

Impact of Gender, Age and  
Personality on Impulse Buying

A study investigating the impact of Gender, Age and Personality on levels of impulse  
buying behaviours

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## Abstract

Impulse buying can be defined as an unplanned rapid purchasing behaviour which is suddenly initiated, involving the experiencing of an urge to buy. This urge is felt abruptly and strongly and is often irresistible. Most of the research investigating this phenomenon, has focused on the variables of age, gender and personality traits, however, this has not been done simultaneously. The current study aims to investigate and identify an association between gender personality and impulse buying together, being one of the first studies, particularly in Europe to do so. The main hypothesis presented by the study suggests that gender and personality do have an impact on the levels of buying behaviours. The second hypothesis offered in this study is that younger individuals will have higher levels of impulse buying than older individuals. The sample of the current study consisted of a total of N=499 participants, with 9.6% being male (n=48) and 90.4% being female (n=451), with n=11 participants being excluded from the study due to being underage or choosing not to disclose their gender. The design of the current study was a quantitative survey design, with participants recruited for participation through convenience and snowball sampling. The study employed the descriptive cross-sectional survey design and was used in order to examine the influence of consumers' demographic characteristics such as age and gender and their personality type on impulse buying. Multiple regression analysis was performed to determine how well Impulse buying behaviours could be explained by three variables including gender, age and personality type. Results show that age and personality do have a significant effect on impulse buying behaviours and no significant influence was found regarding gender.

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## **Literature Review**

Impulse buying can be defined as an unplanned rapid purchasing behaviour which is suddenly initiated, involving the experiencing of an urge to buy. This urge is felt suddenly and strongly and is often irresistible (Rook,1987). Earlier research into impulse buying identified the differences between impulse buying behaviour and non-impulse buying behaviour (Cobb and Hoyer, 1986; Rook, 1987). Impulse buying has been described as more arousing and irresistible for the individual than planned buying behaviour (Munusamy et al. 2010). Impulse buying is a universal and exclusive aspect of consumers' lifestyle (Parboteeah, 2005) and has many characteristics such as a bias in favour of instantaneous possession and moderately swift decision making. Impulsive buying behaviours are regarded as being more rampant in retail settings when an increase in disposable income is present (Dittmar and Drury, 2000). It has been suggested by Stern (1962), based on previous research, that impulse buying has four major forms including, pure impulse buying, reminder impulse buying, suggestion impulse buying and planned impulse buying.

Pure impulse buying is the most easily identifiable form of impulse buying. Pure impulse buying occurs when the consumer engages in abnormal purchasing patterns, buying on sudden urges of uniqueness or entertainment. This type truly represents impulse buying, breaking normal buying patterns for a novelty purchase, however it is suggested by Burck (1956) that this type of impulse behaviour is associated with a small number of purchases.

Reminder impulse buying refers to the sudden remembrance of a wanted item due to shrunk stock, with always having the intention to buy it (Burck ,1956). This type of impulse buying occurs when the shopper sees the item or sees an advertisement or other information

associated with the item and sparks the urge to buy it again, due to the remembered experience of knowledge of the product.

Suggestion impulse buying arises when the consumer rapidly evaluates on the spur of the moment, seeing the product, but, having no prior knowledge of the product yet visualising a need for it. This is unlike reminder impulse buying though, with this behaviour, the individual has no prior knowledge of the product (Nesbitt, 1959).

Finally, planned impulse buying discusses the consumer having the intention to engage in the buying behaviour based on special offers (Reynolds, Simintiras, & Diamantopoulos, 2002). The individual begins shopping with a specific purchase in mind, although does have the intention to make other purchases. This is the most recent form of impulse buying that has been offered, also being believed to be the most significant. This is thought to be more common in females, though not enough research has been given to this.

Impulse buying can occur suddenly, often in a split second and is often due to an unplanned decision. It is a common and widespread component in the marketplace, therefore is considered a rapid, persuasive and hedonically complex buying behaviour, which involves considerate and deliberate reflection of alternative information and choices (Tendai & Crispen, 2009). Furthermore, it has been suggested that many purchases are being made, physically, in themselves as customers give in to their impulse's but also technologies such as the Internet and television shopping channels, expanding the consumers ability to act on impulse purchasing urges, increasing how accessible both the products and services are and the ease with which impulse purchases can be made (Kacen & Lee, 2002).

### **Factors influencing impulse buying**

Impulse buying has been considered an unescapable and distinctive phenomenon in many different lifestyles across the world and has been receiving cumulative attention from



consumer researchers (Rook 1987; Rook and Fisher 1995). Former research on impulse buying have recurrently just focused on the definitional components distinguishing impulse from non-impulse buying (Cobb and Hoyer 1986; Piron 1991; Rook 1987) and from this, providing a theoretical framework for inspecting this distinct phenomenon of impulse buying (Burroughs 1996; Hoch and Loewenstein 1991; Rook and Fisher 1995; Rook and Gardner 1993). However, few researchers have focused on the things influencing the behaviours. In addition, while numerous researches are beginning to focus much of their research interest on impulse buying, very little is still known about the factors that affect impulse buying.

Impulse buying may be influenced by an individual's inner states or traits, or by other environmental factors, such as advertisements. Researchers have tried to determine if an individual's personality traits influence their tendency to engage in this behaviour. Generally, impulse buying behaviours have been associated with the ease and convenience of buying. Engaging in buying behaviours leads to the overindulgence of many of the individual's resources such as, money, time, and both mental and physical effort. When engaging in these buying behaviours exhausts these resources, the behaviour becomes more difficult and decreases the possibility of engaging in an impulsive behaviour, as it requires more thought and planning (Stern, 1962). Contrarily, when engaging in these buying behaviours can be done with ease, this is when the impulsive buying behaviours are extremely likely to occur, as there is no exhaustion of time and effort.

Research has shown that there are copious factors which play a role in influencing impulsive buying behaviour. Copious amounts of research, including that of Donovan, Rossiter, Marcoolyn, & Nesdale, (1994); Rook, (1987); Rook & Gardner, (1993); Wein-berg & Gottwald, (1982), suggest that the consumer's mood or emotional state has a major influence on their impulsive behaviours. Emotions have been observed as significant internal cues regarding impulse buying. It has been suggested by Rook and Gardner (1993) that

individuals who engage in impulse behaviours are more likely to react more to their emotions than those who do not engage in impulsive behaviours. In much of Rook and Gardner's (1987,1988,1993) work, it has been suggested that consumers are likely motivated to engage in these behaviours, as an attempt to manage their emotional states. It was found that impulse buyers were more expected to engage in impulse buying in both positive and negative emotional states compared to those who are non-impulse buyers. Thus, showing that impulse buyers are expected to engage in impulse buying, being affected by both positive and negative emotional states.

There have been many different factors which researchers have suggested act as triggers towards impulsive purchasing behaviours. These triggers have been divided into internal and external triggers (Wansink 1994) with internal cues relating to the individual's moods and emotional states, and external cues relating to environmental and sensory factors. Atmospheric cues have also been suggested in recent studies to be important triggers for engaging in impulse buying behaviours. These cues include, sights, smells and sounds (Eroglu and Machleit 1993).

Other factors created by marketers including Automated Teller Machines (ATM's), telemarketing, online shopping, credit cards and 24-hour retail outlets, are also very strong factors influencing the consumers ability to engage in impulsive buying behaviours, as it is very convenient for individuals to buy things on impulse. (Rook 1987; Rook and Fisher 1995). In addition to this, marketing mix cues are also present. These marketing mix cues includes advertisements both physical and online and point of purchase promotions and displays, in return leading to impulse purchases.

