

The Impact of Agreeableness on Consumer Purchasing Motivations

Diogo João Dias Baptista

Dissertation presented as partial requirement for obtaining
the Master's degree in Information Management

BOOK SPINE



2022

Marketing & Applied Psychology
The impact of agreeableness on consumer purchasing motivations

Diogo João
Dias Baptista

MEGI



2022

Marketing & Applied Psychology
The impact of agreeableness on consumer purchasing motivations

Diogo João
Dias Baptista

MGI



NOVA Information Management School
Instituto Superior de Estatística e Gestão de Informação
Universidade Nova de Lisboa

THE IMPACT OF AGREEABLENESS ON CONSUMER PURCHASING MOTIVATIONS

by

Diogo Baptista

Dissertation presented as partial requirement for obtaining the Master's degree in Information Management with a specialization in Knowledge Management and Business Intelligence

Advisor: Diana Orghian

August 2022

ABSTRACT

Consumer behaviour has been one of the areas most affected by technology in recent years. Many businesses and organizations collect data from all type of sources and feed it to algorithms and predictive models to mine for information on customers and service users. Despite the large amount of data collected, there is a universal lack of interest in collecting data about personality, often due to the process being less practical and personality being subjective. However, some studies have shown that personality traits have potential to be a significant factor when determining how a consumer behaves and can contribute to understanding how people make their purchasing decisions. In this study, the objective was to evaluate what personality data collection could provide towards improving target marketing and how the character of a person can help us supply tailor-made services to clients based on their motivations. The study was conducted on a sample of social media users and the results indicate that high agreeableness usually leads to a preference for products that are either produced by a reputable company or the product is popular itself and social trends and external opinions are likely to influence the decision more significantly than personal tendencies. On the other hand, low agreeableness shows an inclination towards more informational and rational descriptions where self-centred behaviour is the main motivator for purchasing decisions. These results suggest that agreeableness can not only be used to model advertisements and product descriptions in order to appeal to a specific target audience with certain traits but also be employed as a predictor variable in the development of predictive models and algorithms.

KEYWORDS

Marketing; Consumer Behaviour; Consumer Motivations, Personality Traits; Agreeableness

INDEX

1. Introduction.....	1
2. Literature review	2
Delineating Personality.....	2
Origin of the Big Five Personality Traits	2
Agreeableness Concept	3
Defining Consumer Behaviour.....	3
Consumer Purchasing Motivators	4
Influence of Personality on Consumer Motivations.....	5
3. Research Model and hypotheses	6
4. Methodology	9
Data Collection	9
Data Processing	10
5. Results and discussion	12
Results Analysis	12
Hypotheses discussion.....	13
6. Conclusions.....	15
7. Limitations and recommendations for future works	16
8. Bibliography.....	17
9. Appendix.....	21
Full Survey.....	21
Microsoft Excel Calculations.....	23

LIST OF TABLES

Table 1 – Motivations and their descriptions	6
Table 2 - Consumer purchasing motivations.....	10
Table 3 - Agreeableness mean and SD by motivation.....	12
Table 4 - Correlation coefficient between motivations and agreeableness	13

1. INTRODUCTION

Nowadays, data gathering has become one of the main business processes of many companies and organizations due to the development and globalization of new technologies. Since the beginning of the information age that there has been a rapid shift from traditional industry to an economy primarily based on information technology. Such change was the starting point of an arms race for the most efficient method of data collection, storage, and analysis, where businesses looked for a strategy to make the most out of the information extracted from the large amounts of data collected by services and platforms.

With the increasing streamlined process of collecting data from people all around us, it is easy to understand why preference is given to the collection of concrete facts about individuals instead of more abstract concepts such as personality traits. Attributes like age, income, household size or marital status are relatively simple to collect and can more easily be implemented into algorithms to predict consumer behaviour and decisions. Meanwhile, constructs like personality traits and opinions are neglected for the sake of practicality, despite being at the centre of human behaviour and personal preferences. This lower interest in collecting data regarding personality traits derives from the lack of a universal framework for classifying personality and the subjective nature of one's temperament.

Nonetheless, many frameworks for classifying personality traits have been created across the years ([Costa et al., 1988](#)). These are most commonly known as personality tests and despite the subjective nature of such tests, one of the most trustworthy and overall accepted personality evaluations among the scientific community is the Big Five Personality Traits ([McRae et al., 1987](#)). This personality classification has been used multiple times to explore relationships between personality and many other life indicators across the years. Previous studies have already speculated that human personality is a relevant factor regarding consumer behaviour and how they react to message tailoring ([Myers et al., 2010](#)).

Among the five personality traits, these being openness, conscientiousness, extraversion, agreeableness, and neuroticism, some are likely to influence the decision of a consumer when purchasing a product more than others. For this study, the decision was to focus on agreeableness since it has shown promising results in previous studies ([Hirsh et al., 2011](#)). As such, following previous research regarding personality traits and how they are a factor influencing the decision making of consumers, this study is meant to deepen the understanding of how agreeableness, as a personality trait, can influence consumer purchasing behaviour and how this knowledge can be applied to improve the performance of marketing activities.

2. LITERATURE REVIEW

DELINEATING PERSONALITY

The first attempt at building a systematic personality inventory, Woodworth's Personal Data Sheet, was published in 1917, marking the beginning of a series of attempts to methodically define personality. In the following decades, many other measures to identify how we behave differently from each other have been created. The trait theory of personality is an approach which holds that individuals behave differently because they have varying amounts of certain measurable traits ([Goldberg, 1999](#)). However, personality is a difficult construct to measure since it is based on subjective evaluations of an individual and encompasses a complex network of behaviours. Due to this, most personality inventories are designed with this hurdle in mind and try to measure combinations of traits that represent certain behaviour. Such an example is the 5-factor model which is currently a well-established framework for measuring personality traits ([Costa et al., 1992](#)).

