



LUND UNIVERSITY

School of Economics and Management

# You are what you eat - and not what you earn

An Experimental Study on the Influence of Income and Self-perception on Food-based Moral Judgments

by

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# Abstract

One response to mitigate climate change is the replacement of conventional products with more environmentally friendly ones. The increased popularity of organic food can be said to be an effect of this development. This popularity has in combination with the prosocial characteristic of organic food and its associated price premium made sustainable consumption a political question, as it raises questions regarding how wealth in society should be distributed. This thesis relates to the discussion concerning what is deemed as morally right or wrong when it comes to unemployed consumers on welfare purchasing organic food. Drawing on inspiration from Olson et al. (2016) and responding to calls for research related to this observed phenomenon, the purpose of this study is to find out how people make moral judgments based on other people's food consumption, and to see how income moderates this relationship. To further extend theory, the self-perception of the perceiver will be examined.

Our objective is to fulfill this purpose by responding to its associated research questions. We also wish to control for the perceived healthiness of the mentioned food choice and a social desirability response bias. To achieve this, we conducted a cross-sectional experimental study, with a 2x2 between-subjects design. The results were obtained through hypothesis testing and the application of a three-way analysis of covariance. The collection of primary data was realized through convenience sampling method using an online survey. In total 350 valid responses were obtained from participants of Swedish, German, and French nationality.

Our results revealed that income does not significantly alter the relationship between food choice and moral judgment. Moreover, people's self-perception regarding their organic food consumption does not influence this relationship. The choice of food does, however, account for a main effect on moral judgment, leading consumers of organic food to be perceived as more moral than consumers of non-organic food. Furthermore, perceived healthiness of food choice and social desirability response bias correlate with moral judgments of other consumers purchasing food - making it essential to control for these factors in the context of our study.

The findings endorse the *you are what you eat* idiom, meaning that characteristics associated with the food one consumes get transferred to the consumer. The prosocial nature of organic food is likely to be one source behind the positive moral judgments of organic consumers. A potential reason behind why moral judgments of food choice are not moderated by income might furthermore be related to the strength of the prosocial effects of organic food in Europe.

Keywords: Moral Judgments, food, organic food, income, self-perception, attribution theory, social comparison theory, you are what you eat



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# 1 Introduction

## 1.1 Background

Over the past decades, the environment has become a central issue in society, with increased worldwide consumption of goods and services taking its toll on the environment (Chen & Chai, 2010). The understanding of the seriousness of issues surrounding environmental damage has gradually grown since the late eighties and early nineties (Akehurst, Afonso & Martins Gonçalves, 2012), and has led to increased awareness of these issues (Kalafatis, Pollard, East, & Tsogas, 1999). The idea of sustainable development has emerged (Joshi & Rahman, 2015), and increased environmental awareness has noticeably impacted green purchase intentions and behavior (Akehurst, Afonso & Martins Gonçalves, 2012; Hygstedt & Fagerberg, 2014). Today, many consumers claim they are concerned about environmental issues (Young, Hwang, McDonald & Oates, 2010). However, it is argued that a radical approach of keeping consumption to a minimum hardly seems feasible in a consumption-oriented society (Moisander, 2007). If this view reflects reality, then the remaining option to reduce environmental damages is the replacement of products with more environmentally friendly products: so-called *green products*.

The term *green product* is frequently used in everyday language; however, to some degree, it lacks practical relevance since it is difficult for consumers to evaluate products objectively regarding sustainability when making purchase decisions (Moisander, 2007). For this reason, the market has responded by introducing labels of various kinds that can demonstrate environmental friendliness in various aspects. An array of green labels has been created, among which many include the criteria of the products being organic (Livsmedelsverket, 2015). Organic products and perhaps organic food, in particular, seem to over time have come to be almost synonymous with the term green. Organic food is by definition prosocial since it benefits not only ourselves but also society as a whole (Batson & Powell, 2003). The benefits of organic products do however come at a price, and they are commonly associated with a price premium (Lindahl, 2014).

The increased popularity of organic food in combination with its prosocial characteristic and price premium has made sustainable consumption a political question (Frankfurter Allgemeine Zeitung GmbH, 2016). An example of this can be found in Germany, where politicians have demanded more money for welfare recipients, to make organic food affordable for all people and to perform a societal shift to sustainable agriculture (Frankfurter Allgemeine Zeitung GmbH, 2016). This demand was met with skepticism from parts of society that deemed green products to be luxury items (Schummeck, 2016). In the United States, a similar debate surrounding the question of what is morally right to consume for individuals on government support has also been animated (Allon, 2014). A Fox news report about people living on food

stamps being able to buy organic salmon caused quite a stir and lead talk show host Jon Stewart to pose the question: “[w]hat’s the right quantity of quality and class-based shame poor people should aim for in their meal plan?” (Allon, 2014, n.p.). From these debates, it would seem that increased costs, affecting other citizens through the taxes imposed on them, to some degree are a rationalization of the feeling that unemployed individuals on welfare are undeserving of consuming the same food as others who are more prosperous. Income seems to polarize moral judgments of food consumption.

The issue of what kind of products that are morally right for individuals to acquire is part of a research field known as ethical consumption or marketplace morality (Papaoikonomou, Ryan & Valverde, 2011). Despite that ethical consumption sometimes being portrayed as a new and market changing phenomenon of the last decades (Coff, 2010; Devinney, Auger & Eckhardt, 2010; Schlegelmilch, 1996), it has, in fact, a long history. It is something that has appeared in cultures all over the world during the history of humanity (Newholm, Newholm & Shaw, 2015). A substream of this field named consumer ethics focuses especially on the underlying causes of consumer’s ethical judgments (Chatzidakis & Mitussis, 2007) and their perceptions and reactions to potential unethical purchase situations or behaviors (Papaoikonomou, Ryan & Valverde, 2011). That is the causes of the kind of situation described in the debate above.

## 1.2 Problematization

There have been several calls for research concerning perceptions of morality in the marketplace (Campbell & Winterich, 2016; Kirmani, 2015), environmentally protective behavior (Mick, 2006) as well as identity and self-consistency (Campbell & Winterich, 2016) over the last decade. The current study is designed to respond to these calls for more research and is set in a context where amongst others, unemployed individuals living on welfare purchase organic food. This situation can cause moral judgments (see Section 1.1.), and the income of the consumers appears to polarize moral judgments so that: unemployed individuals on welfare are perceived as less moral when purchasing organic food (vs. non-organic food), and high-income earners are viewed as more moral when buying organic (vs. non-organic food), as seen in Olson, McFerran, Morales and Dahl (2016).

Previous research within the sub-stream of *consumer ethics* is however rather limited in relation to food-based moral judgments. The research conducted to date has been situated in the United States (Olson et al., 2016; Rozin & Singh, 1999; Stein & Nemeroff, 1995) and as contextual factors are deemed to be of importance for studies relating to food consumption (Olson et al., 2016; Rozin et al., 1999; Stein & Nemeroff, 1995) the relevance of conducting similar research elsewhere is high. Moreover, the interaction between self-perception, income and food choice, has as far as we are concerned not been investigated either. The findings to date are thus somewhat limited as moral judgments in real life have been said to be dependent on all three of these factors by studies approaching moral judgment from different perspectives (Olson et al., 2016; Zane, Irwin & Reczek, 2016).

Consumer ethics, in relation to food consumption, has, to a vast extent, not been researched, that is problematic for a number of reasons. A shift from non-organic to organic food consumption should be beneficial for society as a whole, and could, for example, help reduce the negative impact humans have on the environment (Brul, Matsson, Parrott & Stopes, 2013). Today, food production and the marketing of food is an area with a great potential to reduce emissions, since approximately 25% of the world's environmental footprint comes from food consumption (Johansson, 2015). The investigation of consumers' moral judgment of other consumers in relation to the category could hence aid to demonstrate the importance of a change of norms in society if such a change is needed. The particular issue highlighted in this thesis involves moral judgment of food consumption of unemployed individuals on welfare in Europe. It has thus been further brought to the forefront by the relatively volatile unemployment rates in contemporary Europe (Eurostat, 2017). The current unemployment rates are to some degree a result of the latest financial crisis (Andersson, 2017). Financial crises are according to Andersson (2017) a product of the current economic system and will continue to occur more frequently than previously if status quo is maintained. To stabilize and improve sustainable development, a change in norms could thus be one part of a solution since, from time to time unemployment rates are likely to rise. Stigmatization of groups is further problematic as it can lead to psychological problems and suffering (Lee, Kim & Vohs, 2011) as well as increased costs for society (Beyondblue, 2015). Current norms could, therefore, be counterproductive for society and the work of policy makers should benefit from an increased understanding of moral judgment in the context of food and employment. Komarova Loureiro, Bayuk, Tignor, Nenkov, Baskentli and Webb (2016, p.7) argue that: "[i]t is important to note that even marketplace moral failures that seem fairly small at an individual consumer level can have staggering social and economic consequences in the aggregate", and it is possible that the current issue is such a case.

Considering the effect of ethical choices of food, potentially moderated by income and self-perception, and the limited amount of research, this area is calling for attention.

## 1.3 Purpose and Objectives

The conflict concerning what is deemed as morally right or wrong when it comes to consumers on welfare purchasing organic food raises questions for investigation. The purpose of this study is to find out how people make moral judgments based on another person's food consumption and to see which impact knowledge of this person's income has on these moral judgments. Further the issue of self-perception of the perceiver and how that influences moral judgment, based on other people's food consumption and income will be examined. To address these problems, we pose the following research questions and sub-questions:

**RQ1:** How do people make moral judgments based on other people's food consumption?

**RQ1a:** How does the income of the judged person impact the above relationship?

**RQ1b:** How does the self-perception of the perceiver impact the above relationship?

**RQ1c:** How does the self-perception of the perceiver, and the income of the judged person impact the above relationship?

The objective of this study is to answer the above questions. Building on a recent study conducted by Olson et al. (2016), we wish to find out if income alters the relationship between food and moral judgment in Europe, as it was demonstrated to do in the United States. As explained previously (see Section 1.2) we further want to add another dimension to find out what role self-perception has in this relationship. Drawing on inspiration from Olson et al. (2016) we use attribution theory and the halo-effect to explain how we as humans attribute meaning to behaviors and objects. Which leads us to control for a potential health-halo effect (see Section 2.2.1.7). That is, we wish to make sure that any positive effect of the perceived healthiness of food items might have on moral judgment, does not affect our results. Due to a possible social desirability response bias when investigating sensitive issues like the one at hand (see Section 2.4.1), we will furthermore add to theory by adjusting our results so that this bias does not have any effect on the outcome. By addressing these issues, we conclusively aim to extend upon previous research in consumer ethics in relation to food.

The above is achieved through a cross-sectional experimental study, with a 2x2 between-subjects design. To answer our research questions, we form four hypotheses. These are accepted or rejected based on the results of a three-way Analysis of Covariance conducted with primary data from a survey involving 350 participants from the three countries in Europe that composed the population of our study (Sweden, Germany, and France). To collect the data we used a convenience sampling method.

## 1.4 Expected Contributions

The expected theoretical contributions from this study are related to the testing and extending of existing theory in a different context. As the only previous study on this specific topic (conducted by Olson et al., 2016) has been carried out in the United States, we do not, to date, have any theoretical knowledge regarding how income alters the relationship between food and moral judgment in a European context. This study is thus first expected to contribute to theory by applying the theoretical model of Olson et al. (2016) to a European context. We further expect to extend existing theory by investigating an additional potential boundary condition, namely self-perception in relation to food purchasing habits (see Section 2.3.2). The relationship between food choice and moral judgment, as well as between both food choice, income and moral judgment will be tested together with this potential boundary condition, thus extending existing theory. Lastly, we also intend to contribute to research by implementing a second covariate that controls for potential socially desirable responses (adapted from Greenwald And & Satow, 1970). If this covariate correlates with the dependent variable, as we predict based on findings in previous research (Fisher, 1993), this is something which can benefit both our study and future research.

Potential practical contributions are related to multiple actors in society. Increased understanding of moral judgments in the context of organic food and employment could benefit policy makers and politicians working with issues related to sustainability and the environment. Moreover, it could also help them to allocate resources in a more efficient manner, potentially improve life quality of stigmatized groups, and reduce the cost for society (Beyondblue, 2015; Lee, Kim & Vohs, 2011). For non-profit organizations and private enterprises, on the other hand, knowledge surrounding the observed phenomenon could aid in the marketing of products related to either of the two spheres of interest: income and food.

## 1.5 Research Delimitations

The scope of this thesis has been delimited in the following manner. Since the research questions concern a phenomenon sensitive to contextual factors (Heider, 2013; Olson et al., 2016; Stein & Nemeroff, 1995) which previously has not been researched in Europe, the population and its associated sample is delimited to include individuals from three countries on this continent: Sweden, Germany, and France.

## 1.6 Outline of the Thesis

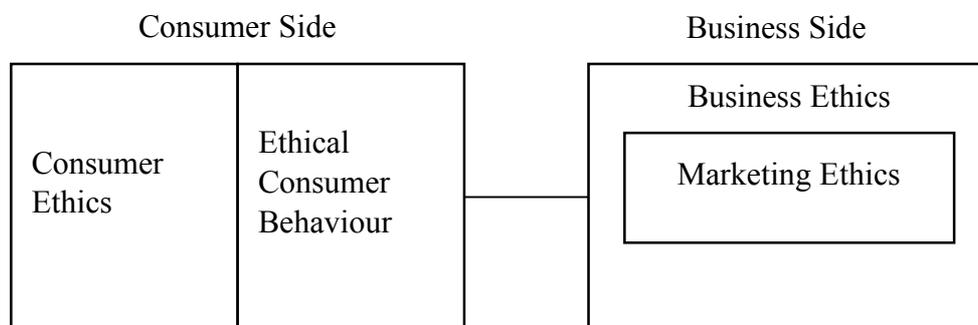
This thesis consists of five chapters. In the first chapter, we provide a background of the study and state our research questions and purpose. Subsequently, a literature review is presented, and the relevant theories are examined, leading us to the hypotheses. In the third chapter, we

outline the methodology of the thesis, justifying and discussing the chosen research methods. This chapter is followed by an analysis in which the collected data is processed, and after which the results are presented. We then discuss these results and draw conclusions based on them in the final chapter of the thesis. The questionnaires and the outputs from our statistical testing can be found in Appendix A respectively Appendix B.

## 2 Literature Review

### 2.1 Typology of Ethical Consumption

While ethical consumption by several influential researchers (Coff, 2010; Devinney, Auger & Eckhardt, 2010; Schlegelmilch, 1996) has been portrayed as a new and market changing phenomenon of the last decades, Newholm, Newholm and Shaw (2015) demonstrate that it has a longer history than what it many times has been accredited with. It is, however, true that research once again started to emphasize and investigate the role of ethical consumption and morality in the marketplace over the last decades (Haidt, 2001; Kirmani, 2015; Komarova Loureiro et al., 2016; Newholm, Newholm & Shaw, 2015). After having settled for an explanation of consumers as rational maximizers, there has been a paradigm shift in several of the fields concerned with this logic, and it has generally become more accepted that other factors such as morality and the beliefs and emotions that it entails affect our behavior (Batson & Powell, 2003; Campbell & Winterich, 2016; Kirmani, 2015). During the last decades, and consequently during the emergence of this paradigm shift, research on morality in the marketplace has been known under different names such as, marketplace morality, consumption ethics, and ethical consumer behavior (Fukukawa, 2002; Kirmani, 2015; Newholm, Newholm & Shaw, 2015; Papaoikonomou, Ryan & Valverde, 2011). At present and over the course of the last years it has commonly been labeled marketplace morality. Within the field of marketplace morality, one can distinguish between three main literature streams: business ethics, ethical consumer behavior, and consumer ethics (Papaoikonomou, Ryan & Valverde, 2011).



