

Bogner, Anna

**Article**

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## Memory asymmetries in experiential and material purchases: The role of self-expression

Anna Bogner

*Technische Universität München*

### Abstract

To date many studies have investigated the different potentials of material and experiential purchases on making consumers happy. There is a strong recommendation to prefer experiential purchases when seeking happiness, the so called “experiential advantage”. But do experiences always make people happier as compared to material purchases? This study proposes a memory asymmetry in experiential and material purchases as a main antecedent of reported consumer happiness in favor of experiential purchases. Employing a mixed online experiment, especially the role of self-expression in that context was investigated. Germanspeaking respondents indicated that when equally self-expressive, both material and experiential purchases can contribute to their happiness in the same degree. Nevertheless, an interesting finding was that there is a significant preference to use experiential purchases for conveying a person’s true self to someone else. The heavier use of self-expressive purchases in socialization can explain why it is easier to recall self-expressive experiential than self-expressive material purchases. This memory asymmetry results in self-expressive experiential purchases being more frequently recalled than self-expressive material purchases when asked to intuitively recall a purchase that has contributed to one’s happiness. Thus, that might be a reason why scholars have observed the “experiential advantage”. The results are discussed as well as their meaning for different areas. Finally, recommendations for future research are offered.

**Keywords:** Material possessions; experiential advantage; memory asymmetry; happiness; self-expression.

### 1. Introduction

Happiness and the choices we make are strongly interrelated concepts and highly discussed topics nowadays. This thesis focuses on material vs. experiential purchases and their effect on consumer happiness. In our materialistic society, a great number of consumers think that money can buy happiness, but it has been shown that the wealth of society is not necessarily linked to increased happiness (Clark, 2017; Epstein, 1994). That is why many recommendations have been given to consumers with the aim to increase their happiness, such as using money to benefit others rather than themselves, buying many small pleasures rather than one big or delaying consumption or buying more experiences than material things (Dunn, Gilbert, & Wilson, 2011). Other studies have emphasized that consumers are made happier when their purchases are more central to their self-concept (Carter & Gilovich, 2012). Especially experiential purchases have been shown to have a self-expressive advantage (Bastos & Brucks, 2017; Kumar & Gilovich, 2015) and there is a strong recommendation to prefer experiential purchases

when seeking happiness, the so called “experiential advantage”, which has been demonstrated in many studies (Nicola, Irwin, & Goodman, 2009; Peng & Ye, 2015; Van Boven & Gilovich, 2003). Nevertheless, as most of these studies rely on recalled memories of past purchases, it might be, that the experiential advantage is biased by memory. It has been shown that material purchases can be very relevant to the self and significantly contribute to one’s happiness (Ahuvia, 2005; Belk, 1988; Caprariello & Reis, 2013; Guevarra & Howell, 2015). But when asked, it is the experiential purchases with a high conversational value and therefore higher potential for self-expression, that people also report to make them happier (Bastos, 2019; Kumar & Gilovich, 2015; Zhang, Howell, Caprariello, & Guevarra, 2014). Narratives can help consumers to make sense of personal experiences, justifying one’s actions and maintaining a sense of self-worth (Baumeister & Newman, 1994). That is why the present thesis investigates whether there is an important effect of memory underlying the experiential advantage and whether the reported difference in happiness between experiential and material purchases is truly a result of the experiential advantage or just a result of memory bias.

rential and material purchases can be better explained by what consumers remember and report instead of the purchase type itself. In other words, I propose that there exists a memory asymmetry with a bias towards recalling more self-expressive experiential purchases than self-expressive material purchases.

This study contributes to advancing research on consumer happiness and specially to shedding a new light on the experiential advantage. It aims to show the importance of considering human memory and memory biases when conducting studies that involve the recall and evaluation of past purchases on happiness, what hasn't been considered much in that area of research so far. It further wants to emphasize the importance of the self on consumer happiness, and specifically proposes self-expression as an important ingredient to happiness. Finally, it contributes to existing literature on the experience recommendation by showing that material and experiential purchases can make consumers equally happy when balanced on these aspects.

Firstly, investigating this theory is important for researchers because they might need to reconsider their recommendations. Most of them assume that happiness is the result of the distinction between experiential and material purchases. This study in contrast aims to show that there are other important factors involved, such as the level of self-expression. This would imply a shift of focus to investigating more specific characteristics of purchases. Secondly, it also affects policy makers because they might be urged to adapt their policies and recommendations to consumers concerning how to best spend their disposable income in order to increase their happiness in equal terms. That is why it also significantly matters to consumers. The results of this study could bring up a new aspect to the daily happiness discussion. They might further contribute to a shift from our experience society to some new and deeper values. Finally, it holds great importance for marketers. As people have increasingly more money available to spend on what makes them happy, it is important for marketers to know what that really is. The results of this study might give them important orientation for product design and marketing communication.

In continuation I give a ground theoretical background and revision of literature on happiness and subjective well-being, happiness in a consumer context, as well as self-expression as an antecedent. This is followed by the proposal of six hypotheses. The conducted experiment is described in detail together with a throughout analysis and description of the results. Following this, I discuss new insights drawn from the study, especially with regard on how they can contribute to current literature and why they matter to different stakeholders. I conclude by addressing limitations of the present research as well as giving recommendations for future research.

## 2. Theoretical Background

### 2.1. A Quest For Happiness

Happiness. The highest goal of humanity but as it seems, more and more difficult to achieve in our fast, overwhelming and materialistic society. How to find happiness?

As old as is humankind, as old is the search for the key to happiness. More often than not, it seems like a quest for the holy grail without clear indications where to search for. The great philosopher Aristotle showed this ambiguity and complexity of the concept when writing: "For this reason also the question is asked whether happiness is to be acquired by learning or by habituation or some other sort of training or comes in virtue of some divine providence or again by chance." (Ross, 1908, p. 1194). Ancient Greek philosophers such as Aristotle himself contributed to some of the earliest literature on happiness with a variety of different concepts on how to achieve it. Nevertheless, this prosperous time for philosophy and theory on happiness was replaced by centuries dominated by the Christian belief that happiness can only be found in the afterlife. Only when Michel de Montaigne and Baruch de Spinoza again took up ancient philosophical concepts in the eighteenth century, they initiated the modern quest for happiness (Lenoir, 2015). Still, theories on what causes happiness varied greatly. Whereas Jean-Jacques Rousseau saw its sources in a good bank account, a good cook and good digestion, his follower Henry David Thoreau, contributed it to activity (Diener, 2009). Although the sources of happiness had not been clearly defined yet, in the same century, it even became a human right when "the pursuit of happiness" was written into the American Declaration of Independence (Hood, 2019). The following century was not so bright for the happiness literature, as in the nineteenth century, within the romantic movement, happiness became highly critiqued and seen as a bourgeoisie desire whereas unhappiness was perceived as being more authentic and creative. With the dramas and wars in the twentieth century, happiness even came to be regarded as utopic. This was clearly reflected in the work of philosophers of this century, like Martin Heidegger and Jean-Paul Sartre, focusing mainly on the question of anxiety. It was not before the 1960s when the concept of happiness gained interest again as effect of a synthesis of modern psychology and eastern spirituality. (Lenoir, 2015)

Today there are different theories concerning the sources of happiness. The telic theory for example proposes that happiness is gained when a goal is reached. This theory is strongly connected to the theory of pleasure and pain, because in order to formulate a goal, feeling a lack of something or deprivation is necessary (Diener, 2009). The activity theory assumes that happiness emerges from human activity such as described in the theory of flow by Csikszentmihalyi (1990) which proposes that activities are pleasurable when the level of challenge matches a person's skill level. The top-down theory sees happiness as the sum of many small pleasures whereas the bottom-up theory assumes that people in general tend to experience things positively, which

influences most momentary interactions of a person. Further, associationistic theories explore why some individuals have temperaments that seem more conducive to happiness. Judgment theories, in contrast, propose that happiness results from the comparison of a standard and the actual state. (Diener, 2009)

Such theories are subject of interest in a relatively new stream in psychology, called “positive psychology”, which explores happiness and well-functioning individuals. It was first mentioned by Abraham Maslow and later introduced again by the former president of the American Psychological Association Martin Seligman in the 1990ies. In contrast to the traditional psychology, centered on malfunctioning psychological processes, positive psychology deals with positive aspects of the human being such as happiness, optimism and character strengths. (Biswas-Diener & Dean, 2007)

“What is going right with people?” (Biswas-Diener & Dean, 2007, p. 11) is the central question in this stream of psychological research and results draw a clear picture of how a happy person looks like. Very happy people seem to have strong social relationships and spend little time alone (Diener & Seligman, 2002). In addition, they make more money, take fewer sick days from work, they have less work turnover, receive better supervisor evaluations on the job, get along with their colleagues better, are rated more highly by customers, spend more time volunteering and in contrast to less happy people are more likely to help strangers (Lyubomirsky, King, & Diener, 2005). Pavot and Diener (2008) researched life satisfaction judgments and showed that broad personality traits, such as extraversion and neuroticism play a significant role in how a person experiences his life. They discovered that these life satisfaction judgments are greatly influenced by individual differences as well as cultural norms and might change over time. In another study it was found that the level of life satisfaction and happiness tend to be adjusted after positive or negative life events. The same study discusses a number of things that seem to greatly influence people’s happiness such as social ties, helping others or the opportunity to participate via democracy and federalism but also points out things that might be counterproductive for happiness. Those include extensive television viewing or social comparison (Bruni, 2009). The Austrian psychologist and holocaust survivor Victor Frankl, identifies happy people as those who have found their personal meaning (Frankl, 1985). This becomes especially clear in the preface of his book “Man’s Search for Meaning” when he advises, “Don’t aim at success—the more you aim at it and make it a target, the more you are going to miss it. For success, like happiness, cannot be pursued; it must ensue... as the unintended side-effect of one’s personal dedication to a course greater than oneself.” (Frankl, 1985, p. 12).

But what are we actually searching for? How does happiness feel like? Since Aristotle, scholars have distinguished between two types of happiness: hedonia, or feelings of moment-to-moment pleasure, and eudaimonia, or the broader sense of well-being that comes from the feel-

ing that one’s life is worthwhile, meaningful, and well-lived (Gilovich, Kumar, & Jampol, 2015a). Happiness is often thought of in the sense of hedonia, as an ecstatic feeling, a single ultimate goal. In contrast, research shows, that happiness is more a feeling of medium to moderately strong pleasant emotions most of the time (Diener & Seligman, 2002). According to Ed Diener, one of the pioneers in the field of subjective well-being, this kind of happiness contains both affective and cognitive components, one’s situation and one’s state of mind (Diener, 2009). Happiness is an interplay of a large number of emotional components, which differ from person to person. The concept of subjective well-being is therefore a global assessment of all aspects of a person’s life (Diener, 2009). Lyubomirsky et al. (2005) proposed the theory that roughly half of our emotional well-being is due to genetics, that 10% is the result of life circumstances and that 40% is personal choices we make. The personal choices that we make every day are under our control, that is why this is the most relevant happiness component and one we can actively pursue. It sounds promising and simple but often becomes a great obstacle in our modern world. Which book to choose? The one with the compelling title “5 steps to happiness”? Or better “Reinvent your happiness”? Which one really contains the secret to happiness or is it just another promising marketing slogan that makes people buy yet another book that will later stand in their shelf, half read, dusty and forgotten?

## 2.2. Materialistic Consumption

The things we buy are often an intent to increase our happiness. During the last years the buying process has become easier and easier - one-click online purchase on Amazon, same-day delivery and free return - leading to impulsive buying and often not well-reflected choices.

Although scholars have tried to warn consumers of the negative aspects of our increasingly materialistic behavior, this tendency does not seem to stop accelerating. Some of these scholar’s claims are that money cannot buy happiness and that pursuing materialistic ideals has a negative impact on happiness, letting unfulfilled basic psychological needs, lowering vitality and increasing depression and anxiety (Belk, 1985; Kasser, 2000; Shrum, Lowrey, & Pandelaere, 2014). Helga Dittmar and colleagues collected 750 measures from over 250 independent studies and demonstrated a clear and consistent negative association between personal well-being and people’s belief in and prioritization of materialistic pursuits in life (Dittmar, Bond, Hurst, & Kasser, 2014). High-materialism consumers purchases are often motivated by showing extrinsic goals such as financial success, image or status (Kasser & Ryan, 1996). Belk (1985) points out that these materialistic and extrinsic oriented purchases might be the false sources of happiness to pursue. He further states, that sometimes people who have been disappointed in some way turn to materials to find their happiness there, but inevitably being disappointed again. Oftentimes, it is not the pleasure of acquisition but the pursuit that drives our material behavior (Hood, 2019), the need to keep consciousness



tuned (Csikszentmihalyi, 2000). In addition, some purchases can make us strive for more and more, leaving us with a feeling of restlessness and dissatisfaction. This is known as the “Diderot effect” which describes how individual items can have an effect on subsequent purchases. In 1969, the French philosopher Denis Diderot bought a new luxury dressing-gown but instead of feeling increased happiness as expected, it made him feel miserable. The new gown stood in strong contrast to his other possessions and he soon found himself buying new items of the same high quality. This increased spending and possessiveness made him feel bad and unhappy. (Hood, 2019)

In a study conducted by Hershfield, Mogilner, and Barnea (2016), the authors found, that materialistic behaviors are strongly enacted in today's society as most people favored more money instead of more time when they had the choice. Nevertheless, the one's choosing time over money were actually happier. Also, economists have observed a negative relationship between increasing wealth, materialism and happiness. The first to identify this effect was the economist Richard Easterlin in the 1970s, when he compared the increase in wealth of several economies after the second world war with the reported levels of happiness of their citizens (Easterlin, 1974). Since then, this has been known as the “Easterlin paradox”. Clark (2017) also suggested a flat relationship between GDP per capita and average happiness in a country and proposed that this might be due to individuals tending to compare their income to a reference group. As their income rises, their reference group does shift too, leading to the same distance between their actual and desired state.

