

Netflix Viewing Behaviours in relation to Introversion and Extraversion

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1.0 ABSTRACT

The present study aimed to examine the effects of being either introverted or extraverted in relation to participant viewing habits and behaviours when using the Video-On-Demand service, Netflix. Areas of examination included participant influential and motivational factors when choosing content to watch, as well as viewing behaviours such as 'binge-watching'. Ninety-one participants completed an online *Introversion, Extraversion and Netflix* questionnaire, composed of the McCroskey Introversion Scale (Richmond & McCroskey, 1998) and also items regarding Netflix usage. Responses formed 'Selecting', 'Sharing' and Behaviour' scores for participants, the means of which were compared between Introverted - Extraverted, and High Introvert/Extravert - Moderate groups. The results of independent T-tests carried out indicated no significant difference in how Netflix is used between groups as hypothesised. Additional analysis between Male and Female groups indicated a significant difference between group 'Sharing' scores. A one-way analysis of variance (ANOVA) indicated a significant difference existed between participant age brackets regarding 'Behaviour' scores. Results, strengths and limitations of the study and suggestions for further research are discussed.

1.1 DECLARATION

This Thesis is entirely my own work and has not been submitted to this or any other third level institution.

Signed: _____

Date: _____

Word Count: 8,446

1.2 ACKNOWLEDGEMENTS

I would like to extend my sincere thanks to my Project Supervisor, Robert Griffin who was an invaluable asset in the completion of this research. The guidance, support, assistance and feedback provided over the duration of the project has been greatly appreciated.

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3.0 INTRODUCTION

3.1 Netflix

How video content is viewed by people at home has changed rapidly and dramatically in recent years, due to Video On Demand (VOD) services and the ability to access entertainment with greater ease and convenience than existed previously. Viewers now have the ability to schedule what they want to watch, when they want to watch it and how they want to watch it. The VOD service Netflix has roughly 86 million customers worldwide, with 200,000 of them in Ireland (The Journal, 2016). New functionalities facilitated by such services include the ability to watch content at any time and also to watch entire seasons of content without having to wait. There is also the significant feature of there being no advertisements shown during the content on offer.

Netflix began airing entire seasons of original content in 2013 (Matrix, 2014). The service offered a new means of viewing film, television shows and documentaries. With this new novelty, viewers were presented with the means to start and continue a new show from beginning to end uninterrupted if desired. According to a survey by Nielsen (2016), 66% of respondents watched multiple episodes of a show one after another and view this feature as a motivator for using VOD services such as Netflix. Popular shows could now be watched through in totality without the traditional wait. Users could read and contribute reviews of content (a feature that has since been removed in favour of recommendations for the user based on viewing history) and rate what they have watched. Discussion amongst people of the shows on offer, either in a word-of-mouth capacity or online was encouraged. The ability to catch up on what others were talking about was increased in a dramatic way (Jenner, 2014). With this sudden change in dynamic, television viewing and associated behaviours of people watching gained in complexity and was opened up to new avenues of investigation. Netflix had granted more power to the user in terms of how, when and in what manner they watched (Cook, 2014). With the popularity of Netflix and similar services growing, the emerging behaviours of different types of users in relation to them warrants research.

4.0 LITERATURE REVIEW

4.1 Big Data and Netflix

Video On Demand services such as Netflix generate a lot of useful data such as demographic information, genre preferences, viewing / usage patterns, what content is most popular and other revealing information. Much is being done within the realm of analysing big data such as that offered by VOD services. Information regarding the viewership of content now comes from a variety of sources with the introduction of the online element, set-top boxes and also via social media (Hill, 2014). The challenge posed by a new wealth of data pertaining to individuals and their viewing behaviours and preferences would appear to be in how to appropriately analyse the data, and to what end.

Behavioural Big Data (BBD) has been described as being “very large and rich multidimensional data sets on human and social behaviours, actions and interactions, which have become available to companies, governments, and researchers” (Shmueli, 2017, p. 98). BBD analysis presents a vast set of new challenges, both in the technical expertise required to accurately do so, and also within the potential ethical and legal difficulties of doing so (Shmueli, 2017). Many methodologies and techniques have been developed and utilised in the gathering of BBD. One such technique is sentiment analysis. This is where the aim of researchers is to extract and analyse subjective information such as opinions on a given subject. To this end, particular methods and techniques may be employed to analyse language (Mantyla, Graziotin and Kuutila, 2018). Researchers may gather such information about various topics by utilising sentiment analysis on text based content or comments obtained online. The effort to gain significant understandings of human behaviour via big data requires knowledge of social sciences, such as psychology, as well as the technical know-how of big data analysis. Smaller pieces of research lend themselves well to targeting specific behavioural aspects, as many studies in recent years have suggested (Cohen & Lancaster, 2014, Wheeler, 2015).

There is little research currently available concerning VOD services (such as Netflix) and associated viewing behaviours in relation to psychological theory. Viewing habits of Netflix users or recent phenomenon such as ‘binge-watching’ are potentially rich areas to explore further, particularly in relation to aspects of personality.

4.2 Viewing Habits, Behaviours and Personality

Binge watching has been defined in the Oxford Dictionary (2018) as “The practice of watching multiple episodes of a television programme in rapid succession, typically by means of DVDs or digital streaming”. This term has been used in recent years more so in relation to streaming sites or VOD resources. Wheeler (2015) examined television viewing behaviours like binge-watching, viewing motivations and associated relationships with aspects such as the psychological wellbeing, attachment, depression and loneliness of the individual. The focus being on online streaming sites such as Netflix. Various measures and a ‘Television Viewing Habits’ questionnaire were utilised in this regard and participants consisted of college students. Measures included the Television Viewing Motives Scale (Rubin, 1983), the Television Affinity Scale (Rubin and Rubin, 1982), the Experiences in Close Relationships: Revised (ECR-R; Fraley, Waller, & Brennan, 2000), the UCLA Loneliness Scale (Version 3) (Russell, 1996), the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977) and Ryff’s Scale of Psychological Well-Being (Ryff, 1989).

The study yielded interesting findings regarding psychological characteristics and relationships with viewing behaviours online. Amongst these were positive associations between depression, loneliness and attachment anxiety with binge-watching behaviour. Revealing information concerning a new phenomenon such as binge-watching has great potential value, as there is little research in this area thus far. There is much room for further research in the area of VOD services such as exploring aspects of personality or different demographics in relation to patterns of behaviour in using these services.

Banerjee, Greene, Krcmar and Bagdasarov (2009) utilised a survey in their analysis of participant data to study verbally aggressive television content and those that may gravitate towards watching such content. This study examined participants viewing preferences in relation to aspects of personality. Measures utilised for the study dealt with aggression, sensation seeking and risk-taking behaviours of participants. An index called the Viewer Aggression Television Consumption Index (VATCI) was developed for the study for analysis of data.

It was observed that television content with more verbally aggressive content may be more appealing to those who rated higher in sensation-seeking. Also observed was the relationship between higher viewer aggression and the consumption of genre content such as crime, action, political satires and animated sitcoms. This relationship was not present for content such as soap operas, sitcoms or reality TV. This may indicate that higher sensation seekers or those scoring higher in viewer aggression, which are extraverted characteristics, would gravitate towards particular genres. While the study yielded interesting results, the specificity of what was being examined and the potential influence of many other mitigating factors does not allow for much generalisability to the larger population. Also noteworthy is the necessity to develop the VATCI specifically for this research, with no existing index or scale examined aggressive traits in relation to content selection.

Cohen and Lancaster (2014) looked at relationships between individual differences and television viewing preferences such as watching alone, co-viewing with others in person or via social media means. An online survey was utilised to gather data. Those who expressed a need for solitude preferred to be alone when watching television or films. An additional positive relationship was observed with those using instant messaging and monitoring social media in relation to what they were watching however. This presents an unexpected finding in that individuals who displayed a need for solitude still displayed an interest in discussing what was being watched via instant messaging or social media.

