The effect of financial scarcity on prosocial consumption

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Abstract

As a result of resource scarcity, consumers often face a difficult choice between selfish and prosocial behavior, for example, whether to consume prosocially or not. The present study investigates into the effect of financial scarcity upon prosocial consumption in the context of chocolate bars purchasing. Following hypotheses were tested: financial scarcity causes the choice of prosocial products and this relationship is mediated by orientation to other people. The experimental design was employed where financial resources amount was manipulated between groups. The pretest (*N=52*) revealed that people indeed remembered chocolate bar characteristics and there was no difference in chocolate bars' desirability. Chocolate bars descriptions and prices were adjusted, based on the pretest results. Results of the main study (*N=238*) suggested that people with different amounts of money did not differ significantly in their proportion of prosocial items in a choice set. However, participants in the abundance condition were more likely to choose fairtrade chocolate. Next, the increase in the percentage of prosocial bars was correlated with orientation to other people, but did not depend on the resource amount. The study gives a reason to doubt, whether financial scarcity influences prosocial consumption and whether social concerns are mediating this process.

Keywords: financial scarcity, resources availability, prosocial consumption, orientation to other people, social concerns, economic psychology

The effect of financial scarcity on prosocial consumption

The number of social and ethical companies is continuously growing, because more and more people value these features (White & MacDonnell 2012). In 2008, the market of value-driven consumers who tend to be sympathetic towards environmental issues and social justice was estimated to be $550 billion (Salmon 2008). At the same time, most types of resources on our planet are limited. As a result, people frequently deal with the limited amount of money, space, food, water, etc. and even in resource-rich environments consumers routinely encounter some cues that emphasize the limited nature of products and resources (Cialdini, 2009). As a consequence, consumers often think about, worry about and discuss various scarcity-related concerns (Twist & Barker, 2006). When lacking in resources, people have to make a difficult choice between selfish and prosocial behavior, i.e. they help each other, share resources or can demonstrate positive consumption where benefits, intentionally or unintentionally, are partially of fully other-oriented (Delacour, 2012). Such behavior has significant effect on both individual consumer and collective well-being (Mick, 2006) and results in reducing resource scarcity and more equal resource distribution. The present research sets out to test whether resource scarcity leads to prosocial behavior. I assume that in case of consumer decision-making situations financial scarcity will activate social concerns and this in turn will lead to prosocial consumption.

Prosocial Consumer Behavior

Prosocial behavior can be defined as behavior which covers the broad range of actions intended to benefit one or more people other than oneself—actions such as helping, comforting, sharing, and cooperation (O'Reilly & Chatman, 1986). And prosocial consumer behavior can be defined as positive consumption acts where benefits, intentionally or unintentionally, are

partially of fully other-oriented (Delacour, 2012). A prosocial product offering is defined as a product, the purchase and/or consumption of which lowers the negative impact or has a positive impact on the environment and society at large (Delacour, 2012)**.** LOHAS (2012) segmentation demonstrated that most of the consumers are concerned about several societal issues at once instead of being focused on only one issue, such as environmental concerns or earth sustainability. Thus, they concluded that ethical and ecological concerns of the consumers are one-dimensional concepts. This provides us a right to consider it as prosocial consumer behavior. Marketers usually identify three main types of prosocial products orientations: economic, social, and environmental (Sheth, Sethia, & Srinivas 2011). Organic and fairtrade products, which I will use in my investigation, are examples of prosocial product offerings.

Most of the researches have been focusing on the understanding of motivation behind the prosocial consumption. There are three different motivations to explain an individual's prosocial behavior (Airley, Bracha, & Meier, 2009): intrinsic, extrinsic, and image. According to intrinsic motivation people who tend to behave prosocially are characterized by altruism. People with extrinsic motivation give a preference to material reward as a consequence of their prosocial behavior. Finally, image motivation implies that the consumer’s actions are a function of how others’ perceive consumers. Holbrook (1998) reported that consumer values can be either self-oriented and other-oriented and either as intrinsic or extrinsic. Grankvist & Biel (2001) demonstrated that normative pressure is effective in reducing the attitude-behavior gap for ecological products. In other words, decisions about prosocial products are influenced by your perception of what others might think about it. Thus, prosocial consumption motivation lays in the area of economic psychology and involves society's influence and internal and external characteristics of consumers.

Another important point in prosocial consumption discussion is the altruistic or egoistic nature of motives. According to Batson (1998) prosocial behavior is driven by purely altruistic motives. Also, Shaw & Shiu (2002) found that the strongest motivators behind prosocial consumption stands for the personal values, moral norms, internal ethics and product interest. However, other researchers (e.g. Peloza & Shang, 2010; Cialdini et al., 1997) argue that there is never motivation without egoistic element driving the behavior. Thus, there is still room for investigation of the triggers of prosocial behavior.

Resource Scarcity and Prosocial Behavior

Prosocial consumption can be triggered by a variety of factors, and as derived from the overview above it is not only internal, but also external and societal motives. On the one hand, it can be suggested that people become less prosocial when resources are scarce. Economic theory (Smith, 1776/1994) suggests that individuals always strive to maximize their utility and this leads to the resource scarcity, which, in turn, results in continuous competitiveness and selfishness. This happens because in a situation with limited resources other people are likely to be perceived as competitors (Hardin, 1968). Furthermore, such situations activate a competitive social value orientation (Roux, Goldsmith, & Bonezzi, 2015), which, in turn, can provoke even more selfish behavior (Shapin, Schaffer, & Hobbes, 1985). Also, individuals experiencing hunger (i.e., scarcity of food) are less likely to share financial resources with an anonymous other (Petersen et al. 2014).