Puri, (1996); Rook & Fisher, (1995); Weun, Jones, & Beatty, (1998), believe trait buying impulsiveness has an influence and Bellenger, Robertson, & Hirschman, (1978) and Wood, (1998) suggest that an individual's demographics such as age and gender play a role.

### **Age and Impulse buying**

There has been very little, research which has systematically addressed the possibility of age differences in relation to impulse buying, however the literature that is available does indicate there is a possible association between the two (Dittmar, 2005). This association suggests the possibility that younger individuals are more strongly affected by impulse buying. Thus, it is believed that impulsive buying may become a major concern, not only due to its rapid growth, but the effects particularly on young consumers. Much of the research on impulsive buying consists of samples with average ages 30-31 years (Black, Monahan, Schlosser, & Repertinger, 2001; Schlosser et al., 1994). Lejoyeux, Haberman, Solomon, & Ade's, (1999) suggest there is no evidence that age has an impact and DeSarbo & Edwards, (1996) suggesting age has an impact on levels of impulse buying. A study conducted by Garce's Prieto (2002) on a Scottish sample, identified 16 - 18-year olds within the sample were showing early signs of uncontrolled buying and lack of control over spending habits. Additionally, there is a possibility this could be related to developmental factors of the adolescent, such as developing their own adult identity through material goods.

### **Gender and impulse buying**

The existing literature examining impulse buying suggests that there is a relationship between gender and impulse buying behaviours (Tifferet & Herstein, 2012). Gender is one of the most common segmentation criteria used by marketers when introducing a product, as it generally has different effects on impulse buying behaviours (Buendicho, 2003; Coley &

Burgess, 2003; Dittmar, Beattie, & Friese, 1995; Rook & Hoch, 1985; Verplanken & Herabadi, 2001).

It is believed that women engage in more impulse buying behaviours being partially due to the prevalent opinion that men do not enjoy shopping (Gąsiorowska, 2003) and there are four main reasons why women are more inclined to engage in these buying behaviours. One of these reasons is due to hedonic consumption, which women have shown to have higher scores in (Tifferet, S., & Herstein, R., 2012). Hedonic consumption refers to the consumption of a product to experience pleasure and happiness and the fulfilment of needs.

It is said that men are not very active shoppers, with it often being hard for women to persuade them to be patient while accompanying them during these shopping experiences (Foroughi, A., Buang, N. A., Senik, Z. C., & Hajmisadeghi, R. S. 2013). Additionally, due to these higher scores in hedonic consumption, it is expected of women to also score higher in impulse buying. Women have greater attraction to shopping; they enjoy walking slowly through stores, and closely inspecting the shelves and displays, comparing prices to those in previously visited stores, products and interacting with staff and other individuals shopping at the time, and finally trying clothes and purchasing the items (Gąsiorowska, 2003). Generally, men do not enjoy engaging in behaviours like this which in return could reduce the chances of engaging in impulsive buying behaviours (Mburu 2010).

A second approach to examining gender as a factor influencing impulse buying behaviours is emotional differences between the genders. Feingold (1994) has suggested that females suffer from higher levels of negative emotions, such as depression and anxiety. In keeping with this, Silvera et al., (2008) and Verplanken et al., (2005) suggest a link between these negative emotions and impulse buying, hence forth using impulse buying as a way of attempting to improve their mental state (Tifferet & Herstein, 2012).

### **Gender and personality**

Several pieces of research have supported the claim that there are personality differences between genders. A meta-analysis study conducted by Byrnes et al., (1999) of 150 studies, discovered overall that there was a difference in levels of risk taking between men and women, with men scoring higher. Similarly, from a larger study carried out which involved 23,000 participants from 26 cultures, findings showed that men scored higher in levels of assertiveness (Costa et al., 2001), while women showed higher scores in warmth, agreeableness and neuroticism (Tifferet & Herstein, 2012).

Much of this previous research was based off the conclusions offered by Maccoby and Jacklin's (1974) study, reviewing sex differences in temperament, cognition and social behaviour. For this review, a narrative style was used, and each study was grouped by area with each sex difference being noted by their significance or lack thereof and conclusions were drawn from those which were significant. This review, mixed studies that used both measured behaviours believed to reflect personality traits and personality inventories. From this, it was found that males were more aggressive and assertive than females, while females were found to be more anxious than males.

Following the Maccoby and Jacklin (1974) review publication, many meta-analyses were conducted, including that of Glass et al (1976,1981) and Eagly et al, (1981, 1986) which supported findings presented by Maccoby and Jacklin, that males show higher levels of aggression than females. Also found was higher levels of ego development present in females than males.

However, Hall (1984) conducted a meta-analysis of the conclusions drawn from later research from 1975-1983, which combined sex differences for several personality dimensions, with traits examined narratively by Maccoby and Jacklin (1974), including assertiveness, locus of control, self-esteem, and anxiety. Findings suggested there were no

sex difference in either self-esteem or assertiveness, however discovering females were more anxious and less internally controlled than males (Feingold, 1994).

### **Relationships between personality and impulse buying behaviour**

The literature suggests that there is a relationship between personality and impulse buying behaviours (Rook and Fisher, 1995). It has been suggested by many researchers such as Puri, (1996) and Beatty & Ferrell, (1998) that certain trait aspects of personality are related to impulse buying behaviours. These personality traits related to buying behaviour include, buying impulsiveness, shopping enjoyment, consumer impulsiveness, lack of self-control and impulse buying tendency (Youn and Faber 2000), and these traits are believed to originate from the personality trait of impulsivity (Eysenck 1993). Eysenck and Eysenck (1977), created a personality model consisting of four specific dimensions of impulsivity. The four dimensions are; risk-taking, liveliness, non-planning and finally impulsiveness. Eysenck and Eysenck (1978), also suggested there is an overlap between impulsivity and sensation seeking.

Whiteside and Lynam (2001), showed four factors for trait impulsivity including, sensation-seeking, sense of urgency, lack of premeditation and lack of perseverance. Impulsive sensation-seeking has been described by Zuckerman (1994), as the seeking of diverse, innovative, intense and complex sensations or experiences which are combined with a willingness to take physical, legal, financial and social risks for these such experiences. Impulsive sensation-seeking is related to several non-rational behaviours including, binge eating, alcohol abuse, gambling and drug abuse (Kane, Loxton, Staiger and Dawe 2004; Robbins and Bryan 2004) lottery buying, irresponsible sexual behaviour and reckless driving.

There have been many models of personality offered and many instruments made available to measure personality. One of these measures is the Multidimensional Personality

Questionnaire, which was developed in 1982 by Tellegen. The final version of this scale was comprised of 11 primary personality dimensions, including control, harm avoidance, aggression, stress reaction, wellbeing, social closeness, social potency, achievement, absorption, alienation and finally, traditionalism (Tellegen 1982). From this, it was found the traits stress reaction, absorption and lack of control (or impulsivity) to be the most relevant to the study of impulse buying.

### **Theories of personality**

There have been many different theories of personality offered with psychologists debating how personality should be described and defined. One of these main ideas offered by psychologists is the trait approach of personality. This trait theory suggests human personality is composed of several broad traits or known also as dispositions.

One of the earliest examinations of this trait theory was by the psychologist Gordon Allport. Allport (1937), identified more than 4,000 words from the English language which could be possibly used to describe personality traits. This was the beginning of the trait theory and this is what led to the development of the well-known big five model. However, this vast number of words initially presented by Allport (1937), makes it difficult to distinguish each personality trait from the next.