*Figure 1 Marketplace Morality (adopted from Papaoikonomou, Ryan & Valverde, 2011)*

Another term for dealing with related ideas is ethically questionable behavior in consumption (Fukukawa, 2002). Ethically questionable behavior is accompanied by a slightly different division of research streams. Its focus is on the decision-making component of marketplace morality and is not concerned with the distinguishment between perception and decision-making in the same way as marketplace morality (Fukukawa, 2002; Papaoikonomou, Ryan & Valverde, 2011). A potential explanation for this is that the stream called marketplace morality is more recently coined, and hence constitutes a more contemporary reflection of research conducted to date, including research within areas previously not investigated. In a rather extensive literature review of ethically questionable behavior, Fukukawa (2002) made an important distinction between two streams of research made until the time of writing: ethically questionable behavior in relation to a specific issue, and ethically questionable behavior providing a more holistic view.

Both these typologies of research on ethical consumption (marketplace morality and ethically questionable behavior) contribute to a better understanding of the field. Ethically questionable behavior in consumption emphasizes the importance of investigating specific issues since, for example, many product categories comprise factors that make the circumstances of consumption different from within other categories (Fukukawa, 2002). The typology of the extensive review of 80 articles conducted by Papaoikonomou, Ryan and Valverde (2011) on the other hand, distinguishes between a business side and a consumer side of marketplace morality. Moreover, it also takes inspiration from Chatzidakis & Mitussis (2007) to make a distinction between two streams of research on the consumer side: ethical consumerism and consumer ethics. Ethical consumerism (interchangeably called ethical consumer behavior) gives attention to the motivations and characteristics behind green and ethical niches (Chatzidakis & Mitussis, 2007). That is environmental and social considerations such as animal, social, and environmental welfare (Low & Davenport, 2007). Consumer ethics, on the contrary, focuses on the underlying causes of consumer's ethical judgments (Chatzidakis & Mitussis, 2007) and their perceptions and reactions to potential unethical purchase situations or behaviors (Papaoikonomou, Ryan & Valverde, 2011). It is within this latter stream of marketplace morality that we locate the observed phenomenon (of consumer's morally judging other consumers when purchasing organic food in relation to their income).

Relative to the business side of marketplace morality less research has been conducted on the consumer side in which we find the stream of consumer ethics. In the opinion of Papaoikonomou, Ryan and Valverde (2011) this does however not indicate that such research is not relevant. As Dholakia and Fuat Firat (2003, p.2) state: "[u]nderstanding ourselves as people who consume may explain much of what we are about as human beings, since in late modernity, many claim, consumption is much of our life."

## 2.2 Consumer Ethics in the Domain of Food Consumption

The purchase situation in which our phenomenon is situated (unemployed individuals purchasing organic food), can lead to ethical judgments by other consumers (see examples in Section 1.1). To understand what constitutes to ethical judgment in this situation, it is necessary

to comprehend the moral nature of food and food consumption. According to Askegaard (2014), moralization of consumption, especially in the domain of food has attracted research in the past several decades and the moral discourse about what to eat and what not is perhaps today more pronounced than ever.

Moralization occurs when moral values are attributed the first time to activities or substances (Rozin, 1997). The morality of food items can in simplest terms be described as a dichotomous view on food - a differentiation between good and bad, usually associated with healthy and unhealthy food (Askegaard, Ordabayeva, Chandon, Chytкова, Cornil, Corus, Edell, Mathras, Junghans, Kristensen, Mikkonen, Miller & Werle, 2014). An attribution that is often based on false assumptions and different understandings of what constitutes to good and bad, leading to bad food being perceived as good and vice versa (Rozin, Ashmore & Markwith, 1996). Assumptions about food are further often imposed by society, through rules concerning eating behavior. A finding, which had researcher acknowledge the influence of culture in the process of food moralization (Askegaard et al., 2014). Culture dictates what to eat and what not to eat - a process embedded in specific contexts, moderated by gender, role and class (Fischler, 1990). Food is commonly connected to moral aspects, and some foods are restricted by society, for example, the Jewish eating non-kosher (Grunfeld, 1972) or food restrictions for certain social castes in India (Appadurai, 1981). The differences in cultural perspectives can also be seen in contradicting attitudes towards food. The French, for instance, associate food mostly with pleasure, whereas Americans have a more utilitarian view of food (Rozin et al., 1999). That food is not merely seen as a nutrient, is salient in culinary traditions and socialization, where for example healthy eaters are judged more intelligent, active and financially secure (Barker, Tandy & Stookey, 1999).

From the aforementioned contemporary discourse concerning what to eat and what not, four types of food moralities emerge: the dichotomous good vs. bad view, the pursuit of discipline and moderation, the control of body size and the morality of market agents (Askegaard et al., 2014). Our observed phenomenon is related to the good vs. bad perception in food moralities. We want to expose whether the good nature of a food item alters moral judgment in situations where the consumer displays certain characteristics, for example when consumers are unemployed and on welfare. Coveney (2006) argues that in modern society, having and making choices is always measured against an index of morality. With the purpose of this study in mind, the focus will thus be on consumption choices in the domain of food which are measured on a morality scale. That is consumer ethics in the domain of food. In the next sections follows a review of studies within this specific stream.

There are several studies which have investigated the underlying moral nature of food (good vs. bad) but sought out to measure its effects against other constructs than morality. For instance the effects of moralization of food on perceived femininity and masculinity of a consumer (Basow & Kobrynowicz, 1993; Chaiken & Pliner, 1987; Shang & Pelozo, 2016) or personal success orientation and likability (Pearson & Young, 2008). Another example is a study by Barker, Tandy and Stookey (1999), where they asked participants to describe consumers of different diets based on a list of 27 antonyms (e.g. attractive/unattractive, interesting/boring, intelligent/unintelligent). However, to the best of our knowledge, only a few studies have investigated the moral nature of food regarding moral judgments (Olson et al., 2016; Rozin &

Singh, 1999; Stein & Nemeroff, 1995). We thus want to describe these studies in detail - encompassing food items, moderating factors of both consumer and perceiver (e.g. gender, class, roles) and cultural context. The other previously mentioned studies related to the moral nature of food have been disregarded as they are less well aligned with the nature of the observed phenomenon.

The consumption of different types of food, such as healthy vs. high in calorie content (Stein & Nemeroff, 1995) and ethical vs. unethical (Olson et al., 2016) has been measured against moral judgment. The findings of these studies indicate an existing relationship between choice of food item and moral judgment of the consumer. An important finding is that the link between food and morality can alter under certain boundary conditions (Olson et al., 2016). That is, when the context changes, so does the relationship between food and moral judgment. Olson et al. (2016) for example, show that the consumption of organic food - naturally perceived as good food - can result in immoral judgment when the consumer is living on welfare. A finding which amongst others illustrates the moderating role of the consumer's occupation. Rozin and Singh (1999) looked into the moralization of cigarette smoking in the United States and found support for the hypothesis that substances or activities which are treated as values, and in other words are being moralized, are more likely to be internalized than instrumental concerns, meaning are not associated with certain values. It can be argued whether this study is residing in the domain of food. It has, however, relevance for moralization of consumption since participants were asked to judge other individuals morally.

The need for investigating boundary conditions can further be seen in the influence of contextual factors on moral judgment, which is evident from previous experimental studies (Olson et al., 2016). Stein and Nemeroff (1995) looked at the influence of gender (male vs. female) but could not find any moderating effects based on the sex of the target or the perceiver. Olson et al. (2016) on the other hand selected different conditions along the socioeconomic continuum (unemployed vs. employed) to identify differences in moral judgments based on source and amount of income. Together, these studies indicate that moral judgment is influenced by a specific consumption choice as well as the context in which it takes place. Conclusively, one should, just as Fukukawa (2002) indicates in her review on ethically questionable behavior (see 2.1) be careful to generalize findings unless they appear in similar contexts.

Another contextual factor is time. The findings described in the section above represent potential explanations to a phenomenon at a certain point in time. It should not be forgotten that undertaken research is a reflection of the time and space that the researchers find themselves in. To understand the motivation behind previous research, it is, therefore, important to review both time and space as contextual dimensions. The moralization of cigarette smoking has been present in American society for decades and smoking has shifted from being a simple matter of choice in the 1950s to a topic of moral discourse over time (Rozin & Singh, 1999). Similarly, Stein and Nemeroff (1995) highlighted the moral aspects of a diet for the American society due to inherent values such as health and attractiveness at the beginning of the nineties. Two decades later, wealth and income inequality reached new heights in the United States and the economic disadvantage of many Americans inspired Olson et al. (2016) to investigate the challenges of

the unemployed consumer on welfare in a recent study. The following table summarizes the contextual factors of the above-reviewed studies.

Study	Consumption Choice	Characteristics of Consumer	Demographics of Participants	Habits/Qualities of Participants	Country/Culture
(Olson et al., 2016)	Food (organic vs. non-organic)	Income (welfare vs. high income)	Students	None	USA
(Rozin & Singh, 1999)	Cigarettes	None	Study across three generations (college students, their parents, and grandparents)	Reaction to cigarette smoking and own smoking habits	USA
(Stein & Nemeroff, 1995)	Food (healthy vs. calorie rich)	Gender (male vs. female)	None	None	USA

*Table 1 Overview of Contextual Factors*

## 2.3 Theoretical Review

Besides investigating the different contextual factors which have been used in similar studies, it has also been necessary for us to understand the mechanisms behind why and how people make moral judgments in the domain of ethical (food) consumption. In the following, we will hence review relevant theories.

### 2.3.1 Attribution Theory

Olson et al. (2016) draw in their work on attribution theory - a theory concerning how we perceive other people - and propose that the prosocial nature of ethical consumption (Batson & Powell, 2003) will lead to moral judgments of the consumer. Heider (2013) describes attribution in his research on the psychology of interpersonal relations as the process of drawing inferences. Attribution thus provides an explanation for how people interpret the behavior of others. A broader perspective can be found in the review of Kelley and Michela (1980) who describe attribution theory as the study of perceived causation, dividing it in attribution and attributional theory. The former investigates the perception of causation whereas the latter is interested in the consequences of these perceptions. An experiment by Thibaut and Riecken (1955) can explain the essential elements of these theories This experiment shows that attributions are affected by antecedents which lead to consequences - a reaction to the observed behavior. Research investigating the relationship between antecedents and attributions (attribution

theory) has mainly been interested in cognitive processes, whereas research on the attributions-consequences link (attributional theory) has been concerned with behavior (Kelley & Michela, 1980). In this thesis, we are primarily interested in how people form judgments rather than the consequences of the same. That is, we wish for example to see if the self-perception of the individual judging another consumer can affect moral judgment, and not in the potential outcomes of this judgment.

Attribution is affected by three classes of antecedents: information, beliefs and motivation (Jones & Davis, 1965). Information affects attribution since it can reveal something about the ambiguity of a person's intention. This can be explained by non-common effects - the intention underlying behavior is most evident when there is no alternative behavior. The perceiver's beliefs present the second class of antecedents which affect attribution. Presumptions about motivation and expectations about effects explain the sometimes dominating role of beliefs without considering available information for an observed behavior. Furthermore, processing of information rarely occurs without the influence of presumptions and expectations (Kelley & Michela, 1980). The motivations behind attribution are closely related to a person's interests. These interests can disclose why a person is at all involved in making attributions and whether he enters this process with an open mind or being distracted by causal questions (Kelley & Michela, 1980). This can also be used to interpret how a perceiver arrives at certain explanations. Furthermore, can self-esteem and social standing amongst others affect the process of making attributions.

### 2.3.2 Social Comparison Theory

Qualities of the perceiver is another contextual factor, that should be considered when investigating *person perception* (Olson et al., 2016; Stein & Nemeroff, 1995). Especially how own consumption habits affect moral judgments of others has been recommended for future research by Olson et al. (2016). Attribution theory (Heider, 2013), as mentioned in the section above, further states that a perceiver's beliefs affect attribution and is thus in alignment with this proposal. It has been shown in the context of ethical consumption that there are different consequences when ethical behavior is observed (Fein & Spencer, 1997; Haidt, 2003). One situation in which ethical conduct is observed stands out from other circumstances. In this situation, an observer learns that he or she is less ethical than others - resulting in either elevation towards ethical behavior or a denigration of the more ethical consumer (Zane, Irwin & Reczek, 2016).

The term *elevation* describes an emotion that occurs when people observe unexpected acts of virtue or moral beauty (Haidt, 2003). On the contrary, the denigration of less ethical consumers can be linked to the role of “self-image- and self-esteem maintenance processes in people’s perceptions and reactions regarding others” (Fein & Spencer, 1997, p.31). Fein and Spencer (1997) found that a threat to the perceiver's self-image or self-affirmation can lead to negative judgments, stereotyping and intolerance of other individuals - a reaction to restore a threatened self-image. In the context of ethical consumption Zane, Irwin and Reczek (2016) furthermore found that consumers who willfully ignored ethical product attributes depreciated those who cared about ethical consumption. The denigration can be linked to a negative social comparison

with others, who have chosen to act ethically (Zane, Irwin & Reczek, 2016). According to social comparison theory (Festinger, 1954), people compare themselves with others in order to judge others personal characteristics. Lockwood and Kunda (1997) further found that social comparison can be recognized as a threat when people perceive themselves as inferior to the compared person regarding relevant characteristics. The self-threat created by others ethical behavior can hence lead to denigration (Zane, Irwin & Reczek, 2016). Furthermore, individuals who denigrate others ethical behavior in certain situations are less likely to act ethically in the same domain in the future (Zane, Irwin & Reczek, 2016). The downstream consequences caused by the denigration of others who act more ethically (Zane, Irwin & Reczek, 2016a), could lead to a dangerous spiral in which ethical consumption becomes less practiced.

### 2.3.3 Equity Theory

Olson et al. (2016) also propose that equity theory may affect moral judgment depending on the characteristics of the target (in the case of their study the income of a consumer). Equity theory was originally developed by Adams (1963) to investigate social inequity by analyzing the reactions of employees to wages. Adams describes his theory as a particular case of Festinger's cognitive dissonance. The latter refers to the theory that individuals strive towards consistency within themselves and that opposing beliefs can lead to discomfort (Festinger, 1962). At the core of equity theory is the perceived balance between an individual's contributions and outcomes compared to other individuals in a similar context and whether this distribution is perceived as fair (Batson & Powell, 2003).

### 2.3.4 The Law of Contagion

Stein and Nemeroff (1995) mention several possible explanation mechanisms behind food-based judgments, such as the magical law of contagion (Frazer, 1951), the Puritan ethic (Mirels & Garrett, 1971), taboo-breaking and halo effects. The magical law of contagion, also called the law of contact is derived from the idea that things that have been in contact with each other continue to interact after separation. The more common *you are what you eat* idiom describes one type of contagion, which is based on the belief that the consumption of food leads to a transfer of characteristics of food onto the consumer (Frazer, 1951). In an experimental study (not related to ethical consumption), Nemeroff and Rozin (1989) found evidence for this theory by looking into the perception of two different fictitious tribes based on their eating behavior. Both tribes hunted wild boars and sea turtles but ate only one type of these animals. The tribe who ate wild boars got attributed more boars-like characteristics (e.g. being good runners), whereas the member of the tribe who ate water turtles were seen for example as better swimmers. These findings implicitly suggest for our research that the good nature of organic food could be passed onto the consumer. Stein and Nemeroff (1995) found evidence for food-morality effects explained by the law of contagion. Interestingly, their study indicates that the food morality link can not be overcome by contrasting information about the consumer. For instance, the active lifestyle of a consumer was perceived as less salient when the same person consumed bad food (Stein & Nemeroff, 1995). Prejudice about those who consume bad food

might be a reason to explain this finding, since prejudice according to (Allport, 1950, p.23 cited in Stein & Nemeroff, 1995) involves an “irrational prejudgment that disregards the facts.” This finding was however contradicted when researched in the context of an unemployed purchasing organic food (Olson et al., 2016), where the consumption of prosocial food instead lead to immoral judgment. Something which either speaks for a weaker contagion effect of good food compared to bad food or a strong prejudice towards people on welfare in the United States.