The utilisation of an online survey was an appropriate method of data gathering, facilitating the collection of relevant participant information in one go. The incorporation of the individual differences and television viewing preferences items into an online format was effective. In regards to new technologies, there is much to investigate in terms of personality factors and patterns of usage. The relationship between patterns of behaviour when viewing content and an aspect of personality like introversion versus extraversion is an interesting area to explore further. For example, would an introvert using Netflix take heed of what others are watching to the same degree as an extrovert?

4.3 Introversion and Extraversion Online

The personality dimensions of introversion and extraversion have been described by Reer and Kramer (2017, p. 98) as “whether a person is sociable and prefers group activities (extraversion) or is rather quiet and dislikes large social events (introversion)”. This is a simplified explanation of the concept first discussed by Carl Jung in the 1920’s (Jung, 1923), which deals with the idea of these two dimensions as being the main overarching personality types. With this notion taken into consideration, the examination of Netflix viewing behaviours in light of these two dimensions is potentially an appropriate place to begin in terms of aspects of personality.

It is generally posited that introverts are more inclined to focus inwardly and display characteristics such as introspection and shyness. Being less likely to seek social interaction and engagement, introverts may also be seen as quiet, reflective and solitary, preferring time alone. In contrast, extraverts focus on the external world and others around them and can be viewed as more sociable, preferring the company of others. Extraverts may display characteristics such as being assertive, outgoing and at times impulsive.

According to John and Srivastava (2008), introverts generally have smaller social networks than that of extraverts. They are more likely to be quieter or more shy on an interpersonal level, and may be more inclined to keep to themselves. In the context of an online interface such as Netflix

however, this may not be relevant and introverts might behave in unexpected ways. Another important generalisation is that introverts are more likely to rely on the decisions of others than extraverts. In light of using Netflix, this might suggest that introverts will rely more on what is trending/popular, on other users' reviews/ratings or on suggested content than extraverts.

In their study concerning young adults and passion for internet activities, Tosun and Lajunen (2009) looked at aspects of personality such as neuroticism, psychoticism and extraversion. The authors noted that internet activity serves slightly different functions for both introverts and extraverts. Findings suggest that extraverts' passion for internet activity related to the extent to which the activity worked in harmony with their social lives, supporting existing social interaction, rather than for its own sake in an online context. This might suggest that extraverts will watch trending content that can later be discussed with others in-person. Whether that content would be suggested by peers or by what strangers are viewing via the Netflix interface is an interesting area to investigate. The study accounted for many factors but may have benefitted from investigating specific activities that may influence passion for internet use.

It has been observed that in light of online discussion groups introverts contribute just as many messages as their extraverted counterparts (Maldonado, Mora, Garcia et al., 2001). It might be assumed that extraverts would contribute more. It was also found that introverts messages were longer and featured more content. In this regard it could be interpreted that introverts are compensating in some fashion for less social interaction than extroverts. For extraverts the online interaction may be supplemental in nature to in-person interaction, rather than compensatory. In the context of Netflix, where user feedback regarding content is encouraged, it would be interesting to investigate whether introverts and extraverts display similar levels of input.

Vollmer, Randler, Horzum and Ayas (2014) suggest that, in terms of computer game addiction in adolescents, extraverts are less likely to display addictive tendencies. Introverts in contrast, were more likely. While this study focused on adolescents exclusively, and as such the results may not be

generalisable to the larger population, this finding is consistent with other similar studies. It is possible that with more time spent engaging in solitary activities, introverts turn to online activity to compensate for isolation or less face-to-face interaction than extraverts might have. Introverts may be more comfortable conducting interactions online (Liu & Larose, 2009) in such contexts as computer games.

Amongst other findings in another study that examined internet addiction (Yao, He, Ko & Pang, 2014), it was observed - contrary to the hypothesis - that introverts were not more likely to display addictive tendencies than extraverts. This is inconsistent with findings concerning online gaming rather than Social Networking Site (SNS) usage (Vollmer, Randler, Horzum & Ayas, 2014), which stated that introverted individuals are more likely to exhibit addictive tendencies. In regards to yet another online medium, in the context of Netflix it would be interesting to explore which personality dimension displays higher levels of usage.

Harbaugh (2010) conducted a study that sought to examine the motivations and behaviours of participants in relation to the social networking site, Facebook. An online 10-question survey regarding SNS use, personality type and demographics was utilised. The participants being either more introverted or extroverted and the reported SNS usage, including any recurring trends associated with either personality type was analysed. A sample which was 77.4% female may have resulted in a bias in results however. Data suggested that extraverts generally spent more time using the site. This is consistent with other findings whereby extraverted individuals may use online interaction to supplement existing in-person interaction. In a study that looked at psychological predictors of personality in college students in relation to SNS usage, Wilson, Fornasier and White (2010) utilised the NEO Five-Factor Inventory (Costa & McCrae, 1992) and the Coopersmith Self-Esteem Inventory (Coopersmith, 1981). It was observed that extroverts displayed higher levels of addictive tendencies in how they used them. The more extraverted individuals expressed spending more time using the Social Networking Sites to interact with others.

In relation to social media usage and behaviours displayed online, Stigers (2011) explores different aspects of personality. Scales are employed to gather data concerning locus of control (the belief of having control over events in life versus the belief of external forces being in control), need for cognition (the enjoyment of or necessity to think and reason), self-esteem (a sense of personal worth), life satisfaction (a sense of wellbeing) and introversion-extroversion (Richmond & McCroskey, 1998). Interestingly, in this study it was found that introverts and extraverts did not differ significantly in regards to time spent online, number of online friends and general attitudes towards using social media. Could this be indicative that, in the context of the Netflix interface where the social element is comprised of seeing what is currently trending or popular rather than interacting with others, the behaviours of introverts and extroverts will not be significantly different? With some varying findings observed in relation to introversion / extraversion in online contexts, the question of what could be observed in relation to Netflix is an interesting one.

4.4 Rationale for Proposed Study and Research Question

The Cyberpsychology element of the present research consists of people's behaviour being examined in the context of using Netflix. The study will focus on Netflix users in Ireland, with no major demographic criteria being applied to participation. Participants in the study will have an active subscription or will have used Netflix previously (at least within the previous six months). The influence of either being an introvert or extravert on choices we make and how we make them when selecting what to watch on Netflix is the crux of the study. Also examined will be watching habits and behaviours, including binge-watching, genre preferences, content selection influences and persuasive elements of the service.

Video On Demand services such as Netflix and Amazon Prime are a relatively new phenomenon, where little research has been carried out thus far. In this regard, patterns of behaviour and any predictors of same are valuable contributions to the body of knowledge associated with online streaming interfaces. Does being either more introverted or extraverted have any observable effect on how individuals use online streaming services such as Netflix and are there recurring behaviours or more likely habits associated with being either one or the other? Do more introverts or extroverts use Netflix? Which spends more time using the service? What influences decision making when selecting what to watch? These questions will be explored in the present research.

4.5 Hypotheses

H1. Extraverted individuals are more likely to rely on personal preferences than on the opinions or recommendations of others.

H2. Highly Introverted or Extraverted individuals (based on scores using the McCroskey Introversion Scale) are more likely to select content that is currently trending / popular / being talked about on Netflix than individuals who scored within the moderate range.

H3. Introverted individuals spend more time using Netflix for general use and for binge-watching content than Extraverted individuals.

5.0 METHOD

5.1 Design

As the present research deals with general tendencies and group properties, a non-experimental fixed design was employed and an online-questionnaire based method was used. The data collected was not modifiable by the researcher.

The present study used objective, descriptive, quantitative data for statistical analysis. Participant scores on the Introversion Scale (Richmond & McCroskey, 1998) indicated whether participants were more introverted/extroverted and responses to the questionnaire items were numerical in nature. The relationship between being introverted/extraverted and responses regarding behaviours and preferences while using Netflix were analysed. Relationships between questionnaire items and participants being either more introverted or extraverted were examined.

The independent variable consisted of participants self-reported scores of being either introverted or extraverted, using the Introversion Scale. The dependent variable consisted of participant responses to the items featured on the administered online *Introversion, Extraversion and Netflix* questionnaire regarding Netflix usage.