Many personality inventories are very long, usually consisting of hundreds of questions in an attempt to include most relevant behaviours of an individual. As such, practicality suffers for the sake of creating a comprehensive evaluation of personality. It was then conjectured that patterns of covariation among personality traits existed and they could be summarized into larger traits which, although less exhaustive, provided a more intuitive understanding of what personality entails ([McRae et al., 1997](#)).

ORIGIN OF THE BIG FIVE PERSONALITY TRAITS

Beginning as a way to categorize human personality, the Big Five Personality Traits model was conceived to be a method of relating personality traits with academic behaviours ([Poropat, 2009](#)). The model was worked on by multiple independent sets of researchers whose objective was to use factor analysis on various verbal descriptors related to human behaviour in order to reduce them to a manageable number of main personality traits ([Digman, 1990](#)). This was possible by studying the relationships between a large number of verbal descriptors and human character. The descriptors were reduced by evaluating overlaps and then factor analysis was used to group the remaining traits, using people's estimations obtained in questionnaires and peer ratings, into the underlying factors of human personality ([Shrout et al., 1995](#)).

The prototype of the model was first formulated by Ernest Tupes and Raymond Christal in 1961 but only gained notoriety in the 1980s. In 1990, J.M. Digman devised his five-factor model of personality which was later worked upon by Lewis Goldberg. The five personality traits contain most personality

traits and are considered as representing the primitive structure behind all personality traits ([O'Connor, 2002](#)).

Across the years, at least 4 groups of researchers have worked independently in personality theory and have identified similarly the same 5 factors. Tupes and Christal were first, followed by Goldberg at the Oregon Research Institute, Cattell at the University of Illinois, and Costa and McCrae, these researchers used comparatively different methods with the intention of finding the 5 traits and therefore, each grouping of five factors has slightly different definitions. Nonetheless, the factors from the distinct groups have been found to be highly correlated and factor analytically aligned ([Costa et al., 1986](#)).

Despite the five factors being accepted as representing the majority of personality traits, studies indicate that the Big Five Traits are somewhat lacklustre in predicting and explaining behaviour compared to using more numerous facets of the main traits. The Big Five Traits are thus, a simpler way to apply personality traits to academic studies but not exhaustive by any means ([Mershon et al., 1988](#)).

AGREEABLENESS CONCEPT

As one of the five personality traits, agreeableness expresses itself in individual behavioural characteristics which are perceived as cooperative, considerate, kind, and sympathetic ([Thompson, 2008](#)). Nowadays, it is regarded as the main personality structure responsible for reflecting personal preferences and behaviours in cooperation and social harmony ([Graziano et al., 1997](#)). Individuals who have a high score in this category are more empathetic and altruistic while a low score relates to a more confrontational attitude and selfish behaviour like manipulation and competition instead of cooperation ([Kaufman et al., 2019](#)).

Since agreeableness is considered one of the big personality traits, it represents a grouping of smaller personality sub traits that cluster together statistically. There are various specific sub traits under agreeableness that form the big personality category, these being mostly trust, honesty, altruism, compliance, modesty, and sympathy ([Matsumoto et al., 2012](#)).

DEFINING CONSUMER BEHAVIOUR

As per the definition of consumer behaviour by Frank R. Kardes, consumer behaviours is “all activities associated with the purchase, use and disposal of goods and services, including the consumer's emotional, mental and behavioural responses that precede or follow these activities” ([Kardes et al., 2011](#)). The term can either refer to individual consumers or organizational consumers. Consumer behaviour encompasses purchase activities like the purchase of goods and services, how these are

acquired and all the tasks leading up to a purchase decision, including information search, evaluating possible payment methods and the purchase experience in general ([Sassateli, 2011](#)). Consumer reactions might be emotional responses, such as feelings or moods, mental or cognitive responses regarding thought processes and behavioural responses such as consumer's observable behaviour in relation to the and disposal of goods or services.

Another definition of consumer behaviour by the American Marketing Association is "the dynamic interaction of affect and cognition, behaviour, and environmental events by which human beings conduct the exchange aspects of their lives". As a field of study, consumer behaviour is regarded as a social science. Its analysis and study makes use of behaviour principles to interpret human consumption. As a field of study, consumer behaviour is seen as between economic psychology and marketing science ([Foxal, 2001](#)).

In marketing, understanding consumption and purchase tendencies is a significant part of the marketers' profession. In its broadest sense, consumer behaviour involves how products or services are consumed and experienced as well as how purchase decisions are made. Consumers are active decision-makers on account of deciding what to purchase. Their decisions can be influenced by factors like disposable income, household size, marital status and more. However, their preferences are ever changing and can be affected by other factors across time. Regarding the purchase decisions, these can involve long and detailed processes that include searching for information and comparing between competing alternatives. Other purchase decisions, such as daily or regular purchases are made almost instantaneously with little time investment or effort in information search and decision making due to being almost reflexive.

Since the 1950s that marketing has been shifting from the traditional reliance in economics to more effective practises coming from behavioural sciences, including sociology, anthropology, and clinical psychology. This resulted in a new focus on the individual customer itself as a unit of analysis. In addition, this change in the marketing discipline created an increasing scientific sophistication regarding theory development and testing procedures ([Sheth, 1985](#)).

