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(Media-) Escaping through Streaming Services - the Relationship between Positive and Negative Escape-Coping and Self-Regulation

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Abstract

Introduction. In the past, research has emphasized the physiological impacts of streaming services on the individual. However, little research has been done about streaming services as a coping tool, helping people to escape from their outer world. This manner of coping, also referred to as (media-) escaping, sheds light on positive as well as negative consequences for an individual's mental health and the ability to engage in self-regulating activities.

Aim. The aim of this research was to identify whether there is a relationship between (media-) escaping and self-regulation.

Methods. This study was conducted quantitively using an online questionnaire. The convenience sample was composed of 209 participants, with the majority being students. Negative and positive (media-) escaping was measured by using the subscales "*coping/escapism*" (negative) and *"enrichment"* (positive) of the Watching TV Series Motives Questionnaire (WTSMQ). In addition, the Short Form Self-Regulation Questionnaire (SSRQ) was used to assess self-regulation. This study used a correlational design and because the data was not normally distributed, the non-parametric test Spearman's Rho was used.

Results. Outcomes revealed significant relationships between positive/negative (media-) escaping and self-regulation. In essence, the relationship between negative (media-) escaping and self-regulation was moderately strong and negative (r_s = - .484). Besides, the relationship between positive (media-) escaping and self-regulation was weak and positive (r_s = .257). Mean scores for negative (media-) escaping (M = 2.52) as well as positive (media-) escaping (M = 2.6) were above the midpoint of the scale, indicating higher agreement levels for the corresponding escape reasons. With hindsight to self-regulation, the mean score was well above midpoint of the scale (M = 4.73), indicating a higher self-regulation of the sample.

Conclusion. From the current study it can be concluded that participants who had a lower level of self-regulation were more likely to use online streaming services as a strategy to engage in negative (media-) escape coping. In addition, participants with a higher level of self-regulation were more likely to use online streaming services as a way to reward and enrich themselves. In practice, health science should not solely relate (media-) escape coping to health and self-regulation deficits. Instead, the outcomes regarding positive (media-) escaping can serve as a starting point for further research on causality matters and as a support for healthcare to educate about a healthier media-coping.

Keywords: (Media-) escaping, self-regulation, online streaming services

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Introduction

Watching all episodes of *Friends*, one of Netflix's oldest, most-watched series, will take five days and one hour. Although finishing series within this timeframe seems unlikely, there is a growing trend towards watching multiple episodes in a sitting on streaming services such as Netflix and Amazon Prime (Shim, Lim, Jung & Shin, 2018). As a result, a new media-consuming behaviour has emerged with the driving force being the media and entertainment industry. These industries have shifted their focus away from a synchronised and scheduled classical television viewing, towards extending the accessibility of online streaming services (Shim et al., 2018). Consequently, through online streaming services, subscribers are given the freedom and online independency to decide what, when, and how long to watch (Shim et al., 2018; Granow, Reinecke & Ziegele, 2018).

The magnitude of this new freedom provided by streaming services can be revealed by the viewing behaviour of Netflix subscribers in the Coronavirus pandemic in 2020: Netflix, the most important streaming service company nowadays (Shattuc, 2019), had to reduce its video quality for 30 days because of viewer congestion in terms of over-usage (Moura, Wabeke, Hesselman, Groeneweg & Spaandonk, 2020). Further, even in times before the Corona pandemic, Netflix has disclosed that world-wide users watch 140 million hours of content on a daily basis ("2017 on Netflix- A Year in Bingeing", 2017). Concluding, the hours spend watching content on streaming services, display increasing popularity of integrating online streaming into people's daily lives.

As a result of increasing online streaming popularity, doors are opened to a new form of flexible media consumption. This modern form of media consumption has been used as a possibility to cope with everyday stressors such as "emotional challenges of relationship drama, stress, and social pressure" (Pilipets, 2019, p.6). Consequently, streaming services are seen as a "coping toolbox" (Perks, 2018). The coping strategy within this "toolbox" can be referred to as (*media-) escapism*, the act of disengaging from one's real world (Hastall, 2017). Altogether, streaming services and the content they offer have been acknowledged as a tool to escape from one's environment and potential stressors.

Past research has explored the negative consequences of (media-) escaping through classical TV viewing and gaming (Hastall, 2017). For this reason, attention should be paid to a less studied area concerning the positive and negative nature of (media-) escape coping through streaming services. Negative (media-) escapism can be described as the act of avoiding one's real world and thus, disengaging from triggering and distressing emotional

states (Hastall, 2017). Hence, it may be compared to a negative and avoidant style of coping. To define, *"avoidance coping"* is aimed at withdrawing oneself from the stressor and involves mental as well as behavioural disengagement through ignoring and distracting oneself from stressors (Perks, 2018). In essence, negative (media-) escaping shares similar qualities with an avoidant coping behaviour that goes in hand with the intent to withdraw from environmental stressors such as loneliness or boredom. Nevertheless, apart from a negative and avoidant (media-) escape coping, streaming services also allow subscribers to engage in positive (media-) escapism, and therefore, another coping strategy.

