UNDERSTANDING MONEY: A FRAMEWORK FOR UNDERSTANDING RESEARCH ON MONEY CONSTRUCT IN CONSUMER BEHAVIOR

Özge SIĞIRCI*

ORCID ID: 0000-0002-3395-3532

ABSTRACT

Different disciplines such as economics, sociology, philosophy, and psychology have examined the different dimensions of money construct from different perspectives. In this paper, our aim is to review, summarize and categorize the previous literature on money that has used a consumer behavior point of view. By this aim, we reviewed 213 articles found in four recognized marketing journals (*Journal of Consumer Research*, *Journal of Consumer Psychology, Journal of Marketing*, and *Journal of Marketing Research*) and categorized the research found in these journals under six perspectives. These six perspectives on money research include 1) perceiving money, 2) managing and allocating money 3) spending money 4) giving money, 5) having money, 6) saving money. We investigated the related research under each perspective in detail and mentioned future research areas. This review could help researchers to see the gaps in the literature and direct their future research into these areas.

Keywords: money, consumer behavior, perceiving money, managing money, spending money, giving money, having money, saving money.

PARAYI ANLAMAK: TÜKETİCİ DAVRANIŞI ALANINDA PARA KAVRAMI ÜZERİNE YAPILAN ARAŞTIRMALARI ANLAMAYA YÖNELİK BİR CERCEVE

ÖZET

Para kavramının farklı boyutları, iktisat, sosyoloji, felsefe, psikoloji gibi çeşitli disiplinler tarafından farklı bakış açılarıyla incelenmiştir. Bu araştırmada ise amacımız, para kavramı üzerine tüketici davranışı bakış açısını kullanarak yapılmış geçmiş araştırmaları incelemek, özetlemek ve kategorize etmektir. Bu amaç doğrultusunda, tanınan dört pazarlama dergisinde (Journal of Consumer Research, Journal of Consumer Psychology, Journal of Marketing, and Journal of Marketing Research) bulduğumuz 213 makaleyi inceledik. Bulunan makaleleri ise, incelemeniz sonucu altı perspektif altında topladık: 1) parayı algılamak, 2) parayı yönetmek ve ayırmak, 3) parayı harcamak, 4) parayı vermek/bağışlamak, 5) paraya sahip olmak, 6) parayı biriktirmek. Her perspektif altındaki araştırmalar detaylıca incelenmiş ve gelecek çalışma önerileri sunulmuştur. Bu araştırma, alandaki boşlukların görülmesi ve gelecek çalışmaların bu noktalara yönlendirilmesi konusunda araştırmacılara yardımcı olabilecektir.

Anahtar Kelimeler: para, tüketici davranışı, parayı algılamak, parayı yönetmek, parayı harcamak, parayı vermek/bağışlamak, para sahipliği, para biriktirmek

^{*}Dr. Öğr. Üyesi, Kırklareli Üniversitesi, İktisadi ve İdari Bilimler Fakültesi, İşletme Bölümü, ozge.sigirci@klu.edu.tr

1. Introduction

Money is a tangible resource that is used as a medium of exchange for goods and services in modern societies. But what makes money an important resource in modern societies is not only it is being a medium for people to acquire their needs and sustain their life but also the different meanings people assign to money. It is believed that the more money people have, the happier, the more successful and the more powerful they will be. Because of all these reasons people have talked about, thought about, dreamed about money, they have written songs and books, created movies and proverbs about money. More than that, people have so thrilled by money that they have even pushed the limits and committed a variety of unlawful and immoral acts for money; such as cheating, lying, stealing, murdering, prostituting themselves and even starting wars.

Money, that is such at the center of daily life, of course, has taken attention from researchers. Different disciplines such as economics, sociology, philosophy, and psychology have examined the different dimensions of money construct from different perspectives. As marketing is conceptualized as an exchange process (Bagozzi 1978), and money is the medium that is used for these exchanges, it makes money construct an important research concept for marketing discipline too. Moreover, everyday relationship of consumers with money such as earning, saving, spending, losing or the associations of money, abundance or lack of money, makes it an important construct for consumer behavior researchers. Despite the importance of the construct for consumer behavior, conceptual papers on money from the consumer behavior perspective are limited (e.g., Aaker, Rudd and Mogilner 2011; Dunn, Gilbert and Wilson 2011). Also, among the conceptual papers in the intersection of money and consumer behavior literature, we have not come across any paper reviewing the research on money. Thus, the objective of this paper is to review, categorize and summarize the research on money conducted from a consumer behavior point of view.

By this paper it would be possible to see the topics focused, independent and dependent variables and the theoretical lenses used in the previous money literature. This would contribute both to the researchers and practitioners at least in two important ways. First, it would be easier to see the gaps and contradictory points in literature and design research in an attempt to fill these gaps and contradictions. Second, it would be possible to understand consumers' relationship with money from a variety of dimensions, which would help practitioners to design appropriate marketing strategies.

We first mentioned the literature review method used in the paper and then categorized the previous research under appropriate titles and tried to review it in a meaningful flow.

2. Literature Search Method

Our aim was to examine the research on money from the perspective of consumer behavior. On the other hand we had to limit our search with a manageable number of sources. Thus, we limited our search with the articles published in four recognized journals, which publish research in consumer behavior: *Journal of Consumer Research, Journal of Consumer Psychology, Journal of Marketing,* and *Journal of Marketing Research*. In that way, although we are leaving many articles outside of our review we believe that our review still includes articles that are published in highly respected journals in Consumer Behavior field and reflects the main perspectives about the research on money.

First of all, we conducted our search from the selected journals' homepages by searching for the articles that include "money" keyword either in their titles or abstracts. While examining all the articles compiled, we realized that money was used in the conceptualization of only a few of the articles and in most of the articles it is used only in operationalization (e.g., charitable giving, economic rewards, amount of resources allocated). In order to make a significant contribution and to review the research on money from a broader perspective we decided to include both types of articles in our review. Thus, we can say that this review includes the findings from "research on money" and "research related to money".

Then, we examined all the collected articles and eliminated the articles in which the money is not used either in conceptualization of the constructs or in the operationalization of variables, money is used to operationalize an unrelated construct (i.e. status signaling consumption, indulgence consumption), money is used as a mediator or a moderator. Also, we eliminated the articles in which a consumer behavior approach is not used. We also did not include the conceptual papers. After these eliminations we had a compilation of 74 articles.

3. Six Perspectives on Money Research

There could be many different ways to categorize the collected articles (i.e. the theoretical lens used in the research). Though, to have a meaningful categorization and a flow, we decided to categorize them based on the articles' main perspective on money construct. As a result, examination of the articles in our final list showed us that the research on money could be categorized under five research perspectives: 1) Perceiving money, 2) allocating and managing money, 3) spending money, 4) giving money, 5) having money, 6) saving money.

Here, we try to summarize the literature in a meaningful flow under the related titles by mentioning the focus of the articles, independent, dependent variables and the theoretical lens used in the research.

3. 1. Perceiving Money

Under this perspective we see two different research streams. The first research stream focuses on to understand what money activates, what sort of mindsets it activates and the consequences of this activation and mindsets. To understand what money concept activates and its consequences for consumer behavior, money is generally compared with time or other resources such as effort.

The second research stream is focusing on the sensory cues of money and the consequences of these sensory cues for consumer behavior. We will discuss each research stream, their focus, the theories used and the consequences they suggest.

3.1.1. Concept of Money

This research stream mainly focuses on what sort of mindsets and associations money activates and their consequences for consumer behavior. This research stream has developed after 2000's.

When we examine the related literature, we see that product attitudes and decisions, consumer judgments, stability of consumer preferences, product evaluation strategies, willingness to donate, charitable giving and fairness perceptions are examined as the consequences of the what money concept activates.

Under this research stream we see that, besides inference making literature, mostly the information processing literature has been used to understand the money concept and what it activates in consumers' mind, which in turn leads to a variety of different behavioral and perceptual consequences. To understand this, money is generally is conceptualized as an intangible resource and compared with other resources such as time and effort to document what money activates differently than other resources.

Activations of Money:

Mogilner and Aaker (2009) by relying on associative network model have examined the effects of the activation of time versus money on consumers' product attitudes and decisions. Their research showed that temporal mindset evokes product experience, which in turn is associated with personal connection and leads to more positive product attitudes and decisions. On the other hand, monetary mindset evokes product possessions, which is generally not associated with personal connection and as a result leads to less positive product attitudes and decisions comparing to temporal mindset. But activating money can also lead to favorable product attitudes and decisions for the products that personal connection is elicited just by possessing them such as prestige products.