CONSUMER PURCHASING MOTIVATORS

With the increasingly personalized approach to marketing that new technology enabled, studies on consumer purchasing motivations increased in the last decades. Target marketing and tailor-made advertising became the new reality, with many advertisements appealing to specific desires of the consumer. Consumer decision making has been studied and it is understood that many motivators for purchasing a product are often emotional rather than rational ([Bettman, et al., 1998](#)). As nowadays

online channels have allowed communities to grow in size and increase interaction among themselves, the weight social trends and peer pressure have on consumer decisions has increased. Nonetheless, an increase in community fashions has hardly been the only change in the last decades. Now more than ever, planned obsolescence has been used to decrease product lifespan and increase product purchasing rates. This is corroborated by products which get new versions every year, of which smartphones are a prime example. Worldwide firms also make use of brand reputation, and it is not rare to see a customer buying a product due to its high prices in order to obtain social prestige ([Kardes et al., 2011](#)).

INFLUENCE OF PERSONALITY ON CONSUMER MOTIVATIONS

Some studies regarding the effects of personality on consumer behaviour have shown how personality traits may regulate the reasons why we buy some products. The big five personality traits have been previously scrutinized as driving forces for behaviour towards message tailoring. These studies have provided us with interesting results, among them, the influence of personality traits on the channels consumers use to make their purchases ([Hermes et al., 2021](#)).

Although the effect sizes for all five personality traits have been limited, they were considered significant nonetheless, mainly due to small differences in effectiveness being notable when used on a large scale which is most often than not, the case when considering consumerism. The results of these studies have indicated that tailoring a message to an individual's personality profile may increase the effectiveness of advertising campaigns and product descriptions. Among the five big personality traits, agreeableness has shown the best scores concerning the big five traits as predictors of consumer's reactions to advertisement ([Hirsh et al., 2011](#)).

Thus far, the agreeableness trait has been speculated to moderate the connection between the type of product message exposure and the attitude towards that same message. Concerning those with high agreeableness, it is expected that they show a more favourable attitude towards sensations and social messages while those with low agreeableness are anticipated to prefer more informational and personal ads. This is mainly on account of agreeableness being associated with interpersonal relationships, intimacy, and solidarity ([Myers et al., 2010](#)).

3. RESEARCH MODEL AND HYPOTHESES

To study the impact of agreeableness on consumer purchasing motivations, I propose a research model composed of two components: agreeableness and motivations, with motivations being divided in nine branches. These branches include brand reputation, novelty, social trends, product opinion, aesthetics, performance, familiarity, high price, and simplicity. These motives for buying products were obtained from a generalization of a plethora of incentives consisting of multiple dozen possible motivations for purchasing a product ([Kardes et al., 2011](#)), which although more detailed and comprehensive, it is unpractical for research purposes due to the large amount of possibilities which would increase the complexity of the study without contributing much to its interpretation of the results.

Motivation	Description
Brand Reputation	The reputation associated with the brand of the product
Novelty	The quality of being new and innovative
Performance	How well the product performs for the functions it was created for
Aesthetics	The product's appearance and how visually appealing it is
Social Trends	How popular the product is in social circles
High Price	The product is relatively expensive compared to others of the same kind
Product Opinion	The opinions of others about the product
Simplicity	The product has the bare minimum to execute its functions and no more
Familiarity	How familiar you are with the product

Table 1 – Motivations and their descriptions

The motivations will be grouped based on their nature, following studies that have already speculated how agreeableness moderates the reaction to the different types of messages one might be exposed to when making a purchase. Therefore, each motivation will be classified as either social and transformational (H2) or personal and informational (H3) ([Myers et al., 2010](#)). By social and transformational, it is understood that these motivations will include a yearning for sensations and experiences, focusing mainly on how a product will make a costumer feel based on characteristics, which were perceived and given weight by a community or social groups. Personal and informational motivations will be of a more individualistic nature, where the motivations and sentiments will derive

mostly from within oneself and their own identity. These are often characterised by an emphasis on the product itself and its apparent characteristics rather than extra perceived worth given by a community.

Agreeableness and other personality traits have been studied as influencers of reactions to advertisements and related to the effectiveness of message tailoring ([Hirsh et al., 2011](#)). Therefore, it is likely that agreeableness itself is a factor behind why people respond better to certain messages and a main element of what motivates people to buy certain products. For that reason, it is hypothesised that:

(H1). *Agreeableness is correlated, either positively or negatively, with motivations for buying products.*

Moreover, individuals with high agreeableness have been known to manifest it by preferring experiences related to solidarity and union. These are often found in interpersonal relationships and communities, which have considerable sway in dictating personal predilections ([De Raad, 2000](#)). Such predilections may be evident when the individuals act upon them while shopping. Looking at the motivations designated before, it is expected that brand reputation novelty, social trends, product opinion and high price are favoured by highly agreeable individuals. Hence, it is hypothesized that:

(H2a). *Agreeableness is positively correlated with how much the consumer is impacted by the reputation of the brand of the product being purchased.*

(H2b). *Agreeableness is positively correlated with how much the consumer is impacted by the novelty of the product being purchased.*

(H2c). *Agreeableness is positively correlated with how much the consumer is impacted by the social trends surrounding the product being purchased.*

(H2d). *Agreeableness is positively correlated with how much the consumer is impacted by the opinion others have of the product.*

(H2e). *Agreeableness is positively correlated with how much the consumer is willing to pay to have a product that is expensive and therefore, more prestigious compared to other cheaper alternatives.*