Analysis was based on independent t-tests performed on data in relation to the three hypotheses, associated groups, questionnaire items and data subsets. For Hypothesis 1, participants were divided into Introverted or Extraverted groups, based on the McCroskey Introversion Scale (1998) scores. Scores from < 24 - 35 were categorised as Extraverted. Scores between 36 to > 48 were categorised as Introverted. These two groups were also utilised for analysis regarding Hypothesis 3. Analysis was based on the difference between mean scores of the two groups.

For Hypothesis 2, those scoring as either highly introverted (scoring > 48) or highly extraverted (scoring < 24) were grouped together. Participants scoring in the moderate range (25 - 47) comprised

a second group. Analysis relating to this hypothesis was based on difference between mean scores of the groups.

5.2 Participants

For the present study convenience sampling was utilised to acquire the relevant participants, through which the desired data was gathered and analysed. The participants were recruited from the Institute of Art Design & Technology, Dun Laoghaire as well as other sources through using the SNS, Facebook. This was accomplished via the circulation of the *Introversion, Extraversion and Netflix* questionnaire via a web-link which was posted on Facebook, including IADT psychology related pages. The post consisted of high level information regarding the study and a link to the *Introversion, Extraversion and Netflix* questionnaire. This featured an information sheet regarding the study as well as an embedded online consent form.

Participants consisted of individuals of indiscriminate age, gender or population who use the online video on demand service, Netflix. Criteria for participation in this regard was to include either currently having an active subscription, having previously had an active subscription or having had experience using the Netflix interface within the last 6 months. A convenience sample of 91 participants was recruited to participate in the study, on a voluntary basis. The sample consisted of individuals of mixed gender (62.6% Female, 36.3% Male, 1.1% Non-conforming) and non-descript age (with the criteria of all participants being at least 18 years of age). Participant age was signified by the selection of an age bracket (18 - 24, 25 - 34, 35 - 44, 45 - 54, 55 - 64, 65 - 74, 75 or Older). The most frequently selected age brackets by participants were 25 - 34 years of age (62.6%), 35 - 44 years of age (20.9%) and 18 - 24 years of age (9.9%).

5.3 Materials & Measures

The body of the email was comprised of a link to the questionnaire, which was created using Google Forms. An information sheet regarding the nature of the present research and what was involved in participating (Appendix A) featured on the first page (Section 1), as well as demographic questions regarding age and gender. An informed consent prompt was included within the first page also. This featured a tick box that prompted the participant to accept the statement that they have read and understood the information sheet previously presented, as well as their rights of participation and what that entails. Ticking this box indicated that the participants informed consent was given. This was required to be read and ticked before the participant could proceed to the McCroskey Introversion Scale (1998) and the Netflix Usage questionnaire items and access the next stages of the study.

In Section 2, participants each completed a self report scale to determine whether they are more introverted or extraverted. The participants were not required to score the results themselves. This involved the utilisation and completion of the (free to use) Richmond and McCroskey (1998) Introversion Scale (Appendix B) by all participants. Alpha reliability for this scale has been estimated to be above .80.

In section 3, participants also completed the online 'Netflix Usage' portion of the *Introversion, Extraversion and Netflix* questionnaire (Google Forms, Appendix C). This featured questions concerning behaviours and choices made when using the video on demand service Netflix. Questions dealt with what influences decisions on selecting what to watch on Netflix, how influential sharing with others or recommendations are on decision making, how often content is watched on Netflix, how much time is spent binge-watching using Netflix and more. Section 4 thanked participants for their time upon completion.

As no existing questionnaire addressed the desired information regarding Netflix usage, a ten item questionnaire was developed by the researcher (Appendix C). These items were developed in relation to the three hypotheses upon which the analysis of data was to be based. Items one, two and three related to Hypothesis 1 and were grouped for analysis. Total 'Selecting' scores for these items were calculated for each participant. Higher scores indicated a preference for selecting content based on external influence whereas lower scores indicated a preference for selecting content based on personal interests. Cronbach's alpha was calculated to be .569. Items four, five and six related to Hypothesis 2 and were grouped for analysis. Total 'Sharing' scores for these items were calculated for each participant. Higher scores indicated a preference for sharing or discussing content viewed with others whereas lower scores indicated a preference not to do so. Cronbach's alpha was calculated to be .165. Lastly, items seven, eight, nine and ten related to Hypothesis 3 and were grouped for analysis. Total 'Behaviour' scores for these items were calculated for each participant. Higher scores here indicated greater Netflix usage and time spent 'binge-watching'. Cronbach's alpha was calculated to be .590.

5.4 Ethical Considerations

As ethical considerations were standard in nature and did not involve controversial or potentially harmful elements, an Ethics Form A was utilised and submitted for ethical approval. Approval was obtained from the Department of Technology and Psychology Ethics Committee (DTPEC) prior to the commencement of the study and collection of any data. Ethical considerations for carrying out the present research online were in line with the British Psychological Society's (2017) 'Ethics Guidelines for Internet-Mediated Research'.

An information sheet was featured at the beginning of the questionnaire, which explained the nature of the study and what was involved. Participant consent was obtained within the *Introversion, Extraversion and Netflix* questionnaire before participant responses were submitted.

Data collected was anonymous in nature, and participants were not identifiable from any responses. Nothing controversial or upsetting - such as physical/psychological harm, deception, coercion etc - was involved in participation. No members of any vulnerable population were involved.

5.5 Pilot Study

Prior to the circulation of the *Introversion, Extraversion and Netflix* questionnaire, a brief pilot study was carried out to trial and assess the functionality of the questionnaire using Google Forms. As well as providing the questionnaire to the Project Supervisor, it was administered to three participants known to the researcher via Facebook through using a web-link generated in Google Forms. This was done in an effort to test if it was intuitive for participants to use and could successfully retrieve the desired data and populate a corresponding spreadsheet accordingly.

The suggestion to include the information sheet regarding the study into the beginning of the questionnaire was incorporated into the design. Also included due to feedback obtained were additional options when providing participant gender. The phrasing was also changed from 'Gender' to 'Gender - with which do you most associate?' This was done to make this demographic question more inclusive. Additional age brackets were included to accommodate a broader range of participants.

Feedback was obtained that none of the wording or structure of the questionnaire was confusing for participants and completion was quick and easy. Collected data was successfully returned and automatically populated in the linked spreadsheet in Google Forms. Having satisfactorily performed the desired function and collecting the relevant data, the researcher was ready to circulate and administer the online questionnaire.

5.6 Procedure

Stage 1. A message was circulated to participants via Facebook with an invitation and link to the *Introversion, Extraversion and Netflix* online questionnaire, created using Google Forms.

Stage 2. Participants read the message with high level information regarding the study and followed the link to the questionnaire. An information sheet featured at the beginning of section 1. At this juncture participants are able to respond with any questions that they may have before proceeding.

Stage 3. Pending any potential questions posed being answered satisfactorily, participants either decided to opt out or to take part in the study.

Stage 4. Participants ticked the embedded informed consent form (indicated by ticking the relevant box) in section 1 of the online Netflix questionnaire. This included an indication that they had read and understood the conditions of participation and had provided their informed consent. This was required in order to proceed. Also required was the provision that participants had either an active subscription, have previously had an active subscription or have had experience using Netflix within the last 6 months.

Stage 5. Participants then proceeded to section 2, where the 18 item Introversion Scale (Richmond & McCroskey, 1998) was completed before proceeding to section 3, the Netflix Usage questionnaire.

Stage 6. Participants responded to the Netflix Usage questionnaire items concerning their usage of Netflix and associated behaviours. Upon completion of section 3, participants were presented with a message thanking them for their participation in section 4. Data was then submitted.

Stage 7. Participant responses to both the Introversion Scale and the online Netflix questionnaire were gathered and scored appropriately. Participants were grouped as being either Introverted or Extraverted, depending on the scores of the Introversion Scale. Participants scoring in the moderate range were divided into either Introverted or Extraverted, at the midpoint score of 36. Participant data was coded before being inserted into a spreadsheet. This information was input into the statistical software SPSS (Version 24) for statistical analysis.