Lee et al. (2015) building their research on dual-process models and specifically on Epstein's cognitive-experiential self-theory (CEST; Epstein 1994; Kirkpatrick and Epstein 1992) examined the effects of time and money on the stability of consumer preferences. They proposed that as being two basic resources, time and money

activate different processing modes; while money evokes analytical processing mode, time evokes affective processing mode. Also, whereas analytical processing focuses on costs and benefits and uses piecemeal assessments, affective processing focuses on pleasure and enjoyment, more holistic assessments (Epstein 1994) and greater preference consistency (Lee, Amir, and Ariely 2009; Pham et al. 2001). As a result, this difference in the processing of these two resources influences the stability of consumer preferences where money considerations in a product-choice context leads to more inconsistent preferences than time considerations.

Su and Gao (2014) building their research on consumer information processing literature showed the effects of time versus money priming on the product evaluation strategy of consumers. According to their research, time priming leads consumers to process information holistically, which in turn leads them to choose an alternative-based evaluation strategy (verbally described attributes). On the other hand money priming elicits analytical/piecemeal information processing and this leads them to choose an attribute-based evaluation strategy (numerically described attributes).

Other research has focused on the effects of time versus money activation on the charitable giving behavior. Relying on the associative networks (Anderson and Bower 1973), which propose the activation of the associated constructs when a concept is activated, and the accessibility theory, Liu and Aaker (2008) documented the effects of time versus money activation on charitable giving. They showed that different types of mindsets are activated by the questions of how much time versus how much money participants would like to donate and this leads to either the considerations of feelings and emotional meaning or the consideration of economic utility respectively. These distinct mind-sets also affect charitable giving in which the considerations of feelings and emotional meaning activated by the mentioning of time leads to a greater willingness to donate to a charitable cause.

Similarly and by using the literature from mindset activation and construal level theory, Macdonnell and White (2015) focused on the effect of different mindset activations of time versus money on charitable giving. They suggested that thinking about money concept activates more concrete mindsets whereas thinking about time concept activates more abstract mindsets. As a result, a request for money will lead higher charitable-giving intentions and behaviors when a concrete mindset is active and a request for time will lead to more generous charitable-giving intentions and behaviors when an abstract mindset is active.

On the other hand, Hansen, Kutzner and Wänke (2012) not comparing money construct with any other resource but by solely focusing on the idea of money and relying on mindset activation and construal level theory, proposed that comparing to money-unrelated constructs, reminders of money trigger abstract mental construals and has an effect on consumer judgments (i.e. product feature or brand extension judgments). But they also mentioned the *meaning of the money* or *framing of the money* as a moderator in which money prime leads to abstract mental construals only

when consumers are faced with the general reminders of money but not with little money, costs or expenditures.

Inferences about Money:

While trying to understand money concept, researchers also used preference signaling theory and inference-making literatures. Shaddy and Shah (2018) compared time, money, mental effort, physical effort, social support and social influence from the point of their perceived fairness and tried to understand the reason why some resources are perceived fairer to use than others. It is proposed that resources differ based on their signaling of preferences. The more a resource signals the preference of the person, the easier to infer how much a person wants or needs something. Thus allocation policies, which are based on the resources whose preference signaling are clearer, are perceived as fairer. The preference signaling of the six resources are ranked as social influence, social support, money, mental effort, physical effort and time in an ascending order. Also, a positive correlation was found between their preference signaling and perceived fairness.

3.1.2. Sensory Characteristics of Money

This research stream focuses on the effects of the different physical/visible/tangible properties of money on a variety of consumer perception and behavior (i.e. perceived value of money, saving or spending behavior). Properties of money that have been examined in this research stream include, money being in the form of a whole or parts, being worn or crisp, being cash or credit card, and its numeric representations in different currencies. We reviewed this group of research under the titles of *Representation of Money* and *Physical Appearance of Money*.

Representation of Money:

A group of research has examined the effects of different representations of a specific amount of money on consumer behavior.

Mishra, Mishra and Nayakankuppam (2006) investigated consumers' perceived value and willingness to spend when they have the same amount of money as a whole versus in the form of parts. Based on the processing fluency and affect literatures they showed that consumers experience greater processing fluency when they process the money in the form of a whole (large denomination) than they process the money in the form of parts (smaller denominations) and this generates positive affect which in turn results both the overvaluation of the whole and reluctance to spend the whole. The researchers called this a "bias for the whole." On the other hand, Raghubir and Srivastava (2009) contributed to the denomination research by proposing an alternative explanation. They explained the issue from self-control and regulation perspective. They showed that consumers less likely to spend money in large denominations comparing to the same amount of money in the form of smaller denominations not because of processing fluency as proposed by Mishra et al. (2006) but because of self-control. Their research put forward that consumers choose the

money in lager denominations because of their lower perceived fungibility when they want to have self-control in spending.

Wertenbroch, Soman and Chattopadhyay (2007) examined the effects of currency numerosity on consumer spending; specifically how consumers spend when there is a contradiction between the numerosity of the home currency versus a new currency. They found that consumers underspend when the new currency is less numerous than the home currency and overspend when the new currency is more numerous than the home currency. They put forward the anchoring and adjustment (Tversky and Kahneman, 1974) and reference values as the mechanisms underlying their findings.

Physical Appearance of Money:

The other research stream under the sensory characteristics of money perspective focuses on the physical appearance of money. This research stream uses mainly the affective mechanisms to explain the effects of the physical appearance of money on consumer behavior.

Di Muro and Noseworthy (2012) have examined the physical appearance of money on consumers' spending behavior. By their research, they challenged the idea of the denomination effect by showing that consumers tend to spend more when they have worn bills and spend less when they have crisp bills. The underlying mechanism of consumers' spending tendency differences based on the money's being worn versus crisp is explained by disgust and pride taken from affect literature. According to their explanation, consumers who are disgusted by the contamination from others want to get rid of from the worn bills, whereas they want to keep the crisp bills because of the pride of owning them around others.

Galoni and Noseworthy (2015) took the findings of Di Muro and Noseworthy (2012) a step forward. Although they agreed that worn bills could result spending more they proposed an alternative mechanism for this and suggested the consumers' lowered valuations of the products bought by worn bills instead of the idea of rid themselves of the worn bills. Bringing the disgust and law of contamination (Rozin & Nemeroff, 1990) literatures together, authors proposed that disgust evoked by the worn bills would be transferred and lower the valuations of the products which will in turn lead to buying more products to compensate for this lower valuation.

On the other hand Shah et al. (2015) and Duclos and Khamitov (2019) examined the effects of the physical form of money (cash, check versus credit or debit card). They both used the affect literature to explain the consequences of the usage of different types of physical money forms. Drawing on the pain-of-paying literature, Shah et al. (2015) documented that pain of payment, which depends on the form of payment, influences the perceived value of the purchase and post-transaction connection felt toward the product and organization. According to their findings, cash and check are more painful ways of payment comparing to debit or credit card. As a result when consumers pay with cash or check both their pain of payment and their perceived value of the purchase and the post-transaction connection felt toward the product and

organization are higher. Similarly while Duclos and Khamitov (2019) focused on the physical form of money and pain-of-paying literature, they investigated its effects on consumers' intertemporal choice. Looking to the literature from a different angle, they proposed that since the pain of parting from money depends on the physical form of money (cash versus dematerialized money) it can influence consumers' willingness to wait for larger-later rewards. Accordingly they showed that, parting from cash is more painful than parting from dematerialized money, and this will make consumers more impatient and less willing to wait for larger-later rewards in cash situations.

3.2. Managing and Allocating Money

This perspective includes the research that focuses on the allocation of monetary resources, mental accounts and managing money research streams.

3.2.1. Allocation of Monetary Resources

This research stream focuses on the effects of the properties of money accounts (i.e. joint vs. separate accounts, size of the account) and effects of other factors (i.e. exposure to future self or stress) on consumers' allocation of their money decisions such as spending and/or saving it.