On the other hand, low agreeableness is related to more individualistic and confrontational tendencies. Even if prioritizing harmonious interactions is the first chosen approach for individuals with high and low agreeableness, low agreeableness gives an inclination to forego them faster than high agreeableness in favour of more disruptive methods ([Graziano et al., 1996](#)). By giving less significance to community-based preferences, it is presumed that personal and individualistic predispositions are

likely to be observed when purchasing a product. Going by the motivations defined beforehand it is anticipated that these predispositions will be manifested by favouring performance, aesthetics, simplicity, and familiarity. That being the case, it is hypothesised that:

(H3a). *Agreeableness is negatively correlated with how much the consumer is impacted by the perceived performance of the product being purchased.*

(H3b). *Agreeableness is negatively correlated with how much the consumer is impacted by the perceived aesthetics of the product being purchased.*

(H3c). *Agreeableness is negatively correlated with how much the consumer is impacted by the relative simplicity and straightforwardness of the product being purchased.*

(H3d). *Agreeableness is negatively correlated with how much the consumer is impacted by their own familiarity with the product being purchased.*

4. METHODOLOGY

DATA COLLECTION

The first step of this study was to decide the data collection procedure which in this case was a survey conducted on a sample of social media users, eighteen years old or older. The survey was used to measure the agreeableness levels of the participants and then each participant was asked to evaluate and order possible motivations for buying a new product by the most relevant to the less relevant.

To quantify agreeableness levels, three questions were asked for each of the sub traits that make up the trait agreeableness, these sub traits were trust, honesty, altruism, compliance, modesty, and sympathy ([Matsumoto et al., 2012](#)). A score (five-point scale, 1- Strongly disagree, ...5- Strongly agree) was given to each answer based on the degree of agreement with each statement (statements can be seen in **table 2**) and then averaged to give the final agreeableness score. Afterwards, statements concerning plausible thoughts for purchasing the new product were shown so they could be evaluated by the participants. The objective was to assess the level of importance that each participant committed to the different kinds of motivation for acquiring products.

The phone was selected as the product example for the survey questions due to being one of the most marketed products of all time, as well as having characteristics that make it an ideal point of reflection for consumer behaviour ([Grant et al., 2021](#)) These characteristics are its worldwide presence across consumer societies, as well as being a common good, or in other words, a considerable portion of the population above the age of 18 having one or sometimes even possessing two. Another factor is the lifespan of phones which is relatively small compared to other products and therefore, it is a product which people buy multiple times during their lives. Phones are also relatively complex products which have multiple points of consideration when buying one. Their price ranges are relatively big for a product and new multiple models from multiple brands are released every year.

To represent multiple reasons people often have to purchase products, a variety of statements were displayed to represent each motivation one might have to buy a phone. Each motivation for buying a phone will be worded as shown in the following table.

Statements	Motivation
The phone is sold by a very famous company.	Brand Reputation
The phone is the latest model.	Novelty
The phone has a better camera, bigger screen, and more memory than others.	Performance
The phone is visually appealing.	Aesthetics
Everyone is buying the phone and all your friends have one.	Social Trends
The phone is expensive so it must be a good one.	High Price
The phone has high reviews.	Product Opinion
The phone is cheap and has all you need, even if it does not have everything you wanted.	Simplicity
The phone is similar to your previous one and you appreciate familiarity.	Familiarity

Table 2 - Consumer purchasing motivations

DATA PROCESSING

The second step of the study was to assess the motivations for buying the phone and relate them to their level of agreeableness in order to estimate if there was a connection between the motivation and the degree of agreeableness. Agreeableness had a scoring scale between 1 and 5. Meanwhile, the different motivations were ranked based on their relative position after each participant had ordered them by most significant to less relevant. Motivations were considered as significant or in other words, regarded as being one of the main reasons for buying a product if they were ranked among the top 3 reasons for buying a product by the participants.

In order to analyse the relationship between agreeableness and the motivations, the mean and standard deviation of agreeableness for each motivation, when the motivation is considered significant, were calculated. Therefore, if a participant deems a motivation as significant the agreeableness of that participant will be added to the average agreeableness belonging to that motivation. In the end, every participant that considered that motivation as important will contribute to the average agreeableness of that motivation. This will indicate how high or low the average agreeableness is for each motivation. If people with low agreeableness give more importance to a motivation, that motivation will have low average agreeableness. The opposite is also true. If people with high agreeableness often choose a specific motivation, that motivation will have high average

agreeableness. By doing this, it is possible to have a simple and intuitive idea of what motivates people with different degrees of agreeableness the most.

In addition to the mean and standard deviation, the correlation between the agreeableness of the participants and the degree of importance attributed to each motivation by the participants was also calculated. Since the motivations are ranked by default, the correlation of spearman was used instead of other correlations. However, for the correlation to be calculated, the agreeableness of the survey participants had to be converted into a ranking scale. It was then calculated by correlating the motivation ranking with the agreeableness ranking and repeated for every motivation. Also, for the correlation to be statistically significant, the p-value was calculated along with the correlation for each motivation. In the case that the p-value is below the threshold, the correlation will be considered as significant and indicate that there is a connection between the degree of agreeableness and the motivation. All calculations were executed in Microsoft Excel (see [appendix](#) for additional information on calculation formulas).

5. RESULTS AND DISCUSSION

RESULTS ANALYSIS

There was a total of 218 respondents whose responses were considered valid. The bulk of the answers to the survey were received between the months of July and August. The survey was created with Qualtrics platform and disseminated through social media. As such, most answers are believed to have been collected in this manner. Information about gender, age and culture were not collected since they are beyond the scope of this study.