   Next to negative (media-) escaping, subscribers of streaming services can also engage in a positive (media-) escape coping. Positive (media-) escaping can be equated with the intent to experience *"enrichment",* defined as the desire to develop one's personality and broaden one's intellectual views (Flayelle et al, 2019). This positive nature of (media-) escape coping is opposed to avoidance coping and can be compared to *"(pro)active coping".* (Pro)active coping is centred at using coping strategies such as "solving the problem, working hard and relaxing" (Frydenberg & Lewis, 2009, p.746) with the aim to reduce or eliminate the source of stress (Perks, 2018). Furthermore, proactive coping "is used by individuals to maximize gains and to conserve the resources currently held and to strive for new resources" (Moring, Fuhrman & Zausziewski, 2011, p.205). All things considered, (media-) escapism through streaming services can be distinguished in terms of a positive and active, as well as an avoidant and negative coping strategy. This distinction can be supported as research has made a differentiation between a negative "avoidance" and a positive "(pro)active" coping.

   To develop and make use of positive and proactive coping skills, a sufficient level of *self-regulation* is needed (Veijalainen, Reunamo, Sajaniemi & Suhonen, 2019). Self-regulation can be defined as "managing one's thoughts and feelings to engage in goal-directed actions such as organizing behaviour, controlling impulses, and solving problems constructively" (Murray, Rosanbalm, Christopoulos & Hamoudi, 2015, p.3). The relevance to possess self-regulation skills has been stressed by Robinson, Allen, and Howard (2020), claiming that a current high level of self-regulation can be related to mental health in later life. In sum, self-regulation is a required ability to use positive coping strategies. Following, using positive coping strategies in one's life is necessary to ensure mental well-being. Consequently, self-regulation is important to consider when exploring (media-) escape coping because the ability to self-regulate may differ among negative and positive (media-) escapism.

   While (media-) escapism can be used as an avoidant, negative coping strategy, it can also be used to escape in order to develop positive attributes. Hence, the level of self-

regulation may differ respectively. To clarify, on the one hand, individuals may engage in negative, avoidant (media-) escapism with the intent to avoid and withdraw from "stress, anxiety or negative emotions" (Flayelle et al., 2019) and thus, possess a lower level of self-regulation. This can be assumed because studies have found that engaging in avoidance behaviour when facing negative events may indicate a lack of self-regulation skills (Frydenberg & Lewis, 2009). On the other hand, individuals may also use online streaming services with the intent to feel good and be rewarded through the content they watch (Flayelle et al., 2019). Resultingly, the ability to self-regulate may be higher in people who use streaming services as a positive escape strategy, compared to participants who engage in negative (media-) escapism. Altogether, the ability to self-regulate may differ with respect to the positive and negative nature of (media-) escapism used as a coping strategy.

The importance of studying the relationship between positive and negative (media-) escape coping with self-regulation concerns the well-being of subscribers to streaming services: To support, studies have provided strong evidence indicating that one's coping relates to both, one's present and future well-being (Frydenberg & Lewis, 2009). In particular, engaging in positive coping strategies such as "positive appraisal, guidance or support, problem solving" can indicate higher well-being in the present, as well as at a later point in time (Frydenberg & Lewis, 2009, p.747). Applied to this study, engaging in negative (media-) escaping through online streaming may not only harm an individual's abilities to engage self-regulation actions but as well have probable consequences for the subscriber's mental well-being in life. As a result, by researching the relation between positive and negative (media-) escape coping with self-regulation, coping habits of subscribers to streaming services can be understood and their well-being may be improved.

The aim of this research is to identify whether there is a relationship between (media-) escaping and self-regulation. In consequence of lacking research on positive and negative (media-) escape coping, the goal is to answer the following research questions:

(1) To what extent is positive (media-) escaping related to self-regulation?
(2) To what extent is negative (media-) escaping related to self-regulation?

Methods

Design

This research was approved on 17.3.2020 by the local Ethics Committee of the Faculty of Behavioural Science (ECBMS) at the University of Twente and given the request number 200352. For this study, a questionnaire survey design was employed and implemented through the online survey site Qualtrics. This study was part of a joint research project of five individual bachelor theses. Research topics included in the questionnaire-survey were sleeping behaviour, procrastination behaviour, self-regulation of eating behaviour, and social relationships. The variables measured in this study were (media-) escaping behaviour (positive vs. negative escaping) and self-regulation.

Participants

This study comprised a convenience sample, recruited through the media channels of the researchers such as WhatsApp and Instagram. Data was collected between the 8th of April 2020 until the 20th of April 2020. Inclusion criteria that participants had to meet in order to take part in this study were a good proficiency in English, being 18 years or older, and having access to one or more online streaming services.

Procedure

Participants of the current study took part through a received web-link, which directed them to the online questionnaire. Participants could complete the questionnaire via all devices with an Internet connection. Following the link of the questionnaire, participants were shown an informed consent, which communicated the aim of the study and the time of duration (see Appendix A). Moreover, a note on the situation of Covid-19 was included, asking the participants to take into account their behaviour before the exceptional Corona pandemic. After agreeing to the informed consent and the voluntary participation, participants were asked to indicate whether they used any of the listed or other streaming services. Participants who did not use streaming services were directed to the end of the questionnaire and could not continue to fill out the other parts. Next, participants were guided through each of the parts of the central battery of questionnaire items. At the end of the questionnaire, participants were thanked for their participation and shown contact information to get in touch with the researchers in case of questions. The estimated time to complete the questionnaire was 20 minutes.

Materials

Within this study only, the underlying constructs (media-) escaping and self-regulation were explored. The construct (media-) escaping was divided into positive and negative (media-) escaping. Accordingly, in this report, only the scales relevant to the aim of this study will be explained. The questionnaire was structured and separated into different parts, beginning with demographic questions first. After, questions about the constructs of this study followed. Before the publication of the questionnaire survey, a pilot test was carried out by the researchers to assure feasibility.

