



The Impact of the Need for Social Approval on Compulsive Buying Behavior: Exploring the Mediating Role of Brand Attachment

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ABSTRACT

Title: The Impact of the Need for Social Approval on Compulsive Buying Behavior: Exploring the Mediating Role of Brand Attachment

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Compulsive buying is defined as a persistent and habitual purchasing response to unpleasant feelings or circumstances, and it has detrimental effects on society, psychology, and the economy. Although compulsive shopping has been recognized as a problem historically, it has become far more common in the last ten years. With the prevalence of extrinsic motives rising and their potential negative effects on mental health, it is imperative that researchers better understand how emotional brand attachment and the extrinsic motive of the need for social approval, influence the compulsion to buy. Several statistical tests were conducted based on the data collected through the online survey of 178 participants. The findings provide a strong foundation for further research since they demonstrate that compulsive buying behavior is a direct result of the need for social approval. However, this research failed to prove that emotional brand attachment plays a significant role as a mediator between these two variables and that the need for social approval has an impact on emotional brand attachment. Moreover, the direct effect of emotional brand attachment on compulsive buying behavior was found to be non-significant. Limitations of this study, proposals for further research, and academic and managerial implications of the findings are discussed in detail.

Keywords: the need for social approval, emotional brand attachment, compulsive buying behavior, compulsive buyer, extrinsic motives

SUMÁRIO

Título: O Impacto da Necessidade de Aprovação Social no Comportamento de Compra Compulsiva: Explorando o papel mediador do apego à marca

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A compra compulsiva é definida como uma resposta persistente e habitual de compra a sentimentos ou circunstâncias desagradáveis, e tem efeitos prejudiciais na sociedade, na psicologia e na economia. Embora as compras compulsivas tenham sido historicamente reconhecidas como um problema, tornaram-se muito mais comuns nos últimos dez anos. Com o aumento da prevalência de motivos extrínsecos e os seus potenciais efeitos negativos na saúde mental, é imperativo que os investigadores compreendam melhor como a ligação emocional à marca e o motivo extrínseco da necessidade de aprovação social influenciam a compulsão para comprar. Com base nos dados recolhidos através do inquérito em linha a 178 participantes, foram realizados vários testes estatísticos. Os resultados fornecem uma base sólida para investigação futura, uma vez que demonstram que o comportamento de compra compulsivo é um resultado direto da necessidade de aprovação social. No entanto, esta investigação não conseguiu provar que a ligação emocional à marca desempenha um papel significativo como mediador entre estas duas variáveis e que a necessidade de aprovação social tem um impacto na ligação emocional à marca. Além disso, o efeito direto da ligação emocional à marca no comportamento de compra compulsiva foi considerado não significativo. As limitações deste estudo, as propostas para investigação futura e as implicações académicas e de gestão dos resultados são discutidas em pormenor.

Palavras-chave: necessidade de aprovação social, ligação emocional à marca, comportamento de compra compulsiva, comprador compulsivo, motivos extrínsecos

TABLE OF CONTENTS

ABSTRACT:.....	Error! Bookmark not defined.
SUMÁRIO	Error! Bookmark not defined.
TABLE OF CONTENTS.....	iii
TABLE OF FIGURES.....	v
TABLE OF TABLES	vi
TABLE OF APPENDICES	vii
GLOSSARY.....	viii
CHAPTER 1: INTRODUCTION	1
1.1 Background and research statement	1
1.2 Problem statement.....	2
1.3 Relevance	3
1.4 Research methods	3
1.5 Dissertation outline	3
CHAPTER 2: LITERATURE REVIEW.....	4
2.1 Compulsive buying behavior.....	4
2.2 Need for social approval	5
2.3 Emotional Brand Attachment	8
2.4 Conceptual model	10
CHAPTER 3: METHODOLOGY.....	10
3.1 Research Approach.....	10
3.2 Primary Data.....	11
3.2.1 Data Collection	11
3.2.2 Stimuli Development	12
3.2.3 Measurement / Indicators	13
3.3 Data Analysis.....	17
4.1 Results.....	17
4.1.1 Cleaning the data.....	17
4.1.2 Variables Creation.....	18
4.1.3 Sample Characterization.....	19
4.1.4 Measure Reliability	19
4.1.5 Hypothesis testing	20
4.1.7 Results from Hypothesis Testing	22

4.1.8 Further results	25
4.2 Discussion	28
CHAPTER 5: CONCLUSIONS AND LIMITATIONS	30
5.1 Main Findings & Conclusions	30
5.2 Managerial / Academic Implications	31
5.3 Limitations and Further Research.....	31
REFERENCE LIST:.....	ix
APPENDICES.....	xv

TABLE OF FIGURES

Figure 1: Conceptual Model10

Figure 2: Martin-Larsen Approval Motivation Scale.....14

Figure 3: Emotional Brand Attachment Scale15

Figure 4: Compulsive Buying Scale.....16

Figure 5: The effect of NSA on CBB22

Figure 6: The effect of NSA on EBA23

Figure 7: The effect of EBA on CBB24

Figure 8: Effect of the NSA on CBB through EBA25

TABLE OF TABLES

Table 1: Summary of stimuli13

Table 2: Operational Model16

Table 3: Valid Observations18

Table 4: Reliability Test for Multi-Item Scales20

Table 5: Tests of Normality21

Table 6: Multicollinearity Analysis22

Table 7: Difference in NSA among brands26

Table 8: Kruskal-Wallis Test EBA27

Table 9: Post Hoc Test EBA27

Table 10: Kruskal-Wallis Test CBB28

TABLE OF APPENDICES

Appendix 1: Questionnaire	xv
Appendix 2: Linear Regression Assumptions.....	xxviii
Appendix 3: H1- Simple Linear Regression.....	xxix
Appendix 4: H2- Simple Linear Regression.....	xxx
Appendix 5: H3- Simple Linear Regression.....	xxxi
Appendix 6: H4- Mediator Effect & Full Model Test.....	xxxii
Appendix 7: Difference in NSA among brands	xxxiv
Appendix 8: Difference in EBA among brands	xxxv
Appendix 9: Difference in CBB among brands	xxxvi

GLOSSARY

BAS - Brand Attachment Scale

BAT - Brand Attachment Theory

CB - Compulsive Buying

CBB - Compulsive Buying Behavior

CBS - Compulsive Buying Scale

EBA - Emotional Brand Attachment

GCT - Goal Content Theory

ICD - Impulse-Control Disorder

MLAMS - Martin- Larsen Approval Motivation Scale

NSA -The Need for Social Approval

OCD - Obsession-Compulsive Disorder

SDT - Self-Determination Theory

CHAPTER 1: INTRODUCTION

1.1 Background and research statement

Due to its rapid widespread and negative implications, researchers have been interested in compulsive buying behavior, especially in recent years. Compulsive buying, a term that is defined as a chronic, habitual purchasing behavior that occurs as a primary reaction to unpleasant situations or emotions, can lead to not only economic but also psychological and societal consequences (Faber & O'Guinn, 1992).

The objective of many research was to define the factors or causes that could lead to such behavior to either contribute to positive developments in compulsive buying prevention and treatment methods or “just” to better understand which elements make up the personality structure of the compulsive buyer (e.g. Otero-López & Villardefrancos Pol, 2013). For example, one research demonstrates how higher levels of compulsive buying are linked to lower amounts of self-control (Achtziger et al., 2015), while a more recent one proves how actual self-congruence directly affects impulsive buying (Japutra et al., 2019a). This study focuses on the extrinsic motive of the need for social approval as the underlying cause of compulsive purchasing.

Over the past few decades, it has become common knowledge that individuals who prioritize intrinsic life aspirations rather than extrinsic goals indicate higher levels of subjective well-being (Otero-López & Villardefrancos, 2015). As a result of contemporary capitalist culture, extrinsic motivation is increasingly growing, which leads to different problems such as psychological distress (Domagalski & Kasser, 2002) or even alcoholism (Shamloo & Cox, 2010). Therefore, one may conclude that excessive focus on external goals can have severe negative consequences. Currently, there is limited research on the relationships between external goals and compulsive buying, and even fewer studies focus only on the need for social approval and compulsive purchasing. Further examination of the influence of the need for social approval in this behavior can help one understand how societal expectations influence the psychological well-being of individuals.

Moreover, this study proposes brand attachment as a mediating variable between approval-seeking and compulsive buying behavior. It is proven that brand attachment, the strength of the emotional link that connects the consumer and the brand (Malär et al., 2011), stimulates not only positive but also negative consequences (Japutra et al., 2014). Research has shown that the degree to which customers are emotionally attached to certain brands has an impact on their inclination to engage in compulsive purchases (e.g. Flight & Sacramento, 2015). According to other research, compulsive buyers tend to purchase apparel (Ridgway et al., 2008) to gain social

acceptability (Desarbo & Edwards, 1996). To examine this finding further, this study focuses on apparel brands.

To the best of our knowledge, there is only limited empirical research focusing specifically on the need for approval and investigating how it connects to brand attachment and compulsive buying. Thus, the research on brand attachment as a mediator element between the need for social approval and compulsive purchasing behavior can offer insightful information about the interplay between these variables and aid academics and marketers in understanding overall consumer behavior.

1.2 Problem statement

The issue being looked at in this study is compulsive buying behavior, which is defined as a persistent and habitual purchasing response to unpleasant feelings or circumstances with negative societal, psychological, and economic repercussions (Faber, 2004). There have been only a few investigations into the relationship between extrinsic motivations and compulsive buying. Therefore, understanding how extrinsic motives, specifically the need for social approval, promote compulsion to purchase and how emotional brand attachment can influence this link is a crucial field of research given the current increasing incidence of extrinsic motives and their possible harmful impact on psychological health.

To sum up, this study examines four different interconnections. First, it looks at the relationship between the need for social approval and compulsive buying. Second, it explores the impact of emotional brand attachment on compulsive purchasing behavior. Third, it looks at the effect of the need for social approval on emotional brand attachment. Finally, this research examines the mediating effect of brand attachment on the relationship between the need for social approval and compulsive purchasing behavior.

Therefore, the research questions that arise are:

- How does the need for social approval affect compulsive buying behavior?
- How does the need for social approval affect emotional brand attachment?
- How does brand attachment affect people's propensity for compulsive purchase behavior?
- What's the role of brand attachment in the relationship between the need for social approval and compulsive buying behavior?

1.3 Relevance

This study assumes that placing too much importance on seeking approval might result in unhealthy patterns of consumption, which harm the environment and society. Therefore, discussions about sustainability and reasonable consumption habits can be driven by this research, leading toward the goal of a more sustainable future. Second, if the research shows how brand attachment is a key mediator between the need for social approval and compulsive behavior, companies can concentrate on implementing ethical marketing strategies in order to reduce compulsive buying habits driven by this extrinsic objective.