From the perspective of the effects of money accounts on consumers' allocation behavior, Garbinsky and Gladstone (2019) investigated whether the type of bank account from which one spends has an influence on what type of products the person spends his/her money. According to their research, couples spending their money from a joint bank account instead of a separate bank account are more likely to spend their money on utilitarian products than hedonic products because of their increased need to justify their spending to their partner. On the other hand, based on the idea that households with women as chief wage earners do not reflect the assumptions of either resource theory or human capital view, which are dominant theories to understand household choice, Commuri and Gentry (2005) investigated the money pooling and allocation of money in households with women as chief wage earners. Their findings from a qualitative study showed us that both joint and separate pools of money are used for routine expenses and personal spendings respectively when the woman is the chief wage earner in the household. Morewedge, Holtzman and Epley (2007) focused on the size of the resource account and showed that consumers spend more resources (time, money or calories) from their cognitively accessible large resource accounts comparing to cognitively accessible small resource accounts because the commodity looks subjectively more expensive in small accessible accounts. For instance consumers spent less money in shopping, when they thought about their items in their wallet (small accessible resource account) than when they thought about their checking and savings accounts (large accessible resource account) before the shopping. Also, Du and Kamakura (2008) modeled the consumers' allocation of their discretionary money across a variety of expenditure categories.

Other researchers also investigated the effects of the different factors on consumers' money allocation decisions. Hershfield et al. (2011) proposed that connectedness to future self would lead consumers to allocate their monetary resources to future. They showed that consumers exposing to their future selves via virtual reality choose to allocate their money to a retirement savings account and accept later monetary rewards over immediate ones. Moreover, Durante and Laran (2016) examined the effects of stress on consumers' allocation of their money. Based on the consumers' need to control environment, they proposed and showed that stress lead consumers to perceive that they lose their control over environment and consumers would allocate their money strategically by either saving or spending it on necessities to restore their control.

3.2.2. Mental Accounts

Main focus under this research stream is the mental segregation of money and how consumers treat money differently when it is mentally segregated. Main characteristics of mental accounting, earmarking, emotional accounting, accounting periods and their effects on consumers' spending, saving, cost tracking behaviors have been the variables examined under this stream.

First of all, Heath and Soll (1996) focused on two main characteristics of mental accounting: budget setting and expense tracking. They proposed that budget setting and expense tracking alter choice of consumers in a way that after setting the budget consumers resist transferring funds across accounts and this inflexibility leads consumers to underconsume (spend less money or spend no money) after purchasing items that is highly typical of the account. For instance, it is shown that consumers tried to spend less money for entertainment after purchasing a sport ticket, which is a highly typical item of the entertainment account.

From the earmarking point of view, Soman and Cheema (2011) analyzed the relationship between the earmarking money and saving. Earmarking is defined as the "labeling money for a particular purpose". By proposing the self-control and guilt as the possible mechanisms, Soman and Cheema (2011) find out in a field experiment that consumers save more money when the earmarked money is partitioned into two accounts than it is kept in one account. Moreover, the effect of partitioning is found to be greater when the guilt of spending from the accounts is highlighted by using the visual reminders. Sussman and O'brien (2016) examined the effects of earmarking money on consumers' saving and spending behavior. Although previous research highlighted the positive effects of labeling the savings account based on the enhancement of self-control mechanism, this research counter to the previous literature, showed that earmarking money could have negative effects on consumers' financial decisions. They showed that when the savings account labeled for responsible goals such as saving for a child, versus less responsible goals or unearmarked, consumers prefer to use higher interest credit than spending from that previously earmarked account even in case of emergencies. Responsibility and guilt associated with spending from a savings account earmarked for responsible purposes found to be the mechanisms that lead consumers to incur even higher costs to maintain savings.

Looking through a social lens to the earmarking concept, Bradford (2015) conducted a qualitative study to understand how money, as a fungible resource, is transformed into social and moral resources. The findings underline the importance of earmarking money and provisioning approaches in the transformation of money into social and moral resources.

Levav and McGraw (2009) incorporated the feelings of consumers into mental accounting research and added the term "emotional accounting" into the literature. According to them, just like in mental accounting, consumers categorize money in emotional accounting but this time in their categorization process they focus on the feeling the money evokes and they affectively tag the money. These "affective tags" in turn affect how the money will be spent.

Hossain (2018) based on the differences in categorization flexibility, showed us the role of thinking styles in mental accounting. More specifically it is shown that while analytical thinkers are more prone to follow rules, they follow the rules of "mental labeling" and spend their monetary resources (i.e. rebate money from more hedonic vs. less hedonic product) on account consistent purchases (i.e. item from hedonic category vs. item from utilitarian category). On the other hand, holistic thinkers use mental accounting system flexibly and spend their monetary resources either on similar or dissimilar category items.

Consumers often incur costs first such as spending money on a game ticket and receive benefits later such as attending the game and consumers track these costs and benefits in their "mental accounts" (Soster, Monga and Bearden 2010). Soster, Monga and Bearden (2010) examined the effect of accounting periods (day, season, weeks etc.) on tracking of temporal and monetary costs. They proposed that there is an asymmetry between the tracking of temporal and monetary costs in which accounting periods have a stronger effect on the mental tracking of temporal costs comparing to monetary costs. More specifically, for monetary costs consumers track costs and look for benefits independent of when benefits occur (in same or different accounting period). But for temporal costs, accounting period is more important and consumers track costs and seek benefits when the benefits occur in the same accounting period as the costs than a different accounting period.

3.2.3. Managing Money

Constructs such as current money management stress, planning about money and money management intention are the main focus under this research stream.

In their research Netemeyer et al. (2017) conceptualized perceived financial wellbeing and showed its strong effect on overall wellbeing. Based on the existing literature and consumer financial narratives (CFPB 2015), they documented that current money

management stress together with expected future financial security can be used to conceptualize perceived financial wellbeing and created a scale to measure perceived financial wellbeing.

Based on the previous research showing people think differently about time and money (Liu and Aaker 2008; Mogilner and Aaker 2009; Okada and Hoch 2004; Saini and Monga 2008; Soman 2001; Zauberman and Lynch 2005), Lynch Jr et al. (2009) focused on the question that whether there could be differences between their propensity to plan for time and money. Besides creating a scale for measuring propensity to plan for time and money they showed that while individuals plan more for the short run than the long run for time, they plan equally for both short and long run when the case is money.

Bolton, Bloom and Cohen (2011) examined consumers' money management intention in the debt consolidation loan marketing domain. Since most of the debt consolidation loan advertising ignores the downsides of loans such as the high interest rates, the researchers focused on the idea that interventions that help consumers understand more about loans and lenders would increase their money management intentions. The findings showed that informing consumers about both loans and lenders increased their money management intentions, reduced loan evaluations and improved loan decision making.

3.3. Spending Money

Research under this perspective can be evaluated as the "research related to money". Although we have already discussed the effects of different properties of money or activations of money on consumers' money spending behavior under different perspectives (i.e. perceiving money, allocating money etc.) under this perspective we grouped the research that have focused on the consequences of spending money or the effects of money-unrelated factors on spending money. Spending money on what, feelings associated with spending money, spending money how and how much and spending money for whom are the sub-topics we have discussed here.

3.3.1. Spending Money on What and Feelings Related to Spending Money

Research under this title focuses on how spending money on different product types such as hedonic vs. utilitarian, material vs. experiential can have effects on a variety of consequences (i.e. pay in time vs. money, preferred time of consumption, happiness).

Okada (2005) based on the need to justify the spending perspective examined consumers' spending patterns for utilitarian versus hedonic products. According to their research, since it is more difficult to justify spending for hedonic purchases consumers tend to pay in time (expending effort) for hedonic purchases whereas they prefer to pay in money for utilitarian purchases.

From an intertemporal perspective, Kumar and Gilovich (2016) examined whether the type of product consumers spending their money has an effect on the preferred timing of consumption. According to their research, consumers tend to spend their money now for material purchases (clothing, jewelry) and spend their money later for experiential purchases (vacations, concerts). In an other word, consumers tend to spend their money on material purchases now comparing to experiential purchases because of the more utility they derive from waiting for experiences than waiting for material purchases.

Spending money on experiences or material possessions could also affect the happiness of consumers. Contrary to the general opinion and previous finding that spending money on experiences make consumers happier than spending money on material possessions (Van Boven and Gilovich, 2003), Nicolao, Irwin, and Goodman (2009) tested the idea that whether the valence of the experiences or material possessions (being positive vs. negative), that consumers are spending their money, has an effect on the happiness of the consumers. They showed that spending money on experiences could make consumers more or less happy than spending money on material goods depending on the experiential purchase being a positive or a negative one.