Previous studies have shown that it is relatively rare for a respondent to score below 2.5 agreeableness in a scale from 1 to 5 and the average is around 3.77 ([Weisberg et al., 2011](#)). In this case, the average agreeableness among the participants of this study is 3.63 and the standard deviation is 0.53 which is close to the population average. **Table 3** outlines the mean and standard deviation of the consumer motivations when these are considered significant (rank in the top 3) in the decision making of the consumer. Brand reputation, novelty, social trends, and product opinion reveal relatively high average agreeability, suggesting a possible positive correlation with agreeableness. On the other hand, performance, aesthetics, high price, simplicity, and familiarity indicate a low average agreeability among the respondents who elected them as relevant. Among all the motivations, not all of them number in the top 3 in the same frequency, with high price being the least tallied and performance being chosen more regularly than the others. This means that some motivations are more well represented than others in the following table.

Motivations	Agreeableness	
	Mean	SD
Brand Reputation	3.83	0.51
Product Opinion	3.78	0.53
Novelty	3.74	0.59
Social Trends	3.73	0.52
High Price	3.57	0.51
Familiarity	3.57	0.52
Simplicity	3.54	0.46
Aesthetics	3.45	0.46
Performance	3.40	0.50

Table 3 - Agreeableness mean and SD by motivation

The correlations between the motivations and agreeableness are expressed in **table 4**, where there is also present the p-value for each correlation coefficient. The correlation coefficient was calculated with the Spearman correlation while the p-value was obtained through the Student's T-test together with the sample size (see [appendix](#) for additional information on calculations). The correlation for brand reputation, novelty, performance, aesthetics, social trends, and product opinion are statistically significant seeing that the p-value is inferior to the threshold. Brand reputation, novelty, social trends, and product opinion have a positive correlation with agreeableness suggesting that an individual who has high agreeability will have higher chances of being swayed by the mentioned motivations. Conversely, performance and aesthetics show a negative correlation. By this, it is understood that the lower the agreeableness, the more probable these motivations have an impact on decision making. Price and familiarity are not statistically significant, therefore implying a lack of significant impact on consumer behaviour when considering agreeability. Simplicity is close to the acceptable p-value threshold and thus, it was prudently considered as not significant

Motivations	Agreeableness	p-value
Product Opinion	0.31	p < 0.001
Brand Reputation	0.30	p < 0.001
Social Trends	0.19	0.004
Novelty	0.17	0.012
High Price	0.02	0.791
Familiarity	-0.11	0.160
Simplicity	-0.14	0.039
Aesthetics	-0.29	p < 0.001
Performance	-0.39	p < 0.001

Table 4 - Correlation coefficient between motivations and agreeableness

HYPOTHESES DISCUSSION

The majority of hypotheses in the model were empirically supported by the results. In summary, H1, H2a (Brand Reputation), H2b (Novelty), H2c (Social Trends), H2d (Product Opinion), H3a (Performance) and H3b (Aesthetics) were backed by the results while H2e (High Price) and H3d (Familiarity) were not, either by lack of sufficient data or by lack of an existent correlation between agreeableness and the corresponding motivations. Hypothesis H3c (Simplicity) is the exception with its p-value being close to the threshold of 0.05 even if it is slightly smaller than it. For this reason, with the intention of being sensible, hypothesis H3c was deemed not supported by the empirical evidence.

Hypothesis 1 was supported, meaning that agreeableness does have a correlation with motivations for buying products even if a minority of motivations are not included in this group and lack any correlation with agreeableness. Nevertheless, results indicate that the ones which do have a correlation, have very minor p-values meaning that the correlations are statistically significant. Results also suggest that the degree of correlation among the motivations that are statistically significant vary, with ones having a relatively high correlation (performance) and others with relatively low correlation (novelty).

Hypotheses 2a, 2b, 2c, 2d were also supported by the results, demonstrating that high agreeableness positively influences motivations related to social tendencies and that having high agreeableness skews the opinions in favour of the community. These findings align with what was found in prior studies ([De Raad, 2000](#)). Brand reputation and product opinion seem to have the highest positive correlation among the social motivations with social trends coming in close second. Product novelty seems to be in the lower end but still statistically significant.

Hypothesis 2e or high prices have shown to be irrelevant when purchasing a product based on the agreeableness of an individual. This might be due the lack of acknowledgement by the participants on account of the negative associations connected with vanity or perhaps an absence of self-awareness by the participants. It can also be that the high price motivation is simply influenced by other personality traits and not agreeableness.

As for hypotheses 3a, 3b, the study reveals that agreeableness does indeed have a negative correlation with more individual preferences and informational rather than transformational messages as has been speculated in previous studies ([Myers et al., 2010](#)). Both, performance, and aesthetics have a very low p-value ($p < 0.001$) suggesting that these motivations are highly relevant for individuals with low agreeableness and are likely to influence their decision making significantly.

Regarding hypotheses 3c and 3d, these were not supported by the results. In the case of simplicity and familiarity, although they show some negative correlation with agreeableness, their statistical significance is not confirmed on account of the relatively high p-values. This means that as far as agreeableness is concerned, it has little sway over these motivations.