Lastly, by demonstrating that obsessive buying behavior is a direct outcome of the need for social approval, the study's findings could serve as a foundation for future research that may provide useful developments for programs aimed at preventing and treating compulsive buying. In conclusion, both researchers looking to improve their understanding of consumer behavior and professionals looking to create more successful marketing campaigns and actions to encourage responsible consumption can benefit from the findings.

1.4 Research methods

Primary data was used to tackle the research questions mentioned above. Both qualitative and quantitative approaches were used. The stimuli were created to avoid bias and assess emotional brand attachment among participants. For this purpose, a focus group was conducted, followed by one-on-one interviews to confirm the stimulus creation. After that, the online survey was published to get insights about the need for social approval and its effect on compulsive buying behavior while taking into consideration emotional brand attachment as a mediator between the two.

All statistical analyses were run in SPSS, where the majority of hypotheses were tested by conducting Simple Linear Regressions. Furthermore, one type of process model by Hayes was used to address possible mediator links alongside ANOVAs to see if there are any significant differences in constructs between the brands. If the data was non-parametric, Kruskal-Wallis Tests were used as a replacement for One-Way ANOVAs.

1.5 Dissertation outline

The following chapter of this thesis will be a literature review. In this chapter, definitions of the analyzed constructs are going to be outlined, together with findings from previous research that link those to the development of the hypothesis. After that, the methodology chapter will be presented, where adopted techniques and the reasons why those specific approaches were used

will be explained. The next chapter will summarize the results from the data analysis, outlining possible reasons for such outcomes. The final chapter will include the conclusions, as well as its limitations and potential implications.

CHAPTER 2: LITERATURE REVIEW

The study of compulsive consumer purchasing is a crucial component of consumer behavior research. Examining negative consumption phenomena could offer revised or fresh viewpoints on the research of positive consumption habits. Research on the harmful effects of consumption is also beneficial because it may be able to improve society's quality of life, a crucial condition for the value of any study (Shoham & Makovec Brenčič, 2003). As previously mentioned, research about the relationship between approval-seeking and compulsive buying behavior, which is mediated through emotional brand attachment, is very limited. In order to create a framework for understanding how compulsive buying, the need for social approval, and emotional brand attachment interact, this chapter will examine these three concepts together with their definitions and findings from previous studies. By finding gaps in the literature, this literature review will explore these links and their impact on customer behavior more deeply. At the end of the chapter, the conceptual model framework will be presented.

2.1 Compulsive buying behavior

Compulsive buying (CB) has historically been acknowledged as a problem, and Kraepelin first defined it as "oniomania" more than 100 years ago (Kraepelin, 1909). In the past ten years, there has been a boom in compulsive buying behavior (CBB) (Neuner et al., 2005), which is more prevalent among younger people (Dittmar, 2005). Despite the fact that CB research is expanding, there is still a need for a deeper comprehension and awareness of this issue. Even while CB seems to be more common than ever, particularly among younger people, it is frequently overlooked or downplayed in healthcare settings (Müller et al., 2015).

CB has been described as repeated, excessive buying that is out of control, happens repeatedly or regularly, and has negative effects (Faber, 2004). This term encompasses aspects of both impulse control issues (i.e., the inability to control the need or impulse to buy) and obsessive-compulsive behaviors (i.e., preoccupation with buying and repetitive buying) (Ridgway et al., 2008). An obsession-compulsive disorder (OCD) is an anxiety disorder with obsessions (thoughts and preoccupations) and urges (behaviors) that trigger distress and anxiety, fade away large amounts of time, and interfere with a person's daily functioning. An impulse-control

disorder (ICD) represents unavoidable impulses to engage in destructive actions. When a consumer makes an impulsive purchase, they do so spontaneously, unconsciously, quickly, and kinetically. This type of purchase is followed by a hasty decision-making process and a leaning toward instant possession (Japutra et al., 2019b). OCD, on the other hand, describes an uncontrollable impulse that is accompanied by an obsession with buying and repetitive purchases to ease tension (Ridgway et al., 2008). In this study, CB will be studied as a whole without distinguishing between OCD and ICD.

A lot of research has demonstrated how compulsive purchasing behavior leads to negative consequences. Some of those negative implications can be reflected in partnerships, collaborations, and self-concept domains (such as guilt) and cause distress and behavior that may result in relatively substantial debts (Achtziger et al., 2015). A small percentage of people who visit malls regularly suffer from compulsive buying disorder, which is linked to significant and reliable psychopathology indicators such as borderline personality disorder and substance misuse. In comparison to non-compulsive buyers, compulsive buyers are three times more likely to have an eating disorder and more than twice as likely to abuse drugs (Maraz et al., 2016).

Additionally, compulsive purchasing is positively correlated with the impulsive traits of urgency, lack of perseverance, and lack of premeditation (Billieux et al., 2008). According to studies, obsessive shoppers also experience increased degrees of obsession, anxiety, and depression (Scherhorn, 1990). It has also been demonstrated that some factors, like materialistic beliefs and the desire to purchase for one's ideal self (Dittmar, 2005), self-esteem (Yurchisin & Johnson, 2004), and the neurotic personality trait (Otero-López & Villardefrancos Pol, 2013), all play significant roles in the development of compulsive shopping. Moreover, it seems that one in twenty people have CBB at some point in their lives and that being young and a woman is linked to a higher risk of CBB (Maraz et al., 2016).

Furthermore, a few structured interviews and self-ratings have been established that may be utilized to diagnose the CBB issue. The most commonly used scale in research that investigated compulsive purchasing behavior is the Compulsive Buying Scale (CBS) by Faber and O'Guinn (Müller et al., 2015). This screening tool for CB is going to be employed as well in this study, and the methodology chapter will go into greater detail about it.

2.2 Need for social approval

According to Self-Determination Theory (SDT), the inner resources that an individual evolves are crucial for personality formation and behavioral self-regulation (Ryan, 2017). Additionally,

Goal content theory (GCT) argues that people who are motivated by intrinsic goals—such as personal development and community service—aim towards self-actualization as opposed to those who are motivated by extrinsic goals, which focus on attaining external validation for one's self-worth (Zhang Ying, 2018)

Based on the GCT, achieving intrinsic goals can forecast many favorable outcomes, including academic performance and physical self-worth, whereas pursuing extrinsic goals is linked to negative consequences, including exercise anxiety, worse performance, and less persistence in physical exercise and academic areas (Vansteenkiste et al., 2004). The enjoyment that is felt from accomplishing extrinsic goals fades quickly, and by focusing on those goals, the person continues to hinder the satisfaction of his or her actual needs (Deci & Ryan, 2000). Therefore, one may say that when chasing an external goal, a sort of hedonic treadmill is created (Diener Ed, 2009).

The literature classifies approval motivation as an extrinsic motivation. Extrinsic incentives prioritize receiving praise, recognition, approval, and fulfillment from other people (Panisoara et al., 2015). According to the definition, the drive to conform, caring about other people's opinions, and the need to fit in with society are all indications of the need for social approval (NSA) (Twenge & Im, 2007). Moreover, the drive to win over others' acceptance and fight off rejection is referred to as approval motivation (Boyle et al., 2015). Naturally, NSA is a factor that promotes social integration, supports social behavior, and may be used to predict how people would perform in various organizations. People are tempted to conform not only to the primary (how to dress, haircut, etc.) but also to the secondary norms of a certain group (Panisoara et al., 2015). NSA is a sign of social desirability or of a person's propensity to look for validation from the ones that are deemed of value to them (Crowne & Marlowe, 1960). Someone who has a strong desire for social acceptance tends to rely on the opinions of others and behaves in a way that he or she thinks would win the respect of others. Such a person lacks the self-assurance to behave contrary to what they see as the accepted or common opinion. On the other hand, an individual who has a low desire for social acceptability tends to be more secure in their own attitudes and behaviors. Such a person is less compelled to follow trends and is, therefore, more likely to deviate from conventional attitudes and behaviors than the high approval seeker (Sosik & Dinger, 2007). In this study, the term need for social approval (NSA) refers to a personality trait that deals with a person's demand for social approval.

When reading through existing research, it is intriguing to observe the lack of studies about the potential role of personal goals in CB, especially nowadays, where aggressive marketing strategies are intended to strengthen the encouragement of extrinsic goals and materialistic

values that ultimately drive the individual to continuously purchase increasing quantities of goods (Otero-López & Villardefrancos, 2015). Additionally, to the best of our knowledge, there are no studies that have exclusively focused on the need for social approval as an extrinsic goal that influences such behavior patterns.

Although there aren't many findings on this subject, they offer some insightful information and a solid framework for this study. According to Kasser & Ryan, 1996, financial success, appearance, and popularity are external goals that are closely linked to the idea of materialism, which is seen as a means to obtain the end goal of external approval or receiving rewards. One study found that the high-compulsive purchasing propensity group exhibited noticeably higher levels of importance given to each and every one of the external goals (Otero-López & Villardefrancos, 2015). Moreover, according to Tunnel Gil, 2010 people with high levels of public self-consciousness tend to have low self-esteem and high requirements for social recognition and exhibition. In relation to this matter, it has been demonstrated that those people are more prone to be materialistic and engage in compulsive buying than those with low levels (Xu, 2008). In addition, it is proven that compulsive consumers purchase goods like apparel and accessories (Ridgway et al., 2008) to satisfy their desire for self-expression in order to feel better, increase their sense of self-worth, and gain social acceptability (Desarbo & Edwards, 1996). According to Bearden et al., 1989, if one is inclined to buy things that correspond to what other people expect, all to improve one's reputation in their eyes through their selection of goods and brands, then one has a propensity for normative interpersonal influence. Linked to this, one study has proven that compulsive purchasers are indeed more vulnerable to normative interpersonal influence because getting social approval is crucial to them and, as a consequence, gaining acceptance from others is one of the most relevant reasons why buyers engage in CB (Kukar-Kinney et al., 2016). Similar findings come from another study, which indicated that obsessive buyers have low self-esteem and look to other people's praise to make up for it (Ertelt et al., 2009).

To sum up, the drive to win over others' acceptance and stave off rejection is referred to as approval motivation. People with strong approval motivation (or "the need for approval") are more motivated to control their public impressions in ways that will win approval. They are also more concerned with their public image and others' opinions (Scott & Schlenker, 1981). NSA can be measured with various scales, but the one used in this study is called the Martin-Larsen Approval Motivation Scale (MLAMS). The MLAMS measures the degree to which respondents claim to take part in activities that reflect a desire to receive positive feedback and

social reinforcing and to steer clear of unfavorable assessments and social sanctions (Boyle et al., 2015). More about the scale will be discussed in the methodology chapter.

After reviewing existing literature, one may conclude that it is crucial and necessary to look into the role that the NSA plays in this growing problem of CBB. As a result, the research suggests the following hypothesis:

H1: The need for social approval positively affects compulsive buying behavior.

2.3 Emotional Brand Attachment

Attachment is a fundamental human need that represents an emotional, target-specific link between a person and a target (Orth et al., 2010). According to Attachment theory, the evolution of a person's self-concept and social perspective can be impacted by attachment to an object (Collins & Read, 1990).