### 2.3.5 The Puritan Ethic

Another possible explanation for the food morality link could be seen in the Puritan ethic, which refers to being industrious and denying pleasure (Mirels & Garrett, 1971). In this theory, self-discipline and restraint from overindulgence are rewarded. Individuals, who on the other hand, for example, consume food associated with overindulgence, such as ice cream or with laziness, such as fast food could be seen as violating the Puritan ethic (Stein & Nemeroff, 1995). The findings in the same study were confirmed since the Puritan ethic had an influence on moral judgment (Stein & Nemeroff, 1995).

### 2.3.6 Taboo-Breaking

In a society that promotes healthy eating, consumer of bad food could be viewed as “breakers of a social norm that has the force of a taboo” (Stein & Nemeroff, 1995, p.482). Taboo-breaking, although it is not against the law and just merely not in line with informal rules, could explain a relation between food and immoral judgment (Stein & Nemeroff, 1995). The simple consumption of organic food should not be seen as taboo-breaking. However, when taking place in certain contexts, it may - as seen in Section 1.1 - be in conflict with social norms.

### 2.3.7 The Health-Halo Effect

The earlier introduced studies by Olson et al. (2016) and Stein and Nemeroff (1995) looked into potential halo effects since they could also account for moral judgments when inferences are made from food. A halo effect in products occurs when a certain product attribute influences the perception of other attributes of the same product (Apaolaza, Hartmann, Echebarria & Barrutia, 2017). The term *halo effect* was originally described by Thorndike at the beginning of the 20th century, referring to a perceptual bias (Thorndike, 1920). Bias, in which one pronounced characteristic of a person influences the overall perception of the same person. If this holds true, a health-halo consequently occurs, when the healthiness of a product is more salient than other attributes, leading to an overall perceived healthiness.

The health-halo effect is particularly pronounced in organic food, and has led it to be viewed as low in calorie content (Schuldt & Schwarz, 2010), higher in nutritious (Lee, Kim & Vohs, 2013) and overall healthier than non-organic items (Ellison, Duff, Wang & White, 2016; Schuldt & Hannahan, 2013; Sörqvist, Haga, Langeborg, Holmgren, Wallinder, Nöstl, Seager & Marsh, 2015). In a very recent pilot study, Apaolaza et al. (2017) analysed the organic halo

effect of wine and found that wine labeled as organic improved ratings for several measured attributes (e.g. olfactory, visual and taste) amongst participants. Furthermore, it was also perceived as healthier than wine without organic labeling. This finding supports that food labeled as organic is perceived as healthy and indicates a more positive judgment solely based on organic labeling. The implication for person perception is that the perceived healthiness of a consumed food item could influence the overall perception of a person. If this holds true, its implications on moral judgment in relation to food is that bad food eaters will be perceived in a more negative manner whereas good food eaters will be perceived more positively (Stein & Nemeroff, 1995). Consequently, there is thus a need to control for a potential health-halo in our thesis since we intend to investigate person perception based on organic (good) food. Although Stein and Nemeroff (1995) could not report a strong effect of general-halo or health-halo on moral judgment, it is still recommended (as seen in Olson et al., 2016) to control for possible health halo effects when investigating healthy food. The logic behind is, that if moral judgment corresponds with the perceived healthiness of organic food, the true effects of other factors (e.g. income and self-perception) on moral judgment could be hidden by the effect of the health halo. Thus, as seen in Olson et. al (2016) controlling for a health halo enables us to test a more transparent food morality effect, disregarding the perceived healthiness of organic food.

## 2.4 Theoretical Model and Hypotheses

It is evident from previous research that there are several potential explanation mechanisms behind food based moral judgment. Most of the previously employed theories, for example, the law of contagion (Frazer, 1951) and the Puritan ethic (Mirels & Garrett, 1971) are concerned with the direct relation of food and moral judgment (Stein & Nemeroff, 1995), without necessarily considering other situational factors. In our study, we hence draw on attribution theory and use it as an underlying construct for our theoretical model for several reasons. Firstly, it has been shown that perception can be influenced by context-specific factors (Olson et al., 2016), a finding which is well aligned with attribution theory, wherein attribution is affected by context specific information such as beliefs and motivation of the perceiver (Kelley & Michela, 1980). This theory hence provides a frame to better capture the complexity of our observed phenomenon, wherein income appears to alter the relationship between food choice and moral judgment. Secondly, Olson et. al (2016) relate to attribution theory while they investigate the same phenomenon in a different cultural context. Comparison of results between cultures is thus facilitated by drawing on attribution theory. In this thesis, we thus apply attribution theory (theorized by Heider, 2013) in an experimental setting with the aim to trigger different attributions in specific contexts where an individual's choice of food items and income are stated. These attributions are measured against moral judgment, our dependent variable (DV). In doing this, we aim to simulate the phenomenon (see Section 1.1) in an experimental setting to test if it yields identical moral judgments as in the study by Olson et al. (2016) and to expose potential reasons behind. The moral judgment will be used to give a possible explanation for whether income alters the relationship between food choice and moral judgment. To measure moral judgments we will, like two previous studies in the stream (Olson et al., 2016; Stein & Nemeroff, 1995), use a morality index. In addition, we also use a measure of self-

perception related to social comparison theory, and the respondents own consumption habits, to test how the self-perception of the person who judges (the perceiver) influences the relationship between food choice and moral judgment.

Considering the interplay of several theories in our theoretical model, we will gradually describe the expected relationship of constructs in the following.

### 2.4.1 Hypothesis 1

The relationship between food and morality has been investigated in different contexts (Askegaard et al., 2014) and it has been shown in several studies how the consumption of certain food items evokes moral judgments (Olson et al., 2016; Rozin & Singh, 1999; Stein & Nemeroff, 1995). This expected relationship between food choice and moral judgments is visualized below:

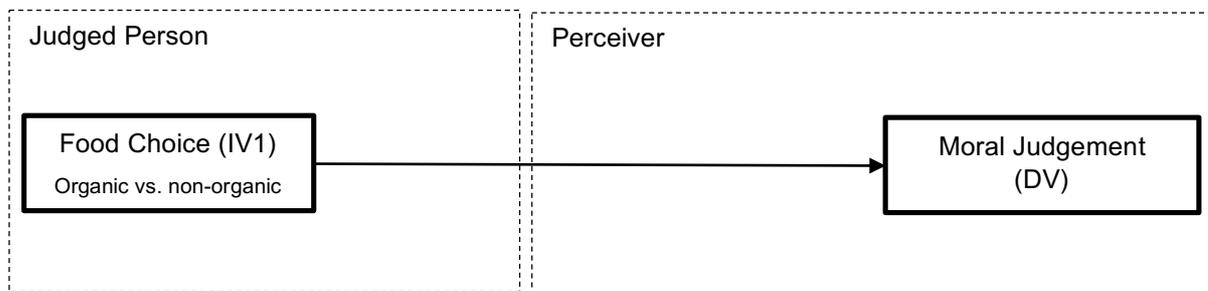


Figure 2 Relation between Food Choice and Moral Judgment

The food choice represents our first independent variable (IV1), which will be manipulated to detect potential changes in our dependent variable *moral judgment* (DV). The choice of food item will be manipulated via two different conditions. In condition one, a described individual chooses an *organic* food item - a choice which is visible in our phenomenon. In condition two, by which we want to control if a contrary choice leads to a difference in moral judgments, the individual chooses a *non-organic* food item - a choice that the organic food item is implicitly compared to in our phenomenon. This categorical division (*organic vs. non-organic*) is furthermore well aligned with the dichotomous view in food moralities (Askegaard et al., 2014), wherein food is categorized as either *good* or *bad*. The perceived healthiness of organic food (Ellison et al., 2016; Schuldt & Hannahan, 2013; Sörqvist et al., 2015) should lead to a more positive judgment (Apaolaza et al., 2017). We hence hypothesize:

**H1:** People who purchase organic food are judged to be more moral than people who purchase non-organic food.

Due to the perceived healthiness of organic food, it is furthermore advised from previous scholars (Olson et al., 2016) to control for a potential health-halo to test the purity of the

morality effect. Our two conditions of food (organic vs. non-organic) might trigger different moral judgments due to the differences in perceived healthiness of the respective food item. We thus introduce *the perceived healthiness of the food choice* as our first covariate (CV1) to control for a potential health-halo.

We further add a measure of *socially desirable response* as a second covariate (CV2), to answer to the need of controlling for this bias in self-reported questionnaires in consumer research (as reported by Maher, 1978). According to Paulhus (1991), socially desirable responding describes the habit of people to present themselves positively and in conform with social rules, creating a response bias. Controlling for socially desirable response is peculiarly important to mitigate response bias when investigating sensitive topics, for example, topics governed by social norms (Fisher, 1993) or attitudes and sensitive behavior (Paulhus, 1991). Participants might in those situations not be willing to report what they actually think. Our phenomenon is potentially linked to social norms, and we ask participants to rate another person on rather sensitive dimensions (e.g. cruel/kindhearted, moral/immoral). For our study, we thus choose a version of the Marlowe-Crowne Scale (Crowne & Marlowe, 1960), which is amongst the most popular scales for measuring socially desirable responses (Mick, 1996). This rather methodological matter will further be discussed further as part of the operationalization in the questionnaire (see Section 3.5.3.5). The thus far developed model, illustrating the relationship in H1 is exhibited below.

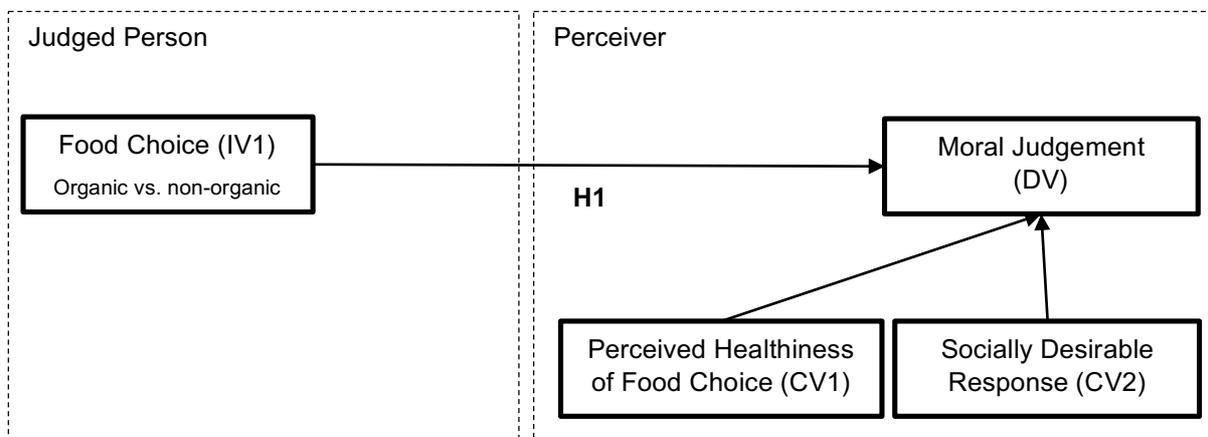


Figure 3 Theoretical Model H1

## 2.4.2 Hypothesis 2

As could be seen in debates in both Germany and the United States (see Section 1.1), the food morality link in our study is potentially influenced by the income of individuals. In previous research, it has also been shown that the relationship between food and morality can be subject

to boundary conditions (Olson et al., 2016). Olson et al. (2016) found an interaction effect between income and food choice in their study in the United States. Their result indicates that income alters the relationship between food and moral judgment in the following manner: unemployed consumer on welfare are judged as less moral when purchasing organic food than when buying non-organic food, and consumer with high income are judged as more moral when they buy organic food than when buying non-organic food. It also shows, that within the organic condition, unemployed individuals on welfare and high-income earners are judged different, with welfare recipients being judged as less moral.

We adapt the factor income as defined by Olson et al. (2016) to add a second independent variable *income* (IV2) to our model. To simulate the phenomenon and to see if any differences in moral judgment between groups exist at all, we include two income conditions on opposite ends of the socioeconomic continuum to polarize moral judgment. Condition one, *unemployed individual on welfare*, is used to describe the income characteristic of the unemployed individual at the center of our phenomenon. Moreover, as condition one could be seen as a lower end of the socioeconomic continuum, we implement *high income* as a second condition to represent the opposing end of the continuum. Conclusively, building on attribution theory, and previous research we hypothesize that:

H2: Unemployed individuals on welfare are judged as less moral when purchasing organic food (vs. non-organic food) and individuals with a high income are judged as more moral when purchasing organic food (vs. non-organic food).

The proposed relationship between food and moral judgment in H1 will thus be complemented with the moderating variable income. Resulting in an extended model that can be seen below:

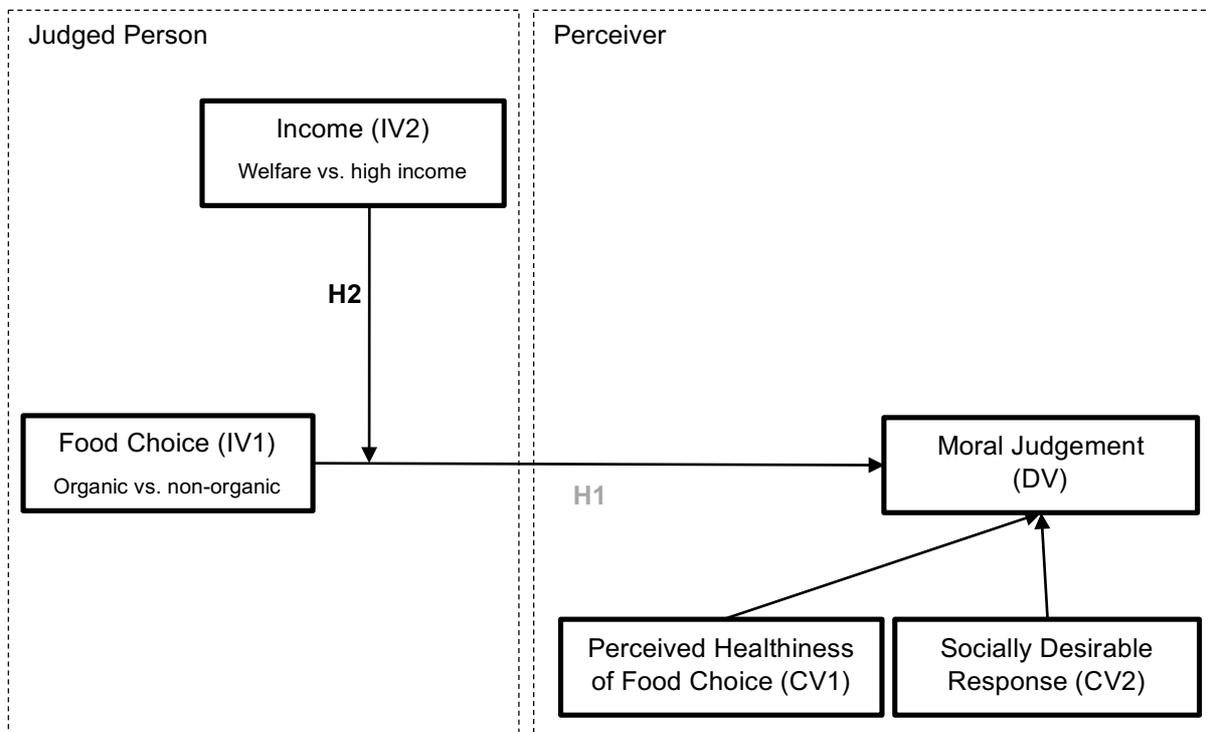


Figure 4 Theoretical Model H2

### 2.4.1 Hypothesis 3

Adding to the existing theory, we introduce a third independent variable to the thus far developed model. The moderating variable that we want to test the effects of is the perceiver's perception of his or her own consumption habits in regards to food choice. The addition is inspired by Festinger's social comparison theory (1954) and the recommendations of previous research in the stream (Olson et al., 2016; Stein & Nemeroff, 1995) to assess qualities of the perceiver when investigating moral judgments. The findings of Zane, Irwin and Reczek (2016) further suggest that the perceiver's own ethical consumption habits can influence moral judgments. Based on the theories of Festinger (1954) and Zane, Irwin and Reczek (2016) we thus categorize our third independent variable *self-perception* (IV3). Category one represents respondents who perceive themselves as *organic consumers* because they state that they buy organic products regularly. Category two represents respondents who perceive themselves as *non-organic consumers* because they state that they do not buy organic products regularly. Moreover, Zane, Irwin and Reczek (2016) found evidence, that less ethical consumers denigrate consumers who act more ethically. We thus predict that identical choices will lead to different moral judgments depending on the self-perception of the person judging.