6. CONCLUSIONS

The results point to the consumer's agreeableness being relevant when evaluating the probability of a given product being chosen by his characteristics. Individuals who are agreeable and possess a high degree of cordiality show a propensity to value the reputation of a product or the brand responsible for it. Their choices seem to be influenced by social trends and the opinions of the people around them. Meanwhile, individuals who are less agreeable and are more confrontational show a preference for their own judgement and the opinions of other have less weight when they are considering what to purchase. This leaning towards their own personal tastes includes not only one's bias but also a disregard for social tendencies in favour of more informational descriptions. Additionally, agreeableness seems to be mostly irrelevant regarding product high price and familiarity, with both polar opposites valuing them equally.

These conclusions show that there is some significance in collecting personality information when designing marketing campaigns for a target audience. There have been studies that show women as being more agreeable than men ([Feingold, 1994](#); [Costa et al., 2001](#)) which already provides a possible viewpoint of how to apply this knowledge. However, despite the existing correlation between agreeableness and certain preferences, this does not strictly mean a relation of causality. Nonetheless, agreeableness can be used to plan marketing campaigns for certain segments of the population and in the future, provided that an efficient method of collecting individual personality data is established, it might be possible to add personality traits such as agreeableness to the more traditional predictor variables such as age in predictive models and algorithms.

7. LIMITATIONS AND RECOMMENDATIONS FOR FUTURE WORKS

It is noteworthy to mention that the study was executed by means of an online survey published in a social network. This method exhibits some limitations, namely, the population that it represents, with the significant part of the participants being young or middle-aged people that have constant access to the internet and are burdened with advertisements for a relatively significant part of their day-to-day lives. The conclusions of the study are not, by any means, exhaustive, considering some cultures are hardly represented in the survey, in view of the fact that studying the impact of cultures in consumer purchasing motivations and agreeableness is beyond the scope of this study.

Besides the limitations belonging to the specific conditions of this study, the usual constraints attached to areas of expertise that have subjective elements are also present, specifically, questions regarding personality traits requiring that the person answering the survey possesses some awareness of their own behaviour. Consumer behaviour is also a rather broad subject and there are a plethora of behaviours and nuances that were lost when generalizing and grouping different behaviours into few representative statements when evaluating them.

In the future it might be of interest to study how other personality traits influence consumer behaviour. Few empirical studies have been made regarding the impact of specialized personality traits in consumer feedback to marketing and advertising campaigns. This leaves a gap in the understanding of why consumers are motivated to make certain choices instead of others.

8. BIBLIOGRAPHY

1. Costa, P.T. & McCrae, R.R. (1988). From Catalog to Classification: Murray's Neds and the Five-Factor Model, *Journal of Personality and Social Psychology*, vol. 55, no. 2, pp. 258-65
<https://psycnet.apa.org/doiLanding?doi=10.1037%2F0022-3514.55.2.258>
2. McRae, R.R. & Costa, P.T. (1987). Validation of the Five-Factor Model of Personality across Instruments and Observers, *Journal of Personality and Social Psychology*, vol. 52, no. 1, pp. 81-90 <https://psycnet.apa.org/doiLanding?doi=10.1037%2F0022-3514.52.1.81>
3. Myers, S. D., Sen, S. & Alexandrov, A. (2010). The Moderating effect of Personality Traits on Attitudes toward Advertisements: A contingency framework. *Management & Marketing Challenges for Knowledge Society Vol.5. No. 3*, pp. 2-20.
https://www.researchgate.net/publication/259501045_The_moderating_effect_of_personality_traits_on_attitudes_toward_advertisements_A_contingency_framework
4. Hirsh, J. B., Kang, S. K., & Bodenhausen, G. V. (2012). Personalized persuasion: tailoring persuasive appeals to recipients' personality traits. *Psychological science*, 23(6), 578-581.
https://www.researchgate.net/publication/224871267_Personalized_Persuasion_Tailoring_Persuasive_Appeals_to_Recipients'_Personality_Traits
5. Goldberg, R. L. (1999). A broad-bandwidth, public-domain, personality inventory measuring the lower-level facets of several five-factor models. *Personality Psychology in Europe*, 7, 7-28. *Personality psychology in Europe*. 7. 7–28. <https://www.researchgate.net/scientific-contributions/Lewis-R-Goldberg-2072658940>
6. Costa, P.T. & McCrae, R.R. (1992). Normal Personality Assessment in Clinical Practice: The NEO Personality Inventory. *Psychological Assessment*. 4. 5-13. 10.1037/1040-3590.4.1.5.
https://www.researchgate.net/publication/232463584_Normal_Personality_Assessment_in_Clinical_Practice_The_NEO_Personality_Inventory
7. McCrae, R. R., & Costa, P. T., Jr. (1997). Personality trait structure as a human universal. *American Psychologist*, 52(5), 509–516. <https://doi.org/10.1037/0003-066X.52.5.509>
8. Poropat, A. E. (March 2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin*. 135 (2): 322–38.
<https://doi.apa.org/doiLanding?doi=10.1037%2Fa0014996>
9. Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*. 41: 417–40.
<https://www.annualreviews.org/doi/10.1146/annurev.ps.41.020190.002221>