Stage 8. Statistical analysis was performed on the collected data. An independent t-test was carried out on participant responses to the *Introversion, Extraversion and Netflix* questionnaire items for each of the three hypotheses. Results were then analysed.

6.0 RESULTS

In order to compare means between groups as hypothesised, several independent T-tests were performed on data gathered. For hypothesis 1, mean ‘Selecting’ scores of the Extraverted Group versus the Introverted Group were compared. For hypothesis 2, mean ‘Sharing’ scores of the High Extravert/Introvert Group versus the Moderate Scorer Group were compared. For hypothesis 3, mean ‘Behaviour’ scores of the Extraverted Group versus the Introverted Group were compared.

In addition to this analysis, further independent T-tests were carried out on the various mean ‘Selecting’, ‘Sharing’ and ‘Behaviour’ scores between groups based on gender and age brackets specified. Finally, a one-way analysis of variance (ANOVA) was carried out on mean group scores.

6.1 Descriptive Statistics

In total, 91 participants completed the *Introversion, Extraversion and Netflix* questionnaire. Of the 91 participants, 33 mostly identified as male (36.3%), 57 as female (62.6%), with 1 as non-conforming (1.1%). Please see figure 1.1.

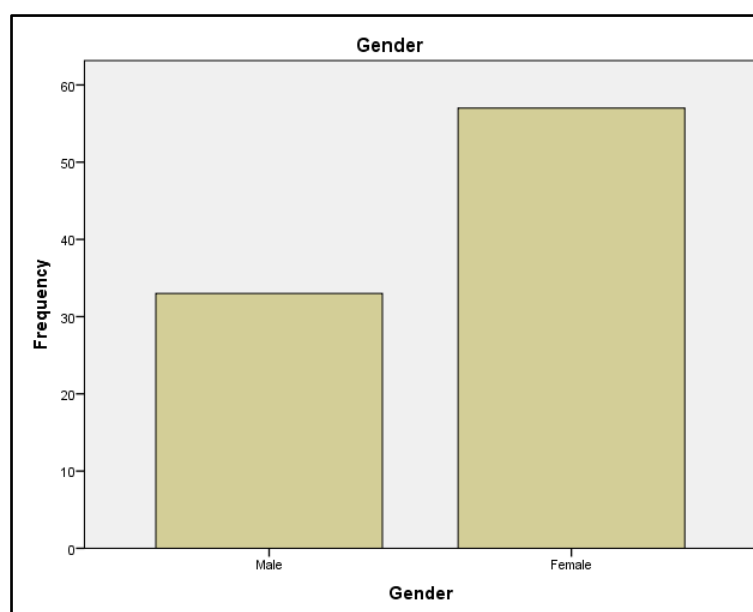


Figure 1.1

Participant age was expressed by selecting the relevant age bracket at the beginning of the questionnaire. The most frequently chosen age brackets were 25-34 ($N = 57, 62.6\%$), 35-44 ($N = 19, 20.9\%$) and 18-24 ($N = 9, 9.9\%$). Please see figure 1.2.

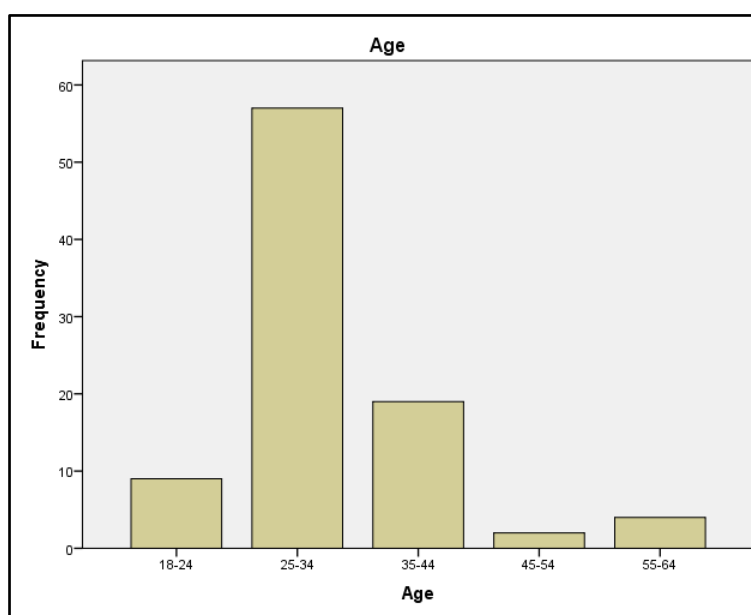


Figure 1.2

Analysis was based on participant scores on both the eighteen-item McCroskey Introversion Scale (1998) and responses to the ten-item *Introversion, Extroversion and Netflix* Online Questionnaire. Resultant scores on the McCroskey Introversion Scale determined participant grouping for all three hypotheses - Extraverted or Introverted for Hypothesis 1 and 3, and High Introvert / Extravert or Moderate Range for Hypothesis 2.

Items one, two and three of the *Introversion, Extroversion and Netflix* questionnaire (Appendix C) were grouped for each participant. Total scores of these items composed the individual 'Selecting' score. Cronbach's alpha was calculated to be .569. Items four, five and six were grouped for each participant, totalled and composed the individual 'Sharing' score. Cronbach's alpha was calculated to

be .165. Lastly, items seven, eight, nine and ten were grouped and totalled, composing the individual 'Behaviour' score. Cronbach's alpha was calculated to be .590. Please see Appendix D.

6.2 Inferential Statistics

Hypothesis 1

The first hypothesis, that extraverted individuals are more likely to rely on personal preferences than on the opinions or recommendations of others was not supported.

Participants were divided into two groups, Extraverted and Introverted, based on scores of the McCroskey Introversion Scale (1998). Scores < 24 indicate high extraversion, whereas scores > 48 indicate high introversion. To divide the sample into either extraverted or introverted categories, those scoring in the moderate range (24 - 48) were categorised by establishing a midpoint of 36. Those scoring 35 or below composed the Extraverted Group (1), $N = 34$. Those scoring 36 or over composed the Introverted Group (2), $N = 57$. Please see figure 1.3.

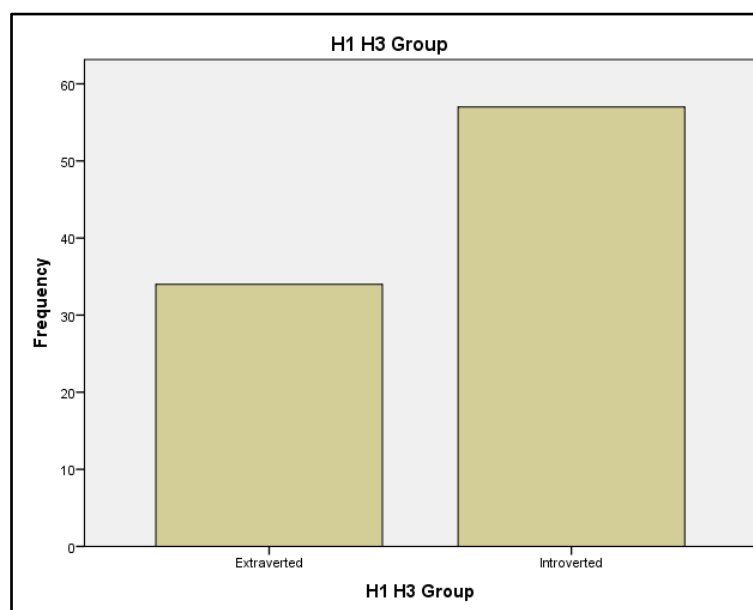


Figure 1.3

To compare the mean 'Selecting' scores of the Extraverted ($M = 7.65$, $SD = 2.173$) and Introverted Groups ($M = 8.26$, $SD = 2.394$), an independent T-test was carried out. With equal variances assumed, no significant difference between participant 'Selecting' scores was observed between groups; $t(89) = -1.228$, $p < .223$ (two-tailed). Please see Appendix D.