On the other hand, money spending pattern of consumers are examined from the social acceptance perspective. Mead et al. (2010) showed that social exclusion leads consumers to spend their money strategically to affiliate with others, such that socially rejected consumers adapt their money spending pattern to the people they want to affiliate with by either spending less or more money according to the preferences of their interaction partner or by even spending their money on unappealing food item in an effort to socially connect.

Past research also investigated the emotions associated with spending money regardless of what money is spent for. Based on the social support and pain literatures, Xu et al. (2015) proposed and showed that social support attenuates the pain of spending. Perceived importance of money as a protection mechanism attenuates for consumers who are having high social support which in turn decreases their negative emotions they feel after spending money in other words their spending pain.

3.3.2 Spending Money How, Spending How Much Money and Spending Money for Whom

This stream of research examines the factors affecting how consumers spend their money, what kind of factors affect consumers to spend more or less money, in which situations consumers spend more or less money and they spend their money for whom.

Under this research stream Wen Wan, Peng Chen and Jin (2017) focused on the effect of anthropomorphized products on the amount of consumers spend by using the person perception literature. Combining the "beautiful is good" rule and the anthropomorphization literature, Wen Wan, Peng Chen and Jin (2017) revealed that

because of the "beautiful is good" belief in person perception, consumers tend to spend more money and time to collect information about a product's appearance attributes when the product is anthropomorphized.

From an interpersonal point of view Rick, Small and Finkel (2011) investigated the relationship between money spending pattern of consumers and their spouse selection and marital well-being. Tightwad consumers who generally spend less money and spendthrift consumers who generally spend more money tend to marry each other but because of the conflict over money they generally have a low marital well-being.

Another research examined the effect of the structure of companies' feedback request surveys on consumers' attitudes and purchase behaviors. Based on the accessibility literature Bone et al. (2017) showed that starting a feedback survey by asking consumers something about their positive purchase experience (open-ended positive solicitation) makes positive memories more accessible, and as a result consumers spend more money in their subsequent purchases from the company.

Zhu, Bagchi and Hock (2018) showed that deadlines have an effect on the amount of both time and money consumers spent. Based on the inferences account they showed that, when the deadlines are longer, consumers perceive the goal more difficult and tend to spend more money and time resources for goal pursuit.

Finally, Rucker, Dubois and Galinsky (2010) examined the effect of consumers' power state on their spending money. Their research showed that power state of consumers affects for whom they will spend their money. Since consumers who are in high-power states perceive their own psychological utility higher than others this leads them to spend their money on themselves instead of others.

3.4. Giving Money

Under this perspective we grouped research under two categories, while the first one compares the effects and consequences of giving time versus money, the second one focuses on giving money.

3.4.1. Giving Time versus Money

This stream of research focuses on the effects of different consumer characteristics on giving time versus money and the consumers' evaluation differences of the companies based on their giving time versus money.

First group of research examines consumers' internal factors (i.e. belief in karma, moral identity) on the preference to give time or money. Kulow and Kramer (2016) examined the effects of the consumers' belief in karma on their donation behaviors from the perspective of altruistic motivations (self-benefiting vs. others-benefiting reasons) literature. According to their findings strength of the karmic beliefs leads consumers to donate time when the charitable appeals focus on others' gains.

However the strength of consumers' karmic beliefs does not lead consumers to donate money since there is no social connection in money donations, and this does not make consumers feel like they deserve the rewards of the karma. Another perspective examining the donations of time versus money focuses on social identity specifically moral identity literature. Reed, Aquino, and Levy (2007) documented that consumers with a high self-important moral identity perceive giving time more moral, and more self-expressive than giving money and they prefer giving time more than money.

On the other hand, another group of research examines consumers' evaluation of companies' giving time versus money under the corporate social responsibility domain. Following fluency and the activation differences of time versus money in consumers' mind literatures, Hildebrand, DeMotta, Sen, and Valenzuela (2017) find that consumers' evaluation of the company based on its contribution type (money vs. in-kind) depends on the controllability of the CSR issue. According to their conceptualization, since less controllable (more controllable) issues such as an earthquake (breast cancer) induces emotions in higher (lower) intensity and this will cause the in-kind (monetary) contributions, which are associated with more (less) emotional meanings, to be processed more (less) fluently and will lead to more (less) favorable consumer evaluations of the company. In sum, the companies making in-kind contributions are perceived more favorably when the CSR issue is perceived to be largely uncontrollable, consumers perceive companies making monetary contributions more favorably when the CSR issue is largely controllable.

3.4.2. Giving Monetary Resources

This stream of research focuses on the strategies to request monetary donations and the effects of different characteristics of people on monetary donations.

Company Strategies to Ask for Monetary Donations:

Brockner, Guzzi, Kane, Levine, and Shaplen (1984) examined the effects of legitimizing but not explicitly requesting for small donations strategy on the pledge to donate money and actual monetary donations. It is believed that the rationale behind this strategy is that consumers do not make large contributions because of economic reasons and are also hesitant to make small contributions with the idea that they could be found inappropriate. Findings of Brocker et al. (1984) support this idea by showing that when the researchers legitimized the small donations without explicitly requesting for them by saying "even a dollar/even five dollars will help", they increased both consumers' pledge to donate and actual donations after one month.

Reingen (1978) compared the five different behavioral influence strategies of inducing consumers to do monetary donations with the direct monetary donation request. It is found that all of the behavioral influence strategies were more effective and created more monetary donations than directly asking consumers to donate money.

Another strategy charitable organizations use while asking for donations is the use of a specific victim. Ein-Gar and Levontin (2013) focused on designing effective appeals for donations and examined the usage of a specific victim (i.e. one person injured in a car accident) or an abstract charitable organization (i.e. rehabilitation center) as the donation target in the appeals for donations. They found that consumers' willingness to donate more to either a specific victim or an abstract charitable organization appeal depends on the psychological distance. More specifically, consumers are more willing to donate time, money or do actual money donations to an abstract charitable organization than to a specific victim when they are socially or temporally distant from the population in need. On the other hand, they are more willing to donate time, money or do actual money donations to a specific victim than to an abstract charitable organization when they are socially or temporally close to the population in need. Also, they showed that while feeling of empathy is the process evidence for the donations to a specific victim, it does not play a role in the donations to a charitable organization.

Charitable organizations can also focus on inducing positive fantasies about the resolution of a crisis in consumers' mind as an effort to get more donations from consumers. Kappes, Sharma, and Oettingen (2013) examined how these positive fantasies about the resolution of a crisis, such as the imagery of poor children attending to school, affect consumers' agreement to donate. Based on the previous literature mentioning that positive fantasies yield low energy (Kappes and Oettingen, 2011), authors proposed that consumers might perceive tasks demanding many resources as overly demanding. Because of consumers fantasizing about the resolution of a crisis perceive demanding tasks as overly demanding, they would agree to donate smaller amounts of money, time and effort, but they will be hesitant to agree donating larger amounts of money, time and effort. Thus, while charitable organizations asking for smaller donations might benefit from the strategy of fantasies about a resolution of a crisis, it will not be a good strategy for a charitable organization asking for larger donations.

Another possible strategy that can be used by companies in requesting monetary donations is the anthropomorphization of money. According to the research of Zhou, Kim, and Wang (2018), anthropomorphization of money can enhance monetary charitable giving. Based on the mind perception theory (Gray, Gray, and Wegner 2007), they showed that when organizations imbue money with humanlike characteristics consumers' perception about the warmth of money enhanced and led them to be more likely to do monetary donations and donate greater amounts of money.

Moreover, other people's behavior could influence the monetary giving of people. Based on the social identity literature, Shang, Reed, and Croson (2008) investigated the effects of mentioning about the identity of the previous donor to the target donor in donation requests. They showed that target donors' monetary pledge amount and the amount they donated were higher when they were told that previously another member with the same gender has donated. In sum, it is documented that the match

between the target and previous donor's identity, which was named as identity congruency effect, increased the actual donations and the donation intention of the target donor.

Organizations also use recognition of donors in their solicitation of donations. In donor recognition strategies charities try to give favorable attention to the donors, such as listing their names in newsletters, sending them letter of thanks, as an expression of charitable organization's appreciation to the donor because of his/her desired behavior (donation behavior) (Fisher and Ackerman, 1998). According to Winterich, Mittal, and Aquino (2013)'s research, the effectiveness of donor recognition strategy depends on donor's individual characteristics namely consumers' moral identity. They found that donors high in moral identity symbolization but low in identity internalization donated more money and had a higher intention to volunteer when a recognition strategy is used because of the social reinforcement mechanism.