10. Shrout, P. E. & Fiske S. T. (1995). *Personality research, methods, and theory*. Psychology Press.
[https://books.google.pt/books?hl=en&lr=&id=XeVHAwAAQBAJ&oi=fnd&pg=PP1&dq=Shrout,+P.+E.+%26+Fiske+S.+T.+\(1995\).+Personality+research,+methods,+and+theory.+Psychology+Press.&ots=OPdsldLwAt&sig=hQ3tcnKV4BzjeeGrVelz26a16rU&redir_esc=y#v=onepage&q=Shrout%2C%20P.%20E.%20%26%20Fiske%20S.%20T.%20\(1995\).%20Personality%20research%2C%20methods%2C%20and%20theory.%20Psychology%20Press.&f=false](https://books.google.pt/books?hl=en&lr=&id=XeVHAwAAQBAJ&oi=fnd&pg=PP1&dq=Shrout,+P.+E.+%26+Fiske+S.+T.+(1995).+Personality+research,+methods,+and+theory.+Psychology+Press.&ots=OPdsldLwAt&sig=hQ3tcnKV4BzjeeGrVelz26a16rU&redir_esc=y#v=onepage&q=Shrout%2C%20P.%20E.%20%26%20Fiske%20S.%20T.%20(1995).%20Personality%20research%2C%20methods%2C%20and%20theory.%20Psychology%20Press.&f=false)
11. O'Connor, B. P. (June 2002). A quantitative review of the comprehensiveness of the five-factor model in relation to popular personality inventories. *Assessment*. 9 (2): 188–203.
<https://journals.sagepub.com/doi/10.1177/1073191102092010>
12. Costa, P.T., & Busch, M. C., Zonderman, A. & McCrae, R.R. (1986). Correlations of MMPI Factor Scales With Measures of the Five Factor Model of Personality. *Journal of personality assessment*
https://www.researchgate.net/publication/19341990_Correlations_of_MMPI_Factor_Scales_With_Measures_of_the_Five_Factor_Model_of_Personality
13. Thompson, E. R. (October 2008). Development and Validation of an International English Big-Five Mini-Markers. *Personality and Individual Differences*. 45 (6): 542–548.
<https://www.sciencedirect.com/science/article/abs/pii/S0191886908002195?via%3Dihub>
14. Mershon, B. & Gorsuch, R. L. (1988). Number of factors in the personality sphere: does increase in factors increase predictability of real-life criteria?, *Journal of Personality and Social Psychology*. 55 (4): 675–80. <https://doi.apa.org/doiLanding?doi=10.1037%2F0022-3514.55.4.675>
15. Graziano, W. G. & Eisenberg, N. (1997). Agreeableness: A dimension of personality.
<https://www.sciencedirect.com/science/article/pii/B9780121346454500020>
16. Kaufman, S. B., Yaden, D. B., Hyde, E. & Tsukayama, E. (March 2019). The Light vs. Dark Triad of Personality: Contrasting Two Very Different Profiles of Human Nature. *Frontiers in Psychology*. 10: 467. <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.00467/full>
17. Matsumoto, D. & Juang, L. (2012). *Culture and Psychology: 5th Edition*. Belmont, California: Wadsworth-Cengage Learning. p. 271. <https://studylib.net/doc/8927479/culture-and-psychology--5th-ed>.
18. Kardes, F., Cronley, M. & Cline, T. (2011). *Consumer Behaviour*, Mason, OH, South-Western Cengage, p.9. [https://books.google.pt/books?id=A-fKAgAAQBAJ&printsec=frontcover&dq=Kardes,+F.,+Cronley,+M.+%26+Cline,+T.+\(2011\).+Consumer+Behaviour,+Mason,+OH,+South-](https://books.google.pt/books?id=A-fKAgAAQBAJ&printsec=frontcover&dq=Kardes,+F.,+Cronley,+M.+%26+Cline,+T.+(2011).+Consumer+Behaviour,+Mason,+OH,+South-)

[Western+Cengage,+p.9.&hl=en&sa=X&ved=2ahUKEwi7n-iugsr5AhV8VvEDHSy6D_IQ6AF6BAgDEAI#v=onepage&q&f=false](#)

19. Sassatelli, R. (2007). *Consumer Culture: History, Theory and Politics*, Sage, p. 10
[https://books.google.pt/books?hl=en&lr=&id=WqyFnLjBZPQC&oi=fnd&pg=PP2&dq=Sassatelli,+R.+\(2007\).+Consumer+Culture:+History,+Theory+and+Politics,+Sage,+p.+10&ots=EPiFtyT9A7&sig=T74a2ap84LXtKduhOcDpxrH9yoc&redir_esc=y#v=onepage&q=Sassatelli%2C%20R.%20\(2007\).%20Consumer%20Culture%3A%20History%2C%20Theory%20and%20Politics%2C%20Sage%2C%20p.%2010&f=false](https://books.google.pt/books?hl=en&lr=&id=WqyFnLjBZPQC&oi=fnd&pg=PP2&dq=Sassatelli,+R.+(2007).+Consumer+Culture:+History,+Theory+and+Politics,+Sage,+p.+10&ots=EPiFtyT9A7&sig=T74a2ap84LXtKduhOcDpxrH9yoc&redir_esc=y#v=onepage&q=Sassatelli%2C%20R.%20(2007).%20Consumer%20Culture%3A%20History%2C%20Theory%20and%20Politics%2C%20Sage%2C%20p.%2010&f=false)
20. Foxal, G. (2001). *Foundations of Consumer Behaviour Analysis, Marketing Theory*, Vol. 1, No. 2, pp 165–199
https://www.researchgate.net/publication/247756948_Foundations_of_Consumer_Behaviour_Analysis
21. Sheth, J. N. (1985). *History of Consumer Behavior: A Marketing Perspective*, in *Historical Perspective in Consumer Research: National and International Perspectives*, Jagdish N. Sheth and Chin Tiong Tan (eds), Singapore, Association for Consumer Research, 1985, pp 5-7.
<https://www.acrwebsite.org/volumes/12106/volumes/sv05/SV-05>
22. Bettman, J. R., Luce, M. F. & Payne, J. W. (1998). *Constructive Consumer Choice Processes. The Construction of Preference*. 25. 323-341. 10.1017/CBO9780511618031.018.
<https://academic.oup.com/jcr/article/25/3/187/1795625?login=false>
23. Hermes, A. & Riedl, R. (2021). *Influence of Personality Traits on Choice of Retail Purchasing Channel: Literature Review and research Agenda*
https://www.researchgate.net/publication/356805907_Influence_of_Personality_Traits_on_Choice_of_Retail_Purchasing_Channel_Literature_Review_and_Research_Agenda
24. De Raad, B. (2000). *The Big Five Personality Factors: The Psycholexical Approach to Personality*, Hogrefe & Huber, Göttingen, Germany
https://www.researchgate.net/publication/232576768_The_Big_Five_Personality_Factors_The_psycholexical_approach_to_personality
25. Graziano, W. G., Jensen-Campbell, L. A., & Hair, E. C. (1996). *Perceiving interpersonal conflict and reacting to it: The case for agreeableness*. *Journal of Personality and Social Psychology*, 70(4), 820–835. <https://doi.org/10.1037/0022-3514.70.4.820>
26. Grant, A. E. & Meadows, J. H. (2021). *Communication Technology Update and Fundamentals: 17th Edition*
https://books.google.pt/books?id=VHnpDwAAQBAJ&pg=PT410&lpg=PT410&dq=billion+mobile+phones+sold...+Nuff+said?+article&source=bl&ots=i_I-

