)	

Thank you for participating in this study!   **To safe your answers, please click on the right.**