Botner, Mishra, and Mishra (2015) analyzed the effects of the tone (orientation) charitable organizations use in their charity names or in their communications -such as combative ("Citizens fighting for Urban Renewal") or supportive strategy ("Citizens for Urban Renewal")- on the amount of monetary donations they get and their survival. From the perspective of regulatory focus theory and using the theoretical predictions of it, it is shown that supportively oriented strategy will lead consumers to donate more money than the combatively oriented strategy and will increase the chance of survival for the organization using supportive oriented strategy.

Consumers' Situational, Personal and Cultural Characteristics in Donating: As one of the cultural characteristic, Winterich, and Zhang (2014) examined the effects of power distance on consumers' charitable giving behavior. Integrating the power distance and one of the key determinant of charitable giving literature namely perceived responsibility, they proposed that because of the lower perceived responsibility to aid others, higher levels of power distance both in country and individual level leads to lower levels of donations including money and time donations.

As a situational factor Schlosser, and Levy (2016) showed that manipulations of consumers' direction of comparison (upward vs. downward) affected their willingness to give. Based on the comparison theory (Buunk and Gibbons, 2007; Festinger, 1954) they showed that consumers who were manipulated for downward comparisons are more likely to perceive giving as a means of expressing altruistic values thus more likely to donate monetary and nonmonetary resources when the charitable appeals focus on the benefits of the others than the benefits of the self.

Sometimes, consumers' perspective at the time they read the donation appeal and the perspective imposed by the characteristics of the appeal could conflict. Such that consumers could have the perspective of the potential helper while they are reading a donation appeal but the appeal might stimulate consumers to imagine themselves in the situation of the beneficiaries (i.e. by using the pictures of the victims) which

focuses on the perspective of the people in need. Based on the information processing literature Hung and Wyer Jr (2009) proposed that the conflict between these two perspectives could result in difficulty in information processing and reveal lower levels of urge to help and money donations.

3.5. Having Money

Under this perspective we categorized two research streams. The first one focuses on the factors that affect consumers in choosing their monetary rewards, and the effects of monetary rewards offered by the companies. The second research stream focuses on immoral behaviors consumers engage to have money, consumers' desire to have money and the perceptions about money based on the ownership of it.

3.5.1. Monetary Rewards

Here, we examined the research about different factors such as, tactile sexual cues, embodied cognition, affecting consumers to choose monetary rewards (i.e. immediate small vs. delayed large monetary rewards, hedonic vs. cash rewards) and the effects of the monetary rewards companies offer to their customers.

Effects of Consumers' Internal Processes and External Factors on Their Choosing Monetary Rewards:

From a sensory point of view Festjens, Bruyneel and Dewitte (2014) showed that tactile sexual cues have an effect on women consumer's decisions about monetary rewards in addition to other economic decisions, in which women touching sexually laden stimuli (a pair of boxer shorts) had a heightened preference for immediate monetary rewards and a lower avoidance for monetary losses. Besides, Van den Bergh, Schmitt and Warlop (2011) added to this group of research by using a perspective from the intersection of sensation, perception and cognition literature: embodied cognition. They showed that motor action directed toward the self (arm flexion) versus away from the self (arm extension) lead consumers to choose smaller-sooner monetary rewards than larger-later ones.

While the role of self-control is broadly examined in money literature, Kivetz and Simonson (2002) examined the opposite form of self-control where consumers try to choose hedonic luxury rewards to avoid spending their money on necessities and savings. It is seen that because of their tendency to spend their money on necessities and savings, when given a chance consumers choose hedonic rewards over cash rewards of equal or higher monetary value in an effort to precommit to indulgence.

Effects of Monetary Rewards Companies Offer to Their Customers or Employees: Under this stream of research we see that research has focused on three main areas. The first group of research is focusing on the effectiveness of monetary incentives given in surveys, experiments, and/or given to the consumers as a sign of acknowledgment. The second group of research focuses on the monetary incentives

companies give their employees to increase their performance. Although in the last group we can mention the money related promotions companies offer to their consumers such as sweepstakes and cashback price promotions we will not discuss them since price promotions is another broad research area that might need special attention and out of the scope of this paper.

For the first group of research we start seeing papers investigating monetary and other types of incentives' effects on various success criteria of surveys -such as response rates, quality level of responses, respondent participation rates, willingness to participate in future surveys and total survey costs. Mostly, this stream of research evolved around late 70's and early 80's. Reviewing this group of research showed us that providing monetary incentive increased the mail survey response rates for both final consumer sample (McDaniel and Rao 1980) and for a commercial sample composed of directors working in different firms (Pressley and Tullar, 1977). Besides response rate, researchers questioned the effect of incentives on the quality of responses. McDaniel and Rao (1980) revealed that not only response rates were higher but also quality of responses measured by item omission, response error, and completeness of answers were better when monetary incentives are provided versus not. Contrary to this finding, based on the attribution theory, self-perception paradigm (Kelley 1973), Hansen (1980) added to this group of research by showing that although both the monetary and nonmonetary incentives enhanced the response rates for mail surveys, the response quality was even lower when a type of incentive either monetary or nonmonetary is offered than offering no incentives. Opposed to mail surveys Meloy, Russo and Miller (2006) examined the effects of monetary incentives in experimental research studies and their findings were in similar direction with the findings of Hansen (1980). From a mood perspective they showed us that performance based monetary incentives enhanced the mood of the respondents and can cause overconfidence or biased information processing that will lead to worsened task performance of the participants. Moreover, a study showed that giving respondents monetary incentives increased respondents' participation rates, their willingness to participate in a future survey and decreased the total data collection costs (Wiseman, Schafer and Schafer 1983). Another research examined the effectiveness of using the foot-in-the-door, follow-ups and cash incentives on consumers' mail survey response rates and revealed that both follow-up contacts and cash incentives enclosed with the survey helped the survey response rates to increase (Furse, Stewart and Rados 1981). Also the effect of a different type of incentive, which is about promising of a contribution to a charity, is added to the literature and compared with the effects of monetary incentives. According to findings, it is seen that only personal cash payments enclosed with mail surveys increased the response rates among noincentive, promised contribution to charity and monetary incentives conditions (Furse and Steward 1982).

On the other hand, Liu, Lamberton and Haws (2015) examined the small monetary benefits companies offer to their customers as a form of acknowledgment. Contrary to the common belief, the authors showed an effect which they termed as the "trivialization effect". According to this effect, consumers feel less appreciated and

less satisfied when getting a small monetary benefit with a similar verbal note from a company than getting solely a verbal acknowledgment because of the different evaluative standards (verbal gratitude expression norms vs. verbal norms and monetary expectations) they use in their evaluations of verbal acknowledgment versus a monetary acknowledgment with a verbal note.

In the second group of research that focuses on monetary incentives given to employees, Burroughs et al. (2011) questioned the effectiveness of the managerial tools companies use to enhance their employees' creative performance. From an intrinsic motivation perspective and by focusing on the effectiveness of monetary rewards and creativity training, they found out that the usage of monetary rewards - such as cash prizes- and the creativity trainings together increase creative performance of the individuals in a new product development domain.

3.5.2. Immoral Behaviors to Have Money, Desire for Money and Ownership of Money

In this group we see papers focusing on the immoral behaviors consumers could show to have money, consumers' desire for money and consumers' money related perceptions based on its ownership.

Xie et al. (2014) examined how people evaluate the immoral behaviors of others' for less versus more money. Based on the cognitive dissonance paradigm and using the idea that the ethical dissonance is smaller in situations where there is enough monetary inducement to enact an immoral behavior (Barkan, Ayal, Gino, & Ariely, 2012), it is proposed and showed that, people see wrongdoers more immoral and attribute more blame when the immoral behavior is enacted for having a small amount of money comparing to a larger amount of money. While the immorality is attributed to the money not to the wrongdoer in the large money condition, immorality is attributed to the wrongdoer in the small money condition.

Lasaleta, Sedikides and Vohs (2014) examined the effect of consumers' feeling nostalgic on their desire for money. Based on the idea that having money diminishes the need for social bonds, their research revealed that nostalgia fosters social connectedness and social connectedness reduces consumers' desire for money.