On the other hand, prosocial behavior can also be an advantage in case of resource scarcity, because it helps people survive within their groups. Piff, Kraus, Côté, Cheng, and Keltner, (2010) showed that ‘lower’ class individuals, who can be regarded as people experiencing scarcity, tended to help others more than ‘upper’ class individuals, who can be

regarded as those experiencing abundance. Furthermore, in 2011, the wealthiest Americans with earnings in the top 20 percent gave an average 1.3 percent of their income to charity, while the bottom 20 percent gave 3.2 percent (Stern, 2013). Thus, when people are running out of resources is when people really need to band together.

H1: Financial scarcity leads to prosocial consumption.

The Role of Social Concerns in Relationships between Resource Availability and Prosocial Behavior

The crucial factor that determines the actions of people in scarcity situations is their perception of the surrounding environment and, especially, of other people in this environment. It can be assumed that in case of limited resources, people become more interdependent (e.g., Kelley & Thibaut, 1978), and this makes them consider the feelings of others, as well as their needs and behavior. Also, people might experience increased empathy toward others. And since Batson and Moran (1999) demonstrated that people who experienced empathy, tended to cooperate more, it can be proposed that in the scarcity condition, people might behave more prosocially. At the same time, in case of experiencing abundance, people assign weaker weight to social concerns because they are more stable and independent because independence is negatively correlated with fear of negative evaluations (Okazaki, 1997). This in turn leads to weaker weight assigned to social concerns in abundance situations.

Because of resource scarcity, the social environment becomes salient and people pay increased attention to it when making decisions. This, in turn, leads to changes in social cognition, namely, people begin to prioritize either their own interests (orientation to oneself) or the interests of another person (orientation to other people). Several studies support the idea that scarcity can foster social behavior and cognitions. For example, Effron and Miller (2011)

demonstrated that in the scarcity condition, people tended to be more concerned with equality. Moreover, other researchers found that 'lower' class individuals explained events in contextual terms, while 'upper' class individuals explained it through internal characteristics of a person (Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012). Additionally, another study demonstrated more precisely that the relationship between the social class and the prosocial behavior was moderated by social value orientation (Roux, Goldsmith, & Bonezzi, 2015). Finally, Adams, Bruckmüller, and Decker (2012) showed that participants selected first-person pronouns with greater frequency in the abundance condition than in the scarcity condition. Consequently, it can be concluded that limited resources are associated with more social concerns, which, in turn, might be related to more prosocial behaviors. Thus, this leads us to our second hypothesis that the relationship between resource availability and prosocial behavior is mediated by orientation to other people.

H2: The relationship between financial scarcity and the prosocial consumption is mediated by orientation to other people.

Considering all the mentioned above, this study aims to contribute to this growing area of research in several ways. Firstly, the resource availability has been mostly investigated by the means of comparing poor and wealthy people, meanwhile, an independent manipulation of resource availability is necessary to identify the real effect on prosocial behavior. So, an investigation of the effect of scarcity and abundance resources (analogues of wealth and poverty) on individuals' behavior without reference to people's socio economic status can help to single out the real effect.

Secondly, even though some researchers have investigated prosocial behavior in the context of resource scarcity (e.g. Effron & Miller, 2011; Adams, Bruckmüller, & Decker, 2012),

the present thesis contributes to the body of consumer psychology researches. Up to this moment no studies have explored the role of social concerns in the causal nature of the relationship between resource availability and prosocial behavior in consumer decision-making paradigm. Based on literature review I can assume resource scarcity leads to activation of social concerns and this in turn leads to prosocial behavior, but this assumption in the context of consumer decisions has not been tested yet. And it should be tasted to be able to extrapolate the result to the growing market of value-driven consumers (Salmon 2008).

Thirdly, no unequivocal conclusions can be made about the influence of resource scarcity on individuals' behavior as there are two competitive points of view on the consequences of resource scarcity for prosocial behavior. As discussed in the introduction, on the one hand, people become more prosocial while experiencing scarcity, but on the other hand, in some cases they on the opposite become less prosocial. The proposed research can contribute to the literature by offering an explanation on why these discrepant views co-exist with the help of testing the role of social concerns. To do this I have conducted the research dedicated to the influence of the financial scarcity effect on prosocial consumption and the role of social concerns in this relationship.

The Current Study

The purpose of the current thesis is to investigate if resource scarcity leads to prosocial behavior and which role social concerns play in this relationship. The present study has been based on the framework of consumer decision-making paradigm. I have chosen a situation of chocolate bar purchasing, because chocolate is desirable for most of people. In this paradigm resource scarcity was manipulated by the amount of money the participants received. I have chosen this manipulation because it provides an opportunity to successfully manipulate and

single out the amount of resources. Prosocial behavior has been measured as a proportion of prosocial products in a choice set. This is a good measurement because it directly reflects prosocial tendency and do not depend on self-reporting. Orientation to other people has been measured as a proportion of certain categories of pronouns that participants used to complete sentences. I have chosen this type of measurement because it reflects unconscious processes and consequently provides a basis to conclude about hidden psychological processes.

I have conducted a pretest which aimed to develop chocolate bar description, check the equality of descriptions, and identify desirable prices for chocolate bars. I did not use anti-social characteristics such as child labour use or law violations, as I applied consumer decisions framework; so, possible use of these characteristics could damage brand images, which would be unethical. Also, companies never put any negative information in the description of their products in real life. So, the description of prosocial characters was only positive or neutral. Based on the pretest results, I have adjusted materials for the main study.

In the main experiment, participants were asked to buy at least one (out of four) desirable consumer items (different types of chocolate bars). Two out of four of the presented items had prosocial characteristics (ecological and fairtrade orientated). In the scarcity condition, participants could not to buy two prosocial items, whereas in the abundance they could buy everything. Prosocial products were made the most extensive, because previous investigations found that prosocial characteristics result in an increase of willingness-to-pay and an increase in sales (e.g. Stratton & Werner, 2013; Prasad et al., 2004; Hiscox & Smith, 2006; Elliott & Freeman, 2003).