This difficulty in distinguishing each trait is what then led to Raymond Cattell (1946) analysing this list and further breaking it down further to 171 characteristics. From doing so, he used a statistical technique widely known as factor analysis to identify traits that are related to one another and from this he moved on to create a 16-personality factor taxonomy of which comprised of 16 personality traits used to determine the differences between individuals' personalities. This then led to the creation of the Sixteen Personality Factor

Questionnaire (16PF). This questionnaire is used widely today in education, vocational guidance and career counselling.

One of the most well-known frameworks of personality trait theory is the Big Five Model introduced by McCrae and Costa in 1990. The foundations of this model were based upon many previous studies including that of Gordon Allport, Lewis Goldberg and Raymond Cattell. Robert McCrae and Paul Costa (1990), later developed the Five-Factor Model. This model describes personality in terms of five broad factors. These five factors include, Openness to experience, Conscientiousness, Extraversion, Agreeableness and Neuroticism also referred to by the acronym OCEAN. These five factors, like the 16PF created by Cattell (1946) are the foundations from which the Big Five Personality Test was introduced. The Big Five personality test gives the individual more understanding into how we react in many different situations and this can also be used to help individuals choose an occupation. Psychologists and many career professionals make great use of this information provided by theorists over many decades in a personality career test for recruitment and candidate assessment in order to highlight strengths and weaknesses.



### **Rationale**

There has been much research done on impulse buying. This research has featured an association between personality and its effects of engaging in impulse buying. There is also research done on the association between gender and impulse buying. However, there is nothing done on all three which raises the question does gender impact the relationship between personality and impulse buying. Most of the research on impulse buying and any of the associations has been carried out in the United States and very little has been carried out in Europe.

### **Research Aims**

The current study aims to investigate and identify an association between gender personality and impulse buying together, being one of the first studies, particularly in Europe to do so.

### **Hypotheses**

The main hypothesis presented by the study suggests that gender and personality do have an impact on the levels of buying behaviours. The second hypothesis offered in this study is that younger individuals will have higher levels of impulse buying than older individuals.

## Methods

### Participants

The sample of the current study consisted of a total of N=499 participants, with 9.6% being male (n=48) and 90.4% being female (n=451), with n=11 participants being excluded from the study due to being underage or choosing not to disclose their gender. All participants fully completed the questionnaire. Participants were recruited through convenience and snowball sampling strategies. These participants were recruited through online resources, including Facebook, twitter and Instagram. The age of participants ranges from 18 -62, (M=27.66).

Participants disclosed demographic information which included their age and gender. The use of this demographic information was essential for the study to infer the results of the study to the general population. Demographic information is also essential to ensure complete ethical standards for the participants were met. By gathering this information, individuals under the age of 18 were disregarded. Furthermore, the research question includes gender differences, therefore making necessary the use of demographic information.

Participation in this study was completely optional and consent was obtained from everyone before access could be granted to the questionnaire. Participants who chose to take part in this study were fully briefed on their right to withdraw from participation at any time up to submission of their data. This was due to the anonymity of participants, information collected cannot be matched to participants after they've submitted. After participation, each participation was debriefed, including details of the purpose of the study and necessary resources were offered.

## **Design**

The design of the current study was a quantitative survey design, with participants recruited for participation through convenience and snowball sampling. The study employed the descriptive cross-sectional survey design and was used in order to examine the influence of consumers' demographic characteristics such as age and gender and their personality type on impulse buying. A quantitative, cross – sectional Within-subjects (or repeated-measures) design was used for the purpose of examining how the predictor variables comprising of Gender, Age and Personality type, impacted the dependant variable, Impulse buying. This design was chosen based upon the two hypotheses offered from the study. That gender and personality do have an impact on the levels of buying behaviours. Also, that younger individuals will be have higher levels of impulse buying than older individuals.

## **Measures**

Two questionnaires were used to produce the experiment variable data; The Faber and O'Guinn Compulsive Buying Scale (CBS) and The Big Five Inventory (BFI). These were chosen as self-report measures and have strong validity and reliability in receiving direct responses from the individuals. Thus, this was necessary for this study to determine everyone's personality and buying behaviours. This being an anonymous survey may have reduced the outcome of social attraction, where participants alter their opinions or behaviours in order to meet social standards, in return potentially risking the validity of the study measurements.

A questionnaire named the Faber and O'Guinn Compulsive Buying Scale was used during the study (See Appendix 2). The Faber and O'Guinn Compulsive Buying Scale was

first published by Faber and O'Guinn in 1989. This was developed and used to measure the behaviours, feelings and emotions, which are related to compulsive behaviours and was intended to screen compulsive buyers from general populations. This questionnaire started out as a 13- item survey which was built around three dimensions including, reactive aspect, post-purchase guilt and tendency to spend. Questions covered statements such as "At times, I have felt somewhat guilty after buying a product, because it seemed unreasonable," "I often have an unexplainable urge, a sudden and spontaneous desire, to go and buy something in a store" and "When I have money, I cannot help but spend part or the whole of it." Respondents of the questionnaire were asked to rate each of the thirteen questions on a 5-point Likert scale which ranged from "very often" to "never".

It was later in 1992, that Faber and O'Guinn modified the scale and created the seven-item version of the scale, used in this study which was also called the "Compulsive Buying Scale". This modified version of the scale focused on loss of control, probable financial behaviours, buying things to improve mood and awareness that spending behaviour is abnormal. Both the initial version of the scale and the modified version perform well psychometrically and are scored through an equation.

Additionally, a second scale was used for this study. This scale was The Big Five Inventory (BFI) also known as the Five-Factor Model (FFM), (See Appendix 3). The Big Scale Inventory was first published by Goldberg in 1993. Lewis Goldberg is one of the most well know personality researchers. His work was based on many before him including Eysenck, Jung and Cattell. Goldberg based his theory on Cattell's 16 fundamental factors of personality which he managed to break down into five factors, later catching the attention of McCrae and Costa in the 1960's who expanded on and confirmed the validity of the model. The model was then termed the Big Five and the five factors of personality included

Openness to experience, Conscientiousness, Extroversion, Agreeableness, and Neuroticism, also referred to the acronym OCEAN.

Furthermore, the big five model brings us to the most current approaches to personality research with many of the salient aspect of this research including: emphasis on the biological basis of personality, exploration into the shifts of personality based on the environment.

Additionally, the model was developed over many decades, growing from the foundations of Cattell's 16 personality factors to being further altered and perfected by Goldberg and then Costa and McCrea. Continuing, this model has been translated to many languages worldwide, increasing its availability to many cultures which led to much research resulting in the international validating of the theory.

However, these five factors do not provide complete and in-depth explanations of personality, as they are personality factors and not personality traits themselves. Hence forth these factors are the labels into which an array of personality traits and characteristics fit.

### **Data Analysis**

The data for this study was analysed using the SPSS software. The results from the two experiment scales were inputted into the SPSS software. Initially, frequency and descriptive tests were conducted in order to assess the normality of the distribution.

A Multiple Regression Analysis was used to investigate whether there is a relationship between the independent variables; age, gender and personality as this test is appropriate for assessing continuous data. The multiple regression analysis considered how precise the independent variables predict impulse buying behaviours and the degree of variance explained by the predicting variables.