Polman, Effron and Thomas (2018) examined the perceived value differences of money based on who owns it. Based on the physical distance account, they showed that people believe that the same amount of money has a greater purchasing power when it belongs to them instead of others. Finally, Hsee et al. (2009) investigated whether consumers' happiness is absolute or relative in their experience with money, acquisition or consumption. They showed that while happiness with money and acquisition is relative, happiness with consumption can be either relative or absolute.

3.6. Saving Money

The research in this group focuses on consumers' saving money. When we examined the articles we have compiled, we realized that in most of the papers, goal directed behavior and goal-pursuit are operationalized with saving money along with other variables such as losing weight or eating healthy. Thus we can say that, research that examines consumers' saving money issues other than a goal-directed behavior perspective is limited and needs more investigation. Here we mentioned, two of the papers that investigate directly consumers' saving money behavior.

Differently than the previous research which has used the goal-directed behavior as the theoretical lens to understand consumer money saving behavior, Dholakia, Tam, Yoon and Wong (2016) used the action control theory (Kuhl, 1984, 1985) to create a personal saving orientation scale which goes beyond the specific saving goals of consumers and focuses on the routinized saving activities. Also, Garbinsky, Klesse and Aaker (2014), showed that feeling powerful leads consumers to save money because of their desire to maintain their current status.

4. Other Constructs Operationalized by Using Money

As we have mentioned earlier, money is also used in some of the papers we have reviewed for operationalizing another construct. Although we did not include these papers in our categorization, we would like to mention them here for a greater understanding of money concept in consumer behavior research.

Impulse buying of consumers is operationalized by using willingness to spend money and spending money (Vohs and Faber, 2007). Also, money amount spent is used as the indicators of status signaling consumption and positive consumer responses (Otterbring et al., 2018; de Bellis et al., 2019). For the self-control vs. indulgence; saving vs. spending money is used (Laran, 2009).

Indulgent options, indulgence, patience and impatience are also operationalized by using immediate-small vs. delayed-large monetary rewards (Wang and Huang, 2017; Wilcox, Kramer and Sen, 2011; May and Monga, 2013; Bartels and Urminsky, 2011).

As mentioned in giving money perspective donating or giving money is used in many articles. From a broader perspective, monetary donations are used in prosocial actions domain (Lin and Reich, 2018). Immoral behaviors were also associated with money related domains and Goldsmith, Roux, and Ma (2018) used cheating to earn money to operationalize immoral behaviors.

Finally, as pointed out under saving money perspective, motivation for goal-pursuit (Yang, Stamatogiannakis, and Chattopadhyay, 2015), goal pursuit (Etkin and Ratner, 2012) and goal reenagagement (Scott and Nowlis, 2013) are operationalized by saving money.

5. Conclusion and Limitations

Although money is the required resource for exchanges in the marketplace the conceptual papers reviewing the money literature from a consumer behavior perspective were lacking. By this paper, we aimed to bring the literature on money together, categorize and summarize the findings.

In this research, we reviewed papers published in well-known research outlets let us to categorize the research topics under six categories namely; *perceiving money*, *allocating and managing money*, *spending money*, *giving money* and *having money* and *saving money*.

Under perceiving money perspective we first see papers focusing on what money activates in consumers' minds and consumers' inferences about money and the consequences of these activations and inferences such as product attitudes and decisions, stability of the consumer preferences, product evaluation strategy, charitable giving and fairness perceptions. Also, the factors about the representations of money (in whole vs. in parts) and the physical appearance of money (dirty, crisp etc.) and their effects on consumer behavior are grouped under this category. Money is generally the independent variable in these papers. Under the managing money perspective we have papers about the effects of money accounts and mental accounts on consumers' money allocation behaviors and we also have papers about the consumers' planning and managing of money. Under spending perspective, we categorized the papers mostly answering the questions of the effects of spending money on different types of products, feelings related to spending, spending money how, how much and for whom. On the other hand, papers under giving perspective focus on consumer characteristics in donating time versus money, consumers' evaluation of companies' money or time donations and companies' strategies to ask for monetary donations. Under having money perspective we see papers focusing on factors affecting consumers choosing monetary rewards, effects of the rewards companies offer to their customers and employees, immoral behaviors consumer can engage to have money and what leads consumers to desire for money. Finally, under saving money perspective, we see papers focusing on measuring the consumers' saving money orientation and the effect of consumers' feeling on saving money.

Although we tried to put forward a general picture of the previous research on money from a consumer behavior perspective, our review is limited with four academic journals. Further researchers could extend the boundaries of our research by adding other research outlets and lenses other than consumer behavior. We categorized the compiled papers based on their topics to create a meaningful categorization and flow but other research efforts could be directed to create a different and more abstract categorization such as the theoretical lenses used in the papers. We hope our review would help other researchers to see the gaps in the literature more appropriately and design their future work in light of it. Moreover, we hope this review would also help practitioners to understand consumers and their relationship with money better.

References

- Anderson, John R. and Gordon H. Bower (1973), Human Associative Memory, New York: Wiley & Sons.
- Barkan, R., Ayal, S., Gino, F., & Ariely, D. (2012). The pot calling the kettle black: Distancing response to ethical dissonance. Journal of Experimental Psychology: General, 141, 757–773.
- Bartels, D. M., & Urminsky, O. (2011). On intertemporal selfishness: How the perceived instability of identity underlies impatient consumption. Journal of Consumer Research, 38(1), 182-198.
- Bolton, L. E., Bloom, P. N., & Cohen, J. B. (2011). Using loan plus lender literacy information to combat one-sided marketing of debt consolidation loans. *Journal of Marketing Research*, 48(SPL), S51-S59.
- Bone, S. A., Lemon, K. N., Voorhees, C. M., Liljenquist, K. A., Fombelle, P. W., Detienne, K. B., & Money, R. B. (2017). "Mere Measurement Plus": How Solicitation of Open-Ended Positive Feedback Influences Customer Purchase Behavior. *Journal of Marketing Research*, *54*(1), 156-170.
- Botner, K. A., Mishra, A., & Mishra, H. (2015). What's in a message? The longitudinal influence of a supportive versus combative orientation on the performance of nonprofits. *Journal of Marketing Research*, 52(1), 39-55.
- Bradford, T. W. (2015). Beyond fungible: Transforming money into moral and social resources. *Journal of Marketing*, 79(2), 79-97.
- Brockner, J., Guzzi, B., Kane, J., Levine, E., & Shaplen, K. (1984). Organizational fundraising: Further evidence on the effect of legitimizing small donations. *Journal of Consumer Research*, 11(1), 611-614.
- Burroughs, J. E., Dahl, D. W., Moreau, C. P., Chattopadhyay, A., & Gorn, G. J. (2011). Facilitating and rewarding creativity during new product development. *Journal of Marketing*, 75(4), 53-67.
- Buunk, A. P., & Gibbons, F. X. (2007). Social comparison: The end of a theory and the emergence of a field. Organizational Behavior and Human Decision Processes, 102, 3–21.
- Commuri, S., & Gentry, J. W. (2005). Resource allocation in households with women as chief wage earners. *Journal of Consumer Research*, 32(2), 185-195.
- de Bellis, E., Hildebrand, C., Ito, K., Herrmann, A., & Schmitt, B. (2019). Personalizing the Customization Experience: A Matching Theory of Mass Customization Interfaces and Cultural Information Processing. Journal of Marketing Research, 56(6), 1050-1065.
- Dholakia, U., Tam, L., Yoon, S., & Wong, N. (2016). The ant and the grasshopper: understanding personal saving orientation of consumers. *Journal of Consumer Research*, 43(1), 134-155.
- Di Muro, F., & Noseworthy, T. J. (2012). Money isn't everything, but it helps if it doesn't look used: How the physical appearance of money influences spending. *Journal of Consumer Research*, 39(6), 1330-1342.
- Du, R. Y., & Kamakura, W. A. (2008). Where did all that money go? Understanding how consumers allocate their consumption budget. *Journal of Marketing*, 72(6), 109-131.