H3: People who perceive of themselves as regular consumers of organic food judge others as more moral when purchasing organic food (vs. non-organic food); and people who do not perceive of themselves as regular consumers of organic food judge others as less moral when purchasing organic food (vs. non-organic food).

The expected interplay results in the following model.

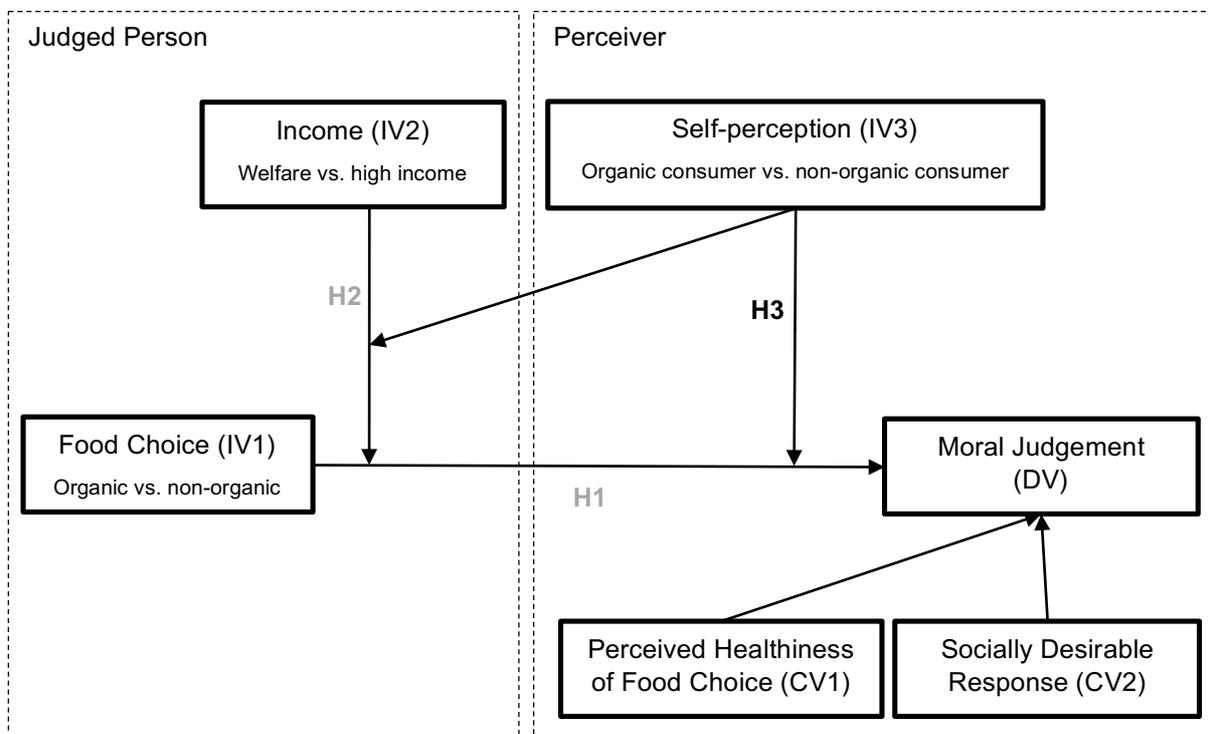


Figure 5 Theoretical Model H3

## 2.4.2 Hypothesis 4

Lastly, we combine all constructs in one final model to test how income and self-perception when combined, affect the relationship between food choice and moral judgment (H4). Since the findings of Stein and Nemeroff (1995), Zane, Irwin and Reczek (2016) and Olson et al. (2016) can not guide us to predict a certain outcome we simply hypothesize:

H4: There is a three-way interaction of food choice, income, and self-perception.

Combining the two moderating variables together with the variables that make up the basis of our framework we obtain the below-demonstrated model.

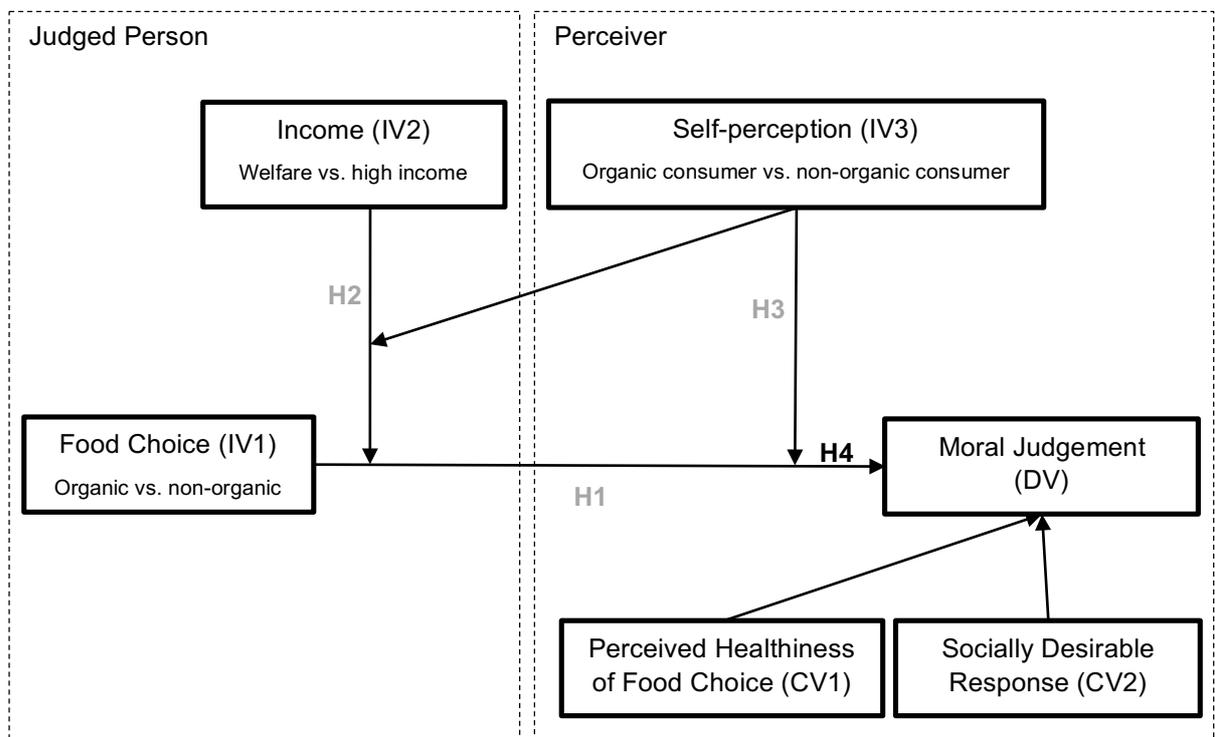


Figure 6 Theoretical Model H4

### 2.4.3 Overview of Theoretical Model and Hypotheses

In conclusion, the figure below (figure 8) displays all the potential interactions of our stated hypotheses in one theoretical model. This model and its associated hypotheses are used to provide answers to our research questions seen in Section 1.3.

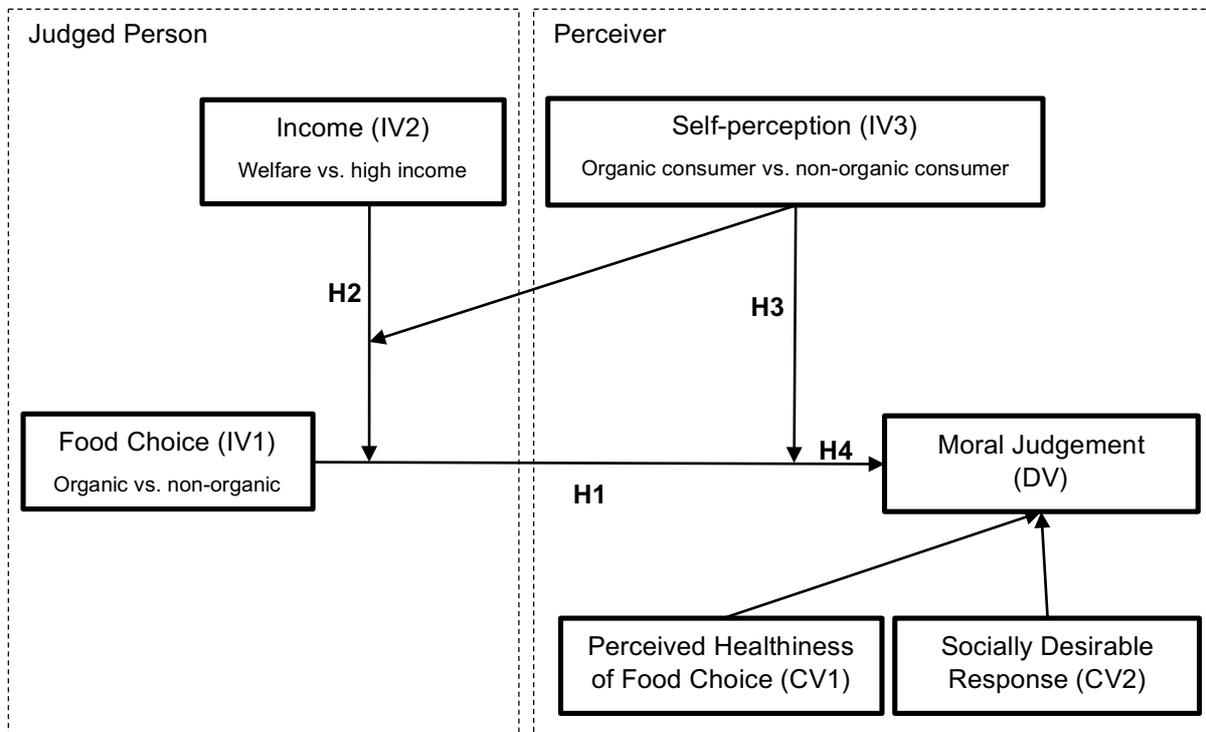


Figure 7 Theoretical Model H1-H4

H1: People who purchase organic food are judged to be more moral than people who purchase non-organic food.

H2: Unemployed individuals on welfare are judged as less moral when purchasing organic food (vs. non-organic food) and individuals with a high income are judged as more moral when purchasing organic food (vs. non-organic food).

H3: People who perceive of themselves as regular consumers of organic food judge others as more moral when purchasing organic food (vs. non-organic food); and people who do not perceive of themselves as regular consumers of organic food judge others as less moral when purchasing organic food (vs. non-organic food).

H4: There is a three-way interaction of food choice, income, and self-perception.

# 3 Methodology

## 3.1 Research Philosophy

While ontology explains the existence and nature of reality, epistemology demonstrates theories of knowledge that facilitate researchers to embrace an understanding of the nature of the world (Easterby-Smith, Thorpe & Jackson, 2015). The departure of this study is an internal realist ontology aiming to expose the nature of the observed phenomenon (consumers that make identical food choices appears to be judged differently in relation to their income). In alignment with this ontology, the methods for examining the phenomenon have an underlying positivistic epistemology which enables us to answer the research questions.

### 3.1.1 Ontological Considerations

There are two ontological approaches to be considered when conducting research: realism and nominalism. In nominalism, there is no truth since the existence of life is a paradox, unspecified and reality is a social construction of people. The truth is, therefore, something people attempt to establish in several versions from different points of view (Easterby-Smith, Thorpe & Jackson, 2015). A less radical ontology is relativism. The relativist perspective claims that people socially construct scientific laws and therefore there is not one simple existence to be exposed (Easterby-Smith et al. 2015). The relativist position hence states that there are many truths. A belief that conflicts with the purpose of this thesis, which aims to find clear-cut answers to the respective research questions.

Realism, on the other hand, states that there exists only one single truth and is built on a belief that facts exist and can be revealed through research (Easterby-Smith et al. 2015). This approach is slightly misaligned with the ideas of this thesis, since it is our view that several different variables, apart from the ones investigated, could have an impact on the observed phenomenon. A less extreme take on realism is internal realism. The main assumption in internal realism is the existence of a single reality which is impossible for researchers to gain access to directly. In the same vein, it can be argued that the perception of morality is obscure and cannot be accessed directly. It is our view that the observed phenomenon exists independently of the researcher. However, we also perceive facts to be measured as obscure, and we accept that they possibly could be defined and measured in different ways. Hence, by this reasoning, we consider the ontological approach of internal realism to be well aligned with this thesis.

### 3.1.2 Epistemological Considerations

Epistemology can be identified as the logic of studying theories of knowledge; it attempts to answer how we know, what we know. The two positions (strong) positivism and (strong) social constructionism are often seen as opposites. However, it is rare that researchers adapt to all aspects of one epistemology (Easterby-Smith, Thorpe & Jackson, 2015).

Social constructionism supports the idea that reality is a social construction. The reality is thus not external or objective, it is shaped and is given meaning by people. From this standpoint, a strong constructionist position emerges which goes beyond the social constructionist approach (Easterby-Smith, Thorpe & Jackson, 2015). By this approach, there is no belief in any pre-existing realities. Instead, the aim is to understand how people opt to create structures to make sense and understand a complex reality containing many truths (Easterby-Smith, Thorpe & Jackson, 2015). To, for example, expose the effect of organic consumption on morality it is, however, necessary to reduce the attribution to a limited amount of selected factors considered to be important in theory. An approach which goes against both social constructionism and strong constructionism.

Strong positivism, on the contrary, is characterized by the belief that there is an existing reality regardless of the observer. Thus, the aim is to discover theories and laws that describe reality (Easterby-Smith, Thorpe & Jackson, 2015). The strong positivist approach requires an empirical design that eliminates alternative explanations. Data collected when following this approach is therefore limited to numbers and facts only. When conducting research in relation to attribution theory, it is however from our viewpoint not possible to in a credible manner eliminate all alternative explanations completely. Because while it is only possible to analyze selected factors, there might still be factors which have not been considered (as shown in the literature review). This indicates that a strong positivist position is not in alignment with this thesis.

The stance of a less strong positivism is however well aligned with these ideas. Less strong positivism states that the social world exists externally but is obscure, and hence facts cannot be accessed directly (Easterby-Smith, Thorpe & Jackson, 2015). The aim is, therefore, to expose the nature of reality rather than discover it. When conducting research from a positivist viewpoint, the researcher seeks to avoid subjectiveness, while at the same time recognizing that this is not always possible (Easterby-Smith et al. 2015). While our interest in this study is to investigate the perception of the participants, it is our aim to measure this subjectiveness in an objective manner to as great extent as possible. The methods used to do so will, however, affect the outcome to some degree, and as researchers, it is hence our belief that we expose the nature of reality with the methods we deem to be most suitable for the task at hand. The epistemology of a less strong positivism, which is well aligned with the ontology of internal realism, is thus the stance we take in this thesis.

## 3.2 Research Approach

The relationship between theory and research in this thesis naturally materializes itself in a deductive approach. On the basis of previous research, we deduce a number of hypotheses that subsequently are empirically tested. Within these hypotheses lie embedded the concepts presented in the theoretical model (see Section 2.4.5). These concepts have been operationalized for the sake of hypotheses testing, and ultimately with the purpose of answering the research questions and the related hypotheses. In accordance with the writings of Bryman and Bell (2011) we furthermore specify the manner in which data has been collected in relation to these concepts. We do this to facilitate for further research and to enable examination of our own study. The findings conclusively allow us to confirm or reject our hypotheses and help us in this manner to revise and add to theory. While this process might seem like a very linear and clear process, it should be taken into account that this is not always the case. The data might for example not fit the original hypotheses, and unexpected findings could this way come to be produced (Bryman & Bell, 2011).