## **Procedure**

The study began by developing a research question. Once this question was obtained the research proposal for this study was created and submitted for ethical approval. Once ethical approval was obtained from the Psychology ethics committee of National College of Ireland the questionnaire used for data collection was created. This questionnaire was then sent for approval from the thesis supervisor. When this questionnaire was reviewed and necessary alterations were made, the survey was published online on social media platforms, including, Twitter, Facebook and Instagram. A brief synopsis of who the researcher was, why the study was being conducted, approximate time needed to complete, accompanying what the questionnaire was measuring was presented on the first page (See Appendix 1).

The participants were assured their identity would remain anonymous and were insured that if they wished to withdraw from the study, they would face no repercussions, and all data provided before submission would be destroyed. Participants were then asked to provide their consent to participate and once this was obtained, they were directed to a page containing brief demographic questions which they were required to answer. Once participants completed the demographic questions, they were then prompted to move on and submit responses to both the Faber and O'Guinn Compulsive Buying Scale and the Big Five Inventory, in this order.

Following completion of the survey a note of appreciation was presented, accompanied by further information on the study. The researcher and supervisor's information were also presented should participants need additional information on the research or additional debriefing. Contact information for other resources were provided should participants suffer any form of distress due to participating in the study. The questionnaire took participants approximately 10 minutes in entirety. Once an appropriate number of responses were obtained, the online survey was then closed, meaning not available

for completion by any more participants. The researcher then went on to develop the raw data file using the SPSS software. The data was then re-coded and missing values inputted.

## Results

### Descriptive Statistics

The current study comprised of 499 participants. Table 1 displays the relevant categorical variable information investigated in this study. The number of participants applicable to each subcategory and the subsequent valid percent are provided.

Table 2 displays relevant information surrounding the continuous, independent variables examined in this study. The collective mean scores of each variable are moderately high, portraying particularly strong levels of age, extroversion, agreeableness, conscientiousness, neuroticism and openness amongst the sample and mild to moderate compulsive buying levels (Age:  $M= 27.66$ ,  $SD= 8.65$ ; Compulsive Buying:  $M= 5.91$ ,  $SD=1.92$ ; Openness:  $M= 24.99$ ,  $SD = 5.76$ ), Conscientiousness:  $M= 22.76$ ,  $SD= 5.39$ , Extroversion:  $M= 16.83$ ,  $SD= 6.34$ , Agreeableness:  $M= 25.42$ ,  $SD= 5.33$ , Neuroticism:  $M= 19.93$ ,  $SD= 6.20$ .

Inspection of the confidence intervals and range of scores indicate no violation of the data as a result of outliers.

Histograms demonstrated the overall total scores and normal distribution (including outliers) for each measurement scale used in the study (See Appendices 5-9).

Histograms and normal Q-Q plots were examined for each continuous variable to determine normality.

The close 95% confidence intervals suggest that the current sample is reasonably representative of the general population.



Table 1 Frequencies for the current sample each demographic variable (N = 499)

| Variable      | Frequency | Valid Percentage |
|---------------|-----------|------------------|
| <b>Gender</b> |           |                  |
| Male          | 48        | 9.6              |
| Female        | 451       | 90.4             |

Table 2 Descriptive statistics of all continuous variables

|                   | Mean (95%<br>Confidence Intervals) | Std. Error Mean | Median | SD   | Range   |
|-------------------|------------------------------------|-----------------|--------|------|---------|
| Age               | 27.66 (26.90-28.42)                | .387            | 24.00  | 8.65 | 18-64   |
| CBS               | -5.91 (-6.08-5.75)                 | .086            | -6.18  | 1.92 | .36-.95 |
| Extroversion      | 16.83(16.27-17.38)                 | .284            | 17.00  | 6.34 | 2-32    |
| Agreeableness     | 25.42(24.95-25.99)                 | .239            | 26.00  | 5.33 | 8-36    |
| Conscientiousness | 22.76(22.29-23.24)                 | .241            | 23.00  | 5.39 | 8-36    |
| Neuroticism       | 19.93(19.38-20.47)                 | .278            | 20.00  | 6.20 | 1-32    |
| Openness          | 24.99(24.45-25.47)                 | .258            | 25.00  | 5.76 | 3-39    |

## **Inferential Statistics**

### **Standard Multiple Regression Analyses**

Multiple regression analysis was performed to determine how well Impulse buying behaviours could be explained by three variables including gender, age and personality type.

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. The correlations between the predictor variables and the criterion variable included in the study were examined (see Table 2 for full details). Four of the seven predictor variables were significantly correlated with the criterion variable. The correlations between the predictor variables were also assessed with  $r$  values ranging from .009 to .29.

These results indicate that there was no violation of the assumption of multicollinearity and that the data was suitable for examination through multiple linear regression analysis.

The seven predictor variables explained 15.2% of variance in impulse buying levels ( $F(7, 491) = 12.54, p < .001$ ). Four of the seven variables were found to uniquely predict impulse buying neuroticism ( $\beta = .25, p < .05$ ), conscientiousness ( $\beta = -.23, p < .05$ ), extroversion ( $\beta = .20, p < .05$ ) and Age ( $\beta = .15, p < .05$ ) (see Table 3 for full details).

Table 3 Multiple regression model predicting impulse buying scores

|                   | R <sup>2</sup> | Adj R <sup>2</sup> | β       | B     | SE   | CI 95% (B)  |
|-------------------|----------------|--------------------|---------|-------|------|-------------|
| <b>Model</b>      | .15***         | .140               |         |       |      |             |
| Extroversion      |                |                    | .061    | .061  | .013 | .04 / .09   |
| Agreeableness     |                |                    | .017*   | .017  | .016 | -.02 / .05  |
| Conscientiousness |                |                    | -.083*  | -.083 | .016 | -.11 / -.05 |
| Neuroticism       |                |                    | .077**  | .077  | .015 | .05 / .11   |
| Openness          |                |                    | -.005** | -.005 | .014 | -.03/.02    |
| Age               |                |                    | .034*   | .034  | .009 | .02/.05     |
| Gender            |                |                    | .384    | .384  | .280 | -.17/.93    |

Note. R<sup>2</sup> = R-squared; Adj R<sup>2</sup> = Adjusted R-squared; β = standardized beta value; B = unstandardized beta value; SE = Standard errors of B; CI 95% (B) = 95% confidence interval for B; N = 499; Statistical significance: \*p < .05; \*\*p < .01; \*\*\*p < .001

## Discussion

The primary aim of the current research intended to empirically investigate the role of gender, personality and age simultaneously on levels of impulse buying behaviours. The motivation behind the objective of this study was derived from much of the previous research, which stated that these factors of gender (Tifferet & Herstein, 2012), age (Dittmar, 2005) and personality (Rook and Fisher, 1995) independently had an impact on impulsive buying behaviours and therefore suggested they should be further investigated simultaneously. Thus, the researcher undertook the task of simultaneously determining whether these factors best predict levels of impulse buying behaviours. Furthermore, the current study wished to add to existing literature by investigating whether these factors combined had a significant effect on impulse buying behaviours.

Furthermore, whilst sourcing literature for this study, examination of the research indicates that the area relating to consumer psychology demands a movement towards examining further the factors influencing impulse buying behaviours. It is expected that the present study will significantly contribute to this relatively contemporary domain of consumer psychology, by examining the impact of age, gender and personality on impulse buying behaviours.