This clarifies, especially in a consumer context, that the choices we make are strongly connected with our subjective well-being and happiness. If more money and buying more things does not increase our happiness, how should our disposable income be spent?

### 2.3. The Experiential Advantage

A recent stream in literature suggests an answer to that question, proposing that we should shift from spending our money on material things to experiences. But when trying to differentiate and define experiential and material purchases, one quickly discovers that the distinction is not always clear-cut (Gilovich et al., 2015a; Van Boven & Gilovich, 2003). In fact, a number of studies have shown that some purchases can be framed in either experiential or material way, such as a BBQ grill which can be either assessed by its technical details or by the experience it provides with friends and family (Bastos, 2019; Bastos & Brucks, 2017). Nevertheless, some definitions have been made in literature to distinguish those purchase types, with the most recognized one by Van Boven and Gilovich (2003). In their work, they specify the following definition: “Experiential purchases are those made with the primary intention of acquiring a life experience: an event or series of events that one lives through. Material purchases are those made with the primary intention of acquiring a material good: a tangible object that is kept in one's possession.”

(Van Boven & Gilovich, 2003, p. 1194). According to this definition, the most relevant aspect for the differentiation of the two purchase types is their tangibility or intangibility.

The obvious differences between both purchase types and an increasing popularity of experiential purchases has led scholars to investigate the effects they have on consumer's happiness, assuming that there might be some differences. As early as in the 1970s, Alvin Toffler realized that consumers would one day “begin to collect experiences as consciously and passionately as they once collected things.” (Toffler, 1970, p. 226). This obsession for experiences has come true and motivated more people than ever before to take one of the 47 Million flights worldwide in 2019 (IATA, 2020) to pursue an experience at a distant place. According to a Forbes article, 78% of millennials would rather spend their money on an experience than on a material good and living a less materialistic life, the so called “minimalism”, has become increasingly popular among young generations (Weinswig, 2016). Nowadays we have reached a point where “a person's life is quite literally the sum of his or her experiences” (Van Boven & Gilovich, 2003, p. 1200). In line with this trend, it has been recommended by scholars to invest our disposal income in experiences (Gilovich, Kumar, & Jampol, 2015b; Howell & Hill, 2009; Nicolao et al., 2009; Van Boven & Gilovich, 2003). This shift of the happiness discussion in favor of “doing” instead of “having” is known as the “experiential advantage”.

In several studies, Van Boven & Gilovich provided evidence for the assumption that experiential purchases make people happier than material purchases and first came up with the term experiential advantage. In detail, they found that experiences do not only make people happier and contribute to a better mood when thinking about them, but they are also seen as better financial investments. This was especially consistent among women, younger individuals and those living in urban or suburban communities (Van Boven & Gilovich, 2003). Those findings were successfully replicated and confirmed in studies by other scholars such as Howell and Hill (2009), Zhang et al. (2014) and Hayase and Ura (2015). Nicolao et al. (2009) came to similar conclusions but extending literature by showing that the effect is consistent in both directions. Experiences produce more happiness for positive purchases and less happiness for negative purchases than do material purchases. They also gave a potential explanation for the experiential advantage, indicating, that people adapt more quickly to their material purchases in contrast to their experiences (Dunn et al., 2011; Nicolao et al., 2009). Additionally, experiential purchases are in general more social, they include more people and therefore seem to provide higher levels of happiness than solitary purchases (Caprariello & Reis, 2013; Howell & Hill, 2009). They do not only better satisfy our psychological need for relatedness, they seem to be additionally of more hedonic nature which is positively related to well-being (Guevarra & Howell, 2015; Weingarten & Goodman, 2020). Another point is social comparison which has been found as an aspect counterproductive to happiness (Clark, 2017). In contrast to material things, experiences do not seem to be much subject to social com-

parison (Ang, Lim, & Leong, 2015; Carter & Gilovich, 2010; Howell & Hill, 2009). Moreover, people do not tend to rely as much on consumer reviews for experiential purchases than material purchases, indicating that they are less likely to reflect objective quality and are therefore more difficult to compare (Dai, Chan, & Mogilner, 2019; Dunn et al., 2011). As experiences are more unique and less interchangeable than material purchases, they additionally tend to generate less regrets of action but rather more regrets of inaction or missed opportunities (Rosenzweig & Gilovich, 2012). All these are arguments in favor of the experiential advantage.

It has been found that social class predicts purchase happiness derived from things vs. experiences. The experiential advantage emerges for higher levels of social class when all basic necessities and utilities are covered (Lee, Hall, & Wood, 2018; Weingarten & Goodman, 2020). In contrast, financially constrained consumers or consumers prioritizing a good use of one's money instead of happiness, seem to pursue material purchases that provide consumption utility over time (Pchelin & Howell, 2014; Tully, Hershfield, & Meyvis, 2015). Not only this group of consumers derives less happiness from their experiences, there are also those that consume their experiences with a conspicuous consumption intention in a way to simply "show off" (Duan & Dholakia, 2018). Especially today, many people tend to report all of their experiences on social media, always striving for more and more unique ones in order to meet the expectations of their audience, regardless of what makes them actually happy. In a study by Yu, Jing, Su, Zhou, and Nguyen (2016), another effect questioning the experiential advantage was found. High self-discrepancy consumers can be made happier by their material status purchases. Another weakness of experiences found in the happiness literature is, that people generally tend to derive greater happiness thinking about a past experiential purchase, but that their material purchases are the ones that made them happy more frequently (Weidman & Dunn, 2016). Further, material purchases that enable experiences make people equally happy than experiences (Guevarra & Howell, 2015). Finally, Caprariello and Reis (2013) found, that social purchases, independently of whether they are of experiential or material nature were rated as producing higher levels of happiness than solitary purchases.

To conclude, there is evidence for the assumption, that consumer happiness does not depend on the purchase type per se, but on other factors such as the specific properties of a purchase.

## 2.4. The Role of Self-Expression

As seen, happiness does not seem to be the sum of *how much* we can buy. Is it more about *what* we buy? Still, there are some studies that cast doubt that it is as simple as switching from material purchases to experiential ones and we become happier. Indeed it has been suggested that consumer happiness depends on whether our purchases are central to our self-concept (Carter & Gilovich, 2012). This theory lies in line with the argument that identity expression is related

to increased happiness (Kifer, Heller, & Perunovic, 2013). All our purchases reflect our identity in some way and show who we are by the choices we make. Nevertheless, there can be differences in self-expression within experiential purchases, same which holds true for material purchases. My last trip to South America says a lot more about me than my last visit at the hairdresser. In the same sense, a flight ticket I purchased conveys better who I am than the hair dryer I bought. If self-expression is an important ingredient for happiness, it is again all about the right, deliberately made purchase choices. But what are the purchases that express who I am? This points to another question which needs to be answered first: What is the self? And what is my true self or identity?

### 2.4.1. The self and expressing the self.

The question of the self leads us back to ancient philosophers. The famous sentence "I think, therefore I am" (cogito ergo sum) from René Descartes expresses his view of the self and its function very well. According to him it is a necessary condition in order to being able to believe in the existence of the external world. David Hume in contrast believed that the self is nothing more than the collection of different sensations and perceptions and John Locke added that it is our memory that gives us the feeling of continuity of our self. Immanuel Kant was the first one to come up with the theory that the self is the only thing of a human being that remains the same throughout time, independently of the experiences a person lives through. In contrast stands the so-called hermeneutical suggestion which sees the self as a narrative construction, something that evolves and changes according to one's projects and experiences and that is therefore bound to one's own interpretation. Finally, the phenomenological approach proposes that the self is an important condition for being able to experience reality, it is an integrated part of our conscious life. (Kircher & David, 2003)

What is sure is, that the self has been seen in different lights throughout history and its interpretation differs between fields of study (Kircher & David, 2003). Nowadays the self is mostly seen in the context of cultivation, in the sense of the hermeneutical suggestion. This implies that the self is a flexible concept and its construction is motivated by different goals of who we want to be as a person (Csikszentmihalyi & Halton, 1981). In this understanding, four studies conducted by Vignoles, Regalia, and Manzi (2006) aimed to test the influence of different motives on identity formation. They found that people were more likely to adapt identity elements that provided feelings of self-esteem, continuity, distinctiveness, belonging, efficacy and meaning. These findings were consistent on individual, relational and group level.

Additionally, it has been shown, that expressing those identity elements and one's self-concept in an authentic manner, such that they are consistent with the own physiological states, emotions, beliefs and cognitions, has a positive effect on a person's subjective well-being and is important for personal growth (Goldman & Kernis, 2002; Ryan, LaGuardia, & Rawsthorne, 2005; Wood, Linley, Maltby, Baliousis, & Joseph, 2008). According to H. S. Kim and Ko (2007) self-expression

can be defined as using one's words, choices or actions to express one's personality, traits, thoughts and feelings. Expressing oneself in such a way is further conducive to higher self-esteem (Lenton, Bruder, & Slabu, 2013) and can lower stress (Sheldon, Ryan, Rawsthorne, & Ilardi, 1997) whereas when restricted can promote inauthenticity (Kernis & Goldman, 2006), anxiety, low self-esteem and powerlessness (Wood et al., 2008). In conclusion, I propose the following hypothesis:

*Hypothesis 1 (a): Self-expression is positively related to consumer happiness.*

Self-expression allows people to distinguish themselves from others and validate their concept of themselves. Belk (1985) argues in that way when saying that the identity of a person is an abstract concept without any concrete evidence, but that there are two primary ways for outward manifestation of the self: the things we have and the things we do.

#### 2.4.2. Self-expressive material vs. experiential purchases.

Belk further states, that in our individualist culture, it is the choices we make which reflect our self where an object provides it with a body (Belk, 1988). In this context and according to his theory of the extended self, he describes objects as means to consciously expand our self to the exterior world. This aligns with the view of Sartre (2015) expressed in his work "Being and Nothingness" where he states that only by observing what we have we can know who we are. He suggests three ways through which an object can become to be regarded as part of ourselves. Through appropriating or controlling it, by creating it or by knowing it. Especially the use and display of products is essential for self-definition (Richins, 2004) and identity construction (Shrum et al., 2013) being strongest for high materialism consumers. Having a look around the homes of young adults, most often one can see future plans and goals reflected in their objects, whereas the homes of older married couples and objects in them tend to reflect shared past experiences (Belk, 1985).

These objects who have become part of ourselves and our identity can have a number of different functions. They can for example demarcate a boundary towards conflicting identities or help to support conflicting aspects of the self and provide a solution to an identity conflict (Ahuvia, 2005). In addition, material objects have the potential to connect one's meaningful past with the future through their permanence and as reminders of felt emotions (Goodman, Malkoc, & Stephenson, 2016).

As seen, material things can have a very important role in the identity construction of a person and significantly contribute to one's happiness through the symbolical meaning they provide and their potential to create order in consciousness. My favorite comfortable chair, the yoga mat on the floor, all the things in my home are connected to my sense of self, shape my awareness and order my consciousness. Although high-materialistic consumers are more likely to expect transformative properties of the objects they like to purchase (Richins, 2012), a study by Matz, Gladstone, and Stillwell (2016) found that generally, products that matched a

consumer's personality provided high levels of satisfaction with life. Our favorite objects can therefore serve as individualized cues for self-expression (Wallendorf & Arnould, 1988). The objects we use stand in relation not only to ourselves but also to the people surrounding us and the whole universe. These three levels can be described by differentiation and integration. A person must first discover his own limits of being, then he must find ways to connect himself back to others (Csikszentmihalyi & Halton, 1981). The things we possess can express this dynamic process within people, they represent who we are as individuals and serve as symbols for our relationships with others (Wallendorf & Arnould, 1988). This holds especially true for things we feel strongly attached to and which we care for (Schultz, Kleine, & Kernan, 1989). An interesting and vivid example are special sub-cultures like Star-Wars movie fans. They might collect figures of characters from the movies, displaying them at a special place in their home. Those objects clearly express their self which is characterized by its passion for science-fiction, fantasy, creativity and the space, while at the same time indicating their belonging to the group of people which are "Star-Wars Fans".

As described, in contrast to a materialistic view on objects characterized by its possessiveness component, aimed to represent status and wealth, material purchases can also be seen in a symbolic view, so that they give meaning and order (Wallendorf & Arnould, 1988). Sometimes people even give up all their possessions with the aim to re-create themselves (Holt, 1997). This shows that material purchases have a great potential to express who we are, depending on how they are used and how wisely they were chosen. If chosen consciously, their great potential lies in their significance and ability to create a world of meanings that expresses our self, personal goals and thus has the potential to make us happy (Csikszentmihalyi & Halton, 1981).