Hypothesis 2

The second hypothesis, that highly introverted or extraverted individuals (based on scores using the McCroskey Introversion Scale) are more likely to select content that is currently trending / popular / being talked about on Netflix than individuals who scored within the moderate range, was not supported.

For hypothesis 2 participants were divided into two groups, High Extravert / Introvert and Moderate Scorers, based on scores of the McCroskey Introversion Scale (1998). Those scoring < 24 (highly extraverted) and > 48 (highly introverted) composed the High Extravert / Introvert Group (3), $N = 19$. Those scoring within the moderate range (24 - 48) composed the Moderate Scorers Group (4), $N = 72$. Please see figure 1.4.

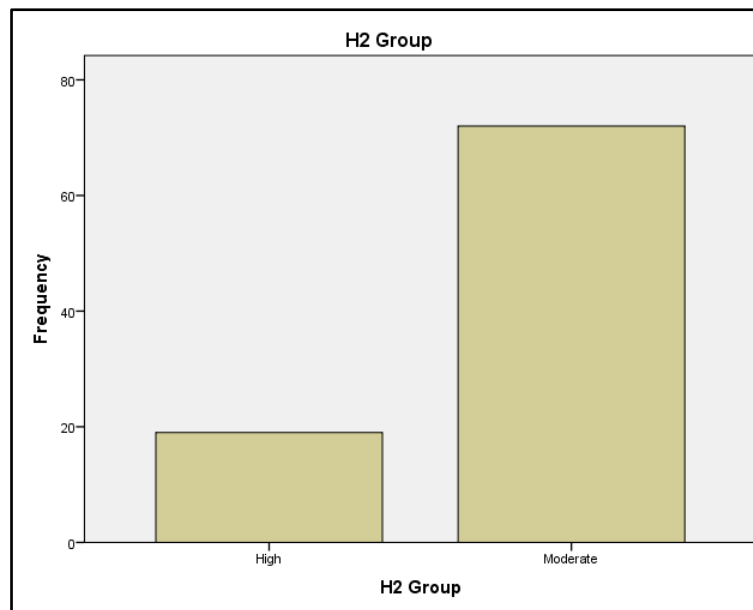


Figure 1.4

To compare the mean 'Sharing' scores of the High Extravert / Introvert ($M = 7.89$, $SD = 2.331$) and Moderate Scorer Groups ($M = 6.92$, $SD = 2.054$), an independent T-test was carried out. With equal variances assumed, no significant difference between participant 'Sharing' scores was observed between groups; $t(89) = 1.795$, $p < .76$ (two-tailed). This result was approaching significance however.

An independent t-test was carried out on individual Netflix questionnaire items also. On item number 4, a difference was observed between mean scores of High Extravert / Introvert ($M = 3.05$) and Moderate Scorer Groups ($M = 2.78$). This was approaching significance. Please see Appendix D.

Hypothesis 3

The third hypothesis, that introverted individuals spend more time using Netflix for general use and for binge-watching content than extraverted individuals, was not supported.

For hypothesis 3, the same Extraverted (1, $N = 34$) and Introverted (2, $N = 57$) Groups were utilised. Please see figure 1.3. To compare the mean 'Behaviour' scores of the Extraverted ($M = 11.00$, $SD = 2.913$) and Introverted Groups ($M = 11.11$, $SD = 3.010$), an independent T-test was carried out. With equal variances assumed, no significant difference between participant 'Behaviour' scores was observed between groups; $t(89) = -.163$, $p < .871$ (two-tailed). Please see Appendix D.

Age and Gender

In addition to the above statistical analyses, an independent t-test was carried out on the mean 'Selecting', 'Sharing' and 'Behaviour' subscale scores of participants grouped into either Male ($N = 33$) or Female ($N = 57$) categories.

To compare the mean 'Sharing' scores of the Male ($M = 7.76$, $SD = 2.166$) and Female Groups ($M = 6.74$, $SD = 2.066$), an independent T-test was carried out. With equal variances assumed, a significant difference between participant 'Sharing' scores was observed between groups; $t(88) = 2.219$, $p > .029$ (two-tailed). Please see Appendix D.

A between groups One-way analysis of variance (ANOVA) was performed to investigate the different age groups in relation to mean scores of the 'Selecting', 'Sharing' and 'Behaviour' subscales.

Participants were grouped by age, as specified on the online questionnaire (Group 1; 18-24, Group 2; 25-34, Group 3; 35-44, Group 4; 45-54 and Group 5; 55-64). There was a statistically significant difference at the $p < .05$ level in 'Behaviour' scores: $F(4, 86) = 5.679$, $p = .00$. Post-hoc comparisons using the Tukey HSD indicated that Group 5; 55-64 ($M = 6.00$, $SD = 2.449$) was significantly different from Groups 1; 18-24 ($M = 12.89$, $SD = 2.667$) and 2; 25-34 ($M = 11.46$, $SD = 2.778$). Please see Appendix D.

7.0 DISCUSSION

7.1 Analysis - Hypothesis 1

The first hypothesis, that extraverted individuals are more likely to rely on personal preferences than on the opinions or recommendations of others was not supported. Participant 'Selecting' scores formed the basis of analysis in extraverted and introverted groups. The Extraverted group consisted of 34 respondents whereas the Introverted group consisted of 57 respondents. This hypothesis posited that the extraverted group ($N = 34, M = 7.65$) would display a lower mean 'Selecting' score than the introverted group ($N = 57, M = 8.26$). While this did occur, there was no significant difference.

A generalisation regarding introverts is that they are more likely to rely on the decisions of others than extraverts, as discussed by John and Srivastava (2008). As such, it was hypothesised that extraverts would be less likely to select from 'trending' or 'popular' content as displayed on Netflix. In contrast the introverted group were expected to display higher 'Selecting' scores, indicating a greater inclination to select content in this vein, factoring in the opinions of others. Results may have been influenced by the groups sizes being slightly imbalanced, with more introverts being present than extraverts. It is also possible that the poor Cronbach's alpha score for the 'Selecting' subscale (.569) is indicative that the three items composing that score display poor internal consistency.

7.2 Analysis - Hypothesis 2

Tosun and Lajunen (2009) noted that internet activities may perform different functions for both introverts and extraverts. Findings suggested that extraverts' passion for internet activity was related to the extent to which it supported existing social interaction. In terms of Netflix, the idea of selecting content based on what could later be discussed with others may be viewed as a motivating factor. In contrast, (Maldonado, Mora, Garcia et al., 2001) observed that introverts contributed just as

many messages in online discussion groups as their extraverted counterparts. Introverts may compensate for smaller social circles by engaging more fully in online contexts. In this regard, it may be that sharing content or discussing with others also appeals to the introvert. This information makes a case for the appeal to both extravert and introvert to share viewing experiences and content with others. As such, it was posited that those scoring as a high extravert or introvert would display greater 'Sharing' scores than those scoring within the moderate range.

The second hypothesis, that highly introverted or extraverted individuals (based on scores using the McCroskey Introversion Scale) are more likely to select content that is currently trending / popular / being talked about on Netflix than individuals who scored within the moderate range, was not supported. For this hypothesis, participant 'Sharing' scores formed the basis of analysis in high extravert / introvert ($M = 7.89$) and moderate range ($M = 6.92$) groups. Results indicated that the high extravert / introvert group did display greater 'Sharing' scores than the moderate range group. Statistical analysis showed no significant difference in these mean group scores. Results were approaching significance however. The group sizes may have been an influential factor as the High Extravert / Introvert group consisted of 19 respondents whereas the Moderate Range group consisted of 72 respondents. As such, the imbalanced group sizes may have contributed to mean group scores. Had the groups been a more comparable size, a more reliable and accurate result may have been observed. The 'Sharing' subscale featuring a Cronbach's alpha of .165 is also indicative that the internal consistency of the items and subsequent scores was low.