The rationale for the current study was established considering there is quite a large amount of research which suggests gender, personality type and age are related to increased levels of impulse buying behaviours (Rook and Fisher, 1995; Puri, 1996; Beatty & Ferrell, 1998). However, little evidence has been reported on the impact of these variables combined on impulse buying behaviours, although multiple studies support the impact of gender, age and personality types on impulsive buying behaviours, other studies have found that no direct association exists (Youn and Faber 2000), therefore signifying that the relationship, particularly with gender is not straightforward. Thus, the current study wished to add to

existing literature by investigating whether these factors combined had a significant effect on impulse buying behaviours.

Two hypotheses were offered with the first and main hypothesis being that gender and personality will have a significant influence on levels of impulse buying behaviours.

Additionally, a second hypothesis was offered suggesting that that younger individuals will be have higher levels of impulse buying than older individuals. The research was therefore undertaken to contribute to the discipline of consumer psychology.

Considering that for the first time the mentioned seven intrinsic factors have been simultaneously examined for their possible impact on impulsive buying, the study makes useful contribution. The results of the study were partially conflicting with previous research conducted in the field of consumer behaviour. As predicted by the researcher, personality types, and age had significant effects on impulse buying behaviours. However, gender did not show significant results when compared to the criterion variable of impulse buying.

As stated previously, the results obtained from the current study do suggest that consumers demographics such as age do have a significant influence on impulse buying. Furthermore, the multiple regression results show that the age of consumers presents a significant association with impulse buying behaviour. This has seen to be the case throughout previous literature on the case including that of Ekeng, Lifu, & Asinya, (2012), suggesting that as one grows older their tendency to engage in impulse buying behaviours decreases. The authors suggest this decrease is due to the added responsibilities of running a family, in contrast with their adolescent counterparts. Adult consumers have greater concerns of caring for their children, in return resulting in spending money on more practical products. This is contrasting the responsibilities of adolescents who do not have such worries of a family to feed and bills to pay, resulting in the ability to make more extravagant spending. In this regard, impulse buying behaviour is a recurrent phenomenon among young people.

The expectation of the researcher that age would show significant results when compared to impulse buying, was also supported strongly, with the current sample consisting of many younger consumers who engage in more buying. The findings of the present study, in addition to much of the previous research, such as Dittmar, H. (2005), suggest there is a need for more focus on a younger sampling in consumer research, as these individuals are the consumers of tomorrow who may have higher levels of impulse buying behaviours.

Similarly, the results from the multiple regression analysis conducted did identify a significant relationship between personality types and impulse buying behaviours. Schiffman (2008), has described personality as being a unique set of psychological traits which are found within the individual that are organised and relatively enduring (Larsen and Buss, 2010) with much of the previous literature suggesting there is a relationship between personality and impulse buying behaviours present (Rook and Fisher, 1995). Many researchers including Puri, (1996) and Beatty & Ferrell, (1998) have proposed that certain trait aspects of personality are related to impulse buying behaviours and do have an impact on the levels of impulse buying behaviours the individual engages in (Youn and Faber 2000), which was identified in the current study. Importantly, one of the first finding of the study related to significant association of two personality constructs, conscientiousness and neuroticism, with impulsive buying behaviour confirms the efficacy of the personality approach to comprehend consumer buying behaviour.

Additionally, Shahjehan et al. (2011) supported the findings of the current study by reporting that impulsive buying was positively correlated with the construct of neuroticism. These findings suggest that individuals that experience emotional instability, moodiness, irritability, anxiety and sadness were more likely than other personality types, to display impulsive buying behaviours. The significant relationship between conscientiousness and impulsive buying behaviour present within the current study in return disagrees with the

findings presented by Donnelly et al. (2012) which suggest that conscientious individuals engage in higher levels of planned behaviours and score lower on levels of impulsive behaviour.

These significant associations between personality constructs and impulsive buying behaviour present in the current research and existing literature further strengthen the confidence that impulsive buying could strongly be engrained in personality.

Finally, an important finding of the current study was the exposure of the absence of gender-wise variation regarding impulsive buying behaviour. Though, many previous studies have indicated that a gender difference is present with women in comparison to men, having higher levels of impulsive buying (Lin and Lin, 2005; Ghani et al., 2011), our findings through the result of the multiple regression analysis did not indicate that impulse buying differs significantly between male and female consumers. However, due to the gender imbalance within the sample for the current study, with there being a significantly larger number of female participants than males this may have influenced the results thus disagreeing with much of the previously examined literature.

Several studies, within the existing literature, including Tifferet & Herstein, (2012), have found a significant existing relationship between gender and impulse buying. However, like the current study results on this variable are inconclusive as previous studies have not shown any relationship between the two, while other results have suggested higher levels among females (Lin & Lin, 2005; Ghani et al., 2011) with others reported the contrary (Cobb & Hoyer, 1986; Wood, 1998; Mai et al., 2003).

Gender is one of the most common segmentation criteria used by marketers when introducing a product as it generally has different effects on impulse buying behaviours (Buendicho, 2003; Coley & Burgess, 2003; Dittmar, Beattie, & Friese, 1995; Rook & Hoch, 1985; Verplanken & Herabadi, 2001), with it being believed women engage in more impulse

buying behaviours (Gąsiorowska, 2003). Nevertheless, this was not highlighted within the current study with there being no significant difference, potentially due to the gender bias within the sample.

### **Major Implications**

The findings obtained from the current study provide significant information for the field of consumer psychology and impulse buying behaviours. Furthermore, the current study provides further empirical evidence which acclaim personality and age to be significant contributors of impulse buying behaviours.

Hypothesis one draws attention to gender and personality as variables likely to predict impulse buying behaviour, therefore, making it possible for providing an insight for future researchers to determine other psychological constructs which may play a role in explaining the phenomena, impulse buying behaviours. The release of gender from the current study as a significant factor in predicting impulse buying behaviours does contradicts the large body of research that suggests women do engage in higher levels of impulse buying behaviours than males (Lin and Lin, 2005; Ghani et al., 2011), however, agreeing with several other studies who determine there is no significant difference.

Furthermore, the accessibility of the study through online resources and the anonymous nature of the study eradicates unnecessary variables such as the Hawthorne effect (Adair, J. G., 1984) from having an impact on the responses of the participants.

These results have several implications for the consumer psychology literature and the current domain devoted to progressive impulse buying behaviours. Highlighted in previous studies, (Puri, 1996; Beatty & Ferrell, 1998) findings show that age and personality did have



a significant impact on impulse buying behaviours, however, the current study found no significant findings to suggest that gender had an impact on levels of impulse buying.

Therefore, highlighting how complex the topic of impulse buying and investigating the effect of different variables on impulse buying levels. Considering that most of the sample was made up of younger participants, this enables the sample to be generalised to the younger population of consumers.

### **Limitations**

In order to interpret understand the results of the current study effectively, one must recognise the limitations of this study. Two self-report scales were active within the current study, to generate and measure the data of the research study. Therefore, this exclusive use of self-report measures may be criticized by other researchers and considered to be a limitation as many other researchers do advocate such measures do lack ecological validity.

Nevertheless, contradicting such claims, self-report measures have been proved to be a valid method of generating research data, which are very often used in studies, examining non-observable concepts such as impulse buying like the current study.

The primary limitation of the current study is the presence of an unequal sample size between males and females. This inequality had the potential to affect the normality of the distribution, as gender-based impacts on impulse buying behaviour levels were examined. The 451 females to 48 male divides, makes it extremely difficult to gather any significant relationship between gender and impulse buying, therefore making it difficult to support the findings of Lin and Lin, (2005) and Ghani et al., (2011). Due to this gender bias with the current study being based on a predominately female sample, mainly recruited from online

social media platforms, therefore, limiting the generalizability of the current findings to wider population.