Still, the happiness derived from objects or experiences changes throughout our life. Children generally derive more happiness from goods, but this changes in later childhood when they start to develop a greater sense for the people around them and their emotional intelligence increases (Chaplin, Lowrey, Ruvio, Shrum, & Vohs, 2020). Additionally, a study exploring the effect of experience types and age on happiness conducted by Bhattacharjee and Mogilner (2013), found self-definition as being the only driver of the effect. Whereas extraordinary experiences are self-defining at any age, ordinary experiences equally contribute to happiness as people age. This shows that self-expression is also an important factor contributing to the happiness we derive from our experiences. In fact, Gilovich et al. (2015b) argue that experiences are more self-expressive in general, because the same purchase seems to be less connected to the self when thought of in material terms rather than in experiential terms. Zhang et al. (2014) also address the finding that experiential buyers are happier with their life experiences than material buyers are with their material purchases, to increased identity expression. Even if materialists pursue material purchases with the intent to manage their identity, their experiences play an equally important part of that

identity (Carter & Gilovich, 2012). The concept of differentiation and integration which characterizes a well-functioning human being can be found in the context of experiences as well. It is true that experiences have the potential to provide the sense of a unique identity (Carter & Gilovich, 2012) while at the same time contributing to social connectedness through story-telling (Kumar & Gilovich, 2015). This can explain why people derive so much enjoyment and happiness from their experiences. People seem to be much aware of this fact. A study by J. Kim, Seto, Christy, and Hicks (2016) showed that people see experiences as a better investment for understanding one's true self and for exploring who they really are as a person than material purchases.

In the previous sections, we have seen that both material purchases and experiential purchases can be highly self-expressive. Further, simply consuming more is not related to subjective well-being and happiness, instead increasing the quality of what we consume might do its job (Csikszentmihalyi, 2000). This seems to be true for both purchase types. Choosing both more self-expressive things and experiences, purchases that really express who we are as a person, might increase the quality of our money spent significantly and as follows increase our happiness. That is why I propose the following hypothesis:

*Hypothesis 1 (b): When purchases are equally self-expressive, purchase type (experiential vs. material) does not influence happiness.*

So finally what seems to really matter is not *how much* or *what* but *why* we choose something (Gilovich & Kumar, 2015). And choosing a purchase that is self-expressive, that expresses who we truly are as a person, might be a very good *why*.

## 2.5. Memory Asymmetries

### 2.5.1. Instrumentality for self-expression.

Although material and experiential purchases can be both self-expressive (Ahuvia, 2005; Carter & Gilovich, 2012) which is positively related to happiness, when asked, consumers tend to report that their experiential purchases made them happier (Gilovich et al., 2015b; Howell & Hill, 2009; Nicolao et al., 2009; Van Boven & Gilovich, 2003). Most of the studies supporting the experience recommendation are based on a memory recollection process of purchases made in the past. Given, that both purchase types can be self-expressive, it seems as though this recollection process might be distorted in favor of experiential purchases. In addition, people do not seem to be much aware of the advantage that material purchases have in some cases (Goodman et al., 2016).

Part of the explanation for this observation might be the higher instrumentality of experiential purchases to express ourselves. If something is a bigger part of ourselves, we are more likely to talk about it and connect with others through our reports of the purchases (Gilovich et al., 2015b). Social connection is an important ingredient to our happiness

(Diener & Seligman, 2002). Especially in more individualist cultures, self-expression is a socializing function, driven by a self-verification process that makes the self recognizable and observable along with having positive psychological effects (H. S. Kim & Ko, 2007; Reed II, Forehand, Puntoni, & Warlop, 2012). In general there is no difference between the happiness derived from sharing about an experience or an object (Bastos, 2019). But although there might be both material and experiential purchases that highly express who we are as a person, people tend to talk more often about their experiential purchases in socialization. They seem to commonly believe that experiences can better convey who they really are. This has been shown by Kumar and Gilovich (2015), who found that people are in general more likely to choose an experiential purchase to talk about than a material purchase. This explains in part why people reported that experiences made them happier. Especially when telling their life story, when people really want to convey to someone else who they are, they prefer to use their experiential purchases (Carter & Gilovich, 2012). Bastos and Brucks (2017) additionally showed, that when framed in experiential terms, people attribute higher conversational value to a purchase, which was positively related to consumer happiness. They further argued that this effect was driven by the motivation for developing a relationship.

We tend to construct a life narrative, where we use possessions, events and places to infer the meaning of the self and describe our identity development (Schultz et al., 1989). Sometimes meaningful objects can help to narrate such stories but in general experiences are preferred, their "story value", as Gilovich et al. (2015a) describe it, is higher. Reason is that life narratives have a similar structure than experiences, including time sequences and relations of causality (Gallo, Townsend, & Alegre, 2019). In addition, experiential purchases are generally thought of in more intuitive and holistic terms (Gallo, Sood, & Mann, 2017; Gilovich & Gallo, 2020). This goes in line with the cognitive-experiential self-theory by Epstein (1994), in which he describes a memory system that is characterized by its holistic and affective nature. Past experiences are represented in images, metaphors and narratives. That is why narrating experiences requires less complex information processing (Epstein, 1994).

Experiences can support various interpretations and meanings, especially when communicating them to someone else (Baumeister & Newman, 1994). Our experiences only live on in our minds as mental representations of what we once lived through. These memories can easily be reinterpreted, altered or reworked (Dunn et al., 2011; Gilovich & Kumar, 2015; Marsh & Tversky, 2004). The satisfaction a material good provides is less memory-based, as it stays in one's possession for a longer time. It is not as easy to romanticize an old watch that stopped working or an uncomfortable chair as an experience we lived through some years ago (Gilovich et al., 2015a). This is related to the theory of the "rosy view" which suggests, that in retrospect, people tend to evaluate experiences much more positive than they actually were (Mitchell, Thompson, Peterson, & Cronk,



1997). All these are reasons for assuming that intuitively recalled purchases, as mostly observed in most previous studies exploring the experiential advantage, were not only of experiential nature but also more self-expressive. Therefore, I propose the following hypothesis:

*Hypothesis 2 (a): Experiential (vs. material) purchases intuitively recalled from memory are more self-expressive.*

### 2.5.2. Memory availability.

If experiential purchases are more instrumental for constructing our life narrative and convey it effectively to others in general, they will be consequently more often used in socialization. This leads to the assumption that because they are more often utilized, recall from memory is easier for more self-expressive experiential purchases than self-expressive material purchases.

That talking more about something increases its memorability goes back to basic functioning of human memory. It is divided in working memory and long-term memory. In order to improve the chances of making a good decision under time restriction and limited processing capacity, we tend to search for information first in working memory and use heuristics, simple clues, to do so (Payne, Bettman, & Johnson, 1991; Wyer & Srull, 1986). This implies that some information might be disregarded and overlooked but to be utilized, information must be readily available and processable (Payne et al., 1991). This is especially relevant for autobiographical memories, which are stored in the “episodic memory” (Tulving, 1972). Although it sounds so, this is not a fixed place in memory and therefore easy to locate. In contrast, information about the self is distributed throughout the whole memory system, there are bits of episodic memory everywhere and the information that one retrieves depends substantially on how the objects were processed at the time of access (Wyer & Srull, 1986).

A very effective way to increase availability of information in memory goes back to, according to Tversky and Kahneman (1973), one of the oldest laws of memory known. It says that repetition increases associative bonds. This has been shown in studies using monkey electrophysiology (Wirth et al., 2003) and human imaging (Law et al., 2005). Conclusions drawn from these experiments are, that the more often and excessive we have processed a given information, the higher the probability of spontaneously being able to retrieve it again from working memory (Habib & Nyberg, 2007; Wyer & Srull, 1986). Especially social rehearsal through storytelling, the process of sharing narratives with others, increases memorability and accessibility of information (Keven, 2016; Kulkofsky, Wang, & Ceci, 2008). That explains why, the more often we talk about a purchase, the more accessible it is in memory and the easier it is for us to retrieve the memory of this purchase. If people prefer to talk about their experiences to convey themselves to others, this might explain why, when recalling past purchases, they tend to recall more self-expressive experiential purchases than material

purchases. As a consequence, they are rated as making people happier. Additionally, those self-expressive experiences might be perceived as being more central to the self and are again more readily remembered (Dunn et al., 2011). This leads me to proposing the following hypothesis:

*Hypothesis 2 (b): It is easier to recall self-expressive experiential purchases than self-expressive material purchases.*

It sometimes seems as if, although they are physically present, we forget our material purchases and it is our experiences that live on, through the stories that we tell. But maybe we do not forget our material purchases, we are rather not able to spontaneously access the information from long-term memory (Payne et al., 1991).

Combining the previous theoretical explanations, the aim of this study was to show that people remember and report more self-expressive experiences than self-expressive objects. As described, a potential reason for this memory asymmetry is that experiences are more instrumental for self-expression in general. People prefer to convey their self to someone else in the form of an experience rather than an object. Therefore, I propose the final two hypotheses, as mechanism underlying the previous effects:

*Hypothesis 3 (a): Experiential purchases have an advantage in memory because they are more instrumental for communicating the self than material purchases.*

*Hypothesis 3 (b): Experiential purchases are therefore more often used in socialization.*

Given the proposed relationship between self-expression and happiness, we can consequently no longer be sure whether it is the purchase type itself or rather the level of self-expression that generates consumer happiness. This would question the experience recommendation considerably.

## 3. Method

### 3.1. Research Design

To answer the hypotheses, I selected an experimental study employing a mixed-factor design. A mixed design is a research design that combines between-group and repeated-measures variables. It is an effective way to measure affective and cognitive processes.

Participants answered a survey with the title “Aspects of Consumer Behavior in the Context of Different Purchase Types”. The survey platform Qualtrics was used to design and launch the survey. Before activating the survey, it was tested thoroughly. Convenient and snowball sampling was used to distribute it. Friends and family were asked to answer the survey and forward it to other people. In addition, it was shared on Social Media Survey Groups. Respondents were also recruited via the survey distribution platform SurveyCircle (www.surveycircle.com). It is a free online platform

where responses can be collected by supporting other people and participating in their studies. The amount of time needed to complete the survey was indicated to be approximately 10 minutes. The time frame of the study was 1 month from December 15, 2020 to January 14, 2021.

The experiment consisted of six different experimental conditions. After having read the instructions and given their consent to participate in the study, participants were randomly assigned to the between-subjects factor (low self-expression, high self-expression, control condition). Following this, they read a short explanation of self-expressiveness in purchases. Participants in the control condition did not read such a description. Employing a within-subjects factor, participants were then asked to recall a material or experiential purchase (in randomized order) they actually did within the last two years. To control for whether the instructions had been understood and induce people to think about the purchase, all participants were instructed to describe it. Following this, the dependent variables, ease of recall, happiness and instrumentality for self-expression were measured. In addition, the control variables, cost of the purchase, purchase nature (hedonic / utilitarian), purchase sociability, social comparison and purchase uniqueness were assessed. A manipulation check for self-expressiveness was additionally included in the questionnaire. Having completed these questions for the first purchase, participants were then asked to recall a second purchase (material or experiential depending on what they recalled before) and answer questions assessing the same set of dependent and control variables as before. Following this, a choice task was given aimed to assess instrumentality for self-expression in a social context when having both purchases in mind. Finally, before being thanked and debriefed, participants were asked for some demographic information. In the following sections, I will describe the procedure in more detail.

### 3.2. Procedure and Measures

#### 3.2.1. Between-subjects factor: self-expression.

The aim of the study was to challenge the literature on the experiential advantage by showing that both purchase types (experiential vs. material) can make consumers equally happy when balanced on self-expressiveness. Further it intended to show that there exists an advantage of self-expressive experiential purchases in memory when spontaneously recalled. A reason for that can be the higher instrumentality of experiential purchases for communicating the self. In order to test the role of self-expressiveness in this context, it is therefore reasonable to use self-expression as between-subjects factor. According to this, three between-subjects conditions were part of the research design.

Participants were randomly assigned to one of three conditions, either a low self-expression condition, a high self-expression condition or a control condition. Drawing from Carter and Gilovich (2012) as well as Carroll and Ahuvia (2006), participants in the low and high self-expressive condition read the following description of self-expression in

purchases (the control condition did not read such an introduction), before they were given additional instructions varying between the groups.

*“Many of the purchases we make reflect our personality and express who we are to varying degrees. Sometimes, we make purchases that make a strong statement about who we are. Other times, our purchases, even though we might like them, reveal very little about our personality. The survey that follows is about a purchase you made in the past.”*

Instructions for the high self-expression condition were:

*“Think of an object (a tangible item) / experience (something intangible) that you bought during the last two years, that you feel strongly expresses your personality and shows who you truly are as a person. Please describe this object / experience.”*

Participants in the low self-expression condition were told:

*“Think of an object (a tangible item) / experience (something intangible) that you bought during the last two years, that you feel reveals very little about your personality and does not show who you truly are as a person. Please describe this object / experience.”*

Finally, respondents in the control condition were given the following instruction:

*“Think of an object (a tangible item) / experience (something intangible) that you bought during the last two years. Please describe this object / experience.”*

Similar to Carter and Gilovich (2012) as well as Kumar and Gilovich (2015) a time frame was given in the instructions to control for temporal distance. The time frame of two years was used to allow for sufficient time so that people were probable to have made such a purchase while at the same time holding it as small as possible.