I predicted that people in abundance condition are likely to buy more item on average because they can afford more. However, the crucial difference within the conditions is the

proportion of prosocial items bought. Such design allowed us to investigate the influence of resource availability on prosocial behavior by creating a choice conflict which is that people wanted to use the money both for buying more chocolate and for buying prosocial products. I predicted that the participants could buy more chocolate but – if motivated by prosocial concerns – refrain from doing so in the scarcity condition. So, I expected that the participants will choose a greater proportion of items with prosocial characteristics in scarcity condition than in abundance, consistent with the hypothesis that financial scarcity leads to higher proportions of prosocial products chosen by consumer. In addition, I expect that resource scarcity will lead to orientation to other people, because of activation of social concerns and this will consequently lead to a prosocial behavior. As such, I hypothesized that the relationship between financial scarcity and the proportion of prosocial products is mediated by orientation to other people.

Pretest

I conducted a pretest in order to determine the price of chocolate bars and make sure that all the products are equally desirable if no information is given on their price. Next, the pretest also gave an indication whether the participants paid attention to the prosocial characteristics of chocolate. The description for each product consisted of six relevant characteristics: (1) one "selling" sentence, describing how good chocolate is, (2) the country of chocolate origin, (3) the country of cacao origin, (4) the flavor, (5) the ingredients and (6) the prosocial characteristic (for 2 out of 4 bars).

Method

Participants

The pretest sample consisted of 52 participants, 28 of them were male and 24 were female. Participants' age ranged from 20 to 32, M=23.52, SD=2.48. In the total sample nobody

indicated that they do not like chocolate, 28.28% like it a little, the same percent like it, 11.5% like it a lot, and 30,8% extremly like chocolate. Next, only one person (1,9%) indicated to not eat chocolate, 7,7% eat it less than once in month, 19,2% eat it every month, 48.1% eat it every week, and 23.1% eat it every day.

Measures

Choice of Chocolate Bars. After reading chocolate bars descriptions, the participants were asked to indicate which one out of four bars they would like to choose. The participants could select only one option.

Chocolate Bars´ Desirability. To identify the chocolate bars´desirability the participants were asked to rate the desirability of chocolate bars on a five-point scale from 1(not desirable) to 5 (very desirable) for each bar. Only numeric values were allowed in this form.

Willingness-to-pay. For each bar the participants answered "How much are you willing to pay for this chocolate bar?". As a comment related to the question the participants saw "in euro (e.g. 1,15)" next to the question. Only numeric values were allowed in this form.

Recognition of Chocolate Bars´ Traits. To measure traits recognition participants were presented a list of all traits mentioned in descriptions and they were asked to indicate whether or not the bar of his or her choice had each of the characteristics. For each characteristic they could answer "yes" or "no".

Control measures. Next, I asked how much the participants like to eat the chocolate and how often they eat it. For the first control variable, they answered question ``Please indicate how much do you like chocolate`` and had options "Do not like chocolate", "Like a little", "Like", "Like a lot", and "Extremely like". For another control question, they were asked to "Please indicate how often you eat chocolate" with choice options "Never", "Less than once in month",

"Every month", "Every week", and "Every day".

Socioeconomic Information. Finally, socio-demographic data of individuals were collected. The participants were asked about their age with an open question "How old are you?" and gender (male or female)

Procedure

The pretest was conducted in English with the help of the online survey platform Qualtrics (see Appendix A for Qualtrics form). First, participants read the description of the study, containing information about the general idea of the study and instructions to it. Afterwards, they were asked to provide their agreement to participate in the study. Individuals were informed that they can withdraw from the study at any moment. On the second page, the participants saw the products, next they were suggested to rate the desirability of these products and the price they would pay for them. Then, the participants were asked which bar they would like to choose and after it to indicate whether or not it had certain characteristics from the list of the traits. After this, they were asked to indicate how much they like to eat chocolate and how often do they eat it. In addition, socio-demographic characteristics such as gender and age were collected.

Results

From the total sample bar A was the most popular with 36,5% of the participants choosing it, whereas the other three other bars were chosen by 21,2% of the sample. The participants managed to successfully remember 74,74% of item characteristics. 74% and 77% of the participants successfully remembered if the product had prosocial organic and fairtrade characteristics accordingly.

Desirability of Chocolate Bars

The participants estimated the desirability of bar A as 3.69 (1.11), of bar B as 3.48 (1.14), of bar C as 3.15 (1.17) and bar D as 3.35 (1.21). To estimate the differences, I have run the *ANOVA* with a single, within-subject factor (desirability of the four bars) as the DV. Mauchly's Test of Sphericity was insignificant so the condition of sphericity was satisfied. According to the results, there were no significant differences in the desirability of different bars (p=0.072).

Willingness-to-pay

Six of the participants were excluded from the price analysis because they indicated that they would like to pay for the chocolate bar more than 5,51 (3*SD* above average population) for one of the bars. The final sample for price analysis consisted of 46 participants, 24 of them male, M_{age}=23.37, *SD*=2.26 range from 20 to 31. The participants were willing to pay on average for bar A 1.45 (*SD*=.68), for bar B 1.40 (*SD*=.70), for bar C 1.16 (*SD*=.80) and for bar D 1.31 (*SD*=.69).

Discussion

As a result, I can conclude that chocolate bar A was more popular in terms of choice comparing to other bars. The reason for it can be that this chocolate did not have any additional taste like crispy rice or caramel. Therefore, it was decided to add another flavor characteristic (hazelnut) to Bar A in the real study. For the rest of the chocolate bars the descriptions did not require any correction because they have been rated equally. Additionally, the pretest proved that people do pay attention to prosocial characteristics.

The prices to be used in the main study were calculated as the mean price for each bar - 40% of it. I deducted 40% from the mean estimated price. Furthermore, I made price corrections for Bar A and B, which will be discussed further.

Main study

To test two hypotheses, I conducted an experiment with two conditions (financial scarcity and abundance) and asked participants to buy chocolate bar(s) and answer several questions. The purpose of the investigation was to test the influence of financial scarcity on a proportion of prosocial products in this set and identify the role of social concerns in this relationship.