People can also form and maintain emotionally charged relationships with brands through a sense of affection, passion, and connection (Alnawas Ibrahim, 2018). Based on the fundamentals of attachment theory, customer brand attachment is defined as “the strength of the bond connecting the brand with the self” (Park et al., 2010). To create long-lasting consumer interactions, researchers oftentimes believe that brand attachment is more essential than brand attitude and loyalty (Park et al., 2010). Brand attachment creates a positive impact on a firm’s profitability and brand equity (Heinberg et al., 2020), which is the reason why brand managers have placed a great emphasis on creating an emotional connection with customers (Shimul, 2022). In this study, the term emotional brand attachment (EBA) and the term “brand attachment” have the same meaning. Moreover, the scale that was employed to measure different levels of EBA among participants was developed in 2005 by Thomas, MacInnis, and Park, and it is called The Brand Attachment Scale (BAS) (Thomson et al., 2005).

Recent qualitative research has shown that brand attachment can also result in negative behaviors like trash-talking (Japutra et al., 2022). According to the findings from another research, brand attachment leads to impulsive/compulsive purchases and mediates the impact of materialism and utilitarian value on compulsive buying (Lim et al., 2020). Additionally, it has been found that higher degrees of brand attachment were more likely to be present in high-level compulsive buyers. Moreover, brand attachment encourages compulsive behavior when buying the same brand during future purchases (Lee & Workman, 2015). On the other hand, a different study shows how compulsive buying tendencies lead to brand attachment. The reasoning behind this is that consumers who purchase goods that make them feel better about

themselves feel more linked to their ideal selves, which promotes brand attachment (Flight & Sacramento, 2015b). On the contrary, this research will try to prove how EBA positively affects CBB.

There are only a few studies that looked at the relationship between extrinsic motives and brand attachment. One research demonstrated how, contrary to the assumption in this study, extrinsic motives actually have a moderating influence on the brand attachment process (Proksch et al., 2015). However, different research shows how achieving self and social goals is one of the crucial causes of brand attachment (Cheong, 2013). In addition, it is proven that social-image congruence also has a positive relationship with brand attachment. Social self-image congruence is described as the degree to which consumers' ideas about how they are perceived by others are compatible with the brand image. Thus, buyers normally purchase or use a brand to express themselves to others, which results in brand attachment (Kim 2015). One of the goals of this study is to demonstrate that the NSA leads to EBA.

As previously noted, this study is going to investigate how EBA as a mediator influences the relationship between the NSA, as one of the extrinsic goals, and CBB. However, the research that looked specifically at this relationship is very limited. Specifically, one study looked at the relationship between self-congruence and CBB and how EBA can serve as a mediator in this context. By definition, self-congruence is a fit between brand personality and consumers' self-concept (Aaker, 1999). The degree to which the personalities of the brands support consumers' perceptions of who they really are is known as actual self-congruence; on the other hand, the degree to which the brands' personalities support consumers' aspirations of who they would like to be in the future is known as ideal self-congruence. The findings from the study suggested that EBA mediates the interaction between actual self-congruence and impulsive buying only partially, but the relationship between ideal self-congruence and impulsive buying fully (Japutra et al., 2019b). Since the NSA is one of the self-congruence motives (J. Kim, 2015), the described findings provide a good basis to guide further research and affirm how essential it is to comprehend this relationship and its effects.

Thus, this study proposes additional three hypotheses:

H2: The need for social approval positively affects emotional brand attachment.

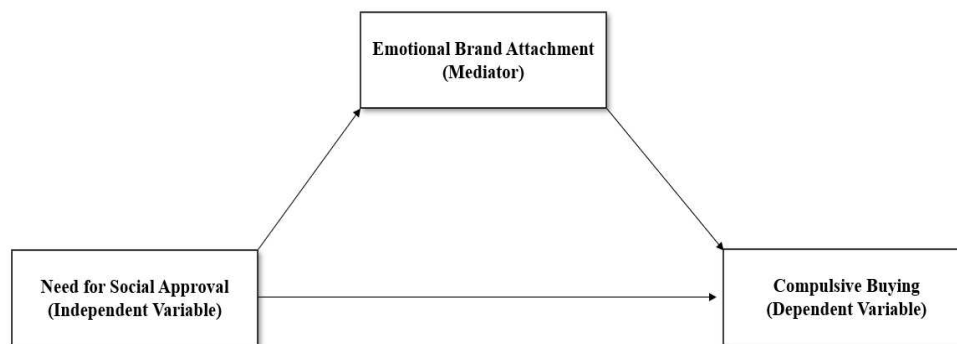
H3: Emotional brand attachment positively affects compulsive buying behavior.

H4: Emotional brand attachment mediates the relationship between the need for social approval and compulsive buying behavior.

2.4 Conceptual model

The conceptual framework connecting the NSA, EBA, and CBB relies on both GCT and Brand Attachment Theory (BAT) and is shown in Figure 1. This conceptual model demonstrates a positive relationship between the NSA and CBB (H1) and the NSA and EBA (H2). Following that, EBA is positively correlated with CBB (H3). As a result, the theoretical framework asserts that EBA fully mediates the links between the NSA and CBB (H4).

Figure 1: Conceptual Model



CHAPTER 3: METHODOLOGY

In addition to outlining the research questions and research of this dissertation, this chapter also shows how the hypotheses that were developed are handled. The research methodology will be discussed first, and then the types of data that were used for the study will be briefly summarized. Finally, details regarding data measurement and development will be given.

3.1 Research Approach

The research approach that was chosen in this research is the problem identification approach. The goal of problem identification research is to find issues that may not be immediately obvious but are nonetheless present or are likely to appear in the future (Shukla, 2010). Understanding the connection between the NSA, EBA, and CBB is the main aim of this study. Once this problem has been identified and described, it can provide a base for further research that aims to find solutions to solve compulsive purchasing behavior issues.

In this research, exploratory and explanatory research were employed. An exploratory study was carried out by reviewing the prior research and looking into the theories that already exist to explain each variable in order to better comprehend the concepts. As a result, more information about the antecedents and outcomes of CBB patterns was investigated. Secondly, theories such as SDT and GCT were explored to understand more about the need for social approval as an extrinsic motivation. Finally, BAT was employed when investigating EBA and

its causes and consequences. Based on these findings, the understanding of the problem became clearer, which allowed for the development of hypotheses. The next step involved a quantitative data collection method, specifically a survey, to measure the variables of interest (need for social approval, brand attachment, compulsive buying behavior) and examine their relationships statistically. Prior to publishing the survey, focus groups and interviews as qualitative methods were employed to create stimulus. To confirm the relationships between these variables, explanatory research using SPSS statistical tests was employed to determine why and how these variables are related and what causal mechanisms might be at play.

3.2 Primary Data

Primary data collection was used to tackle research questions from this study. As previously mentioned, a quantitative research method in the form of an online survey was implemented. Although online surveys have their own disadvantages (e.g.. privacy and security concerns, limited control over respondents and limited reach of respondents), there are many advantages of this approach, such as cost savings, flexibility, and fast data collection, which is why this method was chosen (Vaske, 2011).

The online survey contained 17 different questions divided into seven different blocks. The first block was an introduction to the survey, while the control question about purchase frequency built the second block. Afterward, EBA was assessed for four different brands in the third block. The next block was composed of NSA questions, followed by block five, which assessed CBB. The sixth block consisted of demographic questions, and the final block had a manipulation question to ensure that participants paid attention while filling out the survey. Before publishing the survey, a pilot survey was run to confirm that all the questions were clear and the flow was easy to follow. The online survey was shared via many different channels such as WhatsApp, Instagram, Facebook, and E-mail and was open from November 11th to November 27th, 2023. The complete questionnaire can be found in Appendix 1.

3.2.1 Data Collection

Looking into relationships between the NSA, EBA, and CBB and how they interfere was the main aim of this research. As previously mentioned, the chosen category to examine these links was the apparel category.

The methodology employed in this study was non-random convenience and snowball sampling due to time and financial limitations. Participants were contacted using different social media platforms, such as WhatsApp, Instagram, Facebook, and E-mail. The study's population of

interest consisted of people who could engage in consumer behavior, meaning buy clothing items from the brands used in this study in the past two years, and therefore may display varied degrees of CBB. As a measurement instrument, the CBS was used to evaluate various levels of compulsive purchasing habits. Not defining the number of purchases made in the past two years enabled the gathering of a wider range of customer behaviors and attitudes, providing a more thorough knowledge of the study issues. To make sure that these criteria are met, a control question concerning clothing shopping regularity was asked at the beginning of the questionnaire. Only those respondents who answered positively and bought at least once clothing from the listed brands in the past two years were able to continue to the main questionnaire.

Ensuring diversity in the levels of the NSA among the participants was essential. To achieve this, the MLAM scale was incorporated into the survey to differentiate individuals with varying degrees of need for social approval. As previously mentioned, the BAS was employed to assess EBA among respondents. To avoid bias in the brand selection, the top 4 non-luxury apparel brands from the credible source of information, Brand Finance Report 2023, were chosen and then included in the main survey to investigate relationships of interest further. The luxury brands were excluded based on the assumption that the target audience may not be familiar enough with high-end products.

The experience management software Qualtrics was used to create and publish the online survey. A total of 305 responses were recorded, with no less than 40 responses per brand stimulus (Nike 46, Adidas 44, Zara 41, and H&M 47). After data cleaning, the number of valid observations was 178.

3.2.2 Stimuli Development

As previously mentioned, the category that was examined in this study was the clothing category, where the top 4 non-luxury brands in 2023 were looked at. Those brands were Nike, Adidas, Zara, and H&M. Stimuli were conceptualized for every one of these brands. The following phase involved conducting a focus group with eight participants and providing them with different variants of possible stimuli (brief overview of the brand, store images, product photos, etc.). Once the ideas, responses, and thoughts of the participants were documented, the stimuli were modified and created. Prior to employing the stimuli in the main survey, one-on-one interviews took place to confirm their applicability and appeal. The summary table of the stimuli is shown in Table 1.

Table 1: Summary of stimuli

NIKE	ADIDAS	ZARA	H&M
			

3.2.3 Measurement / Indicators

The items for this research were established based on measurement scales that have been experimentally validated in previous studies. In the following chapter, the measurement scales that were used will be explained in detail. In the end, an operational model will be presented.

The already mentioned MLAM scale was adopted to measure attitudes toward the need for social approval. The MLAMS measures the extent to which respondents claim to engage in activities that reflect a desire to receive favorable evaluations and social reinforcing and to avoid clear negative assessments and social penalties (Martin, 1984). Items on this 5-point Likert-type scale refer to a variety of qualities, such as being well-respected, liked, and making good impressions, in which issues with evaluation and acceptance may surface. Response options are ranging from Disagree Strongly (1) to Agree Strongly (5). The MLAMS's long, 20-item version has 15 positively and five negatively worded items, with a reliability index (Cronbach alpha coefficient) of 0.75 and a Test-retest reliability coefficient of 0.70 (Leary et al., 2015). Higher scores on the scale indicate more need for social approval. Figure 2 demonstrates the MLAMS.