#### 3.2.2. Within-subjects factor: experiential and material purchase.

In order to assess the effect of self-expressiveness in the context of different purchase types, the within-subjects part of the research design employed one factor with two levels, material and experiential purchases. Participants in all groups (low and high self-expression as well as control condition) were asked to think of a material and an experiential purchase (in randomized order) which they actually did. The instructions were consistent with Van Boven and Gilovich (2003) and Howell and Hill (2009). For the material purchase, they were given the following explanation and instruction:

*“The survey that follows is about a purchase you made in the past. Specifically, it is about an object you purchased - a tangible item you bought. It was an object you could touch with your hand. Note that this purchase should not be one made to cover utilities and necessities.”*

For the experiential purchase participants were instructed as follows:

*“The survey that follows is about a purchase you made in the past. Specifically, it is about an experience you purchased - something intangible you bought. In other words, you did not end up with anything you could hold in your hand at the end of the experience. Note that this purchase should not be one made to cover utilities and necessities.”*

### 3.2.3. Dependent measures and control variables.

After having read the instructions and described a material or experiential purchase, participants were asked several questions concerning the purchase mentioned. In the following presentation of the constructs and measurements employed, Cronbach's Alpha, in the case of multiple items ( $\alpha$ ), means (M) and standard deviation (SD) will be indicated.

#### *Ease of Retrieval*

The first dependent variable was ease of retrieval. After describing the recalled purchase, participants were asked “How difficult or easy was it to bring this specific type of purchase to your mind?” which they rated on a 7-point Likert scale ranging from 1 (very difficult) to 7 (very easy) ( $M = 5.08$ ,  $SD = 2.08$ ). In addition, the time between opening the question and writing the first character was measured in seconds, similar to a study conducted by Gardial and Biehal (1985) measuring memory accessibility and ease of retrieval,  $M = 27.12$ ,  $SD = 52.20$ .

#### *Cost of purchase*

Following this, similar to Goodman et al. (2016); Richins (2012), participants were asked “How much did you approximately spend on this purchase (in €)?” and type the amount it in a text field,  $M = 1076.13$ ,  $SD = 7112.41$ .

#### *Happiness*

A single item, adapted from Van Boven and Gilovich (2003), (“When you think about this purchase, how happy does it make you?”) was used to measure the happiness a participant derived from his purchase. Answers were given on a 7-point Likert scale ranging from 1 (not happy) to 7 (very happy),  $M = 5.54$ ,  $SD = 1.62$ .

#### *Instrumentality for self-expression*

Participants were then asked to answer two items indicating how much they disagreed or agreed with statements concerning the instrumentality of self-expression of the purchase on a 7-point Likert scale from 1 (totally disagree) to 7 (totally agree). The statements were “Telling other people about this purchase conveys well who I am as a person.” and

“Talking about this purchase helps to communicate myself to others.”, 2 items,  $\alpha = 0.92$ ,  $M = 3.76$ ,  $SD = 1.90$ .

#### *Purchase nature (utilitarian / hedonic)*

Participants were also asked “Please rate whether you consider this purchase to be primary utilitarian (defined as useful, practical, functional, something that helps achieve a goal) or primary hedonic (defined as pleasant and fun, something that is enjoyable and appeals to the senses)”, adapted from Gallo et al. (2017). They responded on a 7-point semantic scale varying from 1 (mostly utilitarian) to 7 (mostly hedonic),  $M = 4.76$ ,  $SD = 2.24$ .

#### *Purchase sociability*

Similarly, they read the question “To what extent did this purchase involve the presence of other people?” and indicated the sociability of their purchase on a 7-point Likert scale from 1 (not at all) to 7 (very much), as in Caprariello and Reis (2013),  $M = 3.47$ ,  $SD = 2.19$ .

#### *Social comparison*

Social comparison was assessed by adapting one item from Carter and Gilovich (2010), “Please imagine that someone else had made the same purchase that you had. How much would your satisfaction with your own purchase be diminished?” and rate it on a scale from 1 (not at all) to 7 (very much),  $M = 1.90$ ,  $SD = 1.51$ .

#### *Purchase uniqueness*

Some studies also assess the uniqueness of the purchase (Bastos & Brucks, 2017; Hornik & Diesendruck, 2017). That is why participants were asked to respond to the question “How unique would you say this purchase was for you?” on a Likert scale from 1 (very little unique) to 7 (very much unique),  $M = 4.16$ ,  $SD = 2.03$ .

#### *Self-expressiveness*

Finally, participants were asked to answer one item adapted from Carroll and Ahuvia (2006) serving as control item, concerning the self-expressiveness of the purchase. They were asked, “To what extent would you agree or disagree with the following statement about your purchase? - This purchase expresses who I am.” and rate it on a Likert scale ranging from 1 (not at all) to 7 (very much),  $M = 3.64$ ,  $SD = 2.00$ .

All these items were shown in this order two times, both for the experiential and for the material purchase.

#### *Instrumentality for self-expression in socialization*

In order to assess the instrumentality for self-expression imagining a real-life choice task and with both purchases mentioned previously in mind, participants were given the following indication: “Remember the two purchases you have described before (the material and the experiential one). Now imagine you are at a party. You don't know a lot of people and you start a conversation with someone you just met. If you only had to choose one of the two purchases, which one would you choose to better convey who you really are to this person?”. They could then decide between choosing the material or the experiential purchase described before.

### 3.3. Sample

Three hundred fifty-nine responses to the online survey were collected within a time frame of one month. Participants who failed to correctly respond to the instructions, as assessed by visual revision of the purchase descriptions, were excluded from the data set. 43 participants did not correctly respond to the instructions for at least one purchase and were therefore excluded. In addition, seven responses were excluded due to missing data. The final sample included 309 responses.

Those respondents were distributed among the three experiential conditions as follows. There were 114 responses (36.9%) in the Control Condition, 101 responses (32.7%) in the High Self-Expressive Condition and 94 responses (30.4%) in the Low Self-Expressive Condition.

All respondents were able to describe their purchase in German, so I assumed that those participants did understand all instructions. It also means that the sample was completely German speaking and that all, or at least most of the respondents, were from Germany, Austria and Switzerland. The mean age of the sample was relatively young with 29 years ( $SD = 10.2$ , range = 17 – 78 years). Age did not differ much between the three groups. The sample was not evenly distributed among gender, there were more women (62%) than men (38%), but approximately this same proportion could be found in all three experiential groups. Only in the low self-expressive group the difference was smaller. The great majority of the participants had a Bachelor degree (43%), followed by 30% of participants having a High School degree and 14% a Master's degree. 7% had obtained a German Diplom. Only 4% achieved their Mittlere Reife and 2% left school after Hauptschule (comparable to middle school). Only a minority of participants archived their doctoral degree. Educational level of participants was relatively equally distributed among the three different experiential groups. In general, we can say that the sample was relatively high educated. The mean income of the sample was 2682€ ( $SD = 8023.98$ €, range = 100 – 120000€). It can be seen that the standard deviation was very high. In addition, the mean income and standard deviation of the control condition ( $M_{CC} = 3324.69$ €,  $SD_{CC} = 12056.50$ €) was higher than in the two other groups ( $M_{H-SE} = 2260.75$ €,  $SD_{H-SE} = 3126.83$ €;  $M_{L-SE} = 2403.16$ €,  $SD_{L-SE} = 5544.22$ €). This is due to some very extreme outliers. By excluding the three extreme outliers found ( $> 25000$ €), the mean income and standard deviation became smaller ( $M = 2130.81$ €,  $SD = 2488.21$ €). Still, in the following analysis I did not exclude those outliers as I did not expect them to change the meaning of the outcome. In conclusion, the sample was relatively young with a majority of participants in the age of still attending university or having graduated recently.

### 3.4. Data Analysis

All statistical tests on the data were performed using the statistic program R. Mixed ANOVA was used to test the hypotheses 1(b) to 3(a). As Type III sums of squares were used,

orthogonal contrasts were set for the predictor variables. To confirm the results from the ANOVA, a multilevel model was additionally built and tested for. The packages *ez* (for building the mixed ANOVA) *ggplot2* & *ggpubr* (for data visualization), *nlme* (for building a multilevel model), *pastecs* (for descriptive statistics) and *reshape* (for reshaping the data) were installed. The *rstatix* package for basic statistical tests was used for tests such as one-way ANOVA, Tukey HSD post-hoc test and related tests. It was also used for testing the dependent variables on homogeneity of variance using Leven's test of equal variances, Shapiro-Wilk test of normality and Box's M-test for testing homogeneity of covariances assumption. Chi-square tests for analysis with categorical variables as dependent and independent variables, especially employed in hypothesis 3(b), were performed using the 'CrossTable' function from the *gmodels* package. For regression analysis, as used to test hypothesis 1(a) and to build linear models, the 'lm' function, which comes within the *tidyverse* installation, was conducted. The *car* package was used for regression diagnostics. The package *corr* and *corrplot* were downloaded to perform correlation analysis on the data and display a correlation matrix. Further packages used in the analysis were *readxl* for importing excel files, *textclean* for cleaning and processing text, *emmeans* for computing contrasts, *psych* for calculating cronbach's alpha and *knitr* to knit the rmarkdown document and export it as HTML file. The complete code and output can be found in the electronical appendix of this thesis.

## 4. Results

### 4.1. Manipulation Checks

The following analyses were intended to examine whether the manipulations employed in the online experiment were successful.

#### 4.1.1. Group assignment and self-expression.

In order to test whether the between-subject manipulation of purchase self-expressiveness in form of a random assignment to one of three different experiential groups (control condition: CC / high self-expression: H-SE / low self-expression: L-SE) was successful, I compared the mean self-expressiveness of the purchases recalled in the three groups by means of a one-way ANOVA test. From this point on, experiential groups will always be used with their abbreviations.

Assumptions for conducting the ANOVA were not met, self-expression was significantly non-normal,  $W = 0.98$ ,  $p < 0.001$ , this was also true among the groups. Homogeneity of variances could not be assumed as Levene's test was significant  $p < 0.05$ , which means that the variances in self-expression were different for study participants in all three groups,  $F(2, 615) = 17.36$ ,  $p < 0.05$  and the assumption was not tenable. Homogeneity of covariances was not given as well, as assessed by Box's test of equality of covariance matrices ( $p < 0.001$ ). Nevertheless, as our sample size was big enough ( $n > 30$ ), it was acceptable to violate the assumptions and compute the ANOVA test.



**Table 1:** Final Group Assignments

Group	<i>n</i>	%
Control Condition (CC)	114	36.9
High Self-Expression Condition (H-SE)	101	32.7
Low Self-Expression Condition (L-SE)	94	30.4

A one-way ANOVA was performed to evaluate if the purchase self-expression was different for the three experiential groups: CC ( $n = 114$ ), H-SE ( $n = 101$ ), L-SE ( $n = 94$ ). Self-expression was statistically significant between different treatment groups,  $F(2, 615) = 117.53$ ,  $p < 0.01$ , generalized eta squared = 0.28. Tukey HSD post-hoc test was performed on the data in order to see where the differences lied. Self-expression was significantly higher in the H-SE group compared to the CC,  $b = 0.74$ ,  $p < 0.001$ . Self-expression was significantly lower in the L-SE group compared to the CC,  $b = -1.83$ ,  $p < 0.001$  and also significantly lower than in the H-SE group,  $b = -2.58$ ,  $p < 0.001$ , ( $M_{CC} = 3.95$ ,  $M_{H-SE} = 4.69$ ,  $M_{L-SE} = 2.12$ ). It can therefore be assumed that the experiential manipulation for self-expression was successful. Especially the difference in purchase self-expressiveness in the H-SE and L-SE was high. In contrast it can be seen already, that intuitively recalled purchases (CC), tend to range more at the high self-expressive end of the continuum and are therefore similar to purchases in the H-SE condition.

#### 4.1.2. Purchase type.

The second manipulation check was aimed to test whether the within-subjects instructions concerning the type of purchase were successful. After participants were given the instructions according to their assigned groups, they were asked to write down and describe a material or experiential purchase they remembered (in randomized order). These descriptions were visually checked and decided whether participants had correctly understood the instructions and responded accordingly to them. Not meeting the instructions in this case meant exclusion from the data set. Responses were excluded in the case that (a) they did not describe the purchase type (experiential or material) that was requested in the instructions or (b) participants were not able to recall a purchase. Correct answers were coded with “Yes” (1), incorrect answers with “No” (2). Employing these criteria, overall, 11.98% of the initial 718 observations (counted by purchases not by participants) were excluded.