## 3.3 Research Strategy

Given that our research approach has led us to deduce theory into testable hypotheses, a quantitative rather than qualitative research strategy has been applied. This enabled us to measure and test the interactions and main effects and hence helped us to answer the research questions. Quantitative research differs from qualitative research in that it can be measured numerically (Bryman & Bell, 2011). This gives one the possibility to describe data in terms of statistics, as well as infer findings to a population, although the generalizability of this study is affected by the non-probability sampling method (Burns & Burns, 2008). Without the use of numerical terms, it would simply not have been possible to measure and compare the interactions and main effects we wished to test for. For example, words - the measurement used in qualitative research - could not possibly determine whether there is an interaction between an individual's income, his or her food consumption and how he or she is being judged morally.

## 3.4 Sources of Data

There are mainly two ways to go about when conducting quantitative research: collecting primary data or using secondary data already collected (Easterby-Smith, Thorpe & Jackson, 2015). When conducting the current study, we chose to collect primary data. This choice was mainly due to the specificity of the research questions, which to the best of our knowledge, had not been answered previously in a European context. Due to the quantitative nature of our research, it was not possible to combine sources of secondary data (if such data would have existed), and the natural option hence became to collect the data ourselves.

## 3.5 Research Design and Methods

To align the research questions and their associated aims with the design of the study, we performed a cross-sectional experimental study, with a 2x2 between-subjects design. This design included two covariates (perceived health index and social desirability score) that were predicted to have an impact on the dependent variable (morality index) and that we thus wanted to control for. The logic behind the design was our wish not only to describe the observed phenomenon but also measure potential effects that influence it. To obtain such knowledge and to reduce the ambiguity of the results, we used an experimental design in accordance with the advice of Burns and Burns (2008). This design also enabled us to increase the power of the associated F-test for main and interaction effects by getting rid of the predictable variance of the covariates from the error term (as stated in Tabachnick & Fidell, 2013).

To achieve the above, the respondents were randomly assigned to four different groups which were the result of the two factors and their four associated conditions (Food choice: organic or non-organic, and Income: welfare or high income). The design hence matches the two criteria for experimental design given by Burns and Burns (2008): control over the subjects and the conditions in the study, and random assignment of individuals.

As the nature of the self-perception in the theoretical model (see 2.4) is dependent on the personal characteristics and experiences of the participants, this control was partly lost when it came down to the analysis. The inclusion of a third variable for the analysis of covariance further meant that a larger amount of participants were needed for the sample. This, as the number of groups, was doubled with the inclusion of two additional conditions because the groups have to be of a certain size to detect differences between them and to maintain adequate power (Van Voorhis & Morgan, 2007). Cohen conventions (1988) suggest that a power of about 80% is sufficient for an ordinary study to detect differences, given a medium to large effect size. This can be achieved by a minimum of 30 participants per cell when using statistics to detect differences. As a consequence of the inclusion of a third variable in the analysis, a minimum sample size of 240 participants was desired (eight cells x 30 participants). The analysis of covariance (ANCOVA), described more in detail in Section 3.5.4 were as a consequence a 2x2x2 analysis of covariance. The variables included in the analysis can be seen in Section 2.4.5.

### 3.5.1 Sampling Method

The current study was undertaken using opportunity sampling, a non-probability sampling method. Opportunity sampling, also known as convenience sampling, involves selection of participants on the basis of convenience and accessibility (Burns & Burns, 2008). In other words, this sampling method is characterized by the selection of respondents that happen to be at the same location or platform, at the same time, as the researchers distribute the survey.

It is important to point out that there are certain limitations associated with non-probability sampling. Ideally, research should be conducted using a probability sampling method that is

characterized by chance, and no other factor should be allowed to influence the selection of respondents. The idea is that each element should have a known probability of being selected (Burns & Burns, 2008). As can be seen in the above description, non-probability sampling does not possess these characteristics. The method does thus not allow for generalization (i.e. it affects the external validity). The sample elements chance of selection are unknown, and biases are likely to be introduced when using non-probability sampling (Burns & Burns, 2008). Despite this, there are certain advantages using this sampling method. It is cost-effective, rather uncomplicated to carry out, and does not require a large amount of time that otherwise is associated with the preparation process of sampling (Burns & Burns, 2008). These characteristics, although not ideal, makes non-probability sampling well aligned with the conditions affiliated with this thesis.

### 3.5.2 Data Collection

The collection of data was carried out in two phases. In both phases, primary data was collected through the questionnaire, described in Section 3.5.3. First of all, a pre-study was realized with a smaller group to test the survey. This group of respondents was, by the guidelines of Malhotra (2008), drawn from the same population as the main study. Subsequently, suitable improvements (described in detail in the Section below) were implemented by the learnings of the pre-study. The main study, from which the data analyzed derives, was then carried out in the manner described in Section 3.5.2.2 to complete the data collection.

#### 3.5.2.1 Pre-study

A pre-study was distributed through the social media platform Facebook between the 25th and the 26th of April 2017. Respondents were in the pre-study specifically instructed to leave comments regarding the design of the survey, as well as general feedback. A sample of nine participants carried out the questionnaire in their respective language (three in Swedish, three in German and three in French). The time span for responding to the questionnaire was between approximately four and nine minutes, including the time required to give feedback. The length of the survey was generally deemed as acceptable and we could with the help of this data estimate that the time to complete the survey, without leaving comments, should be roughly four to five minutes. Several minor - but still important - points were brought up in the comments from the pre-study participants.

Two participants did independently of each other point out that the use of a shopping list could cause confusion for participants. The reasons given for this were that people normally would not write *organic* on a shopping list even if they are planning to buy organic products. It was also said that the use of the term *shopping list* could lead to ambiguous thoughts since what is on the list might not be what people actually purchase. To consistently align the participants' perceptions to a higher extent as possible and to avoid that some participants think about a consumer's purchase intention and others about actual behavior, the term shopping list was thus changed to *shopping receipt*.

Moreover, we discarded and changed "sensitive items" of the *shopping receipt* that may give ambiguous perceptions, and thus influence the perception of the described consumer in an

unintended way. For example, the listing of organic products and chicken on the same list was questioned by several of the participants since it was perceived to send out “mixed signals.” It was also pointed out that purchasing organic milk and conventional (non-organic) eggs could make the participants ambivalent when they judge the consumer. The conventional item (non-organic) eggs was thus changed to be listed as organic in the conditions where the consumer purchased organic products; replacing the item organic cereals which was changed to conventional (non-organic) *cereals* in all listings.

The names of two filler items (*methodical and idealistic*) were furthermore changed since they were perceived as being too “difficult” and “academic.” Anticipating that this potentially could affect the response rate negatively, they were changed to *unspontaneous* and *unpractical*. These filler items are not linked to morality in any way and should in no way affect the results of the survey.

In the feedback from the pre-study, it was also pointed out that some participants had overseen the information regarding the consumer’s income. As a response to this, we decided to highlight (make bold) all information regarding the consumer (income and food choice). A screening question was also introduced with the purpose of detecting if participants took into consideration the income of the consumer.

### **3.5.2.2 Main Study**

The main study was just as the pre-study distributed through social media platform Facebook. In order to reach more German individuals, it was also distributed through the learning platform Moodle at Jade University of Applied Sciences, Wilhelmshaven, Germany. The responses were gathered between the 27th of April and 3rd of May 2017. A total of 465 individuals participated in the study, and 350 responses were eligible for analysis after screening (see Section 3.5.4, respectively Section 4.1 for details).

### 3.5.3 Questionnaire

Primary data was gathered from an online survey based on a questionnaire that will be described in detail in this section. The questionnaire combines a total of ten closed questions and one additional open question in which participants could leave comments. It can be divided into five sections: Introduction to the study, exposure to treatment, manipulation check and demographics and qualities of the perceiver.

For the purpose of this study, we translated the questionnaire into Swedish, German and French. The complete questionnaires can be found in Appendix A. The survey was distributed through Qualtrics - an online survey platform (Qualtrics, 2017). This web-based method of distribution was chosen to access a large enough amount of participants across three countries in an economic and time-efficient manner. The method was adopted after considering guidelines for sampling and distribution set up by Burns and Burns (2008).

### **3.5.3.1 Introduction to the Study**

The first section of the questionnaire introduced participants to the study. We first briefly stated our interest in understanding how people make judgments about other people when they only have a small amount of information about them. Stating the purpose - without revealing the research questions - is a method to raise interest amongst participants and consequently mitigate non-response bias (Burns & Burns, 2008). Furthermore, we encouraged completion by offering the possibility to win a shopping voucher of 200 SEK or 20 EUR for an online-shop of the participants choice (depending on the language of the survey). We also ensured the respondents their responses would be anonymized, and the provided information would be treated as confidential in accordance with the recommendations of Burns and Burns (2008). To increase the quality of answers, we additionally provided clear instructions regarding how to complete the survey. The introduction section ended with a radio button, where participants had to confirm that they had understood the provided instructions in order to proceed to the next section.

### **3.5.3.2 Exposure to the Manipulation of the Experiment**

After clicking on the next button, participants were presented with one of four bogus profiles. According to attribution theory (Kelley & Michela, 1980) people use information to make judgments. We consequently highlighted the importance of these profiles for the survey by instructing participants to read the information very carefully and to try to project themselves into the illustrated situation.

The profiles were introduced to give participants selected information about a person's income and purchase choices. The given information (the treatment of the study) divides the respondents into four groups as discussed previously in Section 3.5. The information was related to the independent variables income and food and completes the bogus profiles by combining their respective conditions.

The two conditions of income were operationalized by describing one consumer as unemployed living on welfare and another as an individual with a high (monthly) income. The exact number for high income was adapted to the three questionnaires and the respective country each questionnaire were targeted to Sweden, Germany and France. In Sweden, this figure was 53 200 SEK brut, representing the tax limit for high-income earners in Sweden (Skatteverket, 2005). The equivalent income in Germany (3140 EUR net) marks the beginning of the upper-income group above 200% of mean income (Reichtumsgrenzen, 2017). And for France the sum of 3045 EUR net was chosen as it is the lower limit of income a person can have to be classified as rich in research on wealth and inequalities (Centre D'observation de La Société, 2017) These two extremes of income levels were included to enable comparison of perceptions of individuals at both ends of the socioeconomic continuum (as seen in Olson et al., 2016). The two versions of the shopping receipt were presented in the following manner:

- Shopping receipt of an unemployed individual on welfare
- Shopping receipt of an individual earning 53 200 SEK a month (gross income)

The two conditions of food were operationalized with two distinct shopping receipt belonging to the individual the participant had to judge. These shopping receipts were displaying a list of food items rather than explicitly stating the items of interest; a projective technique in marketing research used to evoke an unselfconscious description of the presented items (Haire, 1950). To account for the two conditions of food choice (organic and non-organic) the two receipts only differed in the labeling of three items out of seven (carrots, milk and eggs). These items were in the organic condition described as organic in one of the receipts and left without any prefix in the other. The list, which originally was used in a study by Olson et al. (2016) was adapted to fit the European context of this thesis better. This was done through the conversion of the measuring units into the metric system. Furthermore, we also changed the fat content of the milk from 2% to 1,5% since the former is not common in the surveyed countries. An example of the shopping receipt is displayed here:

- 1 loaf of sliced bread
- 1 liter of (organic) 1,5% milk
- ½ kilo of (organic) carrots
- 12 (organic) eggs
- 1 package of baking powder
- 1 box of cereal
- ½ kilo of ground coffee

*Table 2 Shopping Receipt*

To ensure a random assignment of participants to each treatment group we used the randomizer function with evenly presented elements in the Qualtrics survey flow. Each treatment group represented, in accordance with the above logic, one condition of income (welfare, respectively high income) paired with one condition of food choice (organic, respectively non-organic). This resulted in the composition seen below:

- Profile 1: Individual on welfare purchasing organic food
- Profile 2: Individual on welfare purchasing non-organic food
- Profile 3: Individual with high income purchasing organic food
- Profile 4: Individual with high income purchasing non-organic food

### **3.5.3.3 Response Section**

In the next section of the survey, participants were asked to make judgments based on the previously displayed profile. This section was used to collect data related to the treatment groups and covariate one (perceived healthiness of food choice) on the dependent variable (moral judgment of consumer). As the respective bogus profile was displayed on a different page than the response page, participants were given the possibility to return to the previous

page in case they required a second look at the profile. This option was also clearly stated in the questionnaire. In question 1, participants had to evaluate the target based on the shopping receipt and a description of a consumer’s income. Following a quantitative approach, we used a semantic differential. This scale was initially developed by Osgood et al. (1978) to measure meaning (defined as a mediational process which takes place when information is received or produced).

The semantic differential for question 1 comprised a list of eight bipolar dimensions with seven rating points each. We used an odd-numbered scale to allow participants to choose a neutral answer and to allow for comparison with similar studies that have used the same scale (Olson et al., 2016; Stein & Nemeroff, 1995).

Uncaring	<input type="radio"/>	Caring						
Unethical	<input type="radio"/>	Ethical						
Intuitive*	<input type="radio"/>	Analytical*						
Cruel	<input type="radio"/>	Kindhearted						
Unspontaneous	<input type="radio"/>	Spontaneous						
Moral*	<input type="radio"/>	Immoral*						
Talkative	<input type="radio"/>	Quiet						
Unpractical*	<input type="radio"/>	Practical*						

*Table 3 Semantic Differential for Judgment*

Four key dimensions which previously had been used to measure morality by Olson et al. (2016) made up the morality index (cruel/kindhearted, immoral/moral, uncaring/caring, and unethical/ethical). The moral adjectives in these dimensions were originally identified by Stein and Nemeroff (1995) and are considered important for judging a person’s morality. The remaining four dimensions (methodical/spontaneous, practical/idealistic, quiet/talkative, and analytical/intuitive) were used as filler items since they by Stein and Nemeroff (1995) had been rated as less than moderately important for judging a person's morality. To even further disguise the morality items we applied random manipulations. We randomly mixed the items of the morality index with the filler items using Microsoft Excel (RAND function). Furthermore, we manipulated a random number of dimensions (marked by an asterisk in the table above) and reversed poled them to prevent participants from always agreeing to positive aspects. Something which otherwise could be a danger when using this kind of measure (Burns & Burns, 2008).

The second question in this section (question 2) also related to the earlier displayed shopping receipt. With this question, we wished to obtain data to control for a potential health-halo effect (one of the two covariates) on the dependent variable. We did so by measuring the perceived health index of the shopping receipt on a semantic differential (as previously done in Olson et al., 2016). Participants had to rate the overall health value of the grocery receipt on the following four dimensions, out of which the fattening item (marked with an asterisk in the table below) was reverse poled:

Not at all nutritious	<input type="radio"/>	Very nutritious						
Not at all wholesome	<input type="radio"/>	Very wholesome						
Not at all fattening*	<input type="radio"/>	Very fattening*						
Not at all good for you	<input type="radio"/>	Very good for you						

*Table 4 Semantic Differential for Perceived Healthiness*

### 3.5.3.4 Manipulation Check

The purpose of the next section was to conduct a manipulation check. That is, to control whether participants were aware of the operationalized items for the independent variables or not. With this approach, we intended to screen out participants who were not aware of the relevant information, from the bogus profiles, needed for completing the experiment in the intended manner. Question 3 was thus introduced to control if people were aware of organic food items in the shopping receipt, and question 4 controlled whether people read the information about the income of the individual. Providing participants with the option to answer *I don't know* is one method to evoke satisficing behavior and hence a method to exclude participants from the survey displaying such behavior (Krosnick, 1991). Krosnick (1991) argues that an optimal answer requires cognitive resources which means that some participants will answer in a satisficing manner to avoid cognitive effort. Adopting this logic, the participants were thus given three answer options on a nominal scale for these two questions (Yes/No/I do not know).