Figure 2: Martin-Larsen Approval Motivation Scale

MARTIN-LARSEN APPROVAL MOTIVATION SCALE	
1 = Disagree Strongly	
2 = Disagree	
3 = No Opinion	
4 = Agree	
5 = Agree Strongly	
1. Depending upon the people involved, I react to the same situation in different ways.	11. If I hear that someone expresses a poor opinion of me, I do my best the next time that I see this person to make a good impression.
2. I would rather be myself than be well thought of.	12. I seldom feel the need to make excuses or apologize for my behavior.
3. Many times I feel like just flipping a coin in order to decide what I should do.	13. It is not important to me that I behave 'properly' in social situations.
4. I change my opinion (or the way that I do things) in order to please someone else.	14. The best way to handle people is to agree with them and tell them what they want to hear.
5. In order to get along and be liked, I tend to be what people expect me to be.	15. It is hard for me to go on with my work if I am not encouraged to do so.
6. I find it difficult to talk about my ideas if they are contrary to group opinion.	16. If there is any criticism or anyone says anything about me, I can take it.
7. One should avoid doing things in public which appear to be wrong to others, even though one knows that he is right.	17. It is wise to flatter important people.
8. Sometimes I feel that I don't have enough control over the direction that my life is taking.	18. I am careful at parties and social gatherings for fear that I will do or say things that others won't like.
9. It is better to be humble than assertive when dealing with people.	19. I usually do not change my position when people disagree with me.
10. I am willing to argue only if I know that my friends will back me up.	20. How many friends you have depends on how nice a person you are.

In 2005, Thomson, MacInnis, and Park developed a 10-item 7-point BSA, where respondents needed to describe “the extent to which the following words describe your typical feelings toward the brand.” The scale ranks from Not At All (1) to Very Well (7) and represents three different first-order components: affection, passion, and connection. The first component, Affection, includes the items affectionate, loved, peaceful, and friendly. The items express the warm feelings a consumer has toward a certain brand. The items passionate, delighted, and captivated are included in the second factor, called Passion. This variable shows intense and aroused positive feelings toward a brand. The third factor, labeled as Connection, consists of items: connected, bonded, and attached. These three items represent a consumer's feelings of being connected with the brand (Thomson et al., 2005). Since the Cronbach’s Alpha reliability coefficient of this construct is 0.88 (Thomson et al., 2005), this toll was used to measure the emotional connection between the individual and the brand, also called brand attachment (Malär et al., 2011). As shown in Figure 3, this scale was adapted from 7-point to 5-point items to be consistent with the rest of the research.

Figure 3: Emotional Brand Attachment Scale

Please describe the extent to which the following words describe your typical feelings toward the X brand:					
	Not At All (1)	Slightly (2)	Moderately (3)	Very (4)	Extremely (5)
1. Bonded	_____	_____	_____	_____	_____
2. Connected	_____	_____	_____	_____	_____
3. Attached	_____	_____	_____	_____	_____
4. Delighted	_____	_____	_____	_____	_____
5. Peaceful	_____	_____	_____	_____	_____
6. Loved	_____	_____	_____	_____	_____
7. Affectionate	_____	_____	_____	_____	_____
8. Passionate	_____	_____	_____	_____	_____
9. Friendly	_____	_____	_____	_____	_____
10. Captivated	_____	_____	_____	_____	_____

The CBS (Faber & O’Guinn, 1992) is the “gold standard” measure of screening for compulsive purchasing behavior. Using these seven items assessed on a 5-point interval scale, one can evaluate the need to spend money, recognition of abnormal spending, lack of control over buying, buying to boost one’s mood, and monetary consequences of excessive buying. CB is considered to be present when scores fall below the cutoff of 2 standard deviations below the mean (Kyrios et al., 2020), which is equal to a scale score of -1.34 (Faber & O’Guinn, 1992). Because many studies proved the reliability and validity of this scale (e.g.. Koran et al., 2006), with Cronbach's of 0.95 (Faber & O’Guinn, 1992), this tool was chosen to measure CBB. To assure consistency, the scores of this table needed to be reversed.

The scale and the formula to calculate the result score are shown in Figure 4, while Table 2 demonstrates the operational model.

Figure 4: Compulsive Buying Scale

1. Please indicate how much you agree or disagree with each of the statements below. Place an X on the line which best indicates how you feel about each statement.

	strongly agree	somewhat agree	neither agree nor disagree	somewhat disagree	strongly disagree
a. If I have any money left at the end of the pay period, I just have to spend it.	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>

2. Please indicate how often you have done each of the following things by placing an X on the appropriate line.

	Very Often	Often	Some- times	Rarely	Never
a. Felt others would be horrified if they knew of my spending habits.	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>
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 cards.	---	---	---	---	---

Scoring equation = $-9.69 + (Q1a \times .33) + (Q2a \times .34) + (Q2b \times .50) + (Q2c \times .47) + (Q2d \times .33) + (Q2e \times .38) + (Q2f \times .31)$.

If score is ≤ -1.34 , subject is classified as a compulsive buyer.

Table 2: Operational Model

Framework	Measure	Items	Scale	Reference	Cronbach α
IV	Need for Social Approval	20	5-point Likert Scale	Martin H (1984)	0.75
Mediator	Emotional Brand Attachment	10	5-point Likert Scale (*)	Thomas M, MacInnis D, Whan Park C (2005)	0.88
DV**	Compulsive Buying	7	5-point Likert Scale	Faber R, O'Guinn T (1992)	0.95

*The scale was adapted from the original scale from 0 to 7.

**The scale was reverse-coded.

3.3 Data Analysis

Before describing the techniques used in this thesis, it is worth listing one more time all the hypotheses that were tested:

H1: The need for social approval positively affects compulsive buying behavior.

H2: The need for social approval positively affects emotional brand attachment.

H3: Emotional brand attachment positively affects compulsive buying behavior.

H4: Emotional brand attachment mediates a positive relationship between the need for social approval and compulsive buying behavior.

Because the aim of the first three hypotheses (H1, H2, and H3, was to predict the value of a dependent variable based on the value of an independent variable, Simple Linear Regressions were employed. To test the last hypothesis, Model 4 of the Process Macro by Hayes was run, which simultaneously represented the full model. To analyze if there are significant differences among the means in NSA, EBA, and CBB between 4 different brands, One-Way ANOVAs were implemented where the data was parametric. In the case of non-parametric data, the Kruskal-Wallis test was used.

CHAPTER 4: RESULTS AND DISCUSSION

In this chapter, results from the testing hypothesis will be presented, followed by the interpretation of the results and how they link with the aim of this study.

4.1 Results

4.1.1 Cleaning the data

From November 11th to November 27th, 2023, a total number of 305 responses was collected. After data cleansing, almost 60% of responses were eliminated, resulting in a total of 178 valid observations.

To verify that the respondents had purchased at least one of the top four non-luxury brands in the previous two years and to assess their level of emotional attachment to those brands, a screening question regarding the purchase of those brands in 2023 was included at the start of the survey. Twenty-four individuals were instantly removed from the survey after failing this question. Next, 73 incomplete responses were identified and removed. Additionally, seven additional replies were eliminated in order to prevent the survey from being completed multiple

times by the same individual. An extra 17 respondents were excluded from the poll after failing a manipulative question that was meant to ascertain whether respondents were paying attention. As a next step, the outlier analysis was conducted by performing the Mahalanobis distance analysis in SPSS. Outliers are defined as unusual observations in questionnaire data, which may bias statistical results (Zijlstra et al., 2011). Therefore, performing the outlier analysis and removing them before conducting the data analysis is a necessary step. Since the Mahalanobis distance was reported as one of the best methods to reduce bias by removing observations due to random responses, this analysis was used to find possible multivariate outliers (Zijlstra et al., 2011). All the values that were less than 0.001—six of them in this case—were defined as multivariate outliers and removed before running inferential analyses. Table 3 shows the number of valid observations per stimulus and in total after the data cleaning.

Table 3: Valid Observations

Stimuli	Nike	Adidas	Zara	H&M	Total
Initial Observations					305
Failed Screening Questions					24
Uncompleted Responses					73
Observations	53	53	46	56	208
Repeated IPs	2	1	0	4	7
Failed Manipulation	4	6	4	3	17
Outliners	1	2	1	2	6
Valid Observations	46	44	41	47	178

4.1.2 Variables Creation

The next step involved creating variables by editing, re-coding, and transcribing them. Three new variables were created using the SPSS compute function by calculating the mean of the construct's items: “EBA” for emotional brand attachment, “NSA” for the need for social approval, and “CBB” for the compulsive buying behavior construct. Afterward, an additional variable called “Brands” was created where each brand had a different value to be able to perform One-Way ANOVAs.

4.1.3 Sample Characterization

The online survey attracted participants from 26 different countries. The majority of them (43.8%) are citizens of Croatia, with participants of Slovenian (14.6%), German (10.7%), and Austrian (6.7%) nationalities following. Additionally, 66.9% of respondents are women, and the remaining 33.1% identify as men. Over half of the participants (55.1%) are in the 25–34 age range, while the second biggest group included people in the 18–24 age range (19.7%). In terms of their educational level, 38.8% of them obtained a master's degree, compared to 37.6% who finished a bachelor's degree. Furthermore, the largest percentage of participants are those who are in a relationship (40.4%), followed by single (36.5%) and married (19.7%). The majority of participants, 59.6%, have a job, and the biggest percentage of them make between EUR 1.500 and 1.900 per month in gross income (17.4%). When it came to their shopping habits, the majority of participants purchased apparel from multiple brands listed in the study, with Zara topping the list with 64.6%, followed by Nike (57.3%), H&M (55.6%), and Adidas (53.9%).

It is possible to draw the conclusion that participants do possess comparable characteristics, which might suggest homogeneity. Nonetheless, it is essential to point out again how non-probabilistic sampling approaches were employed, indicating a poor level of population representativeness.

4.1.4 Measure Reliability

In this study, all measurement scales were taken from previous research. However, a researcher is expected to take into account both the instrument's quality and its applicability to specific research topics while selecting or creating a new instrument for a study (Taber, 2018). As a result, assessing the reliability of the scales used in this study was a vital preliminary step.

One of the most significant and common statistics in studies pertaining to the design and application of tests is Cronbach's Alpha (Taber, 2018). George & Mallery, 2003 state that there are general guidelines to go by, which are as follows: $\alpha > 0.9$ indicates excellent quality; $\alpha > 0.8$ suggests good quality; $\alpha > 0.7$ implies acceptable quality; $\alpha > 0.6$ points to questionable quality; $\alpha > 0.5$ signals poor quality; and $\alpha < 0.5$ reflects unacceptable quality.