Based on the pretest, I proposed the price for each chocolate bar. For bar A, I reduced the price on purpose because I changed the description after the pretest and because this is not a prosocial bar. For bar B, I raised the price with 5 cents to make all bars look similar with ending on 9 (e.g. 0,49 and 0,99). As a result prices for the main study were as following: Bar A - .49, Bar B - 0.99, Bar C - 0.69, Bar D - 0.79. Final materials for the investigation have been created in a way that the prices rise: the non-prosocial ones, then the prosocial products. The prices in the main study were organized in this way to give an opportunity to buy one item with the prosocial characteristic for the participants in the scarcity condition. As a result people received 1.70 euro in scarcity condition that leads to the situation where one cannot buy 2 prosocial bars. Meanwhile in abundance condition the participants received 3.10 euro meaning they can buy all bars. Another important characteristic of prices is that the proposed prices are lower than the actual prices. This is done to make the chocolate more desirable in the final experiment so the participants would prefer to buy chocolate instead of keeping money.

Finally, one might assume that the results could be affected by chocolate preferences, for example, by the dislike of some ingredients such as crispy rice. However, this was not the case because I controlled the equality of chocolate bars´ desirability during the pretest, the absence of brand loyalty and introduced randomization to prevent this concern.

Method

Participants

The main study sample (*N=238)*, 111 of them are men, M_{age}=24.29 years, *SD*=3.97, age range: 18 to 46 participated in the study by filling in an online survey. At the beginning of the study, participants were randomly assigned to either the scarcity condition (n = 116) or the abundance condition (n = 122). The two conditions did not differ in gender composition (p = .060), nor in participants' age (p = .790), nor education (p = .585). The participants varied in their level of education: 7.1% of sample finished only primary/high school, 46.6% finished bachelor, 44.5%finished master degree and 1.7% finished PhD.

Research Design

In order to test my hypotheses, I conducted an online post-test only experiment with two randomized between-subjects conditions (scarcity and abundance). By agreeing to participate in the study participants were randomly assigned to one of two conditions. The hypotheses are derived from existing theory, and as such this study employs a deductive approach (Bryman & Bell, 2007).

Measures

Independent Variable

Resource availability. The participants were assigned to one of two conditions and received a certain amount of money, as financial incentives are key to manipulate scarcity and abundance in our paradigm. In the scarcity condition participants were given 1.70€ that only allowed them to buy only one of two bars with prosocial characteristics, so they felt that the money they have is limited. Meanwhile, in the abundance condition participants with 3.10€ could buy all the presented products, using the money that they were given (four products, of which two have prosocial characteristics).

Dependent Variables

Prosocial behavior. In this study the measure of prosocial behavior was the proportion of chosen items with prosocial characteristics among all items that the participant chose.

Orientation to other people. To measure orientation to oneself or to other people I used The Pronoun Selection Instrument (PSI) (Adams, Bruckmüller, & Decker, 2012), which consists of 20 incomplete sentences with two blanks (e.g., "__ kicked the ball to ___" or "___ will not visit ___ again."). I have cut this instrument leaving only 10 Sentences instead of 20 for respondents' convenience. Such manipulation still allowed to gain 20 pronouns per participant which is enough. The participant's task was to complete each sentence by selecting one of five subject pronouns (I, he, she, we, or they) to fill one blank and one of five object pronouns (me, him, her, us, or them) to fill the other blank. The absolute frequency of selecting first-person pronouns serves as an indicator of the prominence of different manifestations of self and agency. I received an original version of this instrument together with the permission to use and change it by e-mailing authors on 03.12.2016.

Manipulation check. After the experiment, the participants evaluated five statements, (e.g. 'I perceived that money I had was limited') on a 5-point scale from "Strongly disagree" to "Strongly agree". This tasks serve as manipulation checks and reflects perceived resource scarcity.

Control Variables

Next, I asked how much the participants like to eat the chocolate and how often they eat it. For the first control variable they answered question ``Please indicate how much do you like chocolate`` and had options "Do not like chocolate", "Like a little", "Like", "Like a lot", and "Extremely like". For another control question they were asked to "Please indicate how often

you eat chocolate" with choice options "Never", "Less than once in month", "Every month", "Every week", and "Every day".

The question about the participants' language proficiency was not included, because during the pretest I found out that there was no difference in choices of bars with different descriptions. This resulted in the fact that the participants could recollect quite accurately which bars had prosocial characteristics and which not. So, there were no differences in the difficulty of the bar descriptions based on the pretest results and consequently, language proficiency would not influence the results.

Socioeconomic Information

Finally, socio-demographic data of individuals were collected. The participants were asked about their age with an open question "How old are you?", gender (male or female), and education with the question "What is your highest level of education?" and choice options "School", "Bachelor", "Master", and "PhD".

Procedure

Participants were recruited via social networks. The ad said that the experiment lasts 5-7 minutes. The investigation was conducted in English with the help of the online survey platform Qualtrics (see Appendix B for Qualtrics form). First, participants read the description of the study, containing information about the general idea of the study and instructions to it. Afterwards, they were asked to provide their agreement to participate in the study. Individuals were informed that they can withdraw from the study at any moment.

After agreeing to proceed, the participants were automatically randomly assigned to either scarcity or abundance condition. Respondents have seen descriptions of four chocolate bars and have been asked to choose at least one of them. Furthermore, the respondents have been

informed that they cannot spend more money than they have. Then the participants responded to manipulation check questions. Manipulation check have been placed right after the influence to detect even short-term effect. After it the participants filled in Pronoun Selection Instrument and in the end they responded to questions about control measures and socio-demographic characteristics.