A chi-square test was used in order to determine whether there were statistically significant differences between the experiential conditions in terms of exclusion rates. Assumptions for conducting the test were met as 80% of expected cell counts were above 5 and no cells had an expected frequency below 1. The output from the chi-square test shows that there was significant evidence of a relationship between the groups and failure to correctly respond to the instructions,  $t(2) = 12.87$ ,  $p < 0.05$ . In the control condition only 6.45% of assigned study participants failed to respond to the

instructions. In the high self-expression condition 12.82% of responses were wrong. In the low self-expression condition 16.95% of respondents failed to respond in accordance to the instructions given. Although the exclusion rates differed across experiential conditions, the difference between groups was not too extreme. Hence, I concluded that excluding these responses from the data would not have an effect on the outcome of the following analysis. Nevertheless, this caveat needs to be considered when interpreting the results. In total, the instructions given concerning the purchase type to recall were met in 88.02% of cases. That is why I regarded them as being successful.

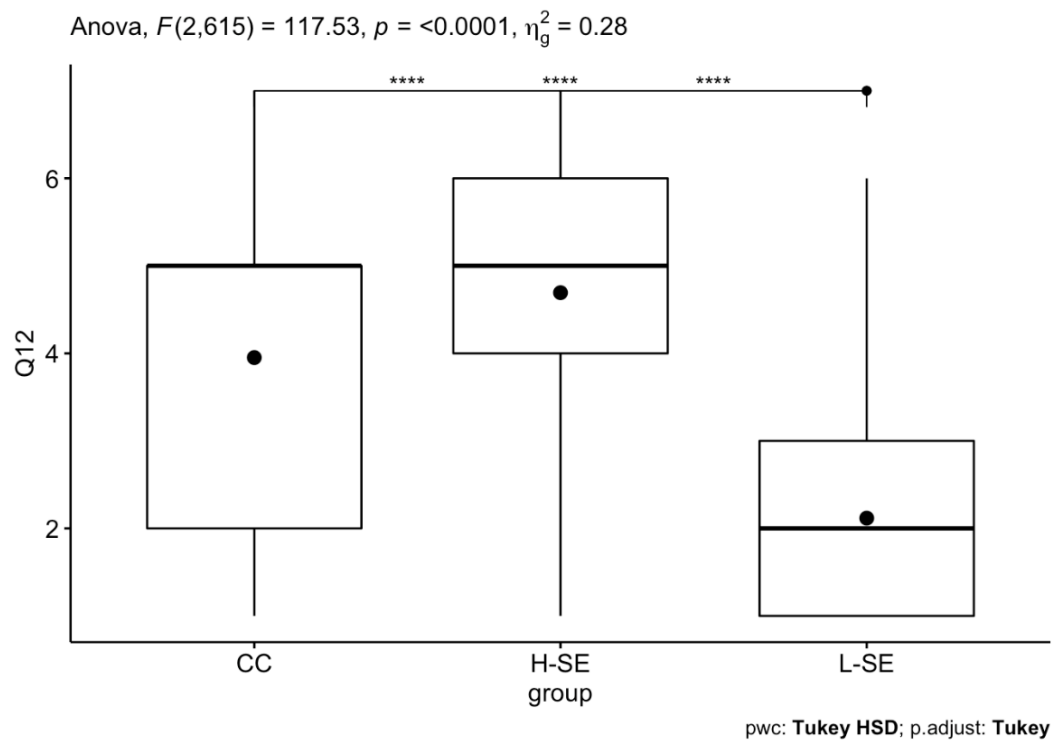
## 4.2. Answering the Hypotheses

### 4.2.1. Preliminary Analyses & Purchase Characteristics.

Before testing the single hypotheses, I tested basic associations between the depended, independent and control variables by means of a correlation table. Moderate correlations were found between the independent and dependent variables relevant for the hypotheses ( $r > 0.3$ ,  $r < 0.5$ ). The associations for the control variables were  $r < 0.3$  in most cases, with exception of purchase nature (utilitarian / hedonic) and purchase uniqueness. The complete correlation table can be found in the R-markdown output in the appendix.

A summary of the purchase characteristics by purchase type (material vs. experiential) including means, standard deviation and main effect of the purchase type is presented in Table 2. Mixed ANOVA was performed with the purchase characteristics as dependent variables in order to see whether there were significant differences between the experiential conditions and purchase types. The variables were tested on normality assumptions by visual inspection of the data as well as performing the Shapiro-Wilk test. In addition, assumptions of homogeneity of variance were tested with the Levene's test as well as homogeneity of covariances assumptions by performing the Box's M-test. Although most of the assumptions were not met, it was still possible to perform the ANOVA on the data as the sample size was sufficiently big ( $n > 30$ ).

The participant's purchases displayed a great variety in cost. Visual revision of the data showed that there were three very extreme outliers in the H-SE material condition. Those outliers were excluded for the following analyses of purchase cost but must be considered when interpreting it. Also, they were not excluded from the analysis considering the hypotheses, as it was assumed that they would not substantially change the results. Material purchases ranged from 1€ to 25 000€ ( $Mdn = 100€$ ,  $M = 495.40€$ ) and



**Figure 1:** Boxplot for Self-Expression by Group with Test Significances (ANOVA)

experiential purchases ranged from 1€ to 20 000€ (Mdn = 100€,  $M = 586.45€$ ). Purchases in the CC ranged from 2€ to 20 000€ (Mdn = 149€,  $M = 619.77€$ ), purchases in the H-SE condition ranged from 2€ to 25 000€ (Mdn = 125€,  $M = 663.81€$ ) and in the L-SE condition from 1€ to 12 800€ (Mdn = 50,  $M = 317.18€$ ). A two-way mixed ANOVA was performed in order to determine whether there were significant differences in cost between the experiential conditions, however no significant main or interaction effect was found. That is why I assumed that the mean purchase cost was similar in the experiential groups. Nevertheless, the three extreme outliers in the H-SE material condition need to be remembered, there might be, in some cases, a tendency to recall more expensive material purchases when they should represent one's true self.

Experiential purchases were found to be more hedonic and material purchases were more utilitarian in all three groups, however material purchases in the high self-expressive condition tended to be less utilitarian than purchases in the other conditions. Moreover, experiential purchases in the low self-expressive condition tended to be less hedonic than purchases in the other two conditions. This was confirmed by a significant main effect of the assignment group (and therefore self-expression) on the hedonic / utilitarian purchase nature  $F(2, 306) = 12.83$ ,  $p < 0.05$ . The effect of purchase type on purchase nature was significant  $F(1, 306) = 126.52$ ,  $p < 0.05$ . There was a significant interaction found between the group and purchase type,  $F(2, 306) = 4.27$ ,  $p < 0.05$ . This indicates that the effect the

assignment group had on the nature of a recalled purchase was different for experiential or material purchases. This was confirmed by a paired comparisons test.

It was also found that the sociability of experiential purchases was significantly higher ( $M = 4.27$ ) than the sociability of material purchases ( $M = 2.67$ ), independent of how self-expressive they were. It was deduced that a significant effect of purchase type existed on purchase sociability  $F(1, 306) = 132.31$ ,  $p < 0.05$ . Pairwise comparison was performed to show that there indeed existed a statistically significant main effect of the purchase type on sociability, ( $p < 0.001$ ).

Social comparison for material purchases was significantly higher ( $M = 2.08$ ) than for experiential purchases ( $M = 1.73$ ), independently of how self-expressive they were. The effect of purchase type on social comparison was significant  $F(1, 306) = 16.40$ ,  $p < 0.05$ , pairwise comparisons confirmed this finding ( $p < 0.01$ ).

Finally, there was evidence for a statistically significant main effect of the group on purchase uniqueness,  $F(2, 306) = 18.57$ ,  $p < 0.05$ . Pairwise comparisons showed that purchase uniqueness was significantly lower in L-SE condition ( $m = 3.38$ ) in comparison to the CC ( $m = 4.36$ ),  $p < 0.01$ ; as well as in comparison to the H-SE ( $m = 4.65$ ),  $p < 0.01$ . In addition, it was also found to exist a statistically significant main effect of the purchase type on purchase uniqueness,  $F(1, 306) = 28.32$ ,  $p < 0.05$ . Pairwise comparisons confirmed this finding ( $p < 0.001$ ). This means that the ratings of purchase uniqueness for experiential purchases were

significantly higher ( $m = 4.52$ ) than for material purchases ( $m = 3.79$ ). No significant interaction effect was found. Given the differences in hedonic / utilitarian purchase nature, purchase sociability, social comparison and purchase uniqueness, those variables were used as covariates in the following hypothesis test.

#### 4.2.2. Hypothesis 1(a).

In order to test whether self-expression was positively related to consumer happiness, a correlation analysis was executed. Spearman rho correlation coefficient was used because of the ordinal data employed. The correlation coefficient measures the level of the association between the two variables. In this case it was a strong positive effect ( $r = 0.55$ ,  $p < 0.05$ ).

Further it was of interest whether purchase self-expressiveness could significantly predict consumer happiness. That is why a regression analysis was conducted. A first linear regression model was built with self-expression as predictor for happiness. It was found that the self-expressiveness of a purchase significantly predicted the happiness derived from this purchase ( $t = 15.94$ ,  $p < 0.01$ ). The positive beta value ( $b = 0.44$ ) indicated a positive relationship between self-expression and happiness. As self-expression of a purchase increased, the happiness derived from it also increased. The result of the regression indicated that the predictor explained 29.2% of the variance in happiness, as shown by  $R^2$ . An analysis of variance  $F(1, 616) = 254.1$ ,  $p < 0.01$  showed, that the model predicted happiness ratings significantly well.

A second model was tested to see whether the model was significantly improved when including the control variables that were found to vary between purchase types or experiential groups. Also, in this model, self-expressiveness was found to significantly predict happiness ( $t = 12.50$ ,  $p < 0.01$ ) in a positive direction ( $b = 0.39$ ). Social comparison was found to predict purchase happiness ( $t = -2.22$ ,  $p < 0.01$ ) as well, but in a negative direction as the beta value showed ( $b = -0.08$ ). This means, that when the ratings of a purchase were higher for social comparison, people were less happy with their purchase. Purchase uniqueness was also found to predict purchase happiness significantly ( $t = 4.97$ ,  $p < 0.01$ ) and in a positive direction ( $b = 0.15$ ). The purchase nature (utilitarian/hedonic) and sociability did not significantly improve the model. The result of the regression in form of the  $R^2$  value indicated, that the predictors explained 32.2% of the variance in happiness. Also this model predicted happiness significantly well,  $F(5, 612) = 58.17$ ,  $p < 0.01$ . However, there was evidence that only the confident intervals of self-expression lied close together, indicating that those estimates were likely to be representative of the true population values. The interval for social comparison and purchase uniqueness were wider, indicating that those parameters were less representative, but nevertheless significant. The model was valid, there were no cases that had standardized residuals greater than 3, the histogram seemed relatively normally distributed, the scatterplot of standardized residuals did not show signs of heteroscedasticity, the VIF values were below 10 as well

as the tolerance values above 0.2, hence there was no sign of multicollinearity.

Comparing the two models by means of an ANOVA, it could be seen that the second model significantly improved the fit of the model to the data compared to the first model,  $F(4, 612) = 6.81$ ,  $p < 0.001$ . However, the F-value was relatively small. Also, the difference between the adjusted  $R^2$  of the first model (adj.  $R^2 = 0.29$ ) and the second model (adj.  $R^2 = 0.32$ ) was not very big. Including the control variables into the model could only explain a 3.0% increase of variance in happiness of the population. That is why I assume that using self-expression for predicting happiness will do a quite good job.

In conclusion, Hypothesis 1(a) could be confirmed, consumer happiness is positively related to purchase self-expression and can above be predicted by it.

#### 4.2.3. Hypothesis 1(b).

As the study confirmed that self-expressiveness can indeed predict purchase happiness, the next hypothesis aimed to test whether, when equally self-expressive, the purchase type (experiential vs. material) does not influence happiness. Mixed ANOVA was conducted as there were two independent nominal variables, one with independent groups and one with repeated measures. The data was plotted and purchase happiness was tested on normality assumptions by visual inspection of the data as well as by performing the Shapiro-Wilk test. In addition, assumptions of homogeneity of variance were tested with the Levene's test as well as homogeneity of covariances assumptions by performing the Box's M-test. Although the assumptions were not met, it was still possible to perform the ANOVA test on the data as the sample size was sufficiently big ( $n > 30$ ).