### 3.5.3.5 Demographics and Qualities of the Perceiver

The closing section was in the questionnaire captioned “Now we would like to ask a few questions about you”, signaling the participant that the following questions were not related to the bogus profiles. Question 5 to 8 were here posed to obtain information about the participants regarding several sociodemographic variables (gender, age, nationality and occupation).

In question 9 we subsequently asked participants about their perception of their own consumption habits regarding organic food. We did so to be able to test for potential moderating effects of self-perception on moral judgment. In order to retrieve this information, we asked participants if they regularly buy food that is labeled as organic food. The question was adapted from Welsch and Kühling (2009), and the term regularly was added to give participants a choice to decide subjectively whether they perceive of themselves as regular organic consumers or not.

This addition further enabled us to measure the answer on a binary nominal scale (Yes/No) and thus align it with our research design.

The section was finally concluded with a brief version of the Marlow-Crowne Social Desirability response Scale (Crowne & Marlowe, 1960). The scale comprises two positively and two negatively keyed items (marked with an asterisk in the table below) which had previously been described in research by Greenwald and Satow (1970). Participants were asked to read each dichotomous statement carefully and to decide if the statement described them (the statement is true) or not (the statement is false). The statements describe behaviors “that are desirable but rare or undesirable but common” (Mick, 1996, p.107). Participants with a high social desirability response score can be said to answer in favor of being perceived positively. The scale for our survey comprised only the following four items to keep the questionnaire short.

	True	False
No matter who I'm talking to, I'm always a good listener.	<input type="radio"/>	<input type="radio"/>
I am always courteous, even to people who are disagreeable.	<input type="radio"/>	<input type="radio"/>
I have sometimes taken unfair advantage of another person. *	<input type="radio"/>	<input type="radio"/>
I sometimes try to get even, rather than forgive and forget. *	<input type="radio"/>	<input type="radio"/>

*Table 5 Measure of Socially Desirable Responses*

Last but not least respondents were asked to give comments about the survey. This final section was then followed by a debriefing, in which they were thanked for their participation.

### 3.5.4 Data Analysis Method

#### 3.5.4.1 Data Screening and Analysis Preparation

To enable analysis, the data was exported from Qualtrics to Microsoft Excel where it was subsequently screened. The primary action was to check for errors. That is values that fall outside of the range of possible values that a variable can have (Pallant & Julie, 2013). Subsequently, we screened for cases outside of the population. In order to be included in the sample, participants had to fulfill certain requirements. Primarily, participants had to be either of Swedish, German or French nationality. Secondly, they had to be exposed to and have received the information given to them in the experiment. Manipulation checks, which had been implemented in questions 3 and 4 (see Appendix A.) were thus used to exclude data from respondents that did not fulfill this criterion. Only participants who could correctly answer both screening questions were included in the study, leaving us with a complete set of validated data.

With the data in place, the morality index (the measure of the dependent variable), the perceived health index (the measure of the first covariate) and the social desirability score (the measure of the second covariate) were computed. All calculations were made in Microsoft Excel, and the final data sheet was imported into IBM SPSS Statistics and subsequently analyzed. The morality index was computed for every participant by averaging their ratings on the four morality dimensions (uncaring/caring, unethical/ethical, cruel/kindhearted and moral/immoral). The dimension moral/immoral had to be reverse poled since it had been manipulated for the questionnaire. The perceived health index was calculated accordingly with a reverse poling of the fattening dimension (not at all fattening/very fattening). Lastly, we calculated the social desirability score for every participant with the following coding:

- No matter who I'm talking to, I'm always a good listener. (True = 1, false = 0)
- I am always courteous, even to people who are disagreeable (True = 1, false = 0)
- I have sometimes taken unfair advantage of another person. (True = 0, false = 1)
- I sometimes try to get even, rather than forgive and forget. (True = 0, false = 1)

The sum of all coded answers for the four statements resulted in a socially desirable response score on a scale ranging from 0 to 4. A high score indicates that the participant had a strong will to answer socially desirable, whereas a low score indicates the opposite.

#### 3.5.4.2 Response Analysis and Descriptive Statistics

With the screening process finalized and the necessary indices computed, an introductory analysis of the data was made. First of all, we analyzed the responses received. This was followed by an analysis concerning the profiles of the respondents, including the variables nationality, age, gender, occupation, and self-perception (regular consumer of organic food, respectively non-regular consumer of organic food). An analysis of the distribution of respondents across the eight cells in the 2x2x2 ANCOVA was also made.

### **3.5.4.3 Cronbach's Alpha Tests**

Having provided an overview of the data, we continued our analysis by assessing the internal reliability of the study. This was achieved through the application of two separate Cronbach's alpha tests (Bryman & Bell, 2011) on the data related to the non-dichotomous multi-item scales of the study. That is the data derived from measures of our dependent variable (moral judgment), and one of the covariates (perceived healthiness).

### **3.5.4.4 Correlation Analysis**

The next step in our analysis was a correlation analysis using Pearson's *r*. We here tested how the dependent variable (moral judgment) and the two proposed covariates (perceived healthiness and socially desirable responses) correlated with each other. In doing so, we could obtain an indication of whether the covariates proposed in our theoretical framework made sense to include in the analysis (Tabachnick & Fidell, 2013).

### **3.5.4.5 Assumptions of ANCOVA**

Subsequently an assessment of whether or not the intended three-way ANCOVA was appropriate was made. This assessment concerned the assumptions associated with an ANCOVA. The ten assumptions of the ANCOVA that the data was matched against were (as indicated by Lund & Lund, 2013):

1. One independent variable measured on a continuous level
2. Independent variables that consist of two or more categorical, independent groups
3. Covariate variables measured on a continuous level
4. Independence of observation (no relationship between observations in the different group of the dependent variables)
5. Linearity between the covariates and the dependent variable on each level of the independent variables
6. Homogeneity of regression slopes (no interaction between the covariate and the independent variables)
7. Absence of outliers in each group of the independent variables in terms of the dependent variable
8. Approximately normal distribution in each group of the independent variables
9. Homoscedasticity (equal error variances within each group, and equal variances of error between groups)
10. Homogeneity of variances (the variance of the residuals is equal for each group of the independent variables)

The first four assumptions of the ANCOVA all relate to the study design. The in-between subjects design analyzed with a three-way ANCOVA (2x2x2) in this thesis, fulfills the above as long as the study design have been correctly set up. This was thus examined.

The fulfillment of Assumptions 6-10 were to a higher extent out of our control as researchers. These assumptions thus required statistical analysis and visual inspection to make sure that they were fulfilled. Furthermore, assumption 7-9 were not tested against actually obtained scores but the predicted scores and the standardized residuals (as indicated in Lund & Lund, 2013). Predicted scores are the scores predicted by the regression line. Residuals are the difference between the predicted and the obtained values of a sample (Tabachnick & Fidell, 2013). By studying the residuals we could determine if the model we use in a good way describes the material, and - as we wished to do here - if the assumptions the model build upon were fulfilled (Körner & Wahlgren, 2006). Standardized residuals are the raw residual divided by the standard deviation. The reason why we standardize residuals is that the standard deviations of residuals can vary greatly between observations, even when errors (the deviation of the observed value from the unobservable population mean) have the same standard deviation. In order to check if the data fulfilled assumption 7-9, both the predicted values and the standardized residuals were hence computed.

#### **3.5.4.6 Analysis of Covariance**

Having obtained the results of the analysis related to the assumptions of ANCOVA we proceeded by conducting the actual ANCOVA. This analysis was used to answer the research questions through the hypotheses outlined in Section 2.4. The ANCOVA could aid us in this cause by exposing the main effects of different factors as well as possible interaction effects (as indicated by Tabachnick & Fidell, 2013). Since the respondents were of different nationalities, we also included the main effect of nationality to make sure that the cultural aspect did not influence the results.

## **3.6 Data Quality**

### **3.6.1 Reliability**

Reliability deals with the need for accurate and stable measures when conducting research. It refers to the degree to which findings are consistent, stable and replicable (Burns & Burns, 2008). As is common in business research (Bryman & Bell, 2011) it does in the case of this study concern the measurement of concepts and their consistency. This is of vital importance for the trustworthiness of the study since the findings would lack in credibility if they varied from occasion to occasion because of the measures applied. The reasons for why we in this thesis focus on the consistency of concepts to increase reliability will be explained below.

There are three prominent factors to take into account when evaluating reliability (Bryman & Bell, 2011): stability, internal reliability (consistency) and inter-observer consistency (error due to observer differences).

#### **3.6.1.1 Stability**

The stability indicates if a measure is stable or not over time. Investigations of stability have however several issues connected to them and are for this reason often not carried out. A

common manner to test stability is the test-retest method (Bryman & Bell, 2011). Essentially this method means that we test a sample at one occasion and then retest the same sample again at a later occasion. However, the first test is likely to influence the second test, leaving us with a result that indicates greater consistency than what is, in fact, the case. Events that influence the sample could also take place in between the two test leading us to not only measure the stability of the test (Bryman & Bell, 2011). Investigating stability has, because of this, been described as a major project of its own right by Bryman and Bell (2011). It was thus, given the time and resources available, deemed to be outside of the scope of this thesis.

### **3.6.1.2 Internal Reliability**

Internal reliability, on the other hand, relates to whether or not respondents' scores on one indicator (e.g. a statement connected to moral judgment) are coherent with scores of other indicators of the same concept (Bryman & Bell, 2011). To increase the reliability of this study, we used indices to measure moral judgment of consumers and perceived health of the described consumer's purchased items. In other words, these concepts were quantified by more than a single question/statement. To ensure the internal reliability of these indices we completed an analysis through the application of two separate Cronbach's alpha tests (see Section 4.2 for results).

### **3.6.1.3 Inter-observer Consistency**

The inter-observer consistency concerns subjective evaluations of the observer and is according to Bryman and Bell (2011) relevant when a questionnaire includes open-ended questions that need to be categorized. Since this study did not include any open-ended questions in relation to the measured variables, we hence disregard the possibility of subjective judgment from our own side. The inter-observer consistency when assessing the reliability of this study was thus regarded to be irrelevant.

## **3.6.2 Replication**

The idea of replicability is closely related to reliability. The assessment of a measure is only possible if details regarding the procedures that make up that measure are clear and available. Replication of previous studies is a core principle of the scientific process. Obtained results from one study should also be possible to obtain if other researchers decide to observe the same phenomenon using the same methods (Bryman & Bell, 2011).

King (1995) emphasizes the importance of replication in aiding researchers to avoid wasting their time reading or (even worse) building upon faulty research. Similarly, the effects of faulty research, when applied practically, could be costly and in worst case lead to devastating results for as well public as private institutions (King, 1995).

To facilitate replication, we have tried to provide as detailed descriptions as possible of the procedures used when conducting the current study. The social sciences are according to several scholars currently in a replication crisis due to failed replication attempts (Pashler & Wagenmakers, 2012). A reason for this is that only a few scientific journals demand to have datasets from published articles made available (Janz, 2014). To counteract this lack of

transparency we encourage interested parties to get in contact regarding the obtained dataset from the study, which we are more than happy to provide.

### 3.6.3 Validity

Validity is the final criteria for evaluating research that will be discussed here. It essentially concerns the integrity of the conclusions that we can draw from our research.

While it is possible to study reliability without examining the meaning of the variables used in research, the same cannot be said about validity. This since validity to an extent regards if we capture what we intend to with the help of the operationalization of our variables (Burns & Burns, 2008).

Furthermore, it is worth pointing out that high reliability indicates high validity, but that this is not necessarily the case (Olsson & Sörensen, 2011). It is however clear that the reverse is not true since a measure can be reliable but measure something else than what we intended it to do. In accordance with this logic, it can thus be said that the level of validity cannot be higher than the level of reliability (Eliasson, 2010). Validity is typically divided into two main categories: internal validity and external validity (Burns & Burns, 2008).

#### 3.6.3.1 External validity

External validity is concerned with the generalizability of results. That is the degree to which we can transfer our results, taken from a sample, to a population. This is dependent on whether or not the sample is representative of the population in question. There are two types of external validity: population validity and ecological validity (Burns & Burns, 2008).

Population validity relates to whether the participants that make up the sample accurately represent the target population. Ecological validity, on the other hand, concerns generalizability to other environmental contexts (Burns & Burns, 2008).

In this thesis, we have clearly stated that we use opportunity sampling. The weaknesses of this sampling method are related to external validity and more precisely to the population validity. The population validity is negatively affected by this sampling method since participants are not chosen at hazard and hence cannot be said to be representative of the population to any higher extent.

The ecological validity of the study can also be questioned, although for slightly different reasons. As moralization in the domain of food has been deemed as sensitive to cultural differences (Fischler, 1990), there is a clear indication that the ecological validity is weak. We have previously stated that our sample and population consist of Swedish, German and French individuals, which are meant to capture the opinions of Europeans somewhat. The extent to which they do so is however questionable as the generalizability to other environmental contexts is low. As this study, to best of our knowledge, is the first of its kind in Europe, we nonetheless want to gain a first idea of how western Europeans judge other consumers morally. Due to the (lack of) available means and the time restrictions, sourcing from three different countries was thus deemed as the best available option to obtain a large enough sample. This

option also gave us the opportunity to a certain extent explore the sensitiveness of cultural differences in relation to our specific topic through the measurement of the main effect of nationality on moral judgment (see Section 4.5).

### 3.6.3.2 Internal Validity

Internal validity, on the other hand, concerns the level of control we have over the examined conditions. We want to be able to ascribe possible differences to the independent variables investigated and not to other factors (Burns & Burns, 2008). There are several types of internal validity, including the following: content validity, face validity and construct validity (Burns & Burns, 2008), which we deem to be relevant in the case of this study.

Content validity deals with how well the content of a measurement displays the intended content that we want to investigate. The content we are interested in measuring is consistent of the different variables in the theoretical model (see Section 2.4.5). Questions we should ask ourselves in order to assess the content validity of the study are:

- How well does the choice of food items included on the shopping receipt represent organic and non-organic food choices?
- Does question 9 *Do you regularly buy food that is labeled as organic food?* reflect the respondent's self-perception in relation to organic food in a good way?
- To what extent do the statements in question 2 capture the health-halo of food items and its influence on moral judgments?
- How well do the description of an unemployed person on welfare and the description of an employed individual with a high income capture the respective levels of income they are meant to represent?

In the case of this study, we derive our measurements from previous studies in order to increase content validity (see Section 3.5.3). To further increase content validity the measurements have also been translated into the respective languages used in the questionnaires (Swedish, German, and French) and all translations were done by native speakers. Moreover, in the cases where previous research had already translated these measures into the languages used, the translations used in these studies were used. Finally, to further assure that we measure the effects of the content we intend to measure, we also introduce control questions regarding the respondent's awareness of the described consumer's characteristics (income) and his/her food choices (including organic or non-organic products). In Q10. we also check if the respondents answer in a socially desired manner by measuring their level of socially desirable response with a shortened version of the Marlowe-Crowne social desirability response scale based on the findings of Greenwald and Satow (1970).

The following type of validity that was taken into consideration was face validity. Face validity relates to the appearance of the measures used in the study (Burns & Burns, 2008). It is important that the face validity is kept high since the appearance of the measurements can be crucial to motivate the participants to answer in a truthful manner. If the participants, for

example, find the measurements to be too abstract, they might lose confidence in the importance of the study and hence respond in a careless manner (Burns & Burns, 2008). According to Burns and Burns (2008) it is usually impossible to measure this kind of validity. There are however techniques used which aim to increase face validity. One such technique which was applied in this study is the usage of filler items (described in Burns & Burns, 2008). By including filler items in the shopping receipt of the described consumer and in the measurement for moral judgment, we intended not to give away the purpose of the study while improving face validity. Filler items are said to reduce the abstractness of the measure (Burns & Burns, 2008), and were meant to help the respondents to start reflecting about the description of the consumer and his/hers purchase. Another method applied to assure that the respondents took the study seriously was asking them straight out about their understanding of the instructions (a technique also described in Burns & Burns, 2008). Moreover, we also tried to assure this by using a style of writing which was (subjectively) deemed to have the right level of seriousness while avoiding the use of too “difficult language.” Although the effects of these actions as implied by Burns and Burns (2008) are very difficult to measure, a qualitative assessment of the face validity was made with the help of the comments collected in the survey. These comments were in general positive regarding the design of the survey, which at least provided us with an indication of the face validity.