Nonetheless, the cross-sectional nature of the current study means that no assumptions of causation or prediction can be made regarding the observed relationships. While the data was collected cross-sectionally, the predictors variables generally focused on factors present since early development i.e. Gender and personality traits with an exception for the hanging variable of age whereas the criterion variable focused on current impulse buying behaviours. However, most of the findings from the current study were consistent with the existing literature, including findings from (Rook and Fisher, 1995; Puri, 1996; Beatty & Ferrell, 1998; Dittmar, 2005), suggesting that the current findings may be reasonably generalisable.

Finally, another obvious limitation of the current research study could be considered regarding the use of short scales for measuring constructs like personality. Although these short scales are easier and more comfortable for the participant making their experience more enjoyable, along with the decent reliability and validity of these scales a case could be made that the short scales do create limitations on possible permutations especially if the analytical techniques such as structured equation modelling is being used in the study.

### **Future Recommendations**

Regarding the implications and limitations of the current research, there are several vital alterations which could be made in future replications of the current study. Primarily, forthcoming research could ensure a more varied sample in relation to gender, as the current sample is predominantly populated with females, thus, an alternative sampling strategy could be adopted to reduce the risk of obtaining a gender biased sample of participants for the groups in investigation. Future research, however, could benefit from attempts to replicate the

current study using larger and more diverse samples that are representative of the general population. Additionally, future researchers could use a longitudinal design to assess the differences of levels of impulse buying behaviours as the participants transition into later life, thus establishing if the variables under investigation are necessary. As mentioned previously, the study uses two self-report measures which are criticised by some, thus future researchers may try and avoid these criticisms, and validate the model by using other relatively more established and more comprehensive measurement instruments.

## Conclusion

To conclude, the present study highlights that consumers demographics such as age, do have a significant influence on impulse buying behaviours, with these higher levels of impulse buying decreasing with the increase of age. In addition, the current study also shows that impulse buying is significantly impacted by the consumers personality traits. Gender differences, however, did not show any significant influence within the present study, although this has been seen within the literature to have a large variance between it being significant and not. Therefore, as age did show a significant relationship, hypothesis 2 was accepted. However, due to the lack of significance in relation to gender and impulse buying, hypothesis 1 was rejected, though findings did show a significant relationship with personality traits. Based on the findings, the study suggests that consumers should order their priorities and always scale off their preferences when making product purchases to avoid buying unplanned products. The current study also highlights the importance of obtaining a balanced sample as it can skew results and lead to no significant relationship being found. Overall, the current study was significant and further added to the discipline of consumer psychology and, impulse buying.

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## **Appendices**

### **Appendix 1**

#### **Consent sheet**

This is a final year research project being conducted by Shauna Farrell, a final year psychology student of National College of Ireland. It is a questionnaire comprising of 53 short questions and is designed to measure gender, personality traits and impulsive buying behaviours.

You are being asked to take part in a research study that aims to examine if gender impacts the relationship between personality and impulse behaviour. Please read this form carefully before agreeing to take part.

The purpose of this study is to examine how gender and personality may impact consumer impulse buying behaviours. You must be over the age of eighteen to take part in this study. This will include questions about your personality and buying behaviours.

This questionnaire should take no longer than 15 minutes to complete.

Your answers in this study will be kept completely confidential as there will be no information included that will make it possible to identify you. The research will only be accessed by researcher and research supervisor throughout. Taking part in this study is voluntary. You are not obliged to take part. You are also free to withdraw from the study at any time before the submission of your data, if you wish to do so.

\* Required

**Appendix 2**

**Faber and O’Guinn with Scoring Compulsive Buying Scale**

Please indicate how much you agree or disagree with each of the statements below.

Place a number on the line that best indicates how you feel about each statement.

|                |                |                            |                   |                   |
|----------------|----------------|----------------------------|-------------------|-------------------|
| Strongly agree | Somewhat agree | Neither agree nor disagree | Somewhat disagree | Strongly disagree |
| 1              | 2              | 3                          | 4                 | 5                 |

1.If I have any money left at the end of the pay period, I just have to spend it. \_\_\_\_

|            |       |           |        |       |
|------------|-------|-----------|--------|-------|
| Very often | Often | Sometimes | Rarely | Never |
| 1          | 2     | 3         | 4      | 5     |

1. Please indicate how often you have done each of the following things by placing a number

a. Felt others would be horrified if they knew of my spending habits. \_\_\_\_

b. Bought things even though I couldn’t afford them. \_\_\_\_

c. Wrote a check when I knew I didn’t have enough money in the bank to cover it.  
\_\_\_\_

d. Bought myself something in order to make myself feel better. \_\_\_\_

e. Felt anxious or nervous on days I didn't go shopping. \_\_\_\_

f. Made only the minimum payments on my credit card. \_\_\_\_

Scoring equation =  $-9.69 + (Q1 \times .33) + (Q2a \times .34) + (Q2b \times .50) + (Q2c \times .47) + (Q2d \times .33) + (Q2e \times .38) + (Q2f \times .31)$ . Substitute your score of 1 to 5 on each question for its place in the equation. For example, if you marked question 1 as 2 (somewhat agree), use 2 in place of Q1 and multiply it by .33. When you have answered each question, add your individual scores together and subtract 9.69 to determine your overall score. If your overall score is a higher negative score than -1.34 (for example, -2.04), you would be classified as a compulsive buyer. Reprinted with permission. Faber R, O'Guinn T, A Clinical Screener for Compulsive Buying. J Consumer Research 1992;19:459

### Appendix 3

#### The Big Five Inventory (BFI)

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

| Disagree<br>strongly | Disagree a little | Neither agree<br>nor disagree | Agree a little | Agree strongly |
|----------------------|-------------------|-------------------------------|----------------|----------------|
| 1                    | 2                 | 3                             | 4              | 5              |

I see Myself as Someone Who...

- |  |  |
|--|--|
| ___ 1. Is talkative                            | ___ 23. Tends to be lazy                           |
| ___ 2. Tends to find fault with others         | ___ 24. Is emotionally stable, not easily upset    |
| ___ 3. Does a thorough job                     | ___ 25. Is inventive                               |
| ___ 4. Is depressed, blue                      | ___ 26. Has an assertive personality               |
| ___ 5. Is original, comes up with new ideas    | ___ 27. Can be cold and aloof                      |
| ___ 6. Is reserved                             | ___ 28. Perseveres until the task is finished      |
| ___ 7. Is helpful and unselfish with others    | ___ 29. Can be moody                               |
| ___ 8. Can be somewhat careless                | ___ 30. Values artistic, aesthetic experiences     |
| ___ 9. Is relaxed, handles stress well         | ___ 31. Is sometimes shy, inhibited                |
| ___ 10. Is curious about many different things | ___ 32. Is considerate and kind to almost everyone |
| ___ 11. Is full of energy                      | ___ 33. Does things efficiently                    |
| ___ 12. Starts quarrels with others            | ___ 34. Remains calm in tense situations           |



- |                                      |  |
|--------------------------------------|--|
| ___13. Is a reliable worker          | ___ 35. Prefers work that is routine                     |
| ___14. Can be tense                  | ___ 36. Is outgoing, sociable                            |
| ___15. Is ingenious, a deep thinker  | ___ 37. Is sometimes rude to others                      |
| ___16. Generates a lot of enthusiasm | ___ 38. Makes plans and follows through with<br>them     |
| ___17. Has a forgiving nature        | ___ 39. Gets nervous easily                              |
| ___18. Tends to be disorganized      | ___ 40. Likes to reflect, play with ideas                |
| ___19. Worries a lot                 | ___ 41. Has few artistic interests                       |
| ___20. Has an active imagination     | ___ 42. Likes to cooperate with others                   |
| ___21. Tends to be quiet             | ___ 43. Is easily distracted                             |
| ___22. Is generally trusting         | ___ 44. Is sophisticated in art, music, or<br>literature |

Please check: Did you write a number in front of each statement?