Demographics and Baseline Questionnaire. To begin with, a baseline questionnaire was created containing five items to gather basic demographic information about the participants' age, gender, occupation, level of education, and nationality (see Appendix A).

Watching TV Series Motives Questionnaire. (Media-) escaping was measured by using the subscales "*coping/escapism*" and *"enrichment"* of the Watching TV Series Motives Questionnaire WTSMQ (Flayelle et al., 2019). Respondents rate on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). Both scales were separately analysed by computing a mean score with higher scores indicating higher agreement levels on the corresponding escape motive. The sub-scale "*coping/escapism*" and it's eight items were used to assess negative (media-) escapism and the extent to which participants stream content with the intent to escape from distressing and negative experienced events. Therefore, item statements such as *"I watch TV series to relieve stress, anxiety or negative emotions"* were posed. The sub-scale *"enrichment"* contained five items to determine positive (media-) escaping and the extent to which participants intent to "broaden their horizon" and increase their knowledge through watching content on streaming services. In this case, statements such as *"I watch TV series to learn or familiarise myself with a new language"* were used. Reliability analysis revealed a good internal consistency for negative (media-) escaping (α = .84), represented by the subscale "coping/escapism". Respectively, a good internal consistency for positive (media-) escaping, represented by the sub-scale "enrichment" was found (α = .80). When comparing, results by Flayelle et al. (2019) indicated acceptable psychometric properties for the sub-scales "coping/escapism" (α = .79) as well as "enrichment" (α = .70).

Short Form Self-Regulation Questionnaire (SSRQ). Self-regulation was measured using the *Short Form Self-Regulation Questionnaire SSRQ* (Carey, Neal & Collins, 2004). The SSRQ contained 31 items measuring individual reported ability to self-regulate through item statements such as *"as soon as I see a problem or challenge, I start looking for all possible solutions"*. Respondents rate on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). After reverse coding the negatively worded items, the SSRQ was scored by calculating the mean score and relating higher scores to a higher level of self-regulation. In this study, the SSRQ revealed good internal consistency ($\alpha = .81$). In comparison to the findings of previous studies, the SSRQ was found to be internally consistent and strongly correlating ($r = .96$) with the original 63-item SRQ, by providing an overall alpha of .92 (Carey, Neal & Collins, 2004).

Data Analysis

For the data analysis, the statistical program for social sciences (IBM SPSS, version 25) was used.

Data set preparation. The sample size encompassing all participants was $N = 263$. However, participants who did not meet the inclusion criteria were excluded from the data set. To explain, participants who were below the age of 18 ($n = 2$), showed missing values in one of the seven parts of the questionnaire ($n = 50$) and who were not subscribed to any of the listed streaming services ($n = 2$) were excluded from the data set. Afterwards, the final cohort used to conduct further statistical analysis compromised $N = 209$ participants.

Participants. To obtain a summary of the participant's characteristics a descriptive table was created containing percentages and frequencies.

Self-regulation and (media-) escaping. To calculate the means and standard deviations for all scales, descriptive statistics have been performed and compared with each other. To analyse the correlation between negative (media-) escaping and positive (media-) escaping with self-regulation, inferential statistics were employed. As a first initial step to employ these inferential statistics, assumptions were checked to determine if using parametric correlational tests were appropriate for the variables. Because assumptions for normality and outliers were violated by the variables negative and positive (media-) escaping as well as self-regulation, the non-parametric test Spearman's Rho was chosen. The choice of using non-parametric tests for Likert data, as in this data set, could be supported by research experts Hauke and Kossowski (2011).

Concerning the significance of the correlation coefficient provided by Spearman's Rho, a significance level of $p < .01$ was taken into account. To interpret the strength of the correlation coefficients, correlation cut-off scores provided by Akoglue (2018) were used. Accordingly, "perfect" negative or positive correlations were represented by values of ± 1. "Strong" negative or positive correlations were represented by values between $\pm .9$ to .7. "Moderate" positive and negative correlation values ranged from $\pm .6$ to .4. Lastly, correlation values between $\pm .3$ to .1 were considered as "weak". To picture the correlations between negative vs. positive (media-) escaping and self-regulation and to compare their directions, a scatterplot was created containing total scores.

Results

Participants

Baseline characteristics of the total sample $N = 209$ were summarized in Table 1. The age of participants ranged from 18 to 54 years, with a mean age of $M_{age} = 23.88$, $SD_{age} = 6.58$. Outstanding was that next to German ($n = 124$, 59.3%) and Dutch participants ($n = 39$, 18.7%), $n = 21$ *"other nationalities"* were presented in this study, among which the most participants were from the United States and Great Britain. Following, the majority of participants were university students ($n = 124$, 59.3%).

Table 1

Sociodemographic characteristics of participants at baseline (N = 209)

| Baseline Characteristics	n	%
Gender		
Female	147	70.3
Male	62	29.7
Nationality		
German	124	59.3
Dutch	39	18.7
Others	46	22.0
Occupation		
Pupils	5	2.4
Students	124	59.3
Employed full-time	51	24.4
Employed part-time	18	8.6
Unemployed	5	2.4
Other	6	35.6
Education		
Primary school	4	1.9
High school	130	62.2
Bachelor's degree	43	20.6
Master's degree	20	9.6
Doctorate	2	1.0
Other	10	4.8

Self-regulation and (media-) escaping

The mean of the participant's self-regulation score was well above the midpoint of the 7-point Likert scale $M = 4.73$ ($SD = .95$). Means ranged from $M_{min} = 1.53$ to a $M_{max} = 6.6$. Mean scores of negative and positive (media-) escaping were situated above the midpoint of the 4-point Likert scale and were $M = 2.52$ ($SD = .62$) and $M = 2.6$ ($SD = .58$) respectively. Means for both variables ranged from $M_{min} = 1$ to $M_{max} = 4$. In total, $n = 92$ (44.0%) participants scored higher than the mean of negative (media-) escaping and $n = 87$ (41.6%) participants scored higher than the mean of positive (media-) escaping.