Results

Data and Manipulation Check

Three participants exceeded the amount of money they were allowed to spend in the scarcity condition and were excluded from analysis as they failed to comply with the requirements of my procedure and spent more than they had. In the total sample, nobody indicated that they never eat chocolate, 23.6% eat chocolate every month, 51.3% of the sample eats chocolate every week, and 12.6% of the respondents eat it every day. Also from the total sample only 1.7% did not like chocolate, 16.8% like chocolate a little, 28.2% like chocolate, 37.4% reported that they like chocolate a lot, 16% extremely like it. Descriptive statistics for major variables are presented in Appendix C, Table 1. The reported statistics were calculated separately for each condition.

The rating of all five questions about perceived resource availability, which served as manipulation check has been averaged into a single manipulation check scale ($\alpha = .69$). For people in the scarcity condition, the feeling that resources were limited (M=2.56, SD=0.76) was greater than for people in the abundance condition (M=2.26, SD=0.64); $t(233)$=-3.26, $p = 0.001$, suggesting that our manipulation of resource availability was effective.

Based on Q-Q plots, the percent of certain amounts of pronouns selected and percent of group based pronouns did not significantly deviated from normality.

Money Availability and Choice of Chocolate Bars

Chi-squared tests were performed to examine the relation between the experimental conditions and choices for Bars A, B, C, and D (see Appendix C, table 1 for frequency comparison). There were no differences across conditions for Bar A (non-prosocial), $\chi 2(1, 235) = .21$, $p = .645$), Bar B (ecological), $\chi 2(1, N = 235) = .18$, $p = .675$), and Bar C (non-prosocial), $\chi 2(1, N = 235) = .10$, $p = .757$). However, for bar D (fair trade) the relation between these variables was significant, $\chi 2$ (1, N = 235) = 4.94, p =.026. People in scarcity condition were less likely to choose chocolate D with fairtrade characteristic than participants in abundance condition. Also, there were no differences between percentage of chocolate bars with prosocial characteristics (B and D) in scarcity (M=44.53, SD=40.54) and abundance (M=47.13, SD=51.54) conditions; $t(233)=-0.48$, $p = 0.629$.

The Role of Social Concerns

Next, there were no significant differences between selection of pronouns categories among people who have and have not chosen bars A, B, and D ($p \geq .12$). In addition, the absolute choice of each pronoun and relative choice of first-person pronouns category in these two conditions did not differ significantly from one another ($p \geq .15$). However, there was a correlation between the percent of prosocial bars chosen by participants and first-person singular pronouns category (I, me), $r = -.13$, N =232, p =.041. So, there was a weak, negative correlation between prosocial bars chosen by participants and first-person singular pronouns meaning increases in percent of prosocial bars was correlated with decreases in first-person singular pronouns. Finally, I cannot run regression analysis to test mediation in this data set because basic assumptions are violated.

Thus, I can conclude that the manipulation did influence the participants so I created an

experimental situation in which participants felt that resources were scarce. The present findings revealed that people did not differ in their prosocial behavior in scarcity and abundance conditions. However, increase in percent of prosocial bars was correlated with decreases in first-person singular pronouns. So, I can conclude that the more participants are self-oriented, the less prosocial they are. Next, participants in abundance condition were more likely to choose the fairtrade chocolate. Also, I found out that social concerns in a way of orientation to others did not mediate relationship between money availability and proportion of prosocial products. These results failed to support both hypotheses.

Discussion

The aim of this study was to investigate the effects of resource availability on prosocial behavior. As outlined previously, I expected that the situation of financial scarcity would lead to the consumption becoming more prosocial because of social concerns activation. I operationalized resource availability as either sufficient or insufficient amount of money to buy chocolate bars and prosocial behavior as the percent of items with prosocial characteristics among all chosen chocolate bars. Next, I hypothesized that this process is mediated by the orientation to other people, which was reflected in the percent of first-person pronouns and can be considered of social concerns. The results have not provided any support to either hypothesis. The study gives a reason to doubt whether the financial scarcity influence the proportion prosocial products in the context of consumer behavior choice. Also orientation to other people was found to be negatively correlated with the proportion of prosocial products, but did not differ in financial scarcity and abundance.

Theoretical Discussion

The crucial part of my research was related to the fact that unlike most studies dedicated

to general life scarcity situations like poverty (Piff, Kraus, Côté, Cheng & Keltner, 2010; Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012), I have focused only on the consumer choices in one particular situation. Specifically, each participant was assigned to the scarcity or abundance condition. Thus, I may conclude that although socio-economic status influences people's prosocial behavior, specific situations of limited resources do not have an influence on prosocial behavior. In addition, it was proved that consumers' psychological motives (Shaw & Shiu, 2002) and values (Holbrook, 1998) play important role in prosocial consumer behavior. This can be explained by long-term (result of income, motives and values) and short-term (result of each unique situation) situations. I can conclude that prosocial consumer behavior depends on people's income, mindset and way of thinking, meanwhile short-term scarcity cannot change behavior that easily and of its own accord solely.

I found that there was a difference between conditions for the choice of bar D, but no difference for bar B. Given the fact that prosocial bars (B and D) were the most expensive, a possible explanation is that according to the utility curve, as long as the need is satisfied (with the help of one prosocial bar) people no longer desire to buy the second prosocial chocolate bar. So even when they had enough money to buy everything they were still buying only one prosocial bar to satisfy their biological (hunger) and psychological (need to help) (Dickert, Sagara, & Slovic, 2011) needs. This could explain why there was a difference between conditions for bar D, but no difference for bar B.

The subsequent question is then why bar B (another prosocial bar) was disregarded? In my opinion, the reason is the effect of the beginning and the end (Hogarth, 1980), so people remember the first and the last items better. Although there were no significant differences for bar preferences during the pretest, I cannot discard this psychological effect of the beginning and

the end, which could explain why bars A and D were more popular than bars B and C.

The results of present study could also be affected by individual-level variables. Existing investigations on this issue were mostly based on survey data and the findings about relationship between prosocial consumption and socio-demographic characteristics can be described as vague and ambiguous (e.g., Andersen & Tobiasen, 2004; De Pelsmacker et al., 2005; Loureiro & Lotade, 2005). Creating a more complicated research design capturing external factors, social psychology processes and socio-demographic characteristics all together would provide an opportunity to make more detailed conclusions concerning predictors of prosocial consumer behavior.