- Duclos, R., & Khamitov, M. (2019). Compared to Dematerialized Money, Cash Increases Impatience in Intertemporal Choice. *Journal of Consumer Psychology*, 29(3), 445–454.
- Durante, K. M., & Laran, J. (2016). The effect of stress on consumer saving and spending. *Journal of Marketing Research*, 53(5), 814-828.
- Ein-Gar, D., & Levontin, L. (2013). Giving from a distance: Putting the charitable organization at the center of the donation appeal. *Journal of Consumer Psychology*, 23(2), 197-211.
- Epstein, Seymour (1994), "Integration of the Cognitive and the Psychodynamic Unconscious," American Psychologist , 49 (8), 709-724.
- Etkin, J., & Ratner, R. K. (2013). Goal pursuit, now and later: Temporal compatibility of different versus similar means. Journal of Consumer Research, 39(5), 1085-1099.
- Festinger, L. (1954). A theory of social comparison processes. Human Relations, 7, 117–140.
- Festjens, A., Bruyneel, S., & Dewitte, S. (2014). What a feeling! Touching sexually laden stimuli makes women seek rewards. *Journal of Consumer Psychology*, 24(3), 387-393.
- Fisher, Robert J. and David Ackerman (1998), "The Effects of Recognition and Group Need on Volunteerism: A Social Norm Perspective," Journal of Consumer Research, 25 (3).
- Furse, D. H., & Stewart, D. W. (1982). Monetary incentives versus promised contribution to charity: New evidence on mail survey response. *Journal of Marketing Research*, 19(3), 375-380.
- Furse, D. H., Stewart, D. W., & Rados, D. L. (1981). Effects of foot-in-the-door, cash incentives, and followups on survey response, 473-478.
- Galoni, C., & Noseworthy, T. J. (2015). Does dirty money influence product valuations?. *Journal of Consumer Psychology*, 25(2), 304-310.
- Garbinsky, E. N., & Gladstone, J. J. (2019). The Consumption Consequences of Couples Pooling Finances. *Journal of Consumer Psychology*, 29(3), 353-369.
- Garbinsky, E. N., Klesse, A. K., & Aaker, J. (2014). Money in the bank: Feeling powerful increases saving. Journal of Consumer Research, 41(3), 610-623.
- Goldsmith, K., Roux, C., & Ma, J. (2018). When seeking the best brings out the worst in consumers: Understanding the relationship between a maximizing mindset and immoral behavior. Journal of Consumer Psychology, 28(2), 293-309.
- Gray, Heather M., Kurt Gray, and Daniel M. Wegner (2007), "Dimensions of Mind Perception," Science, 315 (5812), 619.
- Hansen, J., Kutzner, F., & Wänke, M. (2012). Money and thinking: Reminders of money trigger abstract construal and shape consumer judgments. *Journal of Consumer Research*, 39(6), 1154-1166.
- Hansen, R. A. (1980). A self-perception interpretation of the effect of monetary and nonmonetary incentives on mail survey respondent behavior. *Journal of Marketing Research*, 17(1), 77-83.
- Heath, C., & Soll, J. B. (1996). Mental budgeting and consumer decisions. *Journal of consumer research*, 23(1), 40-52.

- Hershfield, H. E., Goldstein, D. G., Sharpe, W. F., Fox, J., Yeykelis, L., Carstensen, L. L., & Bailenson, J. N. (2011). Increasing saving behavior through age-progressed renderings of the future self. *Journal of Marketing Research*, 48(SPL), S23-S37.
- Hildebrand, D., DeMotta, Y., Sen, S., & Valenzuela, A. (2017). Consumer responses to corporate social responsibility (CSR) contribution type. *Journal of Consumer Research*, 44(4), 738-758.
- Hossain, M. T. (2018). How cognitive style influences the mental accounting system: role of analytic versus holistic thinking. *Journal of Consumer Research*, 45(3), 615-632.
- Hsee, C. K., Yang, Y., Li, N., & Shen, L. (2009). Wealth, warmth, and well-being: Whether happiness is relative or absolute depends on whether it is about money, acquisition, or consumption. Journal of Marketing Research, 46(3), 396-409.
- Hung, I. W., & Wyer Jr, R. S. (2009). Differences in perspective and the influence of charitable appeals: When imagining oneself as the victim is not beneficial. Journal of Marketing Research, 46(3), 421-434.
- Kappes, H. B., & Oettingen, G. (2011). Positive fantasies about idealized futures sap energy. Journal of Experimental Social Psychology, 47, 719–729.
- Kappes, H. B., Sharma, E., & Oettingen, G. (2013). Positive fantasies dampen charitable giving when many resources are demanded. Journal of Consumer Psychology, 23(1), 128-135.
- Kelley, H. H. (1973), "The Processes of Causal Attribution," American Psychologist, 38 (February), 107-28.
- Kirkpatrick, Lee A. and Seymour Epstein (1992), Cognitive- Experiential Self-Theory and Subjective Probability: Further Evidence for Two Conceptual Systems," Journal of Personality and Social Psychology, 63(4), 534-44.
- Kivetz, R., & Simonson, I. (2002). Self-control for the righteous: Toward a theory of precommitment to indulgence. Journal of Consumer Research, 29(2), 199-217.
- Kuhl, J. (1984), "Volitional Aspects of Achievement Motivation and Learned Helplessness: Toward a Comprehensive Theory of Action Control," in Progress in Experimental Personality Research, vol. 13, ed. Brendan A. Maher and Winifred B. Maher, San Diego, CA: Academic Press, 99–171.
- Kuhl, J. (1985), "Volitional Mediators of Cognition-Behavior Consistency: Self-Regulatory Processes and Action Versus State Orientation," in Action Control: From Cognition to Behavior, ed. Julius Kuhl and Jürgen Beckmann, Berlin, Germany: Springer, 101–28
- Kulow, K., & Kramer, T. (2016). In pursuit of good karma: When charitable appeals to do right go wrong. Journal of Consumer Research, 43(2), 334-353.
- Kumar, A., & Gilovich, T. (2016). To do or to have, now or later? The preferred consumption profiles of material and experiential purchases. Journal of Consumer Psychology, 26(2), 169-178.
- Laran, J. (2010). Choosing your future: Temporal distance and the balance between self-control and indulgence. Journal of Consumer Research, 36(6), 1002-1015.
- Lasaleta, J. D., Sedikides, C., & Vohs, K. D. (2014). Nostalgia weakens the desire for money. Journal of Consumer Research, 41(3), 713-729.

- Lee, L., Lee, M. P., Bertini, M., Zauberman, G., & Ariely, D. (2015). Money, time, and the stability of consumer preferences. Journal of Marketing Research, 52(2), 184-199.
- Lee, Leonard, On Amir, and Dan Ariely (2009), "In Search of Homo Economicus: Cognitive Noise and the Role of Emotion in Preference Consistency," Journal of Consumer Research, 36 (2), 173.
- Levay, J., & McGraw, A. P. (2009). Emotional accounting: How feelings about money influence consumer choice. Journal of Marketing Research, 46(1), 66-80.
- Lin, S. C., & Reich, T. (2018). To give or not to give? Choosing chance under moral conflict. Journal of Consumer Psychology, 28(2), 211-233.
- Liu, P. J., Lamberton, C., & Haws, K. L. (2015). Should firms use small financial benefits to express appreciation to consumers? Understanding and avoiding trivialization effects. Journal of Marketing, 79(3), 74-90.
- Liu, W., & Aaker, J. (2008). The happiness of giving: The time-ask effect. Journal of consumer research, 35(3), 543-557.
- Lynch Jr, J. G., Netemeyer, R. G., Spiller, S. A., & Zammit, A. (2009). A generalizable scale of propensity to plan: the long and the short of planning for time and for money. Journal of Consumer Research, 37(1), 108-128.
- Macdonnell, R., & White, K. (2015). How construals of money versus time impact consumer charitable giving. Journal of Consumer Research, 42(4), 551-563.
- May, F., & Monga, A. (2014). When time has a will of its own, the powerless don't have the will to wait: Anthropomorphism of time can decrease patience. Journal of Consumer Research, 40(5), 924-942.
- McDaniel, S. W., & Rao, C. P. (1980). The effect of monetary inducement on mailed questionnaire response quality. Journal of Marketing Research, 17(2), 265-268.
- Mead, N. L., Baumeister, R. F., Stillman, T. F., Rawn, C. D., & Vohs, K. D. (2010). Social exclusion causes people to spend and consume strategically in the service of affiliation. Journal of consumer research, 37(5), 902-919.
- Meloy, M. G., Russo, J. E., & Miller, E. G. (2006). Monetary incentives and mood. Journal of Marketing Research, 43(2), 267-275.
- Mishra, H., Mishra, A., & Nayakankuppam, D. (2006). Money: A bias for the whole. Journal of Consumer Research, 32(4), 541-549.
- Mogilner, C., & Aaker, J. (2009). "The time vs. money effect": Shifting product attitudes and decisions through personal connection. Journal of Consumer Research, 36(2), 277-291.
- Morewedge, C. K., Holtzman, L., & Epley, N. (2007). Unfixed resources: Perceived costs, consumption, and the accessible account effect. Journal of Consumer Research, 34(4), 459-467.
- Netemeyer, R. G., Warmath, D., Fernandes, D., & Lynch Jr, J. G. (2017). How am I doing? Perceived financial well-being, its potential antecedents, and its relation to overall well-being. Journal of Consumer Research, 45(1), 68-89.
- Nicolao, L., Irwin, J. R., & Goodman, J. K. (2009). Happiness for sale: Do experiential purchases make consumers happier than material purchases?. Journal of Consumer Research, 36(2), 188-198.
- Okada, E. M. (2005). Justification effects on consumer choice of hedonic and utilitarian goods. Journal of marketing research, 42(1), 43-53.