Negative (media-) escaping and self-regulation. Spearman's Rho revealed a statistically significant, negative and moderately strong correlation between negative (media-) escaping and self-regulation $r_s = - .484$, $p < .001$, $N = (209)$. To illustrate this relationship, a scatterplot was generated (Figure 1). In context, with respect to negative (media-) escaping, participants who had a lower level of self-regulation were more likely to use online streaming services as a strategy to escape from negative experiences.
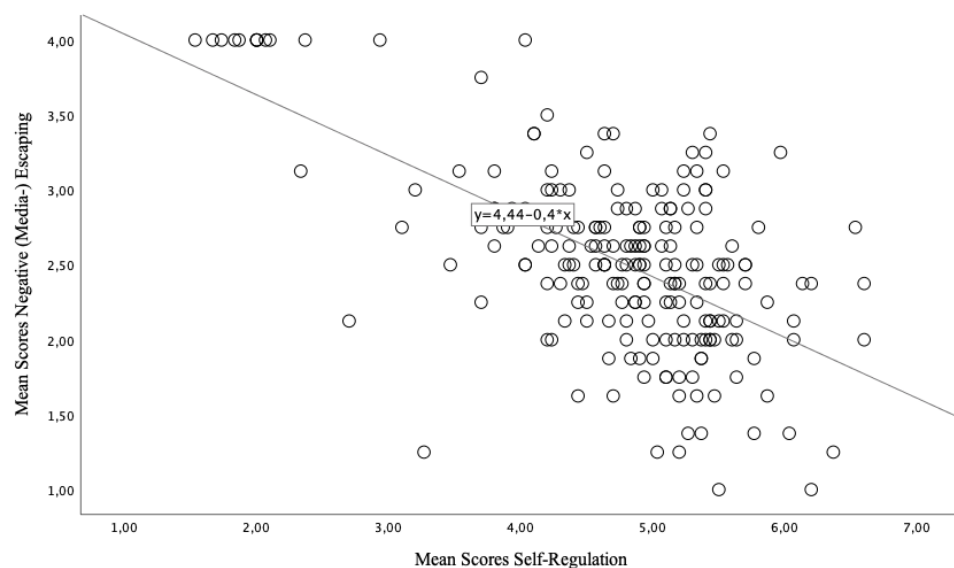
Figure 1. Scatterplot picturing a significant, negative and moderately strong relationship between mean scores of self-regulation and negative (media-) escaping. The axis for self-regulation ranges from the lowest mean score $x = 1$ to the highest mean score $x = 7$. The axis for negative (media-) escaping ranges from the lowest mean score $x = 1$ to the highest possible mean $x = 4$.

Positive (media-) escaping and self-regulation. With respect to the relationship between positive (media-) escaping/enrichment and self-regulation, Spearman's Rho revealed a statistically significant but weak correlation $r_s = .257$, $p < .001$, $N = (209)$. A scatterplot was created to visualise the relationship between positive (media-) escaping and self-regulation (Figure 2). To clarify, the scatterplot demonstrates that participants who possessed a higher level of self-regulation were more likely to use online streaming services as a way to reward and enrich themselves through the watched content.
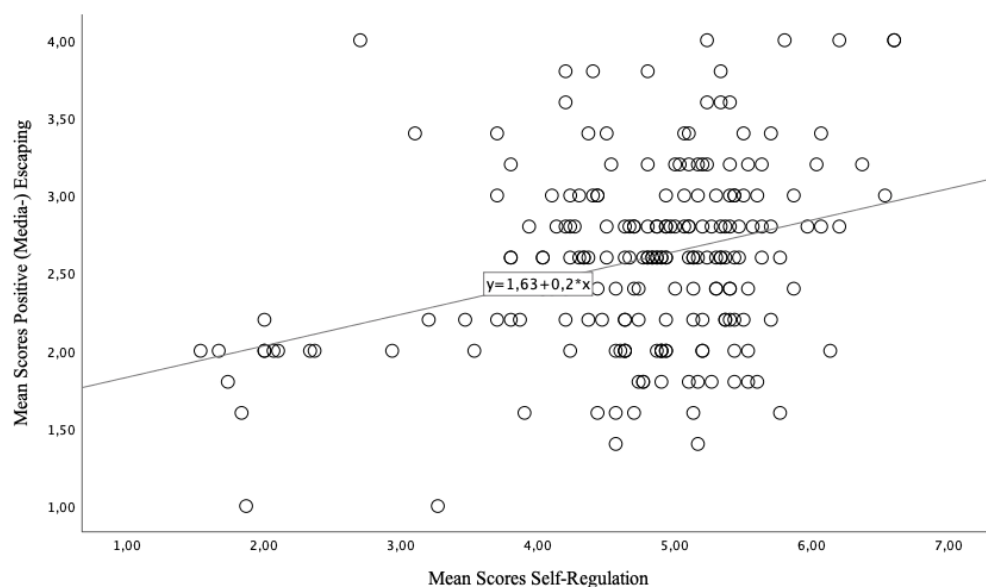
Figure 2. Scatterplot picturing a significant, positive and weak relationship between mean scores of positive (media-) escaping and self-regulation. The axis for self-regulation ranges from the lowest mean score $x = 1$ to the highest mean score $x = 7$. The axis for positive (media-) escaping ranges from the lowest mean score $x = 1$ to the highest possible mean $x = 4$.