7.3 Analysis - Hypothesis 3

Vollmer, Randler, Horzum and Ayas (2014) suggest from their findings concerning computer game addiction in adolescents, that introverted individuals are more likely to display addictive tendencies. In another study regarding internet addiction, Yao, He, Ko and Pang (2014) suggest that introverts are not more likely than extraverts to display addictive tendencies. Wheeler (2015)

observed positive associations between loneliness and binge-watching behaviour. As introverts generally display smaller social circles and may engage in online activities to supplement social interaction, it is possible that Netflix users that are introverted may spend more time using it than extraverted counterparts. This was the basis of hypothesis 3.

The third hypothesis, that introverted individuals spend more time using Netflix for general use and for binge-watching content than extraverted individuals, was not supported. Participant 'Behaviour' scores formed the basis of analysis in extraverted and introverted groups, relating to time spent using Netflix and 'binge-watching'. The same Extraverted ($N = 34$) and Introverted ($N = 57$) groups used in hypothesis 1 were utilised for analysis. Mean scores within the Extraverted group ($M = 11.00$) were comparable to the Introverted group ($M = 11.11$), with no significant difference revealed upon analysis. Similarly to hypothesis 1, the imbalance in size between the two groups may have had an influence on results yielded. The Cronbach's alpha for the 'Behaviour' subscale items was .590, again an indication that the internal consistency between the items was low.

7.4 Analysis - Age and Gender

With mean subscale scores between Introverted and Extraverted groups yielding results of no significant difference, additional analysis was performed. 'Selecting', 'Sharing' and 'Behaviour' scores were also analysed between Male ($N = 33$) and Female ($N = 57$) groups in order to investigate potential differences.

In relation to 'Sharing' scores the Male group ($M = 7.76$) displayed a greater mean score than the Female group ($M = 6.74$), indicating more of an inclination to share viewing experiences and content with others. An independent T-test revealed this difference in results was significant. While this finding is of interest it is worthwhile to consider the low Cronbach's alpha score for the subscale and subsequently lower internal consistency for the 'Sharing' subscale items. There are many potential

mitigating factors that may also have influenced these results, outside of the participants' gender. As with the Extraverted and Introverted Groups in prior analysis, there was a disparity in group size for the Male and Female groups. This may also have skewed results in some fashion.

To investigate differences between the responses and subsequent mean 'Selecting', 'Sharing' and 'Behaviour' scores, a One-way analysis of variance (ANOVA) between age groups was performed. In relation to 'Behaviour' scores, the 55-64 year old group ($N = 4$, $M = 6.00$) was observed to be significantly different from both the 18-24 year olds ($N = 9$, $M = 12.89$) and 25-34 year olds ($N = 57$, $M = 11.46$) at the $p < .05$ level.

The latter groups displayed higher scores than the 55-64 year olds, indicating greater time spent using Netflix and 'binge-watching'. It might be speculated that younger participants are more likely to use Netflix on a regular basis and are more likely to engage in 'binge-watching' behaviour which was reflected in the results. It could also be speculated that participants in the 55-64 year old age bracket are more likely to stick to traditional viewing behaviours, such as terrestrial television. The results should be considered in light of some other existing factors however. The groups sizes are notably uneven between 55-64 year olds ($N = 4$), 18-24 year olds ($N = 9$) and 25-34 year olds ($N = 57$), which may have had a significant impact on the results. As with prior analysis the 'Behaviour' subscale featured a low Cronbach's alpha score and potentially low internal consistency as a result.

7.5 Strengths and Limitations

A strength of the present research is the utilisation of the McCroskey Introversion Scale (Richmond & McCroskey, 1998). The eighteen item scale requires answers to be expressed numerically on a Likert scale, and has been incorporated into other previous and relevant research (Stigers, 2011). The design of the scale, and the fact that it is free to use made it ideal to incorporate

into the *Introversion, Extraversion and Netflix* questionnaire. The brief nature of the scale items and the likert response options allowed for it to be quickly adapted into an online version and was seamlessly incorporated into the overall online questionnaire. It features a relatively quick and easy scoring method, making it appropriate for the purpose of determining which categories respondents should be grouped into for analysis. Additionally, alpha reliability has been estimated to be above .80.

Another strength of the present research was the execution of the questionnaire via Google Forms. It was quick and easy to translate the questionnaire into an online format, once the questionnaire items were determined and settled on. Having the *Introversion, Extraversion and Netflix* questionnaire online made it far more convenient and time-saving to administer to participants than a paper version would allow. The finished questionnaire also featured a link that could be easily disseminated en masse, which was accomplished via circulating the link on Facebook via various IADT psychology pages and general connections. This facilitated prompt and effective data gathering, as participant responses were automatically collected, returned and populated in a corresponding spreadsheet. As such all collected raw data was readily available for analysis. Scale and subscale scoring, as well as data coding was performed in a brief period following data collection. This was highly advantageous in what would have otherwise been a time consuming aspect of the research.

While no existing scale or set of questionnaire items was available that was appropriate to use, a set of items had to be developed for the purpose of the research. This presented something of a challenge and was a potentially limiting aspect of the study. As it was deemed prudent to keep the number of questionnaire items reasonably low (so as not to deter participants), the generation and selection of which items to use was an important process. As questionnaire items were to be responded to on a Likert scale (for consistency with the Introversion Scale items), special consideration was made in the wording.

Perhaps the most prominent limitation of the present research lies in the three subscales utilised in the study. The 'Selecting' subscale consisted of items 1 (*When deciding what to watch on Netflix, I usually select content based on what I find interesting rather than what others are watching.*), 2 (*I often choose to watch content on Netflix based on what is recommended to me by others or by Netflix itself.*) and 3 (*I often select content on Netflix that is 'Trending Now' or 'Popular on Netflix'.*). The 'Sharing' subscale consisted of items 4 (*I prefer to watch content on Netflix in the company of others.*), 5 (*I often select content to watch on Netflix that I can discuss with others later.*) and 6 (*I always provide feedback regarding what I have watched by ticking either the 'thumbs up' or 'thumbs down'.*). Lastly, the 'Behaviour' subscale consisted of items 7 (*I often 'binge-watch' content on Netflix, which means to watch multiple episodes of a series in rapid succession.*), 8 (*I watch content on Netflix more I watch content on traditional television channels.*), 9 (*On average, how much time per day do you spend watching content on Netflix?*) and 10 (*On average, how often do you 'binge-watch' (watching multiple episodes of a series in rapid succession) content on Netflix?*).

The accuracy of these subscales in measuring what they were intended to measure may not be as high as intended, which impacts on validity and reliability of the subscales. The three featured low Cronbach's alphas (all < .70), suggesting poor internal consistency for what the items were measuring. Within 'Selecting' the corrected item-total correlation was .277 for item 3, which would indicate the item did not measure consistently with the subscale as a whole. Within 'Behaviour', this figure was .291 for item 8, suggesting the same. A similar result was found for each item within the 'Sharing' subscale.

7.6 Suggestions for Further Research

While many aspects of the present research went well, there were also aspects of the study that could be greatly improved or refined. Learnings from the present research also include other areas that would be interesting to investigate.

The gathering of data being carried out via the online questionnaire allowed for a reasonably sized sample of participants to be reached in a short period of time. Data gathered was adequate for the present research however a larger sample would provide more responses and a greater and richer set of data. This would allow for more valid and reliable results when carrying out statistical analysis. A larger sample would provide results that would be more accurate and generalisable to the population as a whole.

The Netflix usage component of the *Introversion, Extraversion and Netflix* questionnaire was composed of ten items. A revised and more detailed version would be useful for future research. This could feature more items concerning further aspects of Netflix and would go into greater detail regarding features of the service and ways in which it can be used. A revised version could feature multiple parts, relating to different avenues of investigation. The inclusion of subscales with greater internal consistency would be paramount to the revised questionnaire. To refine these in a way that accurately measures what was intended to be measured would greatly increase the value of findings and provide a stronger basis for analysis and further research. More in-depth analysis of individual items between groups would be of great value also. The mean individual item scores rather than the subscales used would allow for specific research questions to be investigated, as the present hypotheses were more broad in nature.