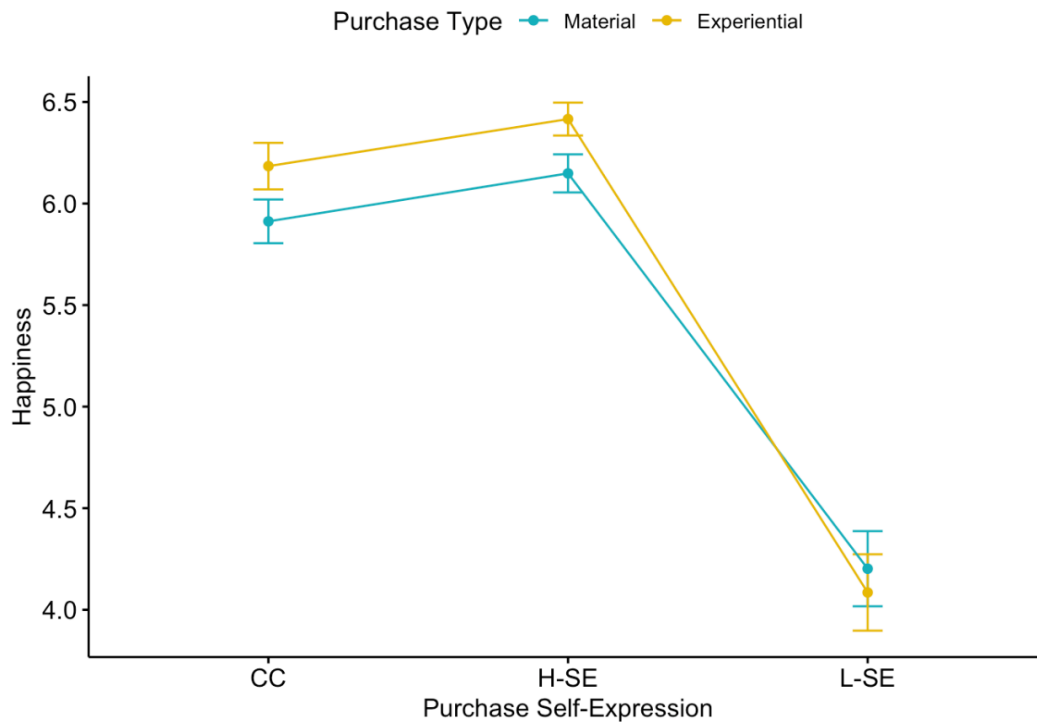
All analyses for test assumptions were also performed preliminary to the hypotheses tests in the following sections employing mixed ANOVA. The depend variables in those tests did not meet the assumptions either, but due to the sufficiently big sample size, tests were carried out. This will be assumed for all the following analyses without mentioning it again.

It was found that a statistically significant mean effect of the experiential group existed on happiness,  $F(2, 306) = 120.94$ ,  $p < 0.01$ . Pairwise comparisons showed that there was a significant effect between the CC and L-SE ( $p < 0.001$ ) and between the H-SE and L-SE ( $p < 0.001$ ). There was no significant difference between the CC and the H-SE group. The means of the CC ( $M = 6.05$ ) and the H-SE ( $M = 6.28$ ) were relatively similar, while the mean purchase happiness of the L-SE group ( $M = 4.14$ ) was significantly lower. The effect of purchase type on happiness was not significant  $F(1, 306) = 2.31$ ,  $p > 0.05$  and a significant interaction effect was not found,  $F(2, 306) = 1.86$ ,  $p > 0.05$ . As there are various advantages of analyzing repeated-measures data with a multilevel model, a GLM was conducted to further confirm the effect found in the two-way mixed ANOVA analysis. The model displayed the same main effect of the experiential group as

**Table 2:** Purchase Characteristics: Means, Standard Deviations, and Main Effect of Purchase Type

Measure	Material		Experiential		$F(2, 306)$	$\eta^2$
	$M$	$SD$	$M$	$SD$		
Purchase Cost	495	1933	586	1836	1.47	0.01
Utilitarian/Hedonic Purchase	3.61	2.12	5.91	1.70	12.83*	0.04
Purchase Sociability	2.67	1.91	4.27	2.10	0.40	0.00
Social Comparison	2.08	1.62	1.73	1.37	0.10	0.00
Purchase Uniqueness	3.79	2.01	4.53	2.00	18.57*	0.07

\*  $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Figure 2:** Purchase Happiness by Group and Purchase Type

found in the ANOVA test and no significant main effect for the type of purchase.

The non-significant main effect of purchase type and significant main effect of experiential group confirmed the hypothesis that when purchases are in the same self-expression group (high / low / control), being similar in self-expression, the type of purchase (experiential / material) has no effect on happiness. It was alone the difference in self-expressiveness between the groups that determined the happiness people derived from their purchases. Hypothesis 1(b) can therefore be confirmed.

#### 4.2.4. Hypothesis 2(a).

Until now it has been shown that purchase self-expressiveness can predict purchase happiness and that purchases, independently whether they are material or experiential, can make people equally happy. Still, many studies have found,

that when intuitively recalled, people tend to report more frequently experiential purchases in contrast to material purchases. That is why in hypothesis 2(a) I proposed, that this is because experiential (versus material) purchases intuitively recalled from memory are more self-expressive.

To test this hypothesis, a mixed ANOVA with self-expression as dependent variable was used to test whether significant differences in self-expression existed within the CC, where study participants intuitively recalled a purchase.

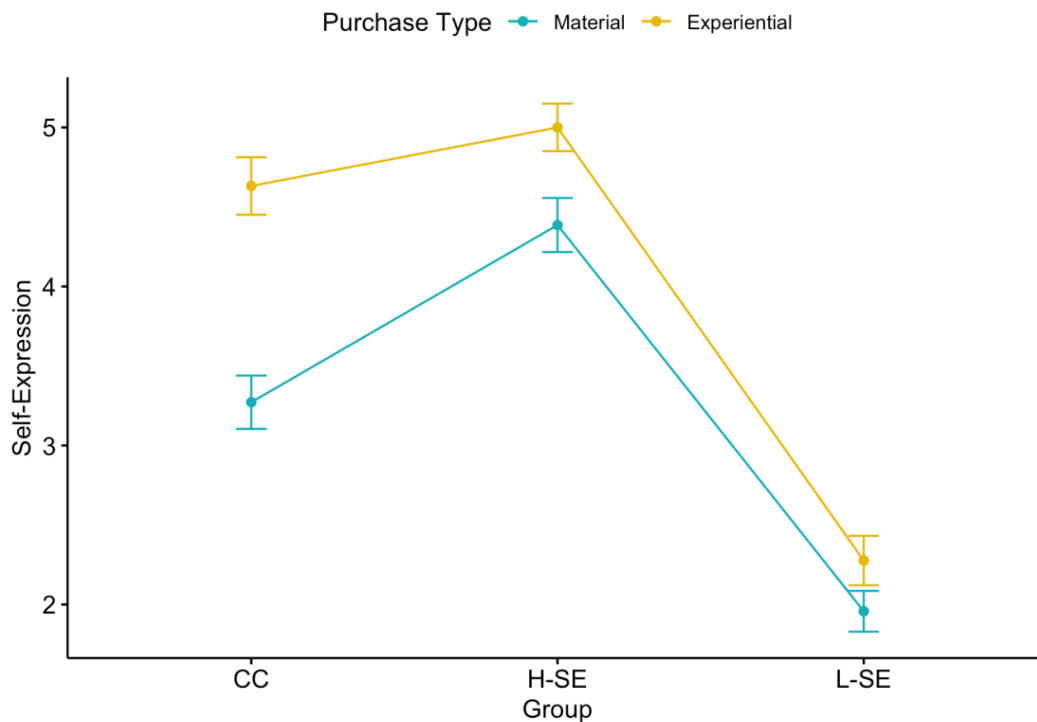
A significant main effect of the assignment group (and therefore self-expression) on happiness,  $F(2, 306) = 95.73$ ,  $p < 0.05$  was found. The effect of purchase type on happiness was also significant  $F(1, 306) = 57.04$ ,  $p < 0.05$ , as well as there was a significant interaction found between the group and purchase type,  $F(2, 306) = 8.25$ ,  $p < 0.05$ . This indicates that the effect the assignment group and therefore



**Table 3:** Mixed ANOVA test output with Purchase Happiness as DV

Predictor	$df_{Num}$	$df_{Den}$	$SS_{Num}$	$SS_{Den}$	$F$	$p$	$\eta_g^2$
(Intercept)	1	306	18518.10	679.01	8345.33	.000	.94
group	2	306	536.72	679.01	120.94	.000	.33
p.type	1	306	3.04	403.03	2.31	.130	.00
group x p.type	2	306	4.89	403.03	1.86	.158	.00

Note.  $df_{Num}$  indicates degrees of freedom numerator.  $df_{Den}$  indicates degrees of freedom denominator.  $SS_{Num}$  indicates sum of squares numerator.  $SS_{Den}$  indicates sum of squares denominator.  $\eta_g^2$  indicates generalized eta-squared.

**Figure 3:** Purchase Self-Expression by Group and Purchase Type

self-expressiveness had on happiness was different for experiential and material purchases. By looking at the Bonferroni adjusted p-value ( $p_{adj}$ ), it can be seen that the simple main effect of group was significant for experiential and material purchases in the case of the CC as well as the H-SE condition ( $p < 0.001$ ). Pairwise comparisons show that the mean score for purchase self-expression was significantly different in all group comparisons for material and experiential purchases ( $p < 0.001$ ). The only comparison that was not significant was between the CC and H-SE condition for experiential purchases.

Due to the significant Bonferroni adjusted p-value in the case of the CC it can be said, that for intuitively recalled purchases, self-expression was significantly higher for experiential purchases ( $M = 4.63$ ) than for material purchases ( $M = 3.27$ ). An additionally performed GLM on the data, displayed the same effect. It confirmed that for the CC the difference in

self-expression was significantly higher between the purchase groups than in the L-SE and H-SE condition ( $p < 0.001$ ). We can therefore confirm hypothesis 2(a).

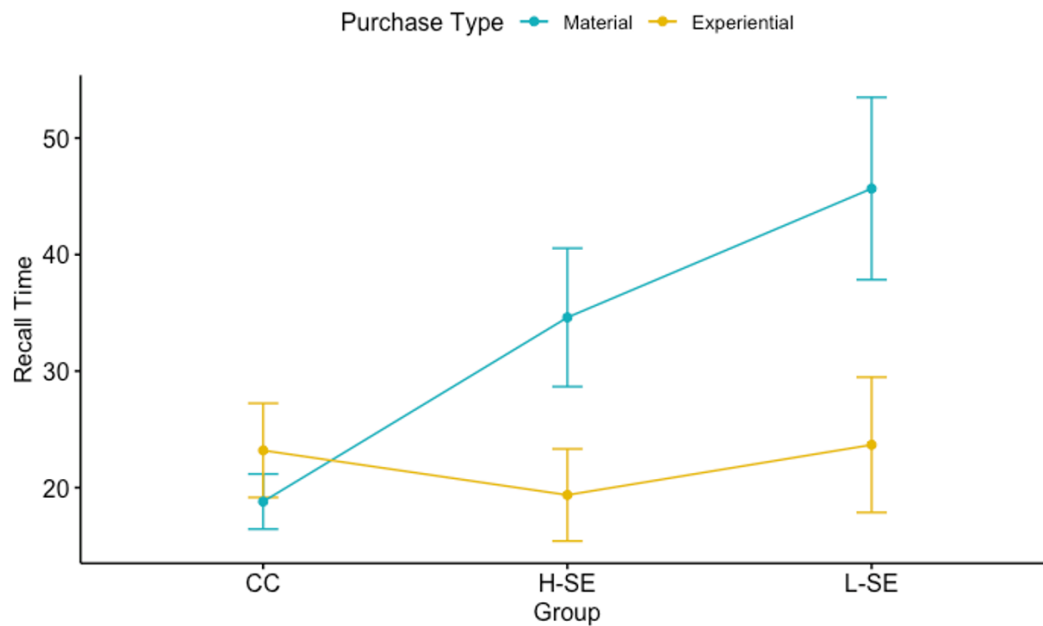
#### 4.2.5. Hypothesis 2(b).

Experiential purchases intuitively recalled from memory were more self-expressive although it has been shown that both purchase types can actually be equally self-expressive and make people equally happy. Thus, the question why people tend to more frequently recall their self-expressive experiential purchases instead of their self-expressive material purchases still remains. In order to explain this effect, in hypothesis 2(b) I argued that it is easier to recall self-expressive experiential purchases than self-expressive material purchases from memory.

In order to test this hypothesis, two measures were employed. The first one recorded the time it took participants

**Table 4:** Mixed ANOVA test output with *Self-Expression* as DV

Predictor	$df_{Num}$	$df_{Den}$	$SS_{Num}$	$SS_{Den}$	$F$	$p$	$\eta_g^2$
(Intercept)	1	306	3560.53	1090.37	999.23	.000	.68
group	2	306	682.22	1090.37	95.73	.000	.29
p.type	1	306	105.37	565.31	57.04	.000	.06
group x p.type	2	306	30.47	565.31	8.25	.000	.02

**Figure 4:** Recall Time by Group and Purchase Type

between opening the question asking for the description of a purchase they did, and responding to it. A mixed ANOVA with time of recall as dependent variable was used to test whether there were significant differences in recall time between the experiential conditions and the purchase types. A first look at the plotted data let one assume that there might indeed be an effect.