[RALeZn&sig=ACfU3U32Xd1XBOSnARuAtNCaY4MhLvtvA&hl=en&sa=X&ved=2ahUKEwjAiqjpv9P6AhXPwYUKHSnCA18Q6AF6BAgEAM#v=onepage&q&f=false](https://www.researchgate.net/publication/51594567_Gender_Differences_in_Personality_across_the_Ten_Aspects_of_the_Big_Five)

27. Weisberg, Y. J., DeYoung, C. G. & Hirsh, J. B. (2011). Gender differences in personality across the ten aspects of the Big Five
https://www.researchgate.net/publication/51594567_Gender_Differences_in_Personality_across_the_Ten_Aspects_of_the_Big_Five
28. Feingold A. (1994). Gender differences in personality: a meta-analysis. Psychol. Bull. 116, 429–456
<https://cin.ufpe.br/~ssj/Gender%20differences%20in%20Personality%20A%20Meta-.pdf>
29. Costa P. T., Jr., Terracciano A. & McCrae R. R. (2001). Gender differences in personality traits across cultures: robust and surprising findings. J. Pers. Soc. Psychol. 81, 322–331
<https://www.cin.ufpe.br/~ssj/Genderdifferences%20in%20personality%20traits%20across%20cultures%20Robust%20andsurprising%20findings.pdf>

9. APPENDIX

FULL SURVEY

Dear participant,

In this survey, we will invite you to share how you perceive yourself and what motivates you to buy products.

It will take less than 5 minutes to complete. Answering any of the following questions does not involve risk, nor is there a right or wrong answer.

Please remember that your participation in this survey is entirely voluntary, so you may choose not to participate, and you can give up at any time. However, your responses will remain anonymous, and are used only for academic purposes.

Thank you very much!

Informed Consent Form

I declare that I am 18 or older and agree to participate in this research. I declare that I was informed that my participation in this study was voluntary, that I was free to leave at any time without penalty, and all data is confidential.

By clicking "I agree", I declare that I am at least 18 years old.

- ☐ I agree
☐ I do not agree

Select the option that describes you the most.

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I do not trust people easily.	☐	☐	☐	☐	☐
I believe others usually have good intentions.	☐	☐	☐	☐	☐
I assume the worst when dealing with people.	☐	☐	☐	☐	☐
I lie to get what I want.	☐	☐	☐	☐	☐
I feel bad when lying to others.	☐	☐	☐	☐	☐
I see lying as a last resort.	☐	☐	☐	☐	☐
I am not interested in other people's problems.	☐	☐	☐	☐	☐
I go out of my way to help others when I can.	☐	☐	☐	☐	☐
I would rather avoid helping someone if it takes too much of my time.	☐	☐	☐	☐	☐
I love a good fight.	☐	☐	☐	☐	☐
I might yell while having a discussion.	☐	☐	☐	☐	☐
I have no problem apologising if I did something wrong.	☐	☐	☐	☐	☐
I consider myself above average.	☐	☐	☐	☐	☐
I believe I have a lot more virtues than flaws.	☐	☐	☐	☐	☐
I usually avoid talking about myself.	☐	☐	☐	☐	☐
I am indifferent to the feelings of others.	☐	☐	☐	☐	☐
I feel sympathy for those who are worse off than myself.	☐	☐	☐	☐	☐
I feel sad when others around me are sad.	☐	☐	☐	☐	☐

Imagine you want to buy a new smartphone. Order the following statements by what describes your motivations the best when buying one.

(Drag and drop)

The phone is sold by a very famous company.	1
The phone is the latest model.	2
The phone has a better camera, bigger screen and more memory than others.	3
The phone is visually appealing.	4
Everyone is buying the phone and all your friends have one.	5
The phone is expensive so it must be a good one.	6
The phone has high reviews.	7
The phone is cheap and has all you need, even if it does not have everything you wanted.	8
The phone is similar to your previous one and you appreciate familiarity.	9

We thank you for your time spent taking this survey.

Your response has been recorded.