Discussion

The aim of this study was to identify whether there is a relationship between (media-) escape coping and self-regulation. In light of this aim, the research questions focused on whether negative and positive (media-) escaping are related to self-regulation. It was found that participants who had a lower level of self-regulation were more likely to use online streaming services as a strategy to escape from negative stressors such as stress and anxiety. Furthermore, it was found that participants with a higher level of self-regulation were more likely to use online streaming services as a way to reward and enrich themselves.

Negative (media-) escaping and self-regulation

The outcome concerning the relationship between negative (media-) escaping and self-regulation is in accordance with the presented literature indicating that avoidance coping strategies were used by people with lower self-regulation skills (Veijalainen et al., 2019). To explain, as negative (media-) escaping is aimed at withdrawing oneself from stressors, this coping can be assimilated to the introduced definition of avoidance coping by Frydenberg and Lewis (2009) explained through actions of "withdrawal" and "disengagement" from personal stressors. Further, in a study by Berzonsky and Kinney (2019) participants with an avoidance identity were unwilling to maintain contact with negative emotions and showed lower levels of self-regulation. Moreover, in this study, participants subscribed to streaming services tended to show higher agreement levels on using streaming platforms to escape from unpleasant emotions. This finding is in line with the expectation that streaming services allow subscribers to engage in a negative (media-) escaping for reasons of withdrawal from negative emotions such as boredom and loneliness (Flayelle et al., 2019). Concluding, these findings suggest that caution should be paid to coping behaviour through online streaming services. As introduced, negative avoidance behaviour as in the case of negative (media-) escapism, cannot only harm people's self-regulation but also their mental health (Frydenberg & Lewis, 2009). Therefore, in practice, streaming services could promote interventions that discourage extensive watching over a long time-period for reasons of withdrawal from negative emotional states. This could be achieved with the help of tools that facilitate self-control over streaming behaviour by mapping individual screen time and making it possible to set time limits for streaming services. To support, similar tools such as the *screen time* feature implemented by Apple Inc ("What is Screen Time on Mac?", n.d.) have been acknowledged as beneficial to practice media self-regulation (Berr, 2019).

Positive (media-) escaping and self-regulation

The finding regarding the relationship between positive (media-) escaping and self-regulation conforms to the introduced literature indicating that people who used (pro)active coping strategies also have higher self-regulation skills (Frydenberg & Lewis, 2009). To explain, the finding of this relationship aligns with the expectation that using online streaming, to actively seek knowledge and gain insights, is equivalent to what was introduced as *proactive coping*. Proactive coping is aimed at muting the impact of a potential stressor on oneself and developing new resources through seeking knowledge (Aspinwall, 2011; Carver, 2015). In addition, the outcome that participants generally showed high agreement levels to engage in positive (media-) escaping is in line with previous expectations, suggesting that people use streaming services not only to escape from negative emotions but also with the desire to develop their personality and gain knowledge (Flayelle et al., 2019). As a result, an implication for society could be to change the negative views of streaming services which often focus on related health problems. Instead, knowledge about the positive relations between streaming services and their subscribers can be used in health care to educate patients about healthy coping through streaming services.

Nevertheless, findings showed that the relationship between positive (media-) escaping and self-regulation was weak, pointing to an alternative explanation or the inclusion of a confounding variable in addition to self-regulation. An example of a confounding variable could be one's evaluation of using (media-) escapism as a coping strategy. To support, literature found that people tended to negatively evaluate their media consumption experiences as procrastination (Reinecke, Hartmann & Eden, 2018). With hindsight to this study, participants may have found it difficult to evaluate their (media-) escape coping in positive terms because of stigmas labelling extensive online streaming (Matrix, 2014). As a consequence, personal evaluations about one's (media-) escaping may serve as an explanation of why the relationship between positive (media-) escaping was weak. Yet, future research is needed to explore subscriber's self-evaluation of their online streaming experience and their self-regulation skills through experimental studies. Resultingly, it could be observed whether positive and negative evaluations of online streaming relate to and cause differences in personal self-regulation abilities.

Limitations and Strengths

There were some limitations to this research. First of all, data was collected in times of the Corona pandemic and might have reinforced negative emotions in participants giving them reasons to withdraw from negative feelings such as boredom or anxiety considered as negative (media-) escaping. Yet, this limitation was examined before the start of data collection and taken care of by reminding the participants within the questionnaire to think of their watching behaviour before this exceptional situation. Next to this, the sample was mainly composed of students which impact the generalizability of the results. Thus, future research should further study the relationship between (media-) escaping and self-regulation in a broader demographic and societal context. At last, the findings of this study should be treated with caution as they cannot account for causality. For this reason, future research is needed to explore the cause and consequence of all studied relationships.

Next to limitations, this study also provided a unique contribution in that it was the first to show a distinction between (media-) escaping used as a positive and/or negative coping tool and its relationship with self-regulation. While past research has made efforts to highlight the negative health impacts of streaming services on the viewer, the strength of this study was to explore online streaming from a positive point of view as well.