Limitations and Recommendation for Future Researches

The presented research is subject to some technical limitations. First, the external validity of the study is questionable. As all the chocolate bars descriptions were presented to participants in a format of an online questionnaire, they might have been perceived and evaluated differently than they would in real life. For example, in my online descriptions equal weight was assigned to different parts of the descriptions because they were presented in a text format. As a result of equal assignment to all elements, participants could make their choice assigning less value to prosocial characteristics than they would do in real life. Usually some elements of bar the description stand out, for example, chocolate bar name and visual elements attract more attention than ingredients description.Considering chocolate, Tony Chocolony bars use the bar name to illustrate that they are against slave-labor practices (Hillen, Blom, Burg, & Verhagen, 2014). Tony's Chocolonely.). Also, different visualizations of plants and our planet can be used as a mean to demonstrate ecological traits of bars. Langen, Roidl & Hartmann (2010) and Crane (2001) found price and performance to be the most crucial features while making consumer

decisions. This is also true for fairtrade products. Further investigations can be done in the format of laboratory and field experiments to improve external validity. I would suggest to conduct an experiment with real chocolate bars, which are not familiar to participants, but still contain all elements of chocolate bars people see in the shops.

Moreover, although I said that participants can take the money they do not spend, in the end they did not receive any money. This limitation could distort the value of money and consequently participants could buy more than they would do in real life. To improve this limitation the experiment should be conducted with the usage of real money. This would make the value of money more clear and reflecting reality. I assume that because of the higher value of real comparing virtual money, in the real experiment with actual purchases participants would spend less money and buy less expensive chocolate bars.

Another point of controversy might be the sampling bias. The sample clearly cannot be considered representative of the whole population as the sample mostly consisted of people aged 20-28. This has happened as a result of convenience sampling technique; Participants are researcher's age group. Meanwhile, based on proven prosocial-growth hypothesis, older people tend to be more prosocial (Van Lange, 2000). Thus, the results from this sample cannot be generalised to other ages.

In addition, one more technical issue could be small sample size. In a similar study by Roux, Goldsmith, and Bonezzi (2015) the effect size was equal to 0.303, based on F-value and sample size. Calculation in G*power software indicated that to observe the same result with the same effect size, I would need 570 participants. I assume that in the case of data collection continuation, I could observe the desirable effect.

Another point of discussion are conceptual matters. Firstly, a consumer decision-making

paradigm has been chosen for my investigation. This could result in different priorities while making decisions, because the presence of other people was not implied. In contrast, prosocial behavior was measured by asking participants to play a dictator game (Piff, Kraus, Côté, Cheng, & Keltner, 2010) or to detect the emotions of the partner (Kraus, Côté & Keltner, 2010) in other investigations. In these studies, the presence of other people was more salient and could result in activating social-related processes, while consumer decisions might be a more egoistic and isolated process. Such social-related process could be perceived level of reciprocity (Cialdini,2001) and possible reputation (Yoeli, Hoffman, Rand, & Nowak, 2013). Thus, the usage of the consumer decision paradigm can lead to lack of influence on prosocial behavior, as a result of poor activating of social-related processes and absence of other people salience.

Secondly, I have clearly observed the differences in various types of prosocial behavior. There was a difference between the ecological and fairtrade emphasis, which referred to considering and not considering other people. Based on this difference, I can conclude that in regard to money scarcity the prosocial products with the salience of other people should be promoted. This results are in line with the Airley, Bracha, and Meier (2009) classification and can be explained by the role of image motivation, which means that salience of other people can activate the prosocial consumption. However, further investigations have to be done to test this relationship more directly.

Thirdly, another important point that could prevent the hypothesis from being proved is poor independent variable operationalization. In my investigation resource availability was manipulated by the amount of money participants had. However, the difference between conditions might have not been enough to see real differences in behavior, because in the scarcity condition people still could buy 75% of chocolate bars. This was done for the purpose of

participants being able to buy both regular and prosocial bars, but I can assume that it has reduced the difference between conditions. Further investigations could include more items and increase the percent of unavailable products in the scarcity condition and consequently activate scarcity-related process more efficiently.

Fourthly, the choice of chocolate bars was justified by the product desirability, however it can be considered as questionable, because according to Hainmueller and Hiscox, (2015), lower-priced items sales are not influenced by fairtrade characteristics. Thus, future investigations could focus on more expensive types of products to activate the effect of fairtrade characteristic.

Finally, prosocial behavior operationalization can be considered as non-reliable. In the current investigation, prosocial behavior was measured as the percent of prosocial bars among all chosen bars. However, this hides an issue that the percentages for a participant who has chosen only one prosocial bar and a participant who has chosen one prosocial and two regular bars differ significantly. This could distort the results because in described case both participants have chosen one chocolate bar, but their tendency to prosocial consumption would be calculated as 100% and 33% accordingly. Although I have extended results section with analysis of absolute choice of each bar per condition, this measurement still can be improved by adding more choice options and considering absolute and relative numbers while talking about prosocial consumption.

Importance

Present research adds to a growing theoretical literature on the extent and implications of prosocial behavior in markets (Andreoni, 2006; Benabou & Tirole, 2006) and provides new evidence of a specific on ecological and fairtrade consumption that are important issues in corporate social responsibility discussions (Baron 2003; Baron and Diermeier, 2007; Besley and

Ghatak 2007).

This research extends marketing tactics related to scarcity by testing how money scarcity influences consumers' choices. For instance, it refers to promotions that stress that only few items are left or that there is little time remaining to buy them (Cialdini 2009; Inman, Peter, & Raghubir, 1997). Marketing guidelines can be extended by targeting differently people, willing to spend different amounts of money during shopping processes. For example, marketers could target people who are ready to spend more with fairtrade products. Also, I can conclude that in regard to money scarcity the prosocial products with the salience of other people should be promoted.