Therefore, all three scales used in this study, the Martin- Larsen Approval Motivation Scale that measures NSA, the Emotional Brand Attachment Scale for measuring EBA, and the Compulsive Buying Scale as a measure of screening for CBB, were assessed in terms of their reliability. The Emotional Brand Attachment Scale showed good quality with 0.888 Cronbach's alpha. Other two scales needed to be adapted since they showed questionable reliability

(Martin- Larsen Approval Motivation Scale with 0.652 and Compulsive Buying Scale with 0.678 Cronbach's alpha). To increase the Alpha, eight items from MLAMS and one item from EBAS were removed, resulting in acceptable quality for both scales.

Table 4: Reliability Test for Multi-Item Scales

Scale	Initial Number of Items	Cronbach's Alpha	Number of deleted items	Cronbach's Alpha if items are deleted	Final Number of Items
Martin- Larsen Approval Motivation Scale	20	0.652	8	0.763	12
Emotional Brand Attachment Scale	10	0.888	/	/	10
Compulsive Buying Scale	7	0.678	1	0.710	6

4.1.5 Hypothesis testing

As previously mentioned, this study aimed to confirm four different hypotheses. For the first three hypotheses (H1, H2, and H3), a Simple Regression was conducted. To draw a conclusion about H4, Model 4 of the Process Macro by Hayes was used. Before the actual hypothesis testing, a preliminary check of the regression assumptions was performed. Several One-Way ANOVAs were conducted to compare the mean ranks of the brands included in this study. Also, in this case, a preliminary check was done to ensure that the ANOVA assumptions were met.

4.1.6 Preliminary check of assumptions

As outlined above, to make sure the data were accurate, consistent, and feasible, a preliminary verification was done by examining six distinct regression assumptions.

The normal distribution of the data was the first prerequisite that had to be satisfied. Therefore, the Shapiro-Wilk was run. As shown in Table 5, the findings indicate that there is no significant difference between the normal distribution and NSA scores (p-value 0.611). However, the other two constructs, CBB and EBA, are not normally distributed since their p-values are less than

0.001. However, since the sample size is large enough and more than 30 respondents were exposed to each stimulus, the central limit theorem (CLT) can be applied, and the normality of the data can be assumed. Moreover, the independence of observations as a second assumption was met since each participant saw only one stimulus.

Table 5: Tests of Normality

	Shapiro-Wilk		
	Statistic	df	Sig.
EBA	0.946	178	<0.001
CBB	0.927	178	<0.001
NSA	0.993	178	0.611

The next step was to check assumptions of linearity, normal distribution, and homoscedasticity of residuals for H1, H2, and H3. After observing the scatterplots for H1 and H2, one may conclude that there are no values above three or below -3, and points are distributed randomly around the horizontal line, which means that both linearity and homoscedasticity assumptions for H1 and H2 are met. Furthermore, normality can be assumed since dots follow the line while observing a normal probability plot. The assumptions are likewise satisfied when the procedure is repeated for H3, as only one point is above three but is still extremely close to it, and the dots follow the line. The scatterplots and the normal probability plots can be found in Appendix 2. The final step was to perform a multicollinearity analysis to guarantee the success of the regression model. A statistical phenomenon known as multicollinearity, or near-linear dependence, occurs when there is a strong correlation between two or more predictor variables in a regression model. The standard error of the coefficients will rise under a strong correlation, making certain variables appear statistically insignificant when they should be significant (Daoud, 2017). Therefore, the presence of multicollinearity weakens the statistical power of the model. To check multicollinearity, three different parameters should be observed: the VIF should be ideally below 2.500, the Eugen value should be ideally higher than 0.010, and the condition index should be ideally below 30.000. As shown in Table 6, all parameters are fulfilled, which indicates how multicollinearity can't interfere with the success of the regression model.

Table 6: Multicollinearity Analysis

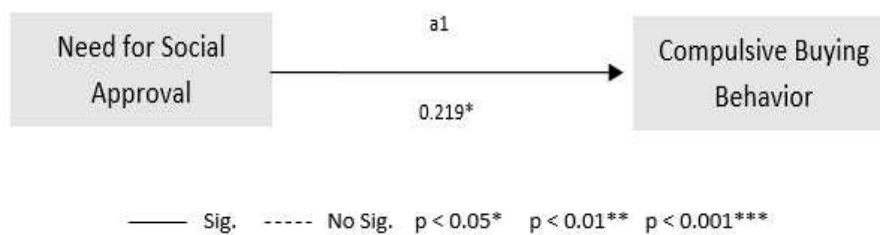
	Need for Social Approval	Emotional Brand Attachment
VIF	1.002	1.002
Eugen Value	0.065	0.020
Condition Index	6.723	12.171

4.1.7 Results from Hypothesis Testing

Hypothesis 1: The need for social approval positively affects compulsive buying behavior.

To explain how much variance in CBB is explained by NSA, a Simple Linear Regression has been employed. In this case, NSA is the so-called predictor variable, and CBB is the outcome variable. This direct relationship can be demonstrated by Path a1, as shown in Figure 5.

Figure 5: The effect of NSA on CBB



First, β coefficient indicates that, on average, CBB increases by 0.219 units for every one-unit increase in NSA, suggesting a positive relationship between the two. Furthermore, a low p-value of 0.002 indicates that the coefficient is statistically significant, which means that this effect is possibly a real effect in the population and is not just due to random variability in the sample.

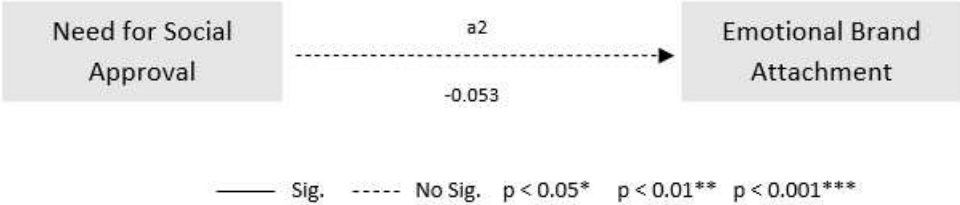
Furthermore, R Square is 0.051, which means that about 5.1% of the variance in CBB is explained through NSA and that the model quality is low. However, the results indicate that the relationship between NSA and CBB is statistically significant ($F=9.454$ and $p < 0.05$), from

which one may conclude that NSA has an impact on CBB. Therefore, H1 is validated, and the exact results are shown in Appendix 3.

Hypothesis 2: The need for social approval positively affects emotional brand attachment.

For this hypothesis, the same test was run, where NSA was again the predictor, but EBA was the outcome variable. Therefore, the direct effect of NSA on EBA was analyzed. Path a2 in Figure 6 describes this relationship, and the results can be found in Appendix 4.

Figure 6: The effect of NSA on EBA

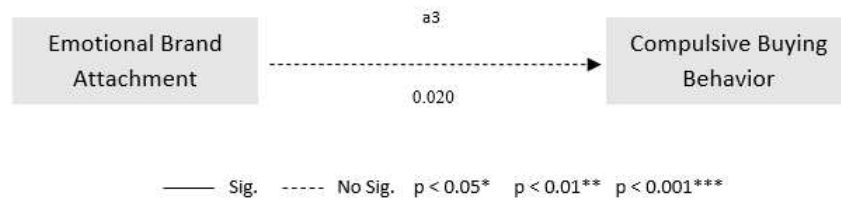


The β coefficient in the coefficients table indicates that, on average, EBA decreases by 0.053 units for every one-unit increase in NSA, suggesting a negative relationship between the two. A high p-value of 0.582 indicates that the coefficient is not statistically significant; furthermore, R Square is 0.002, which means that only 0,2% of the variance in EBA is explained through NSA. The findings imply that the relationship between NSA and EBA is not statistically significant ($F=0.304$ and $p > 0.05$), from which one may conclude that NSA doesn't have a statistically significant impact on EBA. Therefore, H2 must be rejected.

Hypothesis 3: Emotional brand attachment positively affects compulsive buying behavior.

Lastly, Simple Linear Regression was conducted to investigate the direct effect of EBA on CBB. In this relationship, EBA was a predictor, and CBB was an outcome variable. Figure 7 demonstrates this interaction with Path a3.

Figure 7: The effect of EBA on CBB



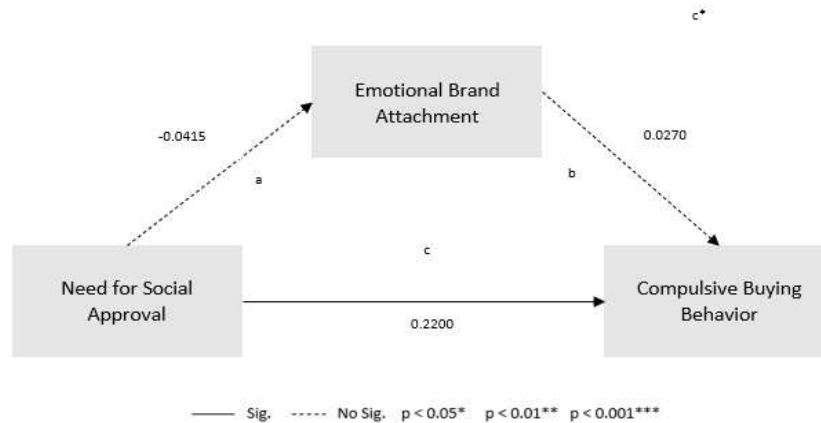
Following the same explanation as above, the B coefficient in the coefficients table indicates that, on average, CBB increases by 0.020 units for every one-unit increase in EBA, suggesting a positive relationship between the two. A high p-value of 0.729 shows how the coefficient is not statistically significant, which confirms that this effect can't explain an actual impact on the population.

Furthermore, R is 0.001, which means that only 0,1% of the variance in CBB is explained through EBA. Additionally, the results indicate that the relationship between EBA and CBB is not statistically significant (F=0.121 and $p > 0.05$). As a result, the EBA doesn't have an impact on CBB, and H3 can be rejected. The results can be found in Appendix 5.

H4: Emotional brand attachment mediates a positive relationship between the need for social approval and compulsive buying behavior.

In this hypothesis, NSA represents the independent variable, CBB demonstrates the dependent variable, and EBA is a mediator between the two. To analyze this relationship, Model 4 of the Process Macro by Andrew F. Hayes was employed. While Path A in Figure 8 describes the direct relationship between NSA and EBA, Path A demonstrates the direct effect between EBA and CBB. Furthermore, the direct effect of NSA and CBB is marked with c, while the total effect is c*. The indirect effect shows how CBB is influenced by NSA through EBA.

Figure 8: Effect of the NSA on CBB through EBA



The regression of Path a is not significant (p-value 0.582), and the model is low in quality since it only explains 0.17 % of the variation of EBA. Similarly, the b Path shows a p-value of 0.484 with a low quality (R square 5%). The only direct effect that is significant is Path c (p-value 0.002). However, since this model is low in quality, as it explains only 5% of the variance of CCB, the conclusion is that EBA is not a significant mediator. This conclusion is also confirmed by observing the indirect effect of NSA on CBB and its bootstrapping confidence interval, which crosses the value of 0 (BootLLCI -0.0152, BootULCI 0.0121). Correspondingly, H4 needs to be rejected. These findings explain the full model test as well and are found in Appendix 6.