Where the focus was on extraversion and introversion in the present research, other aspects of personality would be valuable to explore in relation to Netflix. Topics such as persuasion or conformity and how principles and psychological theories of same apply to user behaviours in the context of Netflix would warrant exploration. Results of note in the present study related not to introversion and extraversion, but to participant age and gender. The different age brackets displayed some significant variations in Netflix usage 'Behaviour' scores, as did male and female groups in relation to 'Sharing' scores. Further research in these areas would be of great value to the body of existing knowledge and perhaps for marketing purposes as well.

7.7 Conclusion

From present findings it could be suggested that there is no significant difference between introverts and extraverts in relation to how Netflix is used. Results indicated that extraverts were not more likely to rely on personal preferences over other individuals' recommendations when deciding what to watch than introverts would be. The participants that scored as being either highly introverted or extraverted were hypothesised as being more likely to select trending content that could be later discussed with others than the moderate scorers. This hypothesis was also not supported. The third and final hypothesis posited that introverted participants would spend more time using the Netflix service overall and would engage in more 'binge-watching' than the extraverted participants. Again, no significant difference between groups resulted in the third hypothesis receiving no support.

What is worth considering however, is that the outcome of the three established and tested hypotheses of the present research may also be viewed as inconclusive. This is due largely to the subscales and the associated low levels of internal consistency, upon which analysis was based. Other mitigating and influential factors may have also been at play, including the group sizes which were consistently uneven across statistical tests carried out.

The differences observed between gender and age groups, despite aforementioned limitations, may prove of interest to Netflix in the realm of marketing and advertising in future. All of the present findings are indicative that there is much room for further research on the topic of Netflix in general. Where currently there is little in terms of empirical findings relating directly to Netflix and similar services, any number of areas in the fields of psychology or consumer behaviour could be examined. As a key feature of the service, users of Netflix are afforded more choice in how to choose and engage with content available (Cook, 2014). The traditional ways in which television and film are consumed by the public have acquired new competition. Habits and behaviours have changed in many ways as a result. In 2016, Netflix had roughly 86 million customers globally (The Journal, 2016). With the

success of the service and other similar services in recent times, the rationale for gaining a better understanding of how and why they are used is quite apparent. The worth of examining human behaviour in the context of new technologies cannot be overstated, and in the context of Netflix there is a wealth of knowledge yet to be revealed.

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9.0 APPENDICES

9.1 Appendix A – Information Sheet & Consent Form

Information Sheet

Study Title: *Netflix Viewing Behaviours in relation to Introversion and Extraversion*

Purpose of the Research

To investigate the influence of either being an introvert or extrovert on choices we make and how we make them when selecting what to watch on Netflix. Also examined in this regard are watching habits and behaviours. The study consists of people's behaviour being examined in the context of using Netflix, where little research has been carried out.

Invitation

You are being invited to consider taking part in the research study *Netflix Viewing Behaviours in relation to Introversion and Extraversion*. This project is being undertaken by Patrick Lawton.

Before you decide whether or not you wish to take part, it is important for you to understand why this research is being done and what it will involve. Please take time to read this information carefully. If there is anything that is unclear or if you would like more information.

Do I have to take part?

You are free to decide whether you wish to take part or not. If you do decide to take part you will be asked to provide your consent beforehand. You are free to withdraw from this study at any time and without giving reasons.

If I take part, what do I have to do?

Participants will first read this information sheet thoroughly, along with the consent form, which must be agreed to before the study proceeds. A link will then be followed which will require the completion of both the Introversion Scale and also the online questionnaire. This will take no more than 10 minutes.

What are the benefits of taking part?

As a participant the data provided by you will contribute to the existing body of knowledge and a further understanding of people's behaviour in an area of research that has not received much attention thus far.

What are the disadvantages and risks (if any) of taking part?

There are no disadvantages involved with taking part, aside from the time involved in participation, which should take approximately ten minutes.

How will information about me be used?

Data collected via the completion of the Introversion Scale and also the online questionnaire will be analysed for any statistical significance.

Who will have access to information about me?

- Data will be stored securely on a password protected computer. It will be accessible only to the researcher and the supervisor.
- Collected data will be anonymous.
- Data will be retained by the researcher for at least one year.

What will happen to the results of the study?

The results of the research will be used in my dissertation for a MSc in Cyberpsychology in the Dun Laoghaire Institute of Art, Design & Technology.

Who has reviewed the study?

This study has been approved by the Department of Technology and Psychology Ethics Committee (DTPEC).

What if there is a problem?

If you have a concern about any aspect of this study, you may wish to speak to the researcher who will do his best to answer your questions. You should contact Patrick Lawton or their supervisor Robert Griffin.

Contact for further information

Patrick Lawton, Researcher: N00062870@student.iadt.ie

Robert Griffin, Supervisor: robert.griffin@iadt.ie

Thank you for taking the time to read the information sheet.

Date

14/02/2018

Consent Form

I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions.

[Tick Box]

I understand that my data will be anonymous, my participation is voluntary and that I am free to withdraw at any time.

[Tick Box]

I agree to take part in the study and hereby provide my informed consent.

[Tick Box]

9.2 Appendix B – McCroskey Introversion Scale (1998)

Introversion Scale Directions: Below are eighteen statements that people sometimes make about themselves. Please indicate whether or not you believe each statement applies to you by marking whether you: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree 1 2 3 4 5

- _____ 1. Are you inclined to keep in the background on social occasions?
- _____ 2. Do you like to mix socially with people?
- _____ 3. Do you sometimes feel happy, sometimes depressed, without any apparent reason?
- _____ 4. Are you inclined to limit your acquaintances to a select few?
- _____ 5. Do you like to have many social engagements?
- _____ 6. Do you have frequent ups and downs in mood, either with or without apparent cause?
- _____ 7. Would you rate yourself as a happy-go-lucky individual?
- _____ 8. Can you usually let yourself go and have a good time at a party?
- _____ 9. Are you inclined to be moody?
- _____ 10. Would you be very unhappy if you were prevented from making numerous social contacts?
- _____ 11. Do you usually take the initiative in making new friends?
- _____ 12. Does your mind often wander while you are trying to concentrate?
- _____ 13. Do you like to play pranks upon others?
- _____ 14. Are you usually a “good mixer?”
- _____ 15. Are you sometimes bubbling over with energy and sometimes very sluggish?
- _____ 16. Do you often “have the time of your life” at social affairs?
- _____ 17. Are you frequently “lost in thought” even when you should be taking part in a conversation?

_____18. Do you derive more satisfaction from social activities than from anything else?

Scoring: To determine your score on the Introversion Scale, complete the following steps: Step 1. Add scores for items 1 & 4 Step 2. Add the scores for items 2, 5, 7, 8, 10, 11, 13, 14, 16, & 18 Step 3. Complete the following formula: $\text{Introversion} = 40 + \text{Total from Step 1} - \text{Total from Step 2}$ Your score should be between 12 and 36. If you compute a score outside that range, you have made a mistake in computing the score. Note: items 3, 6, 9, 12, 15, and 17 are not used in computing your introversion scale. The average score for US college students on this scale is 19, which indicates the typical student is not very introverted. Individuals scoring above 28 are highly introverted; those scoring below 20 have low introversion (are quite extroverted).

Source: Richmond, V. P., & McCroskey, J. C. (1998). Communication apprehension, avoidance and effectiveness b (5th Ed.). Boston: Allyn & Bacon.

9.3 Appendix C – *Introversion, Extraversion and Netflix* Questionnaire

Question Grouping:

Selecting;

Q1. When deciding what to watch on Netflix, I usually select content based on what I find interesting rather than what others are watching.

- A. Strongly agree (1), Agree (2), Neutral (3), Disagree (4), Strongly disagree (5)

Q2. I often choose to watch content on Netflix based on what is recommended to me by others or by Netflix itself.

- A. Strongly agree (1), Agree (2), Neutral (3), Disagree (4), Strongly disagree (5)

Q3. I often select content on Netflix that is 'Trending Now' or 'Popular on Netflix'.

- A. Strongly agree (1), Agree (2), Neutral (3), Disagree (4), Strongly disagree (5)

Sharing;

Q4. I prefer to watch content on Netflix in the company of others.