Construct validity is the final internal validity discussed in this section. Construct validity concerns to which extent the measures used reflect the concepts they are meant to measure (Burns & Burns, 2008). It is, in other words, a question of whether we have managed to operationalize our variables in a manner that is reflective of their nature. The concepts of this study are the ones that were included in the theoretical model (see Section 2.4.5). As stated in Section 3.1 our ontological approach in this thesis was internal realism. That is, we regard the variables as existent independently of the researcher, but at the same time obscure since they could be defined in different ways (Easterby-Smith, Thorpe & Jackson, 2015). Our mission was hence to define the variables in an as good way as possible, as we intended to capture the truth regarding these concepts. While a Cronbach's alpha test as previously discussed in Section 3.6.1 could have helped us imply, whether or not, the items were measuring the same concept, they could not help us to indicate whether we measured what we intended to measure (Burns & Burns, 2008). To achieve this, and to increase construct validity, we instead had to rely and build on theory and previously applied measures. To as high extent as possible, we hence used measures applied in similar research, which had already been published in well-known journals (Greenwald & Satow, 1970; Olson et al., 2016; Stein & Nemeroff, 1995; Welsch & Kühling, 2009). We also tried to refine these measurements, and to adapt them to the local context, with the help of a pre-study. Detailed description of the measures and how the variables have been operationalized can be found in Section 3.5.3, while the refinement process is described in Section 3.5.2. By applying these measures, we argue that we increased the construct validity of this study. The process of increasing construct validity also highlights the importance of replicability in the scientific process, as our assessment of theory and the suitability of measures used in previous studies is highly dependent on the transparency of previous research.

## 3.7 Research Limitations

The scope of this thesis is limited to two types of income and a binary view of self-perception when investigating how the choice of organic versus non-organic food affects moral judgments on an index encompassing four items. It is also limited to control for two possible variables that are expected to correlate with moral judgments in the context of the phenomenon: perceived healthiness of purchased products and socially desirable response of the participants. The two types of income that the treatment has been limited to include are an unemployed individual on welfare and an individual with high income (which have been adapted to the context of each country). The binary view of self-perception encompasses consumers who view themselves as regular consumers of organic food and non-regular consumers of organic food. Both the dependent variable and the covariate controlling for *the perceived healthiness* of the purchased products are limited to four item scales to facilitate comparison with previous research, conducted on the topic outside of Europe (see Section 2.2). The second covariate, *social desirability response* was moreover also measured over four items. The measure used to control for this bias was a short version of the original Marlowe-Crowne Scale (Crowne & Marlowe, 1960), adopted from Greenwald and Satow (1970) to shorten the length of the survey. It does, however, come with a disadvantage: that more reliable results could have been obtained if a complete version of the scale had been implemented (as described in Greenwald & Satow, 1970).

As previously noted the study was conducted using opportunity sampling (see Section 3.5.1). This sampling method involves selection of participants on the basis of convenience and accessibility (Burns & Burns, 2008). In this thesis, the sourcing of participants was carried out through social media platform Facebook and educational platform Moodle, used at Jade University of Applied Sciences, Wilhelmshaven, Germany. As the respondents thus were individuals who happen to be on the same platform, at the same time as we distributed the survey this method encompasses certain limitations. Ideally, research should be conducted using a probability sampling method that is characterized by chance, and no other factor should be allowed to influence the selection of respondents. As previously explained the idea is that each element should have a known probability of being selected (Burns & Burns, 2008). Because our applied sampling method did not possess these characteristics, a major limitation is that it does not allow for generalization. That is, it affects the external validity of the study (see Section 3.6.3.1).

A further limitation linked to the sampling method is that biases are likely to have been introduced as individuals with certain characteristics probably were included in the sample. Respondents from Jade University of Applied Sciences were for example with high certainty students, and an unproportionally large amount of individuals active on Facebook are young (Statista, 2017).

Finally, the delimitation to include individuals of only three nationalities in the sample becomes a limitation since these countries are not able to in an accurate way represent Europe as a whole. Thus, even if we could have generalized our finding to the populations of the respective countries, it would not have been appropriate to generalize the findings to such an extent.

## 4 Results

### 4.1 Response Analysis and Descriptive Statistics

We primarily conducted an introductory analysis of the obtained responses to provide relevant descriptive statistics and gain a better idea of the profile of the data. A total of 465 responses were collected. Out of these 455 were kept as the remaining ten answers came from respondents that did not belong to the population (they were of different nationalities than Swedish, German or French). From these 455 responses, 105 were subsequently screened out since they could not answer correctly to one or more of the two control questions (see 3.5.4.1). A number of 350 responses were left for analysis. In total, approximately 22.6 percent of the respondents were screened out due to the criteria in this second phase of the screening procedure.

The obtained data included respondents from the three different nationalities of the population (93 Swedish, 129 German, and 128 French). The distribution of occupations was the following: 181 students, 137 employed, 11 self-employed, 7 unemployed, 1 retired and 13 other. On average (arithmetic mean) the respondents were 27.63 years old, and the age range stretched from 18 to 69 years of age. The distribution of male and female participants was 126 to 223, with 1 other gender reported.

The distribution across the eight different groups used in the ANCOVA can be seen below.

Dependent Variable: Morality Index

Food			Mean	Std. Deviation	N
Organic food	Welfare	Organic consumer	5.2549	0.76728	51
		Non-organic consumer	5.2083	0.86235	42
		Total	5.2339	0.80741	93
	High income	Organic consumer	5.1140	0.95205	57
		Non-organic consumer	5.0385	0.91863	39
		Total	5.0833	0.93448	96
Total	Organic consumer	5.1806	0.86861	108	
	Non-organic consumer	5.1265	0.88840	81	
	Total	5.1574	0.87520	189	
Non-organic food	Welfare	Organic consumer	4.5592	0.78936	38

		Non-organic consumer	4.5197	0.72917	38
		Total	4.5395	0.75504	76
	High income	Organic consumer	4.1250	0.73512	42
		Non-organic consumer	4.4477	0.83195	43
		Total	4.2882	0.79760	85
	Total	Organic consumer	4.3313	0.78734	80
		Non-organic consumer	4.4815	0.78140	81
		Total	4.4068	0.78552	161
Total	Welfare	Organic consumer	4.9579	0.84631	89
		Non-organic consumer	4.8813	0.86874	80
		Total	4.9216	0.85530	169
	High income	Organic consumer	4.6944	0.99267	99
		Non-organic consumer	4.7287	0.91810	82
		Total	4.7099	0.95713	181
	Total	Organic consumer	4.8191	0.93320	188
		Non-organic consumer	4.8040	0.89457	162
		Total	4.8121	0.91425	350

*Table 6 Distribution across Cells*

The somewhat uneven distribution was a result of the implemented screening procedure and the uncontrollable independent variable self-perception, with its two conditions regular organic consumer (53,7% of the sample) and non-regular organic consumer (46,3% of the sample).

## 4.2 Cronbach's Alpha Tests

In line with the procedure described in 3.5.4.3, we used two Cronbach's alpha tests to measure the internal reliability of the dependent variable morality index, and the covariate perceived health index.

Starting with the four items measuring morality (the morality index) we, first of all, checked that none of the cases had been excluded due to missing values. This was not the case as the number of valid cases (350), equaled the number of total cases 350. With the help of the reliability statistics table, we then established that the Cronbach's alpha ( $\alpha$ ) was 0.733 which indicates an acceptable level of internal consistency, above the general rule of thumb at 0.7 (Burns & Burns, 2008).

We then carried out the same procedure for the four items measuring the perceived health of the described consumer's shopping receipt (the perceived health index). Neither on this occasion were any cases excluded due to missing values. The number of valid cases was hence again 350, which equaled the number of total cases. The Cronbach's alpha ( $\alpha$ ) was established to be 0.734, which as well is an acceptable level of internal consistency (Burns & Burns, 2008).

Variables	$\alpha$	N of items
Morality Index	0.733	4
Health Index	0.734	4

*Table 7 Cronbach Alpha's*

### 4.3 Correlation Analysis

The next step before checking the assumptions of the ANCOVA was to perform a correlation analysis using Pearson's  $r$ . A Pearson's product-moment correlation was run to assess the relationship between perceived healthiness of the shopping receipt and moral judgment as well as socially desirable answers of the participants and moral judgment. In this process, we found that the morality index was significantly correlated (positively) with the health index and the social desirability response scores.

There was a moderate positive correlation between the perceived healthiness (health index) of the shopping receipt and moral judgment (morality index),  $r(347) = .403$ ,  $p < .001$ , with perceived healthiness explaining 16% of the variation in moral judgment. Indicating that participants who rated the shopping receipt as healthier, judged the target subject as more moral. While on the other hand, participants who rated the shopping receipt as less healthy, judged the target subject as less moral.

There was a small positive correlation between socially desirable responses (social desirability score) of the participants and moral judgment (morality index),  $r(347) = .132$ ,  $p = .013$ , with social desirability explaining 1.74 % of the variation in moral judgment. Meaning that participants with a higher social desirability response score judged the target subject as more moral. While on the other hand, participants who had a lower social desirability score, judged the target as less moral.

Conclusively, these results indicate that it was wise to control for both indices, to test the purity of the morality effect, without considering the perceived healthiness of the shopping receipt and the socially desirable responses of the participants.

Correlations		Health Index	Social Desirability Score
Morality Index	Pearson Correlation	.403**	.132*
	Sig. (2-tailed)	0.000	0.013
	N	350	350
Health Index	Pearson Correlation		0.091
	Sig. (2-tailed)		0.090
	N		350

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

*Table 8 Correlations*

## 4.4 Assumptions of ANCOVA

Following the previously described measures, we then moved on to check for the assumptions associated with ANCOVA.

### 4.4.1 Assumptions Related to the Study Design

The first assumption of ANCOVA concerns the dependent variable which should be on a continuous level (Lund & Lund, 2013). In the current thesis, the morality index was measured on four items with a semantic differential on an interval scale. The data hence fulfilled this assumption. The second assumption states that the independent variables should be categorical, with two or more categorical, independent groups (Lund & Lund, 2013). In our analysis, we used three independent variables with two categorical groups each. The data hence also fulfilled this assumption. The third assumption is the measurement of covariates on a continuous level (Lund & Lund, 2013). The health index was measured on four items with a semantic differential on an interval scale. The data thus also fulfilled this assumption. The fourth assumption states that there should be independence of observations, which in the case of this study was assured through a between-subjects design (Lund & Lund, 2013). In practice this meant that the participants were randomly assigned to the different groups and kept from participating more than once, using the option to prevent ballot box stuffing in Qualtrics (Qualtrics, 2015).

For the remaining six assumptions, statistical analysis and visual inspection were (as noted in Section 3.5.4) required in order to make sure that they were fulfilled.

#### 4.4.2 Assumption: Linearity

The fifth assumption is linearity between the dependent variable and the covariate for each of the groups in the independent variables (Lund & Lund, 2013; Tabachnick & Fidell, 2013). To assess this, we performed a visual inspection of scatterplots created in SPSS Statistics (see Appendix B). Based on the visual inspection we could conclude that there is a linear relationship between the health index and morality index for each level of the independent variables.

#### 4.4.3 Assumption: Homogeneity of Regression Slopes

The following assumption is homogeneity of regression. That is, there should be homogeneity of regression slopes (Lund & Lund, 2013). The purpose of this assumption is to check so that there is no interaction between the covariate and the independent variables (Lund & Lund, 2013; Tabachnick & Fidell, 2013). This check was performed through a determination of the interaction term (as seen in Lund & Lund, 2013).

By running a test of between-subjects effects, we could conclude that there were no significant interactions between independent variables and covariates (see Appendix B). In other words, there we had homogeneity of regression slopes for the health index, and the social desirability score on every independent variable. The data thus fulfilled also this assumption.

#### 4.4.4 Assumption: Absence of Outliers

The seventh assumption concerns the absence of outliers (Lund & Lund, 2013; Tabachnick & Fidell, 2013). There are several techniques that can be used for identifying outliers. One of these techniques includes the use of standardized residuals. With the standardized residuals computed, we checked for outliers by sorting them in descending order and checking for values that are either above 3, or below -3. The standardized residuals that are so are usually classified as outliers, indicating that an unusual response has been given in the particular case (Lund & Lund, 2013). The result of this test was a total of three outliers (out of 350 cases) for the dependent variable. To determine what to do with these outliers, we primarily checked each one of them to see which unusual responses were the cause of these results. At a later stage in the analysis process, we furthermore assessed if these outliers had an effect on the results, by running the ANCOVA both with and without the outliers. This did not result in any differences in the results (see Appendix B for comparison). Thus, as the outliers did not change the outcome of our analysis, and with the motivation that outliers are more likely to appear when using a smaller scale (in this case the moral judgment is measured on a scale from 1-7) we hence decided to continue with the ANCOVA despite these outliers (Lund & Lund, 2013).

#### 4.4.5 Assumption: Approximately Normal Distribution

The eighth assumption states that there should be an approximately normal distribution in the within-group residuals (Lund & Lund, 2013). In order to control if the residuals of the morality

index were normally distributed in all eight cells of our ANCOVA model, we ran a Shapiro-Wilk test of normality. The values reported in the SPSS output were all non-significant, except for within three groups (see Appendix B.4):

- welfare + non-organic + regular organic consumer,  $p = .002$  ;
- welfare + non-organic + non-regular organic consumer,  $p = .039$ ;
- high income + non-organic food + non-regular organic consumer,  $p = .009$

To conclude, this test shows that the data in three cells violated the normality assumption. However since ANCOVA is considered fairly robust to deviations from normality (Lund & Lund, 2013) and after a visual inspection of the histograms (see Appendix B.4) for the respective cells, we decided to continue with the ANCOVA.

#### 4.4.6 Assumption: Homoscedasticity

The ninth assumption regards the existence of homoscedasticity. That is, we want to make sure that there are equal error variances within each group, and equal variances of error between groups (Lund & Lund, 2013). We performed this analysis by producing a plot with the standardized residuals on one side and the predicted values on the other. Having conducted the necessary steps to produce a plot for each of the independent variables (income, food and self-perception) a visual inspection to make sure that there was no pattern within or between groups was carried out (see plots in Appendix B.5). Through our assessment, we could conclude that there was homoscedasticity both within and between groups. The assumption was thus fulfilled.

#### 4.4.7 Assumption: Homogeneity of Variances

Having assessed our data, and compared it with the nine assumptions above we finally ran the ANCOVA with the knowledge that the tenth and final assumption would be checked for in the process (as seen in Lund & Lund, 2013). With the output in place, and after an assessment of homogeneity of variances (the tenth assumption) by Levene's test for equality of variances, we could conclude that there was homogeneity of variances,  $p = .621$  (see Appendix B.6). That is, the standard deviations of groups were not statistically significantly different from each other.

## 4.5 Analysis of Covariance

To test the hypotheses we subsequently ran a three-way Analysis of Covariance including the independent variables: food (organic vs. non-organic), income (unemployed individual on welfare vs. individual with high income) and self-perception (regular consumer of organic food vs. non-regular consumer of organic food). The covariates: health halo (perceived health index) and social desirability of the respondent (social desirability score). And the dependent variable:

moral judgment (morality index). In our test, we furthermore included the variable nationality to make sure that different disposition of the sample, with respondents of different nationalities, does not affect the results.