4.1.8 Further results

Prior to examining if there were statistically significant differences in NSA, EBA, and CBB between the four brands (Nike, Adidas, Zara, and Nike), the One-Way ANOVA assumptions were to be verified. If the assumptions were not satisfied, the Kruskal-Wallis H Test was employed instead.

4.1.8.1 Difference in Need for Social Approval among brands

The Shapiro-Wilk test was run in order to verify that the data is normally distributed. Given that every p-value is nonsignificant, it is reasonable to assume that the NSA for every brand matches this presumption. Additionally, since no box plot has any circles or asterisks on either end, there are no outliers in the data. The homogeneity in variance, the final assumption that required verification, is supported by Levene's results showing insignificant p-values (p-value

> 0.05). As a result, One-way ANOVA was used to compare the brands' mean ranks. The exact results of assumptions and One-Way ANOVA can be found in Appendix 7.

Results of One-Way ANOVA with the different mean ranks per brand (H&M 2.5887, Adidas 2.5795, Nike 2.5018, and Zara 2.6768) show that there is no significant difference in NSA between the brands (F 0.582, p-value 0.627), as demonstrated in Table 7.

Table 7: Difference in NSA among brands

ANOVA					
NSA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.666	3	0.222	0.582	0.627
Within Groups	66.348	174	0.381		
Total	67.014	177			

4.1.8.2 Difference in Emotional Brand Attachment among brands

In this case, homogeneity in variance (p-value > 0.05) is the only One-Way ANOVA premise that was satisfied for all the brands. Since the data are not normally distributed (p-values < 0.05, except H&M with p-value 0.001) and the box plots for Adidas and Nike include circles at the ends, the One-Way ANOVA assumptions are not supported. Hence, the nonparametric Kruskal-Wallis H Test was used instead. These findings are shown in Appendix 8.

A significant difference (p-value < 0.001) in EBA was found between the brands (H&M n = 47, Adidas n = 44, Nike n = 46, and Zara n = 41) according to the test results in Table 8. Afterward, the Post Hoc Test was applied to identify the brands that differed significantly from one another. While looking at the results in Table 9, one may conclude that people have a significantly higher level of EBA with Nike compared to the other brands because of the persistently significant difference between Nike and the other brands (with means HM 72.73, Adidas 79.88, Nike 114.13 and Zara 91.41).

Table 8: Kruskal-Wallis Test EBA

Ranks				Test Statistics	
	Brands	N	Mean Rank		EBA
EBA	HM	47	72.73	Kruskal-Wallis H	17.149
	Adidas	44	79.88	df	3
	Nike	46	114.13	Asymp. Sig.	<0.001
	Zara	41	91.41		
	Total	178			

Table 9: Post Hoc Test EBA

Pairwise Comparisons of Brands					
Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
HM-Adidas	-7.141	10.787	-.662	0.508	1.000
HM-Zara	-18.681	10.988	-1.700	0.089	0.535
HM-Nike	-41.396	10.665	-3.882	<0.001	0.001
Adidas-Zara	-11.540	11.162	-1.034	0.301	1.000
Adidas-Nike	-34.255	10.843	-3.159	0.002	0.009
Zara-Nike	22.716	11.044	2.057	0.040	0.238

4.1.8.3 Difference in Compulsive Buying Behavior among the Brands

Last but not least, to test if there is a statistically significant difference in CBB among the brands, the Kruskal-Wallis H Test as a non-parametric test was run since no One-Way ANOVA's assumption was met (Shapiro- Wilk's p-values < 0.05 except Adidas, Levene's Test's p-values based on mean are significant; Nike's box plot shows a circle). The findings are shown in Appendix 9. The results from the test indicate that compulsive buying behavior doesn't differ significantly among the brands (p-value 0.203), as illustrated in Table 10.

Table 10: Kruskal-Wallis Test CBB

Ranks				Test Statistics	
	Brands	N	Mean Rank		CBB
CBB	HM	47	97.18	Kruskal-Wallis H	4.602
	Adidas	44	95.19	df	3
	Nike	46	88.53	Asymp. Sig.	0.203
	Zara	41	75.67		
	Total	178			

4.2 Discussion

As already stated, this study tried to examine different interactions. First, it looked at the overall relationship between NSA and CBB with the assumption that NSA positively affects CBB. As results have shown, H1 is validated, which leads to the conclusion that NSA positively impacts CBB. Therefore, this outcome supports findings from previous research, such as Ertelt et al., 2009 or from an even more recent study conducted by Kukar-Kinney et al., 2016. The second relationship that was explored was the effect of NSA on EBA. Since H2 was rejected, the results of this research are not aligned with the previous two research that proved how social goals (Cheong, 2013) or social self-image (Kim et al., 2015) are pivotal causes of brand attachment. There are several factors why this might happen. First, the study's methodological limitations need to be considered. The number of valid observations was "only" 178, participants were chosen by snowball technique and thus cannot represent the population. There is a possibility that the involvement of a higher number of participants with different backgrounds would result in different study outcomes. Furthermore, this study examined only four brands, which might have an influence on their EBA and, therefore, on the whole effect. In addition, it has been proven that extrinsic motives have a moderating impact on brand attachment (Proksch et al., 2015), which means that NSA might only indirectly influence EBA. Lastly, one study showed that intrinsic motivation can be the reason why people get attached to a certain brand (Gilal et al., 2020). Therefore, it could be that participants in this study are more likely to be driven by intrinsic than extrinsic motivation, as proposed in this research.

Moreover, this thesis aims to demonstrate how EBA has a positive effect on CBB. The resulting outcome of the preformed test was to reject H3. Therefore, this finding isn't aligned with other studies that claimed that EBA leads to impulsive/compulsive buying (Lim et al., 2020) or that higher brand attachment is more likely to be present in high-degree compulsive buyers (Lee &

Workman, 2015). Once again, the stated methodological limitations as a possible cause for this outcome should be taken into consideration. Moreover, it is important to note that already mentioned research implied the direct opposite relationship, meaning that CBB leads to EBA, not the other way around (Flight & Sacramento, 2015b). It would be interesting to see if this direction can be proved in some other setting.

CHAPTER 5: CONCLUSIONS AND LIMITATIONS

The main findings and conclusions based on results from primary data and a literature review will be described in this final chapter. Next, both academic and managerial implications will be discussed. As a final step, limitations and suggestions for further research will be presented.

5.1 Main Findings & Conclusions

Research Question 1: How does the need for social approval affect compulsive buying behavior?

Research has demonstrated that compulsive consumers engage in buying behavior to fulfill their need for self-expression, which helps them feel better, feel more valuable, and be accepted by others (Desarbo & Edwards, 1996). First, this study suggests that there is a significant difference between NSA and CBB. Moreover, the relationship between the two has been shown to be positive, which can be interpreted in a way that the higher the NSA of an individual, the higher the CBB in consumers. As a result, findings from this study are aligned with conclusions from other research.

Research Question 2: How does the need for social approval affect emotional brand attachment?

Consumers normally buy or use a brand to express themselves to others, which causes brand attachment (S. Kim et al., 2015). This thesis wanted to explore this relationship and show that NSA directly affects EBA. After performing a Simple Linear Regression, this hypothesis needed to be rejected. As previously stated, one cause can be that people who participated in this study are more driven by intrinsic motivation, which then might lead to brand attachment in their case, as shown by one study (Gilal et al., 2020). Another reason for this is that the NSA affects EBA only indirectly and serves as a moderator (Proksch et al., 2015).

Research Question 3: How does brand attachment affect people's propensity for compulsive purchase behavior?

The profound connection between the brand and the consumers is defined as brand attachment (Park et al., 2010). Studies have shown how EBA leads to many negative behaviors, one of them being compulsive buying behavior (Lim et al., 2020). Higher degrees of EBA are more likely to be found in high-level compulsive consumers (Lee & Workman, 2015). In contrast, the results from Simple Linear Regression implied that there is no significant difference between EBA and CBB, even suggesting a negative relationship between the two.

Consequently, this finding is not consistent with the findings from the past research. As already stated in the discussion chapter, methodological limitation can be one of the causes of this outcome. Moreover, Flight & Sacramento, 2015b found that the direction of this relationship might be the direct opposite, which is something worth investigating.

Research Question 4: What's the role of brand attachment on the relationship between the need for social approval and compulsive buying?

Finally, this research proposes EBA as a mediating variable between the NSA and CBB. After running the Model 4 of the Process Macro by Hayes, the bootstrapping confidence interval of the indirect effect of NSA on CBB crossed the value of 0 (BootLLCI -0.0152, BootULCI 0.0121), and as a result, H4 needed to be rejected. While doing the literature review, the research on this specific relationship wasn't found. The most similar one analyzed the relationship between self-congruence and CBB, where EBA was a mediator. The results showed that EBA mediates this relationship either partially or fully, depending on the type of self-congruence (Japutra et al., 2019b). However, since the NSA is "only" one of the self-congruence motives (J. Kim, 2015), one can not say the results from this research neither support nor contradict the previous research.

5.2 Managerial / Academic Implications

This research can serve as a catalyst for conversations on sustainability and sensible consumption practices. Moreover, businesses could focus on putting ethical marketing tactics into practice to lessen compulsive buying behaviors motivated by this extrinsic goal. Finally, by showing that the demand for social acceptance directly leads to obsessive buying behavior, the study's findings may lay the groundwork for future investigations that might yield helpful advancements for treatments and prevention of compulsive buying. One strategy to start combating the promotion of extrinsic objectives would be to organize group conversations or reflect on how much significance one gives to social approval.

5.3 Limitations and Further Research

As previously stated, this study comes with its limitations. Although, in total, 305 people participated in the survey, after the data cleaning, the number of valid observations was 178, resulting in a relatively small sample size. Additionally, the snowball approach was used, which means that bias may be introduced, and the sample's representativeness may be diminished. Furthermore, more than 40% of participants were Croatian citizens, so it is not possible to

generalize the results for different cultures. A larger and more geographically representative sample size with different social affiliations should be introduced in the future study. Next, this study only observed the clothing category. Thus, the general effect of the NSA on CBB or EBA, or EBA on CBB can't be explained based on the findings from this research. Moreover, only four non-luxury brands were included in this study, which might greatly influence the measurement of constructs. Including both luxury brands to see if consumers create a higher level of attachment and cover different product categories such as car accessories, cosmetics, or jewelry might allow us to draw general conclusions. The CBS used in this study is a reliable measurement scale applied in many research. However, measuring CBB in a clinical setting with the Yale-Brown Obsessive-Compulsive Scale (Y-BOCS) in a randomly controlled trial might be a better, well-grounded method. Further studies should also look at other variables that could have an effect on CBB. One of them can be materialism since it is proven that materialistic tendencies can affect compulsive buying (Reeves et al., 2012). In addition, it would be interesting to see if the results would differ when, besides emotional bonding, cognitive bonding would be examined as well, as they coexist in brand attachment (Whan Park et al., 2006). Finally, the roles of culture, gender, and age might be worth exploring. One study revealed how CBB is more prominent among women (Mueller et al., 2011), while another stated how young people are more prone to CBB (Ye et al., 2021).