BFI scale scoring ("R" denotes reverse-scored items):

Extraversion: 1, 6R, 11, 16, 21R, 26, 31R, 36

Agreeableness: 2R, 7, 12R, 17, 22, 27R, 32, 37R, 42

Conscientiousness: 3, 8R, 13, 18R, 23R, 28, 33, 38, 43R

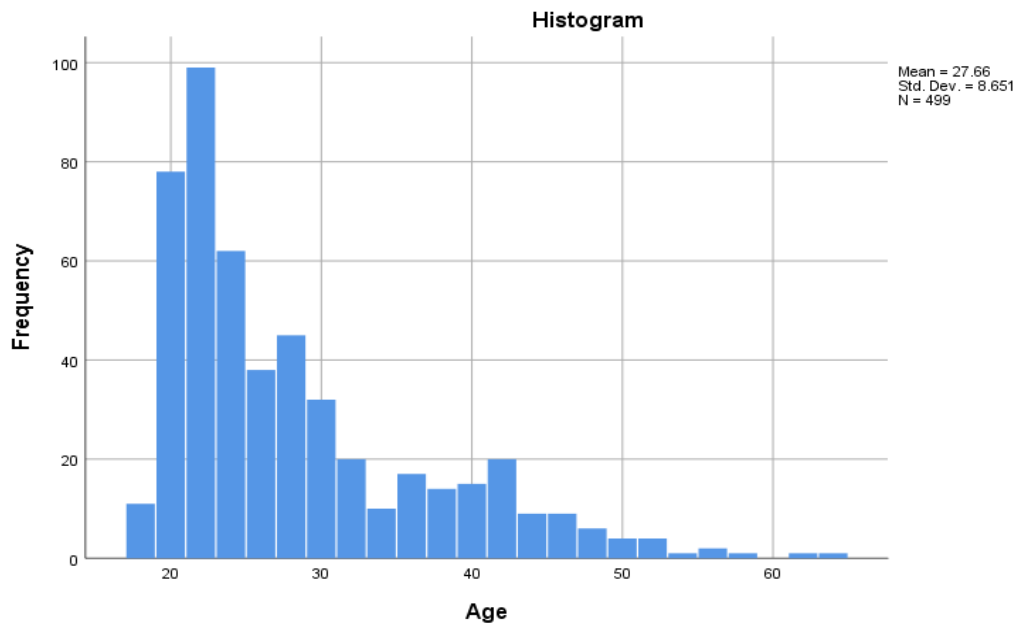
Neuroticism: 4, 9R, 14, 19, 24R, 29, 34R, 39