- A. Strongly agree (1), Agree (2), Neutral (3), Disagree (4), Strongly disagree (5)

Q5. I often select content to watch on Netflix that I can discuss with others later.

- A. Strongly agree (1), Agree (2), Neutral (3), Disagree (4), Strongly disagree (5)

Q6. I always provide feedback regarding what I have watched by ticking either the 'thumbs up' or 'thumbs down'.

- A. Strongly agree (1), Agree (2), Neutral (3), Disagree (4), Strongly disagree (5)

Behaviour;

Q7. I often 'binge-watch' content on Netflix, which means to watch multiple episodes of a series in rapid succession.

- A. Strongly agree (1), Agree (2), Neutral (3), Disagree (4), Strongly disagree (5)

Q8. I watch content on Netflix more I watch content on traditional television channels.

- A. Strongly agree (1), Agree (2), Neutral (3), Disagree (4), Strongly disagree (5)

Q9. On average, how much time per day do you spend watching content on Netflix?

- A. 1 hour or less (1), 1 - 2 hours (2), 2 - 3 hours (3), 3 - 4 hours (4), More than 4 hours (5)

Q10. On average, how often do you 'binge-watch' (watching multiple episodes of a series in rapid succession) content on Netflix?

- A. Once a month (1), 2-3 times a month (2) Once per week (3), Every few days (4), Every day (5)

9.4 Appendix D – SPSS Output & Tables

Frequency Tables:

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 18-24	9	9.9	9.9	9.9
	2 25-34	57	62.6	62.6	72.5
	3 35-44	19	20.9	20.9	93.4
	4 45-54	2	2.2	2.2	95.6
	5 55-64	4	4.4	4.4	100.0
	Total	91	100.0	100.0	

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Male	33	36.3	36.7	36.7
	2 Female	57	62.6	63.3	100.0
	Total	90	98.9	100.0	
Missing	99999	1	1.1		
Total		91	100.0		

H1 H3 Group					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Extraverted	34	37.4	37.4	37.4
	2 Introverted	57	62.6	62.6	100.0
	Total	91	100.0	100.0	

H2 Group					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3 High	19	20.9	20.9	20.9
	4 Moderate	72	79.1	79.1	100.0
	Total	91	100.0	100.0	

Cronbach's Alpha Values:

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.569	.568	3

'Selecting' Score items

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.165	.173	3

'Sharing' Score items

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.590	.634	4

'Behaviour' Score items

Hypotheses 1 & 3

Group Statistics					
	H1 H3 Group	N	Mean	Std. Deviation	Std. Error Mean
Selecting Score (H1)	1 Extraverted	34	7.65	2.173	.373
	2 Introverted	57	8.26	2.394	.317
Sharing Score (H2)	1 Extraverted	34	6.68	2.011	.345
	2 Introverted	57	7.39	2.186	.289
Behaviour Score (H3)	1 Extraverted	34	11.00	2.913	.500
	2 Introverted	57	11.11	3.010	.399

Extraverted vs Introverted Group

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Selecting Score (H1)	Equal variances assumed	1.980	.163	-1.228	89	.223	-.616	.502	-1.613	.380
	Equal variances not assumed			-1.259	74.954	.212	-.616	.489	-1.591	.359
Sharing Score (H2)	Equal variances assumed	.483	.489	-1.543	89	.126	-.709	.460	-1.623	.204
	Equal variances not assumed			-1.576	74.186	.119	-.709	.450	-1.607	.188
Behaviour Score (H3)	Equal variances assumed	.212	.646	-.163	89	.871	-.105	.645	-1.386	1.175
	Equal variances not assumed			-.165	71.365	.870	-.105	.639	-1.380	1.169

Hypotheses 2

Group Statistics					
	H2 Group	N	Mean	Std. Deviation	Std. Error Mean
Selecting Score (H1)	3 High	19	8.47	2.611	.599
	4 Moderate	72	7.92	2.244	.264
Sharing Score (H2)	3 High	19	7.89	2.331	.535
	4 Moderate	72	6.92	2.054	.242
Behaviour Score (H3)	3 High	19	10.84	3.253	.746
	4 Moderate	72	11.13	2.897	.341

High Extravert / Introvert vs Moderate Scorer Group

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Selecting Score (H1)	Equal variances assumed	1.913	.170	.930	89	.355	.557	.599	-.633	1.747
	Equal variances not assumed			.851	25.454	.403	.557	.655	-.790	1.904
Sharing Score (H2)	Equal variances assumed	.168	.683	1.795	89	.076	.978	.545	-.105	2.061
	Equal variances not assumed			1.666	25.857	.108	.978	.587	-.229	2.185
Behaviour Score (H3)	Equal variances assumed	.048	.827	-.369	89	.713	-.283	.767	-1.806	1.240
	Equal variances not assumed			-.345	26.032	.733	-.283	.821	-1.970	1.404

Gender

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Selecting Score (H1)	1 Male	33	7.88	2.088	.363
	2 Female	57	8.09	2.466	.327
Sharing Score (H2)	1 Male	33	7.76	2.166	.377
	2 Female	57	6.74	2.066	.274
Behaviour Score (H3)	1 Male	33	10.94	3.041	.529
	2 Female	57	11.19	2.930	.388

Female vs Male Group

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Selecting Score (H1)	Equal variances assumed	.071	.791	-.409	88	.684	-.209	.511	-1.224	.806
	Equal variances not assumed			-.428	76.168	.670	-.209	.489	-1.182	.764
Sharing Score (H2)	Equal variances assumed	.022	.884	2.219	88	.029	1.021	.460	.107	1.935
	Equal variances not assumed			2.191	64.397	.032	1.021	.466	.090	1.951
Behaviour Score (H3)	Equal variances assumed	.145	.704	-.390	88	.697	-.254	.650	-1.545	1.038
	Equal variances not assumed			-.386	64.935	.701	-.254	.656	-1.565	1.057

Age Groups – One Way ANOVA

Descriptives										
		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum	
						Lower Bound	Upper Bound			
Selecting Score (H1)	1 18-24	9	8.44	2.242	.747	6.72	10.17	5	11	
	2 25-34	57	8.19	2.409	.319	7.55	8.83	3	15	
	3 35-44	19	7.79	2.149	.493	6.75	8.83	3	12	
	4 45-54	2	7.50	.707	.500	1.15	13.85	7	8	
	5 55-64	4	6.25	2.500	1.250	2.27	10.23	3	9	
	Total	91	8.03	2.321	.243	7.55	8.52	3	15	
Sharing Score (H2)	1 18-24	9	7.00	1.936	.645	5.51	8.49	5	10	
	2 25-34	57	7.32	2.221	.294	6.73	7.91	3	13	
	3 35-44	19	7.11	2.158	.495	6.07	8.15	4	12	
	4 45-54	2	6.00	.000	.000	6.00	6.00	6	6	
	5 55-64	4	5.25	.957	.479	3.73	6.77	4	6	
	Total	91	7.12	2.139	.224	6.68	7.57	3	13	
Behaviour Score (H3)	1 18-24	9	12.89	2.667	.889	10.84	14.94	8	17	
	2 25-34	57	11.46	2.778	.368	10.72	12.19	6	17	
	3 35-44	19	10.00	2.539	.582	8.78	11.22	6	15	
	4 45-54	2	12.00	.000	.000	12.00	12.00	12	12	
	5 55-64	4	6.00	2.449	1.225	2.10	9.90	4	9	
	Total	91	11.07	2.958	.310	10.45	11.68	4	17	

Selecting, Sharing and Behaviour Scores compared by Age Group

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Selecting Score (H1)	Between Groups	17.394	4	4.348	.800	.529
	Within Groups	467.507	86	5.436		
	Total	484.901	90			
Sharing Score (H2)	Between Groups	18.815	4	4.704	1.030	.397
	Within Groups	392.855	86	4.568		
	Total	411.670	90			
Behaviour Score (H3)	Between Groups	164.575	4	41.144	5.679	.000
	Within Groups	623.029	86	7.245		
	Total	787.604	90			