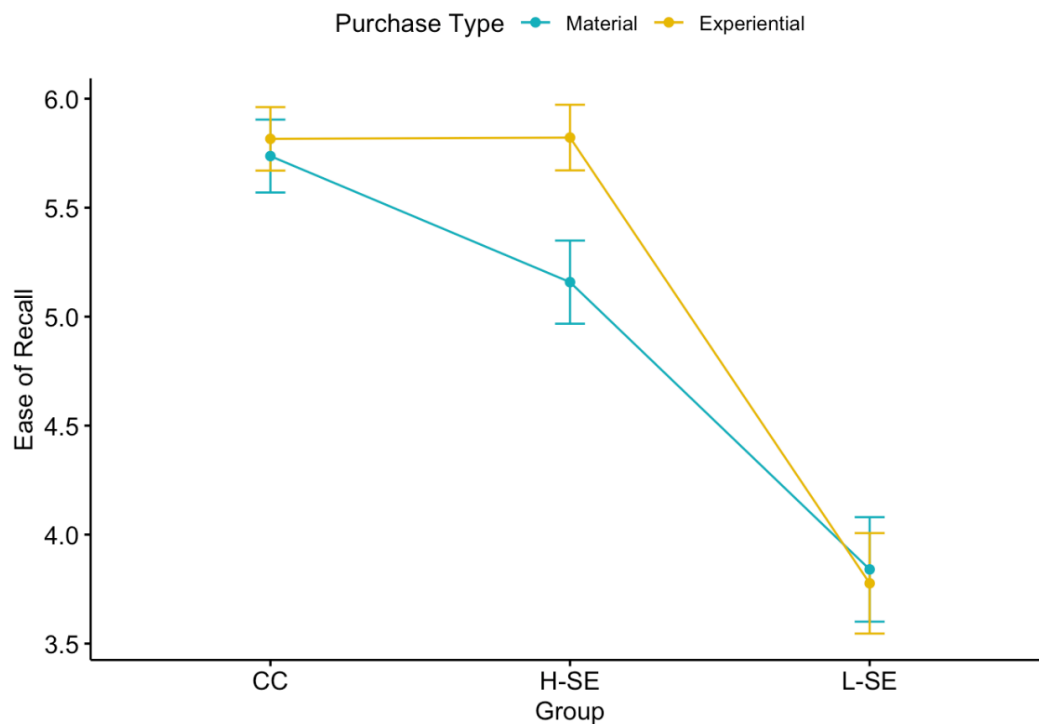
There was no significant main effect found of the purchase type on retrieval time,  $F(1, 306) = 0.75$ ,  $p > 0.05$ . The effect of assignment group on retrieval time was not significant  $F(2, 306) = 2.5$ ,  $p > 0.05$  either. But there was a significant interaction found between the group and purchase type,  $F(2, 306) = 6.83$ ,  $p < 0.05$ .

This indicates that the effect the assignment group and therefore self-expressiveness had on the recall time was different for experiential and material purchases. Considering the Bonferroni adjusted p-value ( $p_{adj}$ ), it can be seen that the simple main effect of purchase type was significant only for the H-SE and L-SE condition ( $p < 0.001$ ). Thus, while in the CC the time of recall was relatively similar for experiential and material purchases, it differed in the H-SE and L-SE group. Pairwise comparisons additionally showed that the mean score of recall time for experiential purchases was significantly different between the CC and H-SE group and the

CC and the L-SE group ( $p < 0.05$ ). This means that experiential purchases were relatively equally easy to recall between experiential groups, whereas it took participants longer to recall H-SE material purchases ( $M = 34.61$ ) and L-SE material purchases ( $M = 45.67$ ) in comparison to intuitively recalled material purchases ( $M = 18.80$ ). Subsequently, performing a GLM on the data, revealed the same patterns. The significant main effect found for the H-SE condition, provided first evidence for the proposed hypothesis.

A second measure was used to test whether self-expressive experiential purchases were easier to recall than self-expressive material purchases. Also, in this case a mixed ANOVA test was employed to see whether participant's ratings of ease of recall differed between the experiential groups and purchase type.

There was a significant main effect found of the assignment group on ease of recall,  $F(2, 306) = 54.03$ ,  $p < 0.05$ . The effect of purchase type on ease of recall was not significant  $F(1, 306) = 0.12$ ,  $p > 0.05$ . There was no significant interaction between the group and purchase type,  $F(2, 306) = 2.45$ ,  $p > 0.05$ . This indicates that the effect the assignment group and therefore self-expressiveness had on the ease of recall was not different for experiential and material purchases. Pairwise comparisons showed that there was a significant dif-



**Figure 5:** *Ease of Recall by Group and Purchase Type*

ference in ease of recall between the CC and L-SE condition ( $p < 0.001$ ) as well as between the H-SE and L-SE condition ( $p < 0.001$ ). In general, it was hardest to recall purchases in the L-SE condition ( $M = 3.81$ ), followed by purchases in the H-SE condition ( $M = 5.49$ ) and easiest for intuitively recalled purchases in the CC ( $M = 5.78$ ). From the graphs it can be seen that it was easier to recall a self-expressive experiential purchase ( $M = 5.82$ ) than a self-expressive material purchase ( $M = 5.16$ ). Nevertheless, the effect was found to be insignificant. Performing a GLM showed similar results, with the exception that the difference in ease of recall between the CC and H-SE was found to be significant as well ( $p < 0.01$ ). This slight difference was not of high importance, as it is not part of the hypothesis.

Although from the within-group comparisons of means, it could be seen that it was slightly easier to recall high self-expressive experiential purchases than material purchases, the effect was not found to be significant in the second test. This means that people did not necessary perceive their self-expressive experiential purchases to come easier to their mind as their self-expressive material purchases. Nevertheless, when looking at the time it took them to come up with those purchases, a significant difference could be observed, as found in the first part of this section. It took participants less time to recall self-expressive experiential purchases than self-expressive material purchases. Hypothesis 2(b) can therefore be confirmed as well.

#### 4.2.6. Hypothesis 3(a).

Previously it has been shown that it was easier for study participants to recall self-expressive experiential purchases compared to self-expressive material purchases. This might be the reason why, when participants were asked for purchases that made them happy, intuitively recalled purchases tended to be more frequently of experiential nature and highly self-expressive. This was found in several other studies although we could confirm that both material and experiential purchases can make people equally happy. So why does this advantage of self-expressive purchases in memory exist? I proposed because experiential purchases are more instrumental for communicating the self to someone else than material purchases, as expressed in hypothesis 3(a).

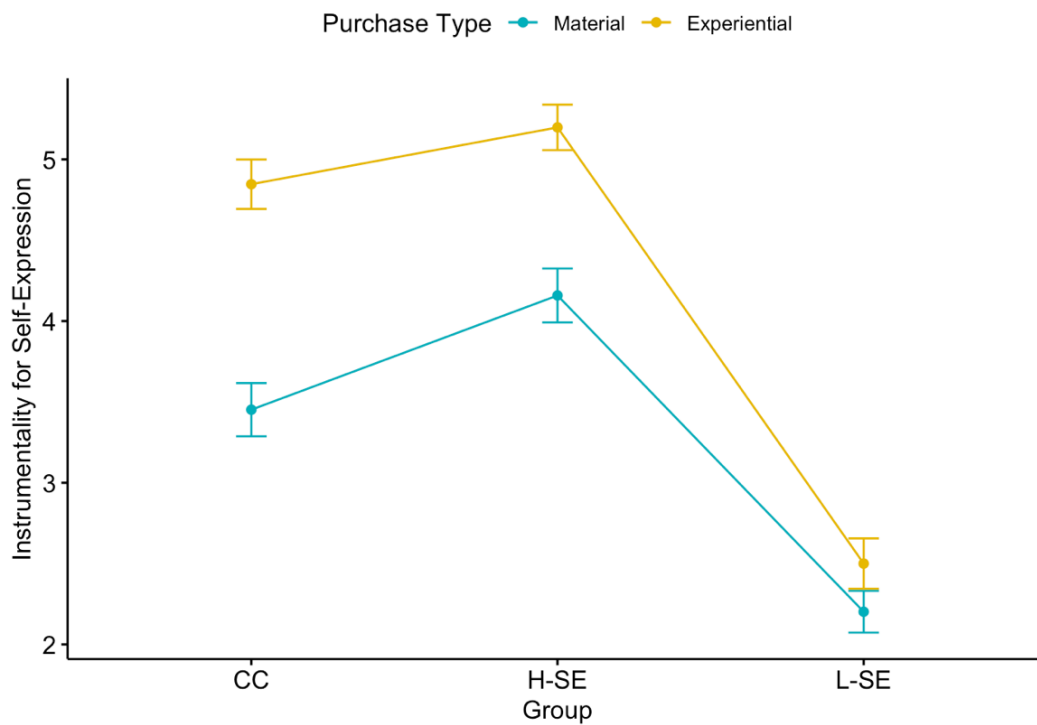
Instrumentality for self-expression was measured employing two items. Both items displayed relatively similar patterns when looking at the descriptive statistics ( $M_1 = 3.88$ ,  $SD_1 = 1.97$ ;  $M_2 = 3.67$ ,  $SD_2 = 1.98$ ). In addition, the correlation coefficient between the two items (as measured by Spearman rho) lied close to 1 which indicated a strong positive correlation,  $\rho = 0.86$ ,  $p < 0.001$ . This means that as one item increased, the other one increased as well. As a measure of internal consistency or how closely related the two items were as a group, Cronbach's alpha was calculated,  $\alpha = 0.96$ . The result showed, that the scale was reliable. Therefore, it was possible to create a new variable for instrumentality for self-expression from the two items. In the following, two independent nominal variables, one with independent groups, one with repeated measures

**Table 5:** Mixed ANOVA test output with Recall Time as DV

Predictor	$df_{Num}$	$df_{Den}$	$SS_{Num}$	$SS_{Den}$	$F$	$p$	$\eta_g^2$
(Intercept)	1	306	100549.85	1179729.49	26.08	.000	.06
group	2	306	19256.26	1179729.49	2.50	.084	.01
p.type	1	306	1100.77	446904.85	0.75	.386	.00
group x p.type	2	306	19958.17	446904.85	6.83	.001	.01

**Table 6:** Mixed ANOVA test output with Ease of Recall as DV

Predictor	$df_{Num}$	$df_{Den}$	$SS_{Num}$	$SS_{Den}$	$F$	$P$	$\eta_g^2$
(Intercept)	1	306	7607.41	1269.18	1834.15	.000	.78
group	2	306	448.45	1269.18	54.06	.000	.17
p.type	1	306	0.36	927.23	0.12	.732	.00
group x p.type	2	306	14.84	927.23	2.45	.088	.01

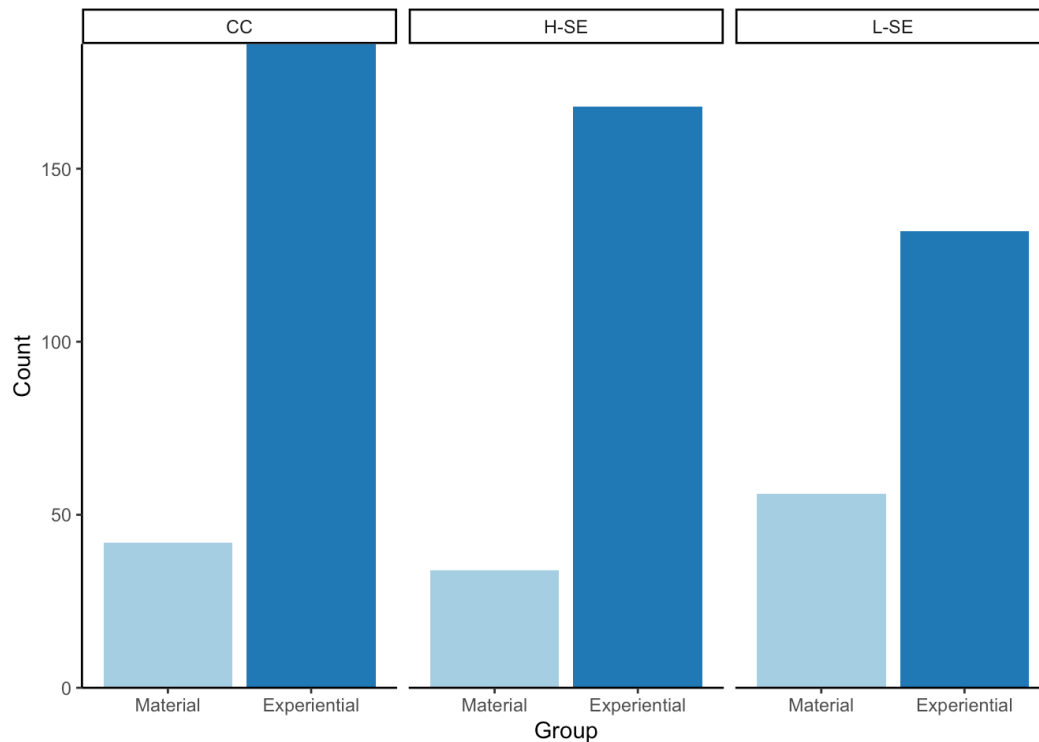
**Figure 6:** Instrumentality for Self-Expression by Group and Purchase Type**Table 7:** Mixed ANOVA test output with Instrumentality for Self-Expression as DV

Predictor	$df_{Num}$	$df_{Den}$	$SS_{Num}$	$SS_{Den}$	$F$	$p$	$\eta_g^2$
(Intercept)	1	306	3925.07	1043.84	1150.62	.000	.72
group	2	306	577.89	1043.84	84.70	.000	.28
p.type	1	306	110.88	446.87	75.93	.000	.07
group x p.type	2	306	31.66	446.87	10.84	.000	.02

were used to conduct a mixed ANOVA on instrumentality for self-expression. Before, descriptive statistics as well as test assumptions were performed and the data graphically dis-

played. The test output showed a significant main effect of the experiential group on instrumentality for self-expression,  $F(1, 306) = 84.70, p < 0.05$ . The effect of purchase type





**Figure 7:** Instrumentality for Self-Expression in a Social Context by Group and Purchase Type

on instrumentality for self-expression was significant as well,  $F(2, 306) = 75.93$ ,  $p < 0.05$ . It was found that a significant interaction existed between the group and purchase type,  $F(2, 306) = 10.84$ ,  $p < 0.05$ . Considering the Bonferroni adjusted p-value ( $p_{adj}$ ), it can be seen that the simple main effect of purchase type was significant for the CC and H-SE condition ( $p < 0.001$ ). Pairwise comparisons confirmed that the mean score for instrumentality for self-expression in the CC was significantly higher for experiential ( $M = 4.85$ ) than material purchases ( $M = 3.45$ ),  $p < 0.001$ . Also, in the H-SE condition experiential purchases ( $M = 4.16$ ) were more instrumental for self-expression than material purchases ( $M = 5.20$ ),  $p < 0.001$ . Performing a GLM on the data displayed the same effects.