Conclusion

The current study gives insights into the relationship between (media-) escaping and self-regulation of participants subscribed to online streaming services. More specifically, results firstly show that higher tendencies to engage in negative (media-) escaping were related to lower self-regulation. Secondly, it was found that the higher tendencies to engage in positive (media-) escaping were related to higher levels of self-regulation. On the basis of these results, it is recommended to prevent negative (media-) escaping behaviour through the implementation of tools on streaming platforms that promote self-regulation and control over screen time. Nevertheless, participants have also indicated to use (media-) escape coping to seek knowledge and develop their personalities. Therefore, research should not view (media-) escaping solely as an opponent to mental health, but as a new possibility to foster healthy coping. In therapeutic contexts, education about differences in (media-) escape coping through online streaming can help subscribers to understand their coping habits and to improve them when necessary.

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Appendix

A. Online questionnaire

How Good or Bad is Netflix For us

Dear Participant,

You are being invited to participate in a joint research study of five individual Bachelor theses, approved by the ethics committee of the University of Twente.
This research is centred on the question "How good or bad is Netflix for us?". The study is carried out by bachelor Psychology students from the Faculty of Behavioural, Management and Social Sciences at the University of Twente.
The purpose of this study is to reveal the relationship between your watching behaviour on streaming services and variables such as sleeping behaviour, (media-) **escapism and its association with self-regulation**, procrastination behaviour, self-regulation skills on eating behaviour and social relationships.
The questionnaire is divided into 7 different parts. It will take you approximately *20* minutes to complete the whole questionnaire.

Your participation in this study is entirely voluntary and you can withdraw at any time. When answering the questions, please consider that we are in a special situation with Covid-19. Try to take into account your behaviour before this time and try to answer the questions by considering your behaviour in general and not only in the past weeks.
We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach is always possible. To the best of our ability, your answers in this study will remain confidential. We will minimize any risks by anonymizing all your data and storing it without any chance to identify you.

For further questions, please contact us:
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1st Supervisor: B. Bente
2nd Supervisor: Dr. N. Köhle

I have read and understood the study information

○ Yes (1)

I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions and I can withdraw from the study at any time without having to give a reason.

○ Yes (1)

Page Break ───

Background information

Before the questionnaire starts, first answer please the demographic questions.

What is your gender?

○ Male (1)

○ Female (2)

○ Other (3)

○ I do not want to say that. (4)

What is your age?

_____

What is your nationality?

○ German (1)

○ Dutch (2)

○ Other, namely (3) _____

Please indicate your occupation.

○ Pupil (1)

○ Student (2)

○ Employed full-time (3)

○ Employed part-time (4)

○ Unemployed (5)

○ Other, namely (6) _____

Please indicate your highest level of education you have finished.

○ Primary school (1)

○ High school (2)

○ Bachelor's degree (3)

○ Master's degree (4)

○ Doctorate (5)

○ Other, namely (6) _____

The first part of the questionnaire starts at the next page

Page Break ───

Part 1 - Streaming behaviour

First, we will ask you some questions about your streaming behaviour. Please consider that we are in a special situation with Covid-19 and remember for the entire survey that there are no right or wrong answers. Try to also take into account your behaviour before this time and to answer the questions by considering your behaviour in general and not only in the past weeks.

Which video-streaming service do you use the most on a weekly basis?

○ Netflix

○ Amazon Prime

○ Hulu

○ Disney Plus

○ YouTube (

○ Videoland (6)

○ Others (7)

○ I do not use online-streaming services (8)

How many days per week do you make use of online-streaming services?

	0	1	2	3	4	5	6	7
Days ()								

On average, how many hours do you use online-streaming services on a daily basis?

	0	1	2	3	4	5	6	7	8	9	10	11	12
Hours ()													

On average, how many episodes in a row do you watch per day?

  ○ 0 (1)

  ○ 1 (2)

  ○ 2 (3)

  ○ 3 (4)

  ○ 4 (5)

  ○ 5 (6)

  ○ 7 (7)

  ○ More than 7 (8)

- -

On a weekly basis, how many hours do you spend watching following content:

	0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
Series (1)	████████████████████████████
Documentaries (2)	████████████████████████████
Movies (3)	████████████████████████████

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Part 2 - Sleep quality

Following, you will be asked questions about **your bedtime and sleeping behaviour**. Please reflect on your behaviour in the **past months**. For each of the following statements, please decide whether it applies to you on a **scale from 1 (never) to 5 (always)**.

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
I go to bed later than I had intended.	○	○	○	○	○
I go to bed early if I have to get up early in the morning.	○	○	○	○	○
If it is time to turn off the lights at night I do it immediately.	○	○	○	○	○
Often, I am still doing other things when it is time to go to bed.	○	○	○	○	○
I easily get distracted by things when I actually would like to go to bed.	○	○	○	○	○
I do not go to bed on time.	○	○	○	○	○
I have a regular bedtime which I keep to.	○	○	○	○	○
I want to go to bed on time but I just do not.	○	○	○	○	○
I can easily stop with my activities when it is time to go to bed.	○	○	○	○	○

Part 3 - Watching behaviour motives

Next, you will be given statement options regarding your online viewing motives. These motives are divided into 4 categories and you will be guided through each of them.
For each of the following statements, please decide whether it applies to, on a scale from 1 (strongly disagree) to 4 (strongly agree).

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
I watch TV series to pass the time and escape from boredom	○	○	○	○
I watch TV series to relieve stress, anxiety or negative emotions	○	○	○	○
I watch TV series to get away from the daily hassles	○	○	○	○
I watch TV series to overcome loneliness	○	○	○	○
I watch TV series to escape a number of responsibilities	○	○	○	○
I watch TV series in order to feel like I am floating in a secondary state for a while	○	○	○	○
I watch TV series to escape the routine	○	○	○	○
I watch TV series to escape reality and seek shelter in fictionary worlds	○	○	○	○

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The second motive is called **"Enrichment"** and focuses on certain abilities individuals may want to acquire through watching content on online streaming platforms.