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APPENDICES

Appendix 1: Questionnaire

Block 1-Introduction (1 Question)

Block 2- Control Question (1 Question)

BlockRandomizer: 1 - Evenly Present Elements

Block 3.1.- EBA Nike (2 Questions)

Block 3.2- EBA Adidas (2 Questions)

Block 3.3-EBA Zara (2 Questions)

Block 3.4- EBA H&M (2 Questions)

Block 4- Need for Social Approval (2 Questions)

Block 5 - Compulsive Buying Behavior (2 Questions)

Block 6- Demographics (7 Questions)

Block 7- Manipulation Question (1 Question)

Q1: Introduction

Dear participant,

thank you in advance for your time and participation in this survey. This online survey is being conducted as part of Universidade Catolica Portuguesa's Master's Thesis in Management with a Specialization in Strategic Marketing. All information gathered will be kept confidential and used exclusively for study. It will take about 5 minutes to do this survey, and it is crucial that you answer each question honestly after carefully reading it. If you are not sure what to answer, please select the answer that comes closest to your initial assessment. There is no right or wrong answer.

Finally, please get in touch with s-avranic@ucp.pt if you have any queries or would like to find out the study's final results.

Q2: Control Question

Have you purchased a clothing item in the last 2 years from any brand listed below? If yes, please choose which one. Multiple answers are possible.

- Nike (1)
- Adidas (2)
- Zara (3)
- H&M (4)
- No, I haven't bought any from the brands above. (5)

Skip To: End of Survey If Q2: Control Question = 5

Q3: Nike Stimulus

Nike: Imagine that you are walking through the shopping mall, and on your left, you see this store:



Nike EBA: Please describe the extent to which the following words describe your typical feelings toward the brand that you saw in the picture before.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Bonded (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connected (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attached (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delighted (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Peaceful (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loved (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Affectionate (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passionate (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friendly (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Captivated (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4: Adidas Stimulus: Imagine that you are walking through the shopping mall, and on your left, you see this store:



Adidas EBA: Please describe the extent to which the following words describe your typical feelings toward the brand that you saw in the picture before.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Bonded (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connected (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attached (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delighted (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Peaceful (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loved (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Affectionate (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passionate (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friendly (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Captivated (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5: Zara Stimulus

Zara: Imagine that you are walking through the shopping mall, and on your left, you see this store:



ZARA EBA: Please describe the extent to which the following words describe your typical feelings toward the brand that you saw in the picture before.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Bonded (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connected (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attached (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delighted (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Peaceful (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loved (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Affectionate (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passionate (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friendly (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Captivated (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6: H&M Stimulus

H&M: Imagine that you are walking through the shopping mall, and on your left you see this store:



EBA H&M: Please describe the extent to which the following words describe your typical feelings toward the brand that you saw in the picture before.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Bonded (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connected (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attached (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Delighted (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Peaceful (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Loved (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Affectionate (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passionate (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friendly (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Captivated (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7.1:

NSA1: Please describe the extent to which you agree to the following statements as honestly as possible. Your data is kept confidential, and it will not be shared with others.

	Strongly agree (5)	Somewhat agree (4)	Neither agree nor disagree (3)	Somewhat disagree (2)	Strongly disagree (1)
Depending upon the people involved, I react to the same situation in different ways. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would rather be myself than be well thought of (admirable). (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Many times I feel like just flipping a coin in order to decide what I should do. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I change my opinion (or the way that I do things) in order to please someone else. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In order to get along and be liked, I tend to do what people expect me to be. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find it difficult to talk about my ideas if they are contrary to group opinion. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
One should avoid doing things in public which appear to be wrong to others, even though one knows that he/she is right. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sometimes I feel that I don't have enough control over the direction that my life is taking. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is better to be humble than self-confident when dealing with people. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm willing to argue only if I know that my friends will back me up. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7.2 NSA

NSA2: As before, please describe the extent to which you agree to the following statements as honestly as possible.

Your data is kept confidential, and it will not be shared with others.

	Strongly agree (5)	Somewhat agree (4)	Neither agree nor disagree (3)	Somewhat disagree (2)	Strongly disagree (1)
If I hear someone express a poor opinion of me, the next time I see this person, I will do my best to make a good impression. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely feel the need to make excuses or apologize for my behavior. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is not important to me that I behave properly in social situations. (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The best way to handle people is to agree with them and tell them what they want to hear. (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is hard for me to go on with my work if I am not encouraged to do so. (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If there is any criticism or anyone says anything about me, I can take it. (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is wise to flatter important people. (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm careful at parties and social gatherings for fear that I will do or say things that others won't like. (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I usually do not change my position when people disagree with me. (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How many friends you have depends on how nice a person you are. (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q8: CBB 1: Now, we would like to know a little bit more about your shopping behavior.

Please indicate how much you agree or disagree with the statement below.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
If I have any money left at the end of the pay period, I just have to spend it. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9: CBB 2: Please indicate how often you have done each of the following things.

	Very Often (5)	Often (4)	Sometimes (3)	Rarely (2)	Never (1)
Felt others would be horrified if they know of my spending habits. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bought things even though I couldn't afford them. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wrote a check when I knew I didn't have enough money in the bank to cover it. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bought myself something in order to make myself feel better. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Felt anxious or nervous on days I didn't go shopping. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Made only the minimum payments on my credit card. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10: Gender

What gender do you identify as?

- Male (1)
- Female (2)
- Non-binary / third gender (3)
- Prefer not to say (4)

Q11: Age

How old are you?

- Under 18 (1)
- 18–24 (2)
- 25 - 34 (3)
- 35 - 44 (4)
- 45 - 54 (5)
- 55 - 64 (6)
- 65 - 74 (7)
- 75 or older (8)

Q12: Nationality

Please indicate your nationality:

- Portugese (1)
- German (2)
- Austrian (3)
- Italian (4)
- Croatian (5)
- Slovenian (6)
- Other, please indicate: (7)

Q13: Education:

What is the highest degree or level of education you have completed?

- Middle School (1)
- High School (2)
- Bachelors Degree (3)
- Masters Degree (4)
- Doctoral Degree (5)
- Other, please indicate: (6)

Q14: Marital Status

What is your marital status?

- Single (1)
- In a relationship (2)
- Married (3)
- Divorced (4)
- Widowed (5)
- Other, please indicate: (6)

Q15: Occupation Please select your occupation:

- Student (1)
- Student Worker (2)
- Employed (3)
- Unemployed (4)
- Retired (5)
- Other, please indicate: (6)

Q16: Income: What is your gross monthly income?

- No income (1)
- Less than 500€ (2)
- 500-999€ (3)
- 1000-1499€ (4)
- 1500-1999€ (5)
- 2000-2999€ (6)
- 3000-3999€ (7)
- 4000-4999€ (8)
- 5000€ or more (9)
- Prefer not to say. (10)

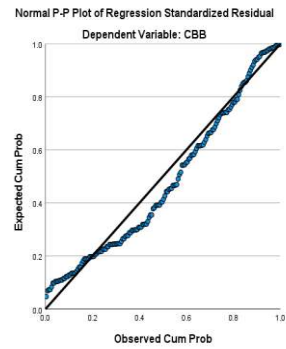
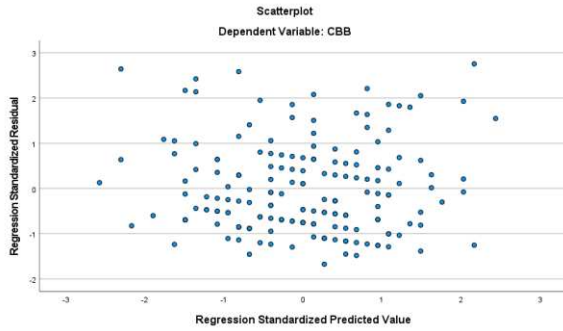
Q17: Manipulation:

What is the name of the brand whose store you saw at the beginning of the survey? Please select the one that applies.

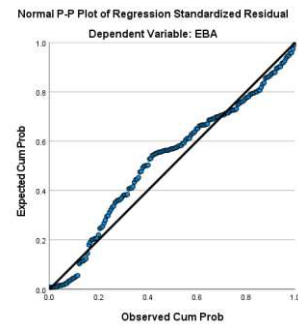
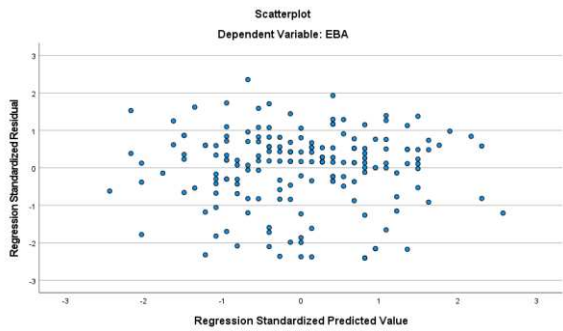
- H&M (1)
- Adidas (2)
- Nike (3)
- Zara (4)
- Other, please indicate: (5)

Appendix 2: Linear Regression Assumptions

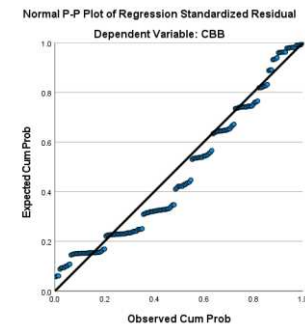
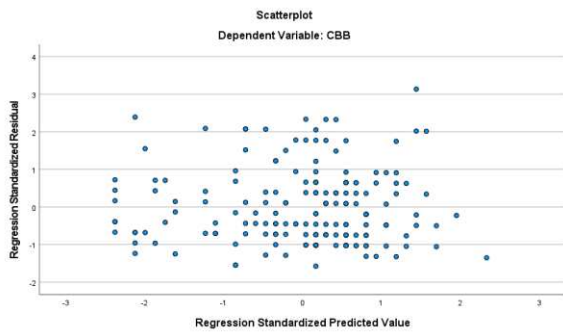
Assumptions H1: The NSA positively affects CBB.



H2: The NSA positively affects EBA.



H3: EBA positively affects CBB.