- Okada, Erica M. and Stephen J. Hoch (2004), "Spending Time versus Spending Money," Journal of Consumer Research, 31 (2), 313–23.
- Otterbring, T., Ringler, C., Sirianni, N. J., & Gustafsson, A. (2018). The Abercrombie & Fitch effect: The impact of physical dominance on male customers' statussignaling consumption. Journal of Marketing Research, 55(1), 69-79.
- Pham, M. T., Cohen, J. B., Pracejus, J. W., & Hughes, G. D. (2001). Affect monitoring and the primacy of feelings in judgment. Journal of consumer research, 28(2), 167-188.
- Polman, E., Effron, D. A., & Thomas, M. R. (2018). Other people's money: Money's perceived purchasing power is smaller for others than for the self. Journal of Consumer Research, 45(1), 109-125.
- Pressley, M. M., & Tullar, W. L. (1977). A factor interactive investigation of mail survey response rates from a commercial population. Journal of Marketing Research, 14(1), 108-111.
- Raghubir, P., & Srivastava, J. (2009). The denomination effect. Journal of Consumer Research, 36(4), 701-713.
- Reed, A., Aquino, K., & Levy, E. (2007). Moral identity and judgments of charitable behaviors. Journal of Marketing, 71(1), 178-193.
- Reingen, P. H. (1978). On inducing compliance with requests. Journal of Consumer Research, 5(2), 96-102.
- Rick, S. I., Small, D. A., & Finkel, E. J. (2011). Fatal (fiscal) attraction: Spendthrifts and tightwads in marriage. Journal of Marketing Research, 48(2), 228-237.
- Rozin, P., Nemeroff, C., Wane, M., & Sherrod, A. (1989). Operation of the sympathetic magical law of contagion in interpersonal attitudes among Americans. Bulletin of the Psychonomic Society, 27(4), 367–370.
- Rucker, D. D., Dubois, D., & Galinsky, A. D. (2010). Generous paupers and stingy princes: Power drives consumer spending on self versus others. Journal of Consumer Research, 37(6), 1015-1029.
- Saini, Ritesh and Ashwani Monga (2008), "How I Decide Depends on What I Spend: Use of Heuristics Is Greater for Time than for Money," Journal of Consumer Research, 34 (6), 914–22.
- Schlosser, A. E., & Levy, E. (2016). Helping others or oneself: How direction of comparison affects prosocial behavior. Journal of Consumer Psychology, 26(4), 461-473.
- Scott, M. L., & Nowlis, S. M. (2013). The effect of goal specificity on consumer goal reengagement. Journal of Consumer Research, 40(3), 444-459.
- Shaddy, F., & Shah, A. K. (2018). Deciding who gets what, fairly. Journal of Consumer Research, 45(4), 833-848.
- Shah, A. M., Eisenkraft, N., Bettman, J. R., & Chartrand, T. L. (2015). "Paper or plastic?": How we pay influences post-transaction connection. Journal of Consumer Research, 42(5), 688-708.
- Shang, J., Reed, A., & Croson, R. (2008). Identity congruency effects on donations. Journal of Marketing Research, 45(3), 351-361.
- Soman (2001), "The Mental Accounting of Sunk Time Costs: Why Time Is Not Like Money," Journal of Behavioral Decision Making, 14 (3), 169–85.

- Soman, D., & Cheema, A. (2011). Earmarking and partitioning: Increasing saving by low-income households. Journal of Marketing Research, 48(SPL), S14-S22.
- Soster, R. L., Monga, A., & Bearden, W. O. (2010). Tracking costs of time and money: How accounting periods affect mental accounting. Journal of Consumer Research, 37(4), 712-721.
- Su, L., & Gao, L. (2014). Strategy compatibility: The time versus money effect on product evaluation strategies. Journal of Consumer Psychology, 24(4), 549-556.
- Sussman, A. B., & O'brien, R. L. (2016). Knowing when to spend: Unintended financial consequences of earmarking to encourage savings. Journal of Marketing Research, 53(5), 790-803.
- Tversky, Amos and Daniel Kahneman (1974), "Judgment under Uncertainty: Heuristics and Biases," Science, 185, 1124–31.
- Van Boven, Leaf and Thomas Gilovich (2003). To Do or to Have? That Is the Ouestion." Journal of Personality and Social Psychology, 85 (6), 1193-1202.
- Van den Bergh, B., Schmitt, J., & Warlop, L. (2011). Embodied myopia. Journal of Marketing Research, 48(6), 1033-1044.
- Vohs, K. D., & Faber, R. J. (2007). Spent resources: Self-regulatory resource availability affects impulse buying. Journal of consumer research, 33(4), 537-547.
- Wang, C., & Huang, Y. (2017). "I Want to Know the Answer! Give Me Fish'n'Chips!": The Impact of Curiosity on Indulgent Choice. Journal of Consumer Research, 44(5), 1052-1067.
- Wen Wan, E., Peng Chen, R., & Jin, L. (2017). Judging a book by its cover? The effect of anthropomorphism on product attribute processing and consumer preference. Journal of Consumer Research, 43(6), 1008-1030.
- Wertenbroch, K., Soman, D., & Chattopadhyay, A. (2007). On the perceived value of money: The reference dependence of currency numerosity effects. Journal of Consumer Research, 34(1), 1-10.
- Wilcox, K., Kramer, T., & Sen, S. (2011). Indulgence or self-control: A dual process model of the effect of incidental pride on indulgent choice. Journal of Consumer Research, 38(1), 151-163.
- Winterich, K. P., & Zhang, Y. (2014). Accepting inequality deters responsibility: How power distance decreases charitable behavior. Journal of Consumer Research, 41(2), 274-293.
- Winterich, K. P., Mittal, V., & Aquino, K. (2013). When does recognition increase charitable behavior? Toward a moral identity-based model. Journal of Marketing, 77(3), 121-134.
- Wiseman, F., Schafer, M., & Schafer, R. (1983). An experimental test of the effects of a monetary incentive on cooperation rates and data collection costs in central-location interviewing. Journal of Marketing Research, 20(4), 439-442.
- Xie, W., Yu, B., Zhou, X., Sedikides, C., & Vohs, K. D. (2014). Money, moral transgressions, and blame. Journal of Consumer Psychology, 24(3), 299-306.
- Xu, Q., Zhou, Y., Ye, M., & Zhou, X. (2015). Perceived social support reduces the pain of spending money. Journal of Consumer Psychology, 25(2), 219-230.
- Yang, H., Stamatogiannakis, A., & Chattopadhyay, A. (2015). Pursuing attainment versus maintenance goals: The interplay of self-construal and goal type on consumer motivation. Journal of Consumer Research, 42(1), 93-108.

- Zauberman, Gal and John G. Lynch Jr. (2005), "Resource Slack and Discounting of Future Time versus Money," Journal of Experimental Psychology: General, 134 (1), 23–37.
- Zhou, X., Kim, S., & Wang, L. (2018). Money helps when money feels: Money anthropomorphism increases charitable giving. Journal of Consumer Research, 45(5), 953-972.
- Zhu, M., Bagchi, R., & Hock, S. J. (2018). The mere deadline effect: Why more time might sabotage goal pursuit. Journal of Consumer Research, 45(5), 1068-1084.