Conclusion

The current master thesis is dedicated to the problem of the influence of financial scarcity on prosocial consumption and the role of social concerns in this process. I have conducted a pretest and experiment with two randomized between-subjects conditions (financial scarcity and abundance). The results of the pretest helped to verify equality of chocolate bars desirability and to adjust prices. The study gives a reason to doubt whether the financial scarcity influence the proportion prosocial products in the context of consumer behavior choice. In other words, whether in case of lacking money people will tend to but more ecological and fairtrade products. Moreover, this process is not mediated by orientation to other people, however orientation to other people was found to be negatively correlated with the proportion of prosocial products.

So, both hypotheses did not find the support in the empirical research; current investigation failed to prove that financial scarcity influences prosocial behavior. However, this research is a subject to limitations and results cannot be fully extrapolated. Based on these limitations, improvements for further research were suggested.

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Appendix A

Qualtrics pretest questionnaire

This study is designed to help our understanding of how people make purchase decisions. On the following pages, you will be asked to answer several questions. This study should take approximately 5 minutes to complete. All responses that you provide in this study are kept strictly confidential. Your participation is voluntary and you may discontinue participation at any time.

If you have questions about this study, please contact the investigator.

If you agree to participate in the study, click >> to proceed.

Below you see the descriptions of four chocolate bars. Please read it and answer the questions below.

BAR A

A milk chocolate bar with a soft, tasty, milky filling that gives you the pleasure and taste of when you were a child. Enjoy the unforgettable creamy chocolate flavor of high-quality chocolate.

Country of origin: Germany. Cacao origin: West Africa and Ecuador.

Ingredients: Milk Chocolate, Sugar, Skimmed Milk Powder.

BAR B

Enjoy soft milky chocolate with mellow caramel. A simple combination that is surprisingly tasty! Feel an exceptional, bright, cheerful and smooth flavor.

Country of origin: United States. Cacao origin: West Africa.

Ingredients: Milk Chocolate, Caramel.

This particular bar is 100% organic, meaning that no environmentally toxic substances were used at any stage in the production process.

BAR C

Some things you just don't outgrow. This bar – with a unique combination of rich milk chocolate and crisped rice - is one of them.

Country of origin: United States.Cacao origin: Ghana.

Ingredients: Milk Chocolate, Crisped Rice. Contains milk and soy ingredients. May contain peanuts, nuts and wheat.

Enjoy the flavors that come with over 100 years of candy-making expertise.

BAR D

This bar is to be taken seriously: milk chocolate filled with crunchy caramel and one more surprising ingredient. The chocolate has creamy flavor that goes deep into your heart.

Country of origin: Netherlands. Cacao origin: Ghana.

Ingredients: Sugar, whole milk powder, cocoa butter, cocoa mass, pieces of caramel, soy lecithin.

This bar is 100% fair trade, meaning that trading based on dialogue, transparency, and respect, that seeks greater equity in international trade.

Please rate the desirability of chocolate bars on scale from 1(not desirable) to 5 (very desirable)

How much are you willing to pay for this chocolate bar?

Which bar you would choose to buy?

- Bar A
- Bar B
- Bar C
- Bar D

Previously you have chosen one bar. Please indicate whether or not the bar of your choice had each of the following characteristics:

- The bar is from Germany
- The bar is from the United States
- The bar is from the Netherlands
- The cacao originated in Ecuador
- The cacao originated in West Africa
- The cacao originated in Ghana
- The bar contains caramel
- The bar contains crisped rice
- The Bar contains skimmed milk powder

- The chocolate is 100% organic
- The chocolate is fairtrade

Please indicate how much do you like chocolate

- Do not like chocolate
- Like a little
- Like
- Like a lot
- Extremely like

Please indicate how often you eat chocolate

- Never
- Less than once in month
- Every month
- Every week
- Every day

What is your gender?

- Male
- Female

How old are you?

___

Thank you for participation! I will use your responses to improve my final investigation.

Appendix B

Qualtrics main study questionnaire

This study is designed to help our understanding of how people make purchase decisions. On the following pages, you will be asked to answer several questions. This study should take approximately 5 minutes to complete. All the responses that you provide in this study are kept strictly confidential. Your participation is voluntary and you may discontinue participation at any time.

If you have questions about this study, please contact the investigator.

If you agree to participate in the study, click >> to proceed.

Below you see the descriptions of four chocolate bars. Please read it and answer the question below.

BAR A

A milk chocolate bar with a soft, tasty hazelnut filling that gives you the pleasure and taste of when you were a child.

Enjoy the unforgettable creamy chocolate flavor of high-quality chocolate and hazelnut.

Country of origin: Germany. Cacao origin: West Africa and Ecuador.

Ingredients: Milk Chocolate, Sugar, Skimmed Milk Powder, hazelnut.

Price: 0.49€

BAR B

Enjoy the soft milky chocolate with mellow caramel. A simple combination that is surprisingly tasty! Feel an exceptional, bright, cheerful and smooth flavor.

This particular bar is 100% organic, meaning that no environmentally toxic substances have been used at any stage in the production process.

Country of origin: United States. Cacao origin: West Africa.

Ingredients: Milk Chocolate, Caramel.

Price: 0.99€

BAR C

Some things you just don't outgrow. This bar – with a unique combination of rich milk chocolate and crisped rice - is one of them.

Enjoy the flavors that come with over 100 years of candy-making expertise.

Country of origin: United States.Cacao origin: Ghana.

Ingredients: Milk Chocolate, Crisped Rice. Contains milk and soy ingredients. May contain peanuts, nuts and wheat.

Price: 0.69€

BAR D

This bar is to be taken seriously: milk chocolate filled with crunchy caramel and one more surprising ingredient. The chocolate has creamy flavor that goes deep into your heart.

This bar is 100% fair trade, meaning that trading based on dialogue, transparency, and respect, that seeks greater equity in international trade.