Appendix 3: H1- Simple Linear Regression

Coefficients^a

Model	Unstandardized Coefficients	Standardized	t	Sig.	Correlations	Collinearity Statistics
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		B	Std. Error	Coefficients Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1.373	0.189		7.272	<,001					
	NSA	0.219	0.071	0.226	3.075	0.002	0.226	0.226	0.226	1.000	1.000

a. Dependent Variable: CBB

Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	0.226 ^a	0.051	0.046	0.58201	0.051	9.454	1	176	0.002

a. Predictors: (Constant), NSA

b. Dependent Variable: CBB

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.202	1	3.202	9.454	0.002^b
	Residual	59.618	176	0.339		
	Total	62.820	177			

a. Dependent Variable: CBB

b. Predictors: (Constant), NSA

Appendix 4: H2- Simple Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF

1	(Constant)	3.004	0.255		11.761	<,001		
	NSA	-0.053	0.096	-0.042	-0.551	0.582	1.000	1.000

Model Summary^b

Model	R	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change	
					F Change	df1	df2		
1	0.042 ^a	0.002	-0.004	0.78721	0.002	0.304	1	176	0.582

a. Predictors: (Constant), NSA

b. Dependent Variable: EBA

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.188	1	0.188	0.304	0.582^b
	Residual	109.066	176	0.620		
	Total	109.254	177			

a. Dependent Variable: EBA

b. Predictors: (Constant), NSA

Appendix 5: H3- Simple Linear Regression

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
		B	Std. Error				Beta	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1.881	0.170		11.079	<,001						
	EBA	0.020	0.057	0.026	0.347	0.729	0.026	0.026	0.026	1.000	1.000	

a. Dependent Variable: CBB

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	0.026 ^a	0.001	-0.005	0.59723	0.001	0.121	1	176	0.729

a. Predictors: (Constant), EBA

b. Dependent Variable: CBB

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.043	1	0.043	0.121	0.729^b
	Residual	62.777	176	0.357		
	Total	62.820	177			

a. Dependent Variable: CBB

b. Predictors: (Constant), EBA

Appendix 6: H4- Mediator Effect & Full Model Test

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
 Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 4
 Y : CBB
 X : NSA
 M : EBA

Sample
 Size: 178

OUTCOME VARIABLE:
 EBA

Model Summary

R	R-sq	MSE	F	df1	df2	p
,0415	,0017	,6197	,3040	1,0000	176,0000	,5821

Model

	coeff	se	t	p	LLCI	ULCI
constant	3,0039	,2554	11,7605	,0000	2,4998	3,5079
NSA	-,0530	,0962	-,5513	,5821	-,2428	,1368

Standardized coefficients

	coeff
NSA	-,0415

OUTCOME VARIABLE:

CBB

Model Summary

R	R-sq	MSE	F	df1	df2	p
,2286	,0522	,3402	4,8231	2,0000	175,0000	,0091

Model

	coeff	se	t	p	LLCI	ULCI
constant	1,2922	,2529	5,1092	,0000	,7930	1,7913
NSA	,2200	,0713	3,0854	,0024	,0793	,3608
EBA	,0270	,0559	,4835	,6293	-,0832	,1372

Standardized coefficients

	coeff
NSA	,2273
EBA	,0356

Test(s) of X by M interaction:

F	df1	df2	p
,3520	1,0000	174,0000	,5537

***** TOTAL EFFECT MODEL

OUTCOME VARIABLE:

CBB

Model Summary

R	R-sq	MSE	F	df1	df2	p
,2258	,0510	,3387	9,4536	1,0000	176,0000	,0024

Model

	coeff	se	t	p	LLCI	ULCI
constant	1,3733	,1888	7,2722	,0000	1,0006	1,7460
NSA	,2186	,0711	3,0747	,0024	,0783	,3589

Standardized coefficients

coeff
NSA ,2258

***** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y

The total effect of X on Y

Effect	se	t	p	LLCI	ULCI	c_cs
,2186	,0711	3,0747	,0024	,0783	,3589	,2258

The direct effect of X on Y

Effect	se	t	p	LLCI	ULCI	c'_cs
,2200	,0713	3,0854	,0024	,0793	,3608	,2273

Indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI
EBA - ,0014	,0062	-,0152	,0121

Completely standardized indirect effect(s) of X on Y:

Effect	BootSE	BootLLCI	BootULCI
EBA - ,0015	,0064	-,0157	,0126

***** ANALYSIS NOTES AND ERRORS

Level of confidence for all confidence intervals in output:
95,0000

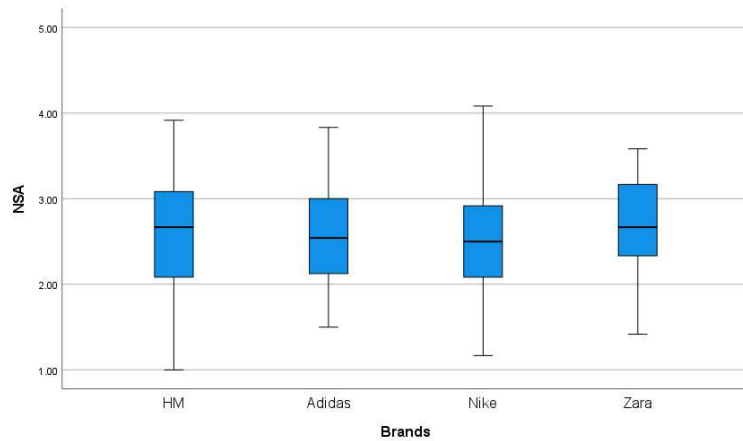
Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

----- END MATRIX -----

Appendix 7: Difference in NSA among brands

One-Way ANOVA assumptions

		Tests of Normality					
		Kolmogorov-Smirnov			Shapiro-Wilk		
	Brands	Statistic	df	Sig.	Statistic	df	Sig.
NSA	HM	.093	47	0.200	0.981	47	0.624
	Adidas	.099	44	0.200	0.972	44	0.357
	Nike	.065	46	0.200	0.985	46	0.827
	Zara	.114	41	0.200	0.974	41	0.456



Levene's Test of Equality of Error Variances

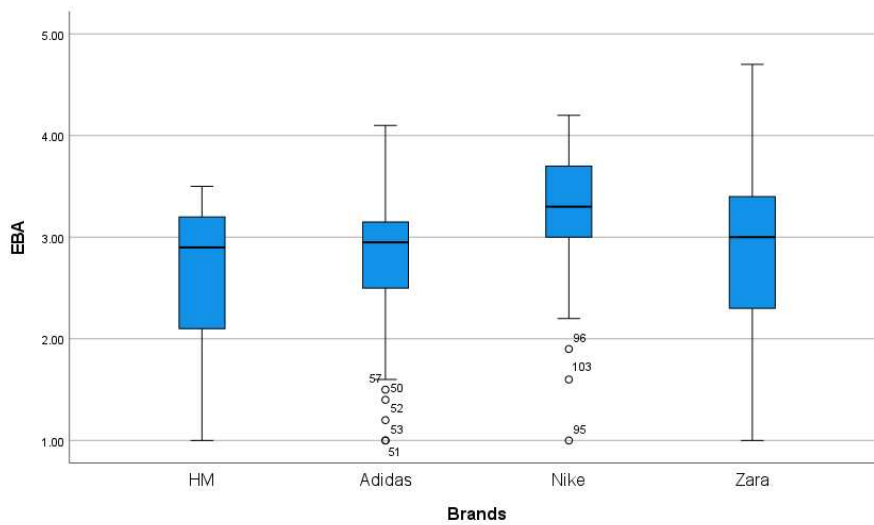
		Levene Statistic	df1	df2	Sig.
NSA	Based on Mean	0.782	3	174	0.506
	Based on Median	0.748	3	174	0.525
	Based on Median and with adjusted df	0.748	3	163.388	0.525
	Based on trimmed mean	0.776	3	174	0.509

Appendix 8: Difference in EBA among brands

One-Way ANOVA assumptions

Tests of Normality

	Brands	Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
EBA	HM	0.183	47	<0.001	0.891	47	<0.001
	Adidas	0.138	44	0.036	0.937	44	.018
	Nike	0.143	46	0.020	0.928	46	.007
	Zara	0.162	41	0.009	0.943	41	.039



Levene's Test of Equality of Error Variances

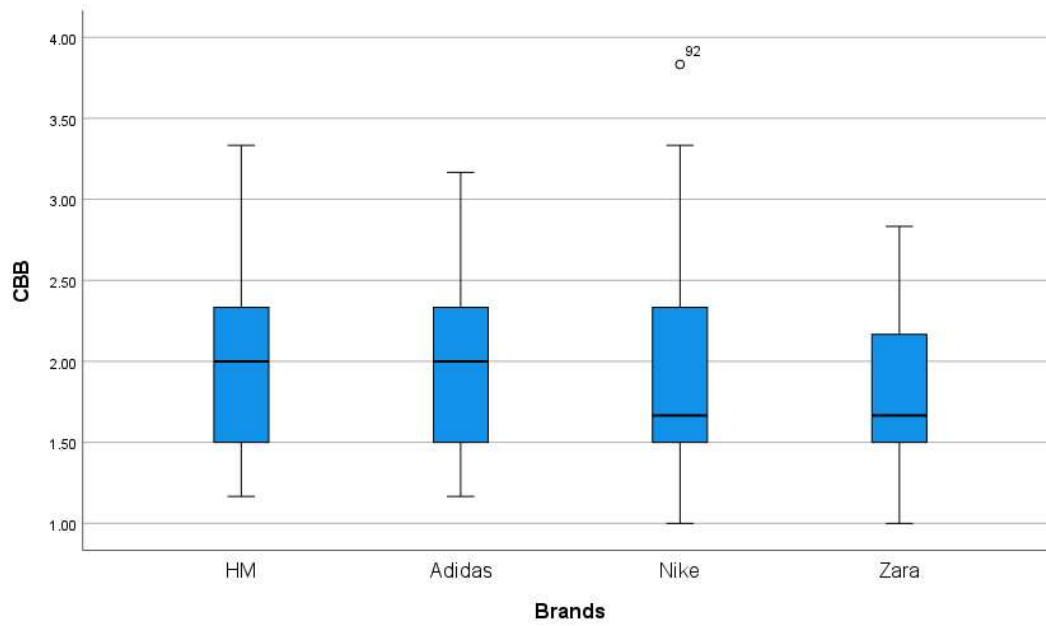
		Levene	df1	df2	Sig.
		Statistic			
EBA	Based on Mean	0.798	3	174	0.497
	Based on Median	0.564	3	174	0.640
	Based on Median and with adjusted df	0.564	3	169.892	0.640
	Based on trimmed mean	0.807	3	174	0.492

Appendix 9: Difference in CBB among brands

One-Way ANOVA assumptions

Tests of Normality

Brands	Kolmogorov-Smirnov			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
CBB	HM	0.143	47	0.017	0.903	47	<0.001
	Adidas	0.128	44	0.069	0.950	44	0.057
	Nike	0.208	46	<0.001	0.886	46	<0.001
	Zara	0.205	41	<0.001	0.936	41	0.022



Levene's Test of Equality of Error Variances

		Levene Statistic	df1	df2	Sig.
CBB	Based on Mean	2.723	3	174	0.046
	Based on Median	1.762	3	174	0.156
	Based on Median and with adjusted df	1.762	3	132.687	0.158
	Based on trimmed mean	2.414	3	174	0.068