The findings confirmed hypothesis 3(a) and showed clearly that experiential purchases were more instrumental for self-expression, although both experiential and material purchases can express well one's identity. This held true for all three between-subjects groups and therefore independently of whether the purchase was self-expressive or not, but the effect was only significant for the intuitively recalled purchases and high self-expressive purchases. Nevertheless, the ambiguity of the question for low self-expressive purchases could be the reason for this finding.

#### 4.2.7. Hypothesis 3(b).

An advantage in memory does not exist simply because of the preference for something, people would need to actively talk more often about their experiential purchases for this ef-

fect to emerge. Due to that, hypothesis 3(b) intended to test whether people indeed use their experiential purchases more often in socialization and what would explain this asymmetry in memory. In a choice task, people were asked to imagine a social situation and deliberately choose between expressing their true self to someone else by talking about their material or their experiential purchase they had mentioned before. As this hypothesis dealt with nominal variables, a chi-square test was used in order to determine whether there was a significant difference in how often the purchase types (experiential vs. material) were used in the choice task simulating a social situation. Assumptions for performing the test were met as 80% of expected cell counts were above 5 and no cells had an expected frequency below 1. The results showed that in a great majority of the cases, people chose their experiential purchase to convey their true self to someone in the situation (78.64%). This held true for the CC (81.58%) as well as for the H-SE condition (83.17%) and L-SE condition (70.21%). Still, a significant evidence of a relationship was found between the groups and which type of purchase was preferred for self-expression,  $t(2) = 11.59$ ,  $p < 0.05$ . In the L-SE group, there was a tendency to more frequently choose the material purchase for expressing the self (29.79%) than in the other conditions. The reason could be the ambiguity of the question in that case. Nevertheless, participants preferred to talk about their experiences in all three groups.

That is why also hypothesis 3(b) can be confirmed, experiential purchases were more often used in socialization and this held true for high self-expressive purchases as well as low

self-expressive purchases and intuitively recalled purchases. It can therefore be said that in socialization, people prefer to convey their self to another person by means of the experiences they purchase. That is why those purchases are heavily used and gain an advantage in memory over time.

## 5. Discussion

Consumers often purchase experiences and goods to increase their happiness (Richins, 2012). To date many studies have investigated the different potentials of material and experiential purchases on making consumers happy and there is a strong recommendation to prefer experiential purchases when seeking happiness, the so called “experiential advantage”, which has been demonstrated in many studies (Gilovich et al., 2015b; Howell & Hill, 2009; Nicolao et al., 2009; Van Boven & Gilovich, 2003). The aim of this study was to advance research on consumer happiness and especially shed a new light on the experiential advantage. The study does so and contributes to the literature by showing the importance of considering human memory effects when conducting studies that involve the recall and evaluation of past purchases on happiness. In line with previous findings by Carter and Gilovich (2012), it has been shown, that people generally prefer to use their experiential purchases to convey who they are as a person to someone else. They also tend to actively talk more often about their experiences in socialization. The relevance of experiential purchases to the self and motivation to talk about them can be exemplary seen by the following description of a study participant:

*“A festival. This may not be particularly unique for me, but festivals etc. play a big role in my life, as they reflect certain joie de vivre and serenity alongside the music, which I want to convey.”*

The heavier use of such self-expressive experiential purchases in socialization leads to their advantage in memory. This was demonstrated by employing a control condition in which study participants were asked to intuitively recall a purchase. More self-expressive experiential than material purchases were recalled. Also, participants reported it would be easier to recall self-expressive experiential than material purchases. As it was shown that purchase self-expression can predict purchase happiness, it is now reasonable that this memory asymmetry could be a reason for why the experiential advantage has been found and replicated in so many studies. The present study advances consumer literature by demonstrating the effects of memory behind the experiential advantage and by emphasizing the relevance of self-expression for consumer happiness. It is a main ingredient that can significantly contribute to the happiness we derive from a purchase. Considering this, material purchases can contribute to consumer’s happiness in the same degree as experiential purchases. The following example from the study vividly shows this observation:

*“The item is white boots with a lace-up and a thick white sole with a striking tread. Why I chose this item is probably because I like to express my personality with clothes. I myself am relatively small, I have blonde hair and a rather doll-like face. I love the boots so much because they allow me to show that I am not so “smooth” but “edgy”.”*

Also Goldman and Kernis (2002) support this view of self-expression as main antecedent of consumer happiness by arguing, that rather than shifting spending from material to experiential purchases, integrating material and experiential consumption is key to a happy life in a consumerist society. The findings of this study are not only important to researchers but also to marketers, consumers and policy makers.

They are important to marketers because they could consider these aspects when designing and promoting their products. The relevance is two-fold, considering the increased happiness consumers derive from purchases that express who they are as a person and the great potential of experiential purchases being more often talked about. It has been shown previously that enhancing self-expressive aspects of an offering has positive effects on brand love (Carroll & Ahuvia, 2006). This means that offerings that achieve to express the self of a person might also increase their emotional response towards the brand in a positive way. This is important because it has been found that such positive feeling towards the product or brand relate directly to product satisfaction judgments, complaint behavior and volume of word-of-mouth transmission (Carroll & Ahuvia, 2006; Westbrook, 1987). Increasing the potential for self-expression of a purchase, might lead to higher customer loyalty and more frequent WOM. A potential way to increase self-expression would be to target small and individualized customer segments and adapt the characteristics of the object or experience to the specific needs of that target group. Another way could be customization or co-creation of products.

Marketers can also learn from the advantage of experiences for expressing one’s true self in a social context for their material offerings. Framing them in a more narrative and symbolic way could enhance their potential of being retrospectively remembered and more often talked about, hence increasing desirability and word of mouth. In fact, Gallo et al. (2019) recently found that when products are framed in an experiential way, people are more likely to review it. Communicating offerings in such a way is known as experiential marketing, where it is not the resource that is in the center of importance but the perspectives and meanings that are presented to the consumer (Lindgren, Vanhamme, & Beverland, 2009). Symbols are key in this marketing approach, that is why it is very much in accordance with the importance of purchase self-expression found in this study. Lindgren et al. (2009) suggest to marketers to define in detail which perspectives and meanings they want to convey with their offering, in order to achieve a connection between the product and consumer. They further emphasize, that a mem-

orable customer experience integrates both emotional and rational aspects in a valuable combination. One practical example would be to invite consumers to a show where the products are used or connect them to special life events, like one's graduation or wedding (Goodman et al., 2016). Further, marketers could use backward framing via post-contact e-mailing and advertising to keep the memory and meaning of the purchase alive (Lindgren et al., 2009).

For consumers, the results of this study could be a motivation to be more conscious when making a purchase. The study emphasizes the idea that it is not as simple as spending one's disposable income on less material things and more experiences. Rather consumers could understand that investing in purchases that help to understand who they are as a person and maximize their individual self-expression can have a much bigger impact on their happiness and well-being. This is aligned with Matz et al. (2016) who suggested that there are optimal and suboptimal ways of spending, depending on personality. Suboptimal spending is very nicely displayed in the following purchase descriptions from the survey:

*"It was a ticket to an amusement park that I thought would be a bit calmer, in reality all the options were either too extreme or too childish for me, I would have been happy to save that money"*

Or in the case of a material purchase:

*"It was a prayer rug, really nice, and actually I wanted it as an inspiration to find more connection to faith. To be honest I just came to the realization that I am not a religious person and the thing is now gathering dust in my dresser drawer".*

Taking the results of this study together, consumers could learn to better evaluate their different purchase possibilities on their potential to increase happiness and help them considerably to make better choices. In addition, focusing more on the self-expressive aspect of purchases might help in some cases to modify or rewrite one's life narrative developed through socialization, getting free of stories and expectations one no longer wants to identify with (Shankar, Elliott, & Fitchett, 2009). Another way to look at the subject is to see consumption as a mean for sharing, giving and scarifying of what one obtained before. This approach has not only been practiced in religious institutions throughout time, but also researches as Belk (1988) explained that this could be, as Erich Fromm suggested, the key to realize one's identity and maximize self-expression without the threat of losing the object of our identity.

The majority of our society is still in the having and doing mode rather than sharing. This is why the results of this study also matter to policy makers. They can be an important inspiration for improving recommendations to consumers on how to best spend their disposable income to sustainably increase their happiness. Similarly, well-being in economically rich societies where a rise in income does no longer make a difference in happiness, could be increased. Policy makers

could subsidy companies and brands that produce and sell more meaningful, environmentally friendly and sustainable products and experiences. Like that they could promote a shift in attention from fast consumption to a more thoughtful, slow consumption, supporting the definition of an environmentally friendly consumer identity. Just thinking about the constantly increasing obsessiveness with travelling and spending holidays in wasteful and inefficient hotels, demonstrates this necessity. Making problems like that visible to consumers might force businesses to embrace a new way of doing things and lead consumers to reconsider what they actually need, as well as where and how they want to spend their time and disposable income. Complementary to that, cost/benefit analysis for different options could be developed in order to support consumers making their daily choices on a higher level, as proposed by Csikszentmihalyi (2000).

## 6. Limitations and Future Directions

Although the present study is based on ground theorizing it may overlook important effects that future research might discover in the field of the experiential advantage and self-expression. When applying the findings of this study to daily life, the following limitations need to be considered.

First, the sample of this study is not an accurate representation of the general population. As it consisted of relatively young and highly educated participants, the results of this study are only applicable to this segment of the population. Differences might be found when investigating an older or less educated sample. In addition, it was restricted geographically to a German-speaking sample from Germany, Austria and Switzerland. Conducting the study in other countries, which are less individualistic as central European countries might yield different results. Another limitation is that the experiential groups were not completely equal in number of participants as exclusion rates differed. Although the sample size was sufficiently big, it is not impossible that this might still have a distorting effect on the outcome. It is recommended to perform a similar study with a larger sample size for higher external consistency. As this research was an online experiment, it cannot be ruled out that external influences might have distracted participants or whether other factors distorted their responses to the survey. Internal consistency in such an experiment is not as high as it would be in a laboratory experiment. Another limitation is that although people were assigned to groups differing in purchase self-expression, their selected purchases were probably not always 100% high self-expressive or low self-expressive. The effects might have been larger under perfect conditions, but still there were found significant effects. A last limitation is that hypothesis 2(b) could not be confirmed with both measures, time of recall and ease of recall. Significant evidence was found that when high in self-expression, experiential purchases were more easily recalled than material purchases employing the first measure. This effect was not found to be significant in the second one. Nevertheless, this finding could

be an interesting point to thoroughly investigate in future research. There seems to be a difference in how long something actually takes and how people perceive it. It would be interesting to investigate this specific process in the current context. In total, in the present study some important effects behind the experiential advantage were found as being significant, such as the heavier use of experiential purchases in socialization with the motivation to convey one's true self to someone else. Yet, this study did not explicitly investigate why this is actually the case. Why do people prefer to talk about their experiences? One potential possibility might be their strong narrative nature. Future studies could address this assumption more thoroughly.

## 7. Conclusion

Ancient philosopher's thinking about happiness was based on observations of the human being and drawing conclusions from it. Today, research can improve our understanding of everyday life by making observations and explicitly testing assumptions. These reliable and replicable methods can help us to shed new light on processes, enrich the scientific discussion and propose ways to improve the way we are living to date. This work has contributed to all of these aspects. It suggested to look at the experiential advantage from a different perspective and consider the effects of memory which emerge from human socialization. To add further, it invited to reconsider the great potential that both material and experiential purchases can have on our happiness in the case that they express who we truly are as person.

What the world needs today is a shift from a fast and excessive consumption which was characteristic for previous centuries, to a more thoughtful behavior, centered around getting to know oneself better, making sense of one's life and finding meaning through contributing to a higher mean. This is a circle in itself. As a person starts to center their attention on their true needs and the motivation behind their consumption is to achieve their goals, they approach their true self and to a meaningful life that is defined by true enjoyment in Aristotle's sense of "eudaimonia" (Ross, 1908). They focus on assuring the well-being of those around them and the planet.

"The things we see are the same things that are  
inside us.

There is no reality but that which we have  
within us."

Demian, Hermann Hesse



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