For each of the following statements, please decide whether it applies to you on a scale from 1 (strongly disagree) to 4 (strongly agree).

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
I watch TV series to discover whole new worlds and to increase my knowledge on a number of subjects	○	○	○	○
I watch TV series to learn or familiarise myself with a new language	○	○	○	○
I watch TV series because they give me food for thought on a number of subjects Item	○	○	○	○
I watch TV series to extend my audiovisual knowledge	○	○	○	○
I watch TV series to develop my personality and broaden my views	○	○	○	○

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Part 4 - Self-regulation
In the following, you will see statements about **self-regulation.   For each of the following statements, please decide honestly whether they apply to you, using a scale from 1 (strongly disagree) to 7 (to strongly agree).**

	Strongly Disagree (1)	Disagree (2)	Somewhat disagree (3)	Neutral (4)	Somewhat agree (5)	Agree (8)	Strongly agree (9)
I usually keep track of my progress towards my goals.	○	○	○	○	○	○	○
I have trouble making up my mind about things.	○	○	○	○	○	○	○
I get easily distracted from my plans.	○	○	○	○	○	○	○
I don't notice the effects of my actions until it is too late.	○	○	○	○	○	○	○
I am able to accomplish goals I set for myself.	○	○	○	○	○	○	○
I put off making decisions.	○	○	○	○	○	○	○
It's hard for me to notice when I've "had enough" (alcohol, food, sweets).	○	○	○	○	○	○	○
If I wanted to change, I am confident that I could do it.	○	○	○	○	○	○	○

When it comes to deciding about a change, I feel overwhelmed by the choices.

○ ○ ○ ○ ○ ○ ○

I have trouble following through with things once I've made up my mind to do something.

○ ○ ○ ○ ○ ○ ○

I don't seem to learn from my mistakes.

○ ○ ○ ○ ○ ○ ○

I can stick to a plan that's working well.

○ ○ ○ ○ ○ ○ ○

I usually only have to make a mistake one time in order to learn from it.

○ ○ ○ ○ ○ ○ ○

I have personal standards, and try to live up to them.

○ ○ ○ ○ ○ ○ ○

As soon as I see a problem or challenge, I start looking for all possible solutions.

○ ○ ○ ○ ○ ○ ○

I have a hard time setting goals for myself.

○   ○   ○   ○   ○   ○   ○

I have a lot of willpower.

○   ○   ○   ○   ○   ○   ○

When I'm trying to change something, I pay a lot of attention to how I'm doing.

○   ○   ○   ○   ○   ○   ○

I have trouble making plans to help me reach my goals.

○   ○   ○   ○   ○   ○   ○

I am able to resist temptation.

○   ○   ○   ○   ○   ○   ○

I set goals for myself and keep track of my progress.

○   ○   ○   ○   ○   ○   ○

Most of the time I don't pay attention to what I'm doing.

○   ○   ○   ○   ○   ○   ○

I tend to keep doing the same thing, even when it doesn't work.

○   ○   ○   ○   ○   ○   ○

I can usually find several different possibilities when I want to change something.	○	○	○	○	○	○	○
Once I have a goal, I can usually plan how to reach it.	○	○	○	○	○	○	○
If I make a resolution to change something, I pay a lot of attention to how I'm doing.	○	○	○	○	○	○	○
Often I don't notice what I'm doing until someone calls it to my attention.	○	○	○	○	○	○	○
I usually think before I act.	○	○	○	○	○	○	○
I learn from my mistakes.	○	○	○	○	○	○	○
I know how I want to be.	○	○	○	○	○	○	○
I give up quickly.	○	○	○	○	○	○	○

Part 5 Procrastination behaviour.
In this part, you will see twelve statements regarding your procrastination behaviour.
For each of the following statements, please decide which answer option applies for you the most on a scale from 1 (very seldom or not true of me) to 5 (very often true, or true of me)

	Very Seldom or Not True of Me (1)	Seldom True of Me (2)	Sometimes True of Me (3)	Often True of Me (4)	Very Often True, or True of Me (5)
I delay making decisions until it's too late.	○	○	○	○	○
Even after I make a decision I delay acting upon it.	○	○	○	○	○
I waste a lot of time on trivial matters before getting to the final decision.	○	○	○	○	○
In preparation for some deadlines, I often waste time by doing other things.	○	○	○	○	○
Even with tasks that require little else except sitting down and doing them, I find they seldom get done for days. (5)	○	○	○	○	○
I often find myself performing tasks that I had intended to do days before.	○	○	○	○	○
I am continually saying "I'll do it tomorrow".	○	○	○	○	○
I generally delay before starting on work I have to do.	○	○	○	○	○

I find myself running out of time.	○	○	○	○	○
I don't get things done on time.	○	○	○	○	○
I am not very good at meeting deadlines.	○	○	○	○	○
Putting things off till the last minute has cost me money in the past.	○	○	○	○	○

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Page Break ——

Part 6 - Self-Regulation of Eating Behaviour

In the following, you will see statements about your self-regulation regarding your eating behaviour.   For the first question, please swipe the scale to the percentage that is most applicable to you.