Country of origin: Netherlands. Cacao origin: Ghana.

Ingredients: Sugar, whole milk powder, cocoa butter, cocoa mass, pieces of caramel, soy lecithin.

Price: 0.79€

Imagine you have 3.10/1.70€. You can use this money to buy chocolate.You need to buy at least one chocolate bar, but you are allowed to buy more. You can buy each chocolate bar only once. The money you do not spend you can keep. Please indicate which bars you would like to buy.

Please note that you must not exceed the amount of money you have.

- Bar A
- Bar B
- Bar C
- Bar D

Please rate the following statements on a 5-point scale from 'Strongly disagree' to 'Strongly agree'

- The money I had was limited
- My resources were scarce
- I felt that I could not choose what I really wanted because of limited amount of money
- If I could I would have bought more chocolate bars
- I had enough money to buy everything I wanted

Each of the following sentences include two sets of five pronouns . For each sentence, you are to make two selections to make a coherent sentence. To choose the pronoun you need to click on title (for example, 'He') and then click on green sign 'Choose'. There are many combinations that are technically correct, but some combinations may seem more correct than others. Please select the combination that seems correct to you at this moment.

1. Don’t worry, I / he / she / we / they will explain it to me / him / her / us / them again.
2. After seeing me / him / her / us / them, I / he / she / we / they decided to stop.
3. Next time, I / he / she / we / they will meet me / him / her / us / them at the gate.
4. I / He / She / We / They want to go to dinner with me / him / her / us / them.
5. I / He / She / We / They helped me / him / her / us / them with the assignment.
6. During that time, I / he / she / we / they didn’t contact me / him / her / us / them.
7. The plan is that I / he / she / we / they will phone me / him / her / us / them next week.
8. I / He / She / We / They will not visit me / him / her / us / them again.
9. After teasing me / him / her / us / them too much, I / he / she / we / they regretted it.
10. I / He / She / We / They will talk to me / him / her / us / them later.

Please indicate how much do you like chocolate

- Do not like chocolate
- Like a little
- Like
- Like a lot
- Extremely like

Please indicate how often you eat chocolate

- Never
- Less than once in month
- Every month
- Every week
- Every day

What is your gender?

- Male
- Female

How old are you?

What is your highest level of education?

- School
- Bachelor
- Master
- PhD

Thank you for your participation!

Appendix C

Table 1

Descriptive Statistics

Variable	Financial scarcity (n = 117)			Financial abundance (n = 116)		
	M	*SD*	Range	*M*	*SD*	Range
Age	24.31	3.97	19-42	24.26	4.02	18-46
Manipulation check	2.56	0.76	1-4.4	2.26	2.8	1-3.8
How much participants like chocolate	3.61	1.02	1-5	3.38	0.98	1-5
How often participants eat chocolate	3.7	0.88	2-5	3.57	0.84	2-5

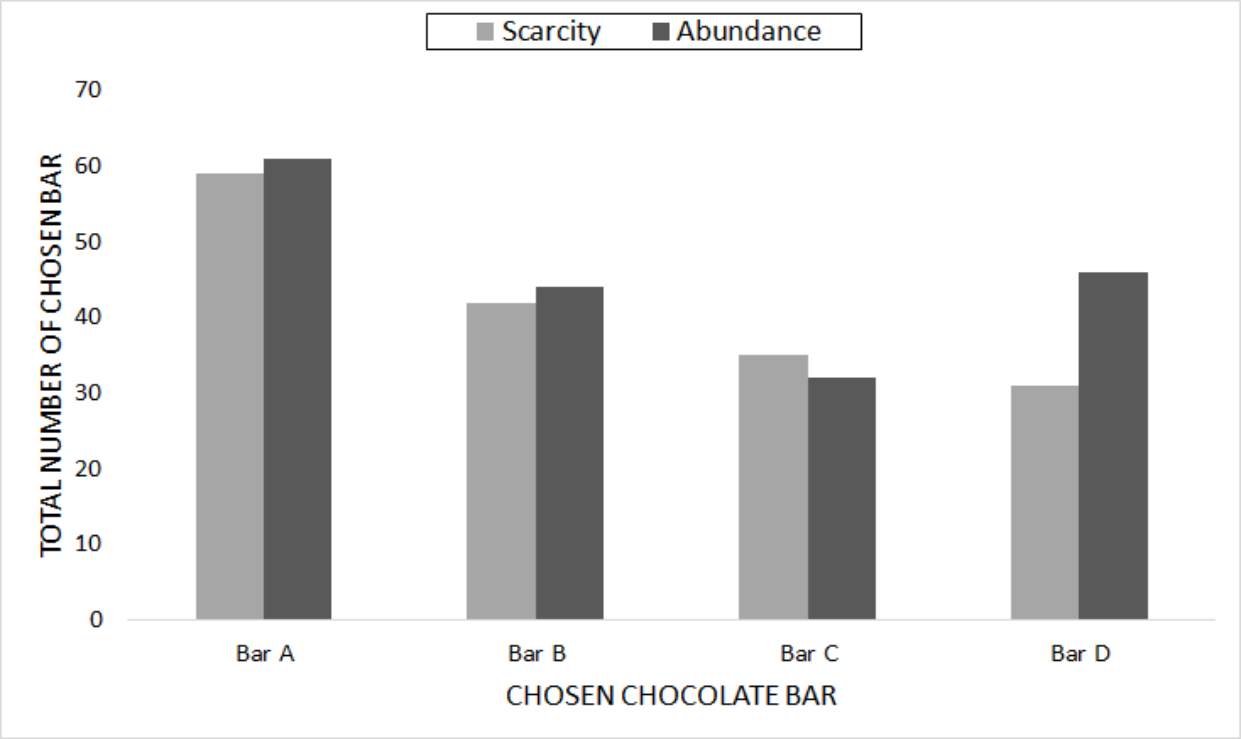

Figure 1. Total number of bars chosen in scarcity and abundance condition.