Openness: 5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44

L. Pervin and O.P. John (Eds.), Handbook of personality: Theory and research (2nd ed.). New York: Guilford (in press).

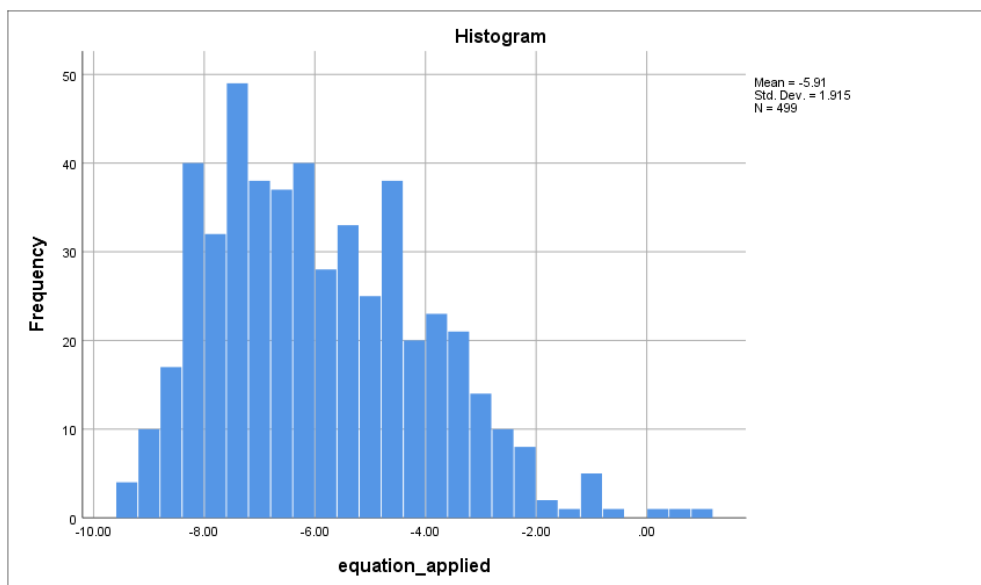
### Appendix 4

#### Histogram for age



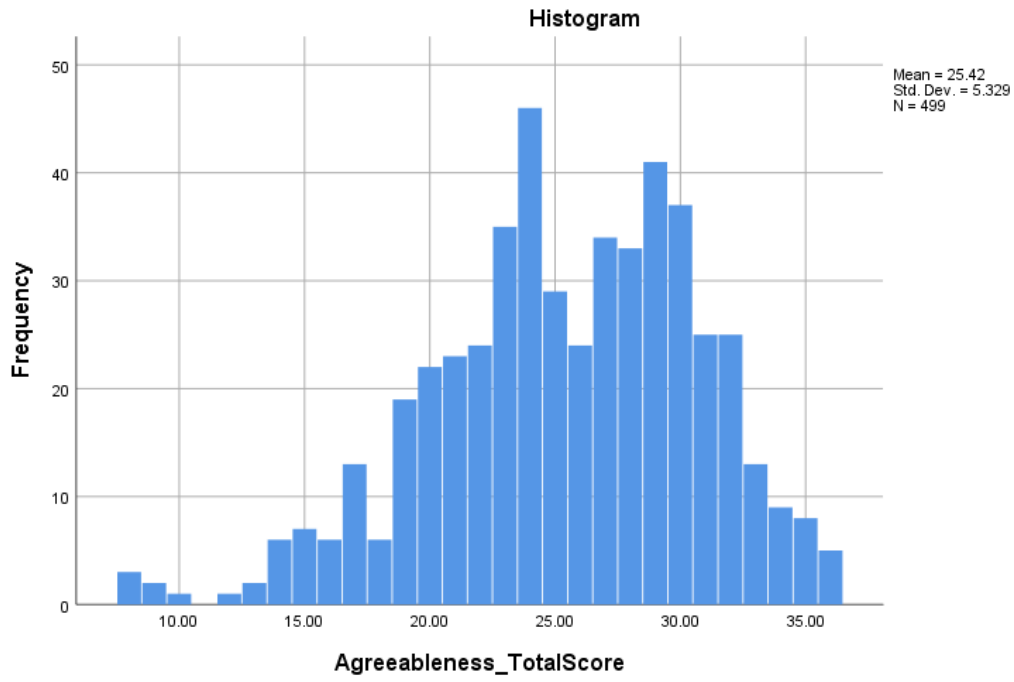
### Appendix 5

#### Histogram for Compulsive buying scale



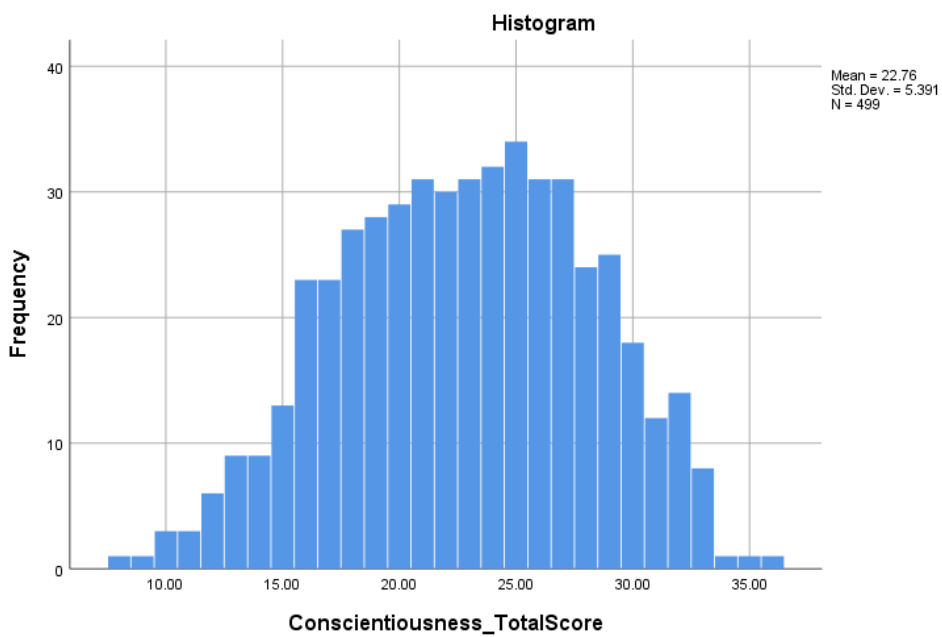
### Appendix 6

#### Histogram for Agreeableness



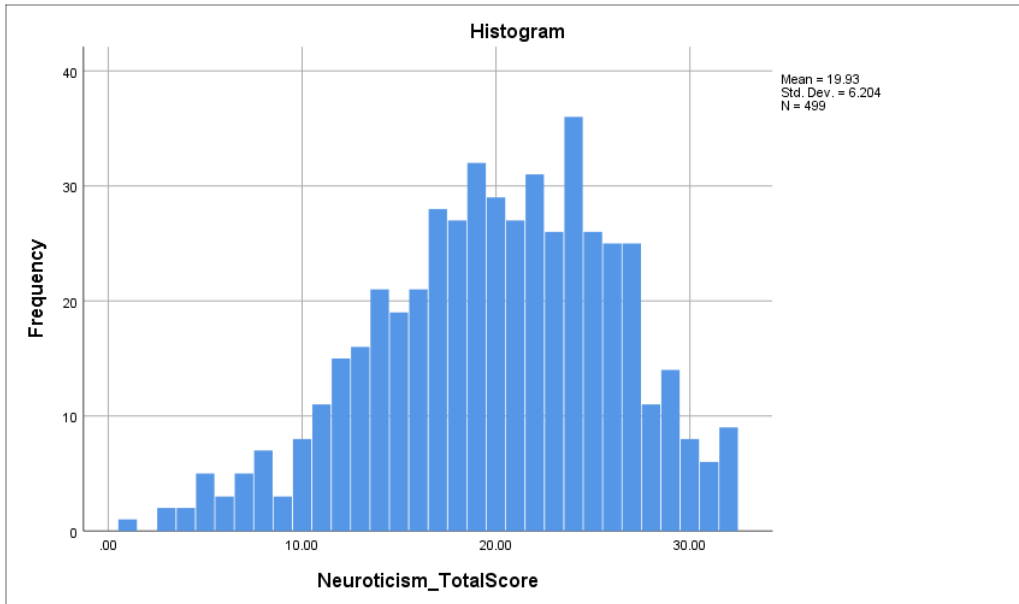
### Appendix 7

#### Histogram for Conscientiousness



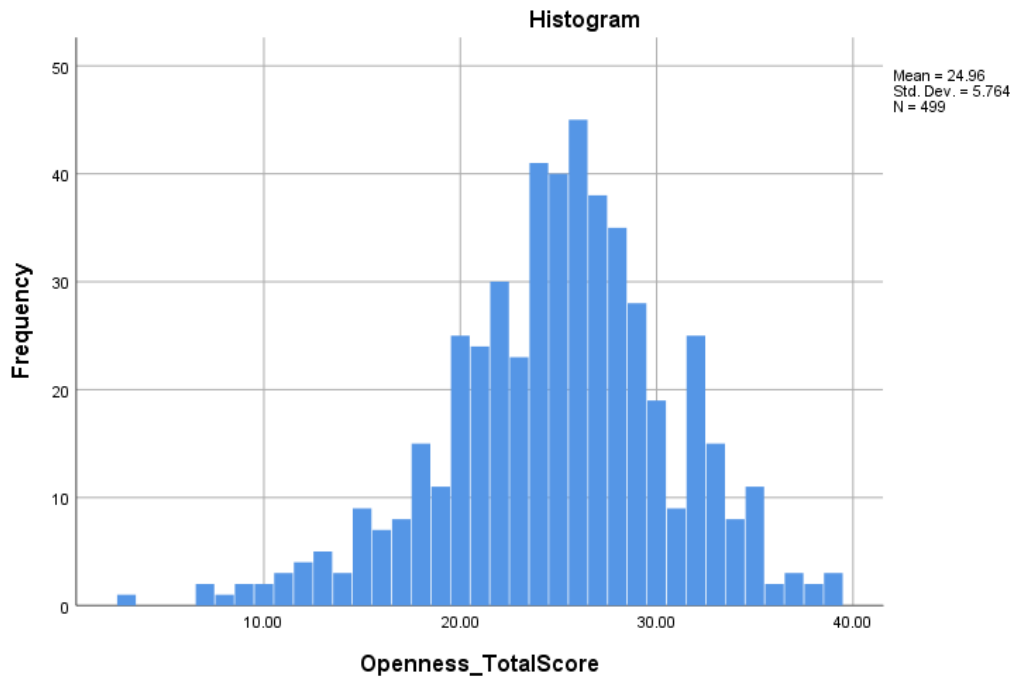
### Appendix 8

#### Histogram for Neuroticism



### Appendix 9

#### Histogram for Openness

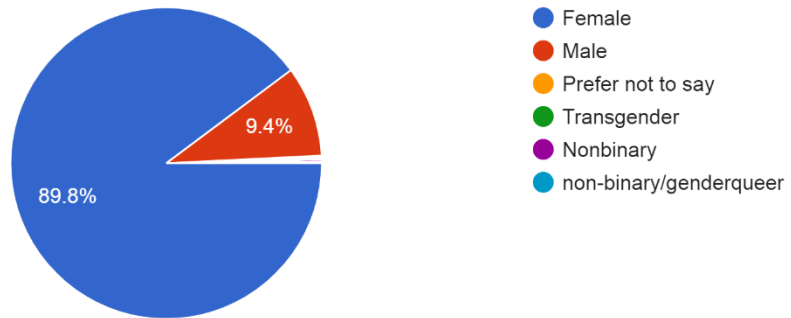


### Appendix 10

#### Gender pie chart

##### Gender

510 responses



### Appendix 11

#### Age distribution chart

##### Age

510 responses