	0 10 20 30 40 50 60 70 80 90 100
On a scale from 0 to 100% how healthy do you consider your diet? ()	▬▬▬▬▬▬▮▬▬▬▬▬

Q28

Please read the following statements and tick the boxes that most fit you. For the next few questions, please, understand that: "Tempting foods" are any food you want to eat more of than you think you should. "Eating intentions" refers to the way you are aiming to eat, for example you may intend to avoid tempting foods or eat healthy foods.

For each of the following statements, please decide honestly whether they apply to, using a scale from 1 (never) to 5 (always).

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)
I give up too easily on my eating behaviours.	○	○	○	○	○
I am good at resisting tempting food.	○	○	○	○	○
I easily get distracted from the way I intend to eat.	○	○	○	○	○
If I am not eating in the way I intended to, I make changes.	○	○	○	○	○
I find it hard to remember what I have eaten throughout the day.	○	○	○	○	○

Page Break

Part 7 - Social relationships

Now, you will see questions about **social relationships.**
You will be asked questions about your **romantic relationships (if you currently have one), familial relationships, and friendships**. As already mentioned above, please consider that we are in a special situation with **Covid-19**, and try to answer the following questions related to social relationships based on your experiences before Covid-19.

- -

Q31 Are you currently in a romantic relationship?

○ Yes (1)

○ No (2)

Skip To: Q37 If Are you currently in a romantic relationship? = No

- -

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Couples Satisfaction Scale
The following questionnaire is about your satisfaction with your current romantic relationship. Please try to answer the questions and statements as honest as possible.

- -

Q33 Please indicate the degree of happiness, all things considered, of your relationship.

	Extremely unhappy (1)	Fairly unhappy (2)	A little unhappy (3)	Happy (4)	Very happy (5)	Extremely happy (6)	Perfect (7)
Happiness	○	○	○	○	○	○	○

- -

In general, how often do you think that things between you and your partner are going well?

○ All the time (1)

○ Most of the time (2)

○ More often than not (3)

○ Occasionally (4)

○ Rarely (5)

○ Never (6)

For each of the following statements, please decide whether it applies to you on a scale from **1 (not all true) to 6 (completely true).**

	Not at all true (1)	A little true (2)	Somewhat true (3)	Mostly true (4)	Almost completely true (5)	Completely true (6)
Our relationship is strong	○	○	○	○	○	○
My relationship with my partner makes me happy	○	○	○	○	○	○
I have a warm and comfortable relationship with my partner	○	○	○	○	○	○
I really feel like part of a team with my partner	○	○	○	○	○	○

For each of the following questions, please decide whether it applies to you on a scale from **1 (not at all) to 6 (completely).**

	Not at all (1)	A little (2)	Somewhat (3)	Mostly (4)	Almost completely (5)	Completely (6)
How rewarding is your relationship with your partner?	○	○	○	○	○	○
How well does your partner meet your needs?	○	○	○	○	○	○
To what extent has your relationship met your original expectations?	○	○	○	○	○	○
In general, how satisfied are you with your relationship?	○	○	○	○	○	○

For each of the following items, select the answer that best describes **how you feel about your relationship**. Base your responses on your first impressions and immediate feelings about the item.

	1 (1)	2 (2)	3 (3)	
Interesting	○	○	○	Boring
Bad	○	○	○	Good
Full	○	○	○	Empty
Sturdy	○	○	○	Fragile
Discouraging	○	○	○	Hopeful
Enjoyable	○	○	○	Miserable

Family relationship scale

The following questionnaire is about the relationships within your family. Please answer the upcoming statements on the provided scale as honestly as possible. Please indicate for every

statement whether you "strongly agree", "agree", "disagree", or "strongly disagree" based on what is in your opinion most appropriate for your family.

	Strongly agree (1)	Agree (2)	Disagree (3)	Strongly disagree (4)
In our family we really help and support each other.	○	○	○	○
In our family we spend a lot of time doing things together at home.	○	○	○	○
In our family we work hard at what we do in our home.	○	○	○	○
In our family there is a feeling of togetherness.	○	○	○	○
My family members really support each other.	○	○	○	○
I am proud to be a part of our family.	○	○	○	○
In our family we really get along well with each other.	○	○	○	○
In our family we can talk openly in our home.	○	○	○	○

Please indicate for every statement whether you "strongly agree", "agree", "disagree", or "strongly disagree" based on what is in your opinion most appropriate for your family.

	Strongly agree (1)	Agree (2)	Disagree (3)	Strongly disagree (4)
In our family we sometimes tell each other about our personal problems.	○	○	○	○
In our family we begin discussions easily.	○	○	○	○
In our family we argue a lot.	○	○	○	○
In our family we are really mad at each other a lot.	○	○	○	○
In our family we lose our tempers a lot.	○	○	○	○
In our family we often put down each other.	○	○	○	○
My family members sometimes are violent.	○	○	○	○
In our family we raise our voice when we are mad.	○	○	○	○

Page Break

Friendship assessment scale

This scale is about your friendships. Please think of the last 4 weeks before **Covid-19** that were still "normal" and try to answer the following 5 statements based on these 4 weeks.

	Almost always (1)	Most of the time (2)	About half the time (3)	Occasionally (4)	Not at all (5)
I found it easy to get on with other people	○	○	○	○	○
I felt lonely	○	○	○	○	○
I had someone to share my feelings with	○	○	○	○	○
I found it easy to make contact with people	○	○	○	○	○
I felt I was a burden to people	○	○	○	○	○

Page Break ———————————————————————————

Thank you for your participation. You helped us a lot in gaining data about how good or bad Netflix is for us. If you have any questions or concerns, feel free to contact us:

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End of Block: Default Question Block