The first results of the analysis could be seen in the test of between-subjects effects, displayed in the table below:

Tests of Between-Subjects Effects

Dependent Variable:

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	86.664 <sup>a</sup>	11	7.879	12.987	0.000	0.297
Intercept	108.038	1	108.038	178.090	0.000	0.345
Food	27.958	1	27.958	46.086	0.000	0.120
Income	5.008	1	5.008	8.256	0.004	0.024
Self-perception	0.025	1	0.025	0.042	0.838	0.000
Food * Income	0.271	1	0.271	0.447	0.504	0.001
Food * Self-perception	0.012	1	0.012	0.020	0.888	0.000
Income * Self-perception	0.819	1	0.819	1.350	0.246	0.004
Food * Income * Self-perception	0.688	1	0.688	1.134	0.288	0.003
Nationality	0.180	2	0.090	0.148	0.862	0.001
Health Index	23.300	1	23.300	38.407	0.000	0.102
Social Desirability Score	3.178	1	3.178	5.238	0.023	0.015
Error	205.047	338	0.607			
Total	8396.563	350				
Corrected Total	291.711	349				

a. R Squared = ,297 (Adjusted R Squared = ,274)

*Table 9 Test of Between-Subjects Effects*

From the table, we could, first of all, conclude that the nationality of the respondents did not by itself have any significant effect on the moral judgment ( $p = .862$ ,  $\eta^2 = .001$ ). The fact that the sample consist of individuals from different countries could in other words, not be said to make a difference for the outcome in our study.

After having established this, we continued our analysis by answering the hypotheses set up in 2.4 with the help of the above table, the estimated marginal means (controlling for the covariates

health halo and social desirability of the respondent) and the post hoc-analysis (pairwise comparisons for the relevant variables).

#### 4.5.1 Hypothesis 1

We began by testing the relationship between food and moral judgment to see if our hypothesized prediction, based on theory (see 2.3.1), held in a European context.

H1: People who purchase organic food are judged to be more moral than people who purchase non-organic food.

As the between-subjects table indicated a significant difference between the means for each of the two conditions of food, we could directly see that the variable had a significant effect on moral judgment ( $p < .001$ ,  $\eta^2 = .120$ ). We could also conclude that the effect size was between medium and large (Murphy, Myers & Wolach, 2014), implicating a rather large difference between the means. The estimated means and the pairwise comparisons tables further revealed that people who purchase organic food are judged as more moral than people who purchase non-organic food.

##### Estimates

Dependent Variable:

Food	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Organic food	5.093 <sup>a</sup>	0.058	4.978	5.208
Non-organic food	4.496 <sup>a</sup>	0.064	4.370	4.622

a. Covariates appearing in the model are evaluated at the following values: Social Desirability Score = 2,23, Health Index = 4,6050.

*Table 10 Food: Estimated Marginal Means*

Pairwise Comparisons

Dependent Variable:

(I) Food		Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
Organic food	Non-organic food	.597 <sup>*</sup>	0.088	0.000	0.424	0.770
Non-organic food	Organic food	-.597 <sup>*</sup>	0.088	0.000	-0.770	-0.424

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

*Table 11 Food: Pairwise Comparisons*

This could be seen in the significant mean difference between the two conditions organic food and non-organic food.

The hypothesis was accepted.

H1: People who purchase organic food are judged to be more moral than people who purchase non-organic food. ACCEPTED

#### 4.5.2 Hypothesis 2

Secondly, we tested for a two-way interaction between food and income. Our observed phenomenon indicates that an interaction effect might exist (see Section 1.1), and theory furthermore states that income is moderating the relationship between food choice and moral judgment (Olson et al., 2016). Previous results had however only been obtained in one study in the United States. To expose the nature of this effect in a European context, we stated the following hypothesis.

H2: Unemployed individuals on welfare are judged as less moral when purchasing organic food (vs. non-organic food), and individuals with a high income are judged as more moral when purchasing organic food, (vs. non-organic food).

The test of between-subjects effects demonstrated that there is no interaction effect between the variables food and income ( $p = .504$   $\eta^2 = .001$ ). This indicates that the relationship between income and moral judgment does not change depending on the purchased food items.

Furthermore, the pairwise comparisons table indicated that there was no significant difference between the two income groups within the organic condition. It also demonstrated that there was no difference between the two income groups within the non-organic condition.

5. Food \* Income

Dependent Variable:

Food		Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Organic food	Welfare	5.221 <sup>a</sup>	0.078	5.067	5.375
	High income	5.034 <sup>a</sup>	0.079	4.880	5.189
Non-organic food	Welfare	4.645 <sup>a</sup>	0.088	4.472	4.818
	High income	4.314 <sup>a</sup>	0.082	4.153	4.474

a. Covariates appearing in the model are evaluated at the following values: Health Index = 4,6146, Social Desirability Score = 2,22.

*Table 12 Food\*Income*

As indicated in the test of between-subjects effects there was nevertheless a significant main effect of income ( $p = .004$ ,  $\eta^2 = .024$ ). This signifies that there is a statistically significant difference of effect on moral judgment between the two conditions unemployed individual on welfare and individual with high income. The mean difference seen in the estimated marginals table and in the pairwise comparisons table below further specified that an unemployed individual on welfare, on average, is perceived as more moral than an individual with high income.

Estimates

Dependent Variable:

Income	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Welfare	4.916 <sup>a</sup>	0.061	4.795	5.037
High income	4.673 <sup>a</sup>	0.059	4.558	4.789

a. Covariates appearing in the model are evaluated at the following values: Social Desirability Score = 2,23, Health Index = 4,6050.

*Table 13 Income: Estimates*

Pairwise Comparisons

Dependent Variable:

(I) Income		Mean Difference (I-J)	Std. Error	Sig. <sup>b</sup>	95% Confidence Interval for Difference <sup>b</sup>	
					Lower Bound	Upper Bound
Welfare	High income	.243 <sup>*</sup>	0.084	0.004	0.077	0.409
High income	Welfare	-.243 <sup>*</sup>	0.084	0.004	-0.409	-0.077

Based on estimated marginal means

\*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Bonferroni.

*Table 14 Pairwise Comparisons Income*

It should, however, be pointed out that even though there is a significant difference between the two, the effect size ( $\eta^2 = .024$ ) is small (Murphy, Myers & Wolach, 2014).

H2: Unemployed individuals on welfare are judged as less moral when purchasing organic food (vs. non-organic food), and individuals with a high income are judged as more moral when purchasing organic food, (vs. non-organic food). REJECTED

### 4.5.3 Hypothesis 3

We also wished to test for a two-way interaction between food and self-perception. Although not directly visible in our phenomenon, theory has indicated that self-perception related to ethical consumption has a moderating effect on the relationship of ethical consumption and moral judgment (Zane, Irwin & Reczek, 2016). As explained in Section 2.3.4 we predicted the following two-way interaction.

H3: People who perceive of themselves as regular consumers of organic food judge others as more moral when purchasing organic food (vs. non-organic food); and people who do not perceive of themselves as regular consumers of organic food judge others as less moral when purchasing organic food (vs. non-organic food).

No such effect could be found. The test of between-subjects effects demonstrated no interaction effect between the variables food and self-perception ( $p = .888$   $\eta^2 < .001$ ). The significance of this is that the relationship between food and moral judgment does not change depending on whether or not the respondents perceive of themselves as regular consumers of organic food.

As also seen in the between-subjects effects table there is neither any main effect of self-perception ( $p = .838$ ,  $\eta^2 < .001$ ), indicating that no effect on moral judgment was found between

consumer who perceive of themselves as regular buyers of organic food and consumers who did not. The hypothesis was thus rejected.

H3: People who perceive of themselves as regular consumers of organic food judge others as more moral when purchasing organic food (vs. non-organic food); and people who do not perceive of themselves as regular consumers of organic food judge others as less moral when purchasing organic food (vs. non-organic food). REJECTED

#### 4.5.4 Hypothesis 4

Lastly, we wanted to test for a three-way interaction between food, income and self-perception. As previous research has not tested this, no theory existed to predict a certain direction.

H4: There is a three-way interaction of food, income, and self-perception.

The test of between-subjects effects indicates that there is no interaction effect between food, income and self-perception ( $p = .288$ ,  $\eta^2 = .003$ ). The means of each of the eight treatment groups in the experiment further confirmed this as there was no significant difference between any of the pairs, which can be seen below:

Food \* Income \* Self-perception

Dependent Variable:

Food			Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Organic food	Welfare	Organic consumer	5.175 <sup>a</sup>	0.110	4.959	5.392
		Non-organic consumer	5.197 <sup>a</sup>	0.121	4.960	5.434
	High income	Organic consumer	4.981 <sup>a</sup>	0.105	4.774	5.188
		Non-organic consumer	5.018 <sup>a</sup>	0.126	4.771	5.266
Non-organic food	Welfare	Organic consumer	4.737 <sup>a</sup>	0.133	4.475	5.000
		Non-organic consumer	4.554 <sup>a</sup>	0.127	4.305	4.803
	High income	Organic consumer	4.250 <sup>a</sup>	0.122	4.010	4.490
		Non-organic consumer	4.443 <sup>a</sup>	0.119	4.209	4.678

a. Covariates appearing in the model are evaluated at the following values: Social Desirability Score = 2,23, Health Index = 4,6050.

*Table 15 Food\*Income\*Self-perception*

The hypothesis was thus rejected.

H4: There is a three-way interaction of food, income, and self-perception. REJECTED

### 4.5.5 Overview of Hypotheses Testing

The results of the hypotheses testing can be seen below.

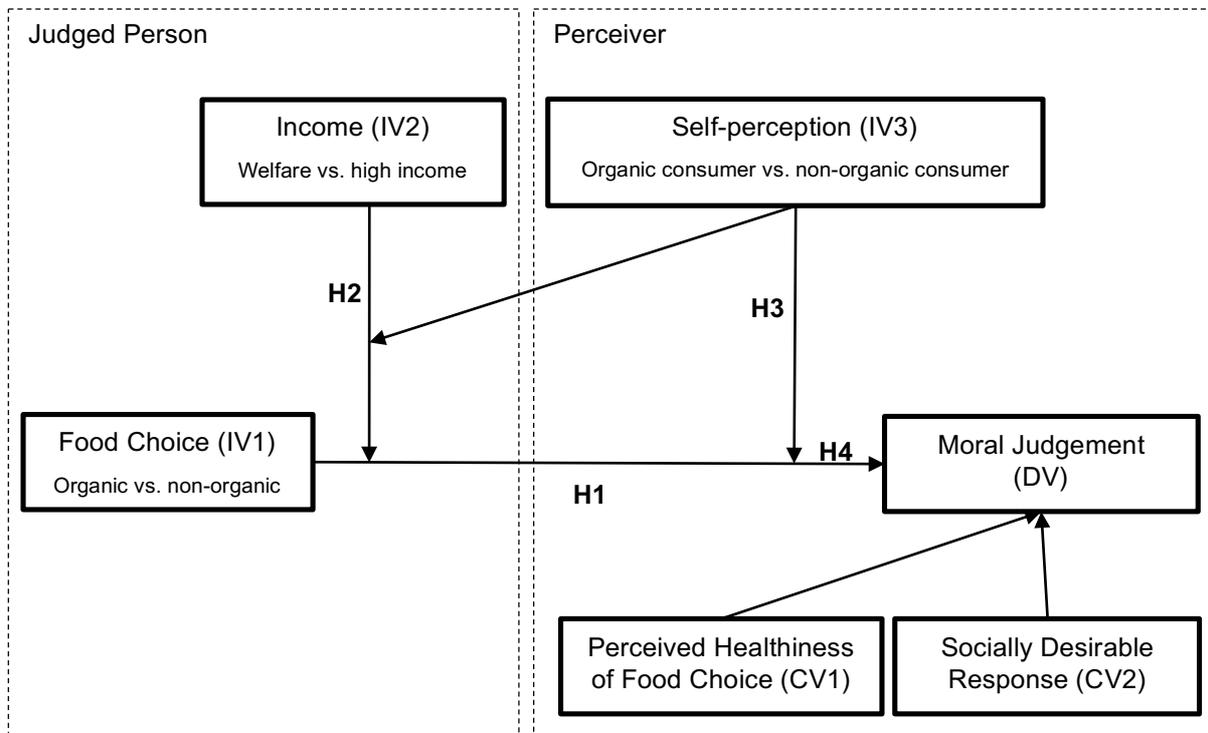


Figure 8 Theoretical Model H1-H4

H1: People who purchase organic food are judged to be more moral than people who purchase non-organic food.	ACCEPTED
H2: Unemployed individuals on welfare are judged as less moral when purchasing organic food (vs. non-organic food) and individuals with a high income are judged as more moral when purchasing organic food (vs. non-organic food).	REJECTED
H3: People who perceive of themselves as regular consumer of organic food judge others as more moral when purchasing organic food (vs. non-organic food); and people who do not perceive of themselves as regular consumer of organic food judge others as less moral when purchasing organic food (vs. non-organic food).	REJECTED
H4: There is a three-way interaction of food choice, income, and self-perception.	REJECTED

# 5 Discussion and Conclusion

## 5.1 Discussion

The conflict concerning what is deemed as morally right or wrong when it comes to consumers on welfare purchasing organic food inspired us to simulate this public debate in an experimental setting. The results of the Analysis of Covariance will be discussed in the following.

All hypotheses (H1-H4) were controlled for potential influences of our two covariates. Our first covariate *perceived healthiness* (CV1) was applied to account for a potential health-halo of food. In addition, we also controlled for a possible *socially desirable response* (CV2) bias with our second covariate. The two covariates were introduced to reduce biases and effects which could dilute our results. Our results support the use of these two covariates in the context of our study.

First, we found a moderate positive correlation between the perceived healthiness of the shopping receipt and moral judgment (see Section 4.3). This indicates that participants who rated the shopping receipt as more healthy, judged the target subject as more moral. While on the other hand, participants who rated the shopping receipt as less healthy, judged the target subject as less moral. This result supports the halo effect (Thorndike, 1920) in which one pronounced characteristic of an object influences the overall perception of the same object.

Second, we further found a small positive correlation between socially desirable responses of the participants and moral judgment. This indicates that participants with a higher social desirability response score judged the target subject as more moral, while on the other hand, participants who had a lower social desirability score, judged the target as less moral. The correlation, therefore, supports the recommendations of previous research to control for the response bias caused by socially desirable answers when investigating sensitive topics (as seen in Fisher, 1993; Paulhus, 1991). In line with this, it can hence be assumed that the topic of our study was perceived as somewhat sensitive for participants. To conclude, both covariates showed a significant correlation with moral judgment. However, the correlation of the perceived health index was greater than the correlation of the socially desirable response score with moral judgment, indicating that it is more important to control for perceived health in the context of our study.

Having established the above, we will discuss the results of the expected relationships of all four hypotheses. After removing the effects of the previously described covariates these results represent more accurate effects on moral judgment.

### 5.1.1 Food-based moral Judgments

In our first hypothesis (H1), we investigated the relationship between our first independent variable *food choice* (IV1), with its two conditions (*organic vs. non-organic*), and our dependent variable *moral judgment* (DV). We predicted that people who purchase organic food are judged to be more moral than people who purchase non-organic food. The results supported our prediction:

- People who purchase organic food are judged to be more moral than people who purchase non-organic food.

This finding endorses the *you are what you eat* idiom, meaning that characteristics associated with the food one consumes get transferred to the consumer. The idiom is a commonly known version of the law of contagion (see Section 2.3.4). Even though the law of contagion (Frazer, 1951) has been established more than half a century ago, our study provides evidence, that it is still valid today when people make food-based moral judgments. The nature of this finding is furthermore closely related to halo effects (Thorndike, 1920), which explain how one pronounced characteristic of a person influences the overall perception of the same person. The choice of organic-food could attribute associations to an individual and transfer such a pronounced characteristic which in certain situations can be perceived as distinctive. Especially if only limited information regarding the judged person is available. This could, for instance, occur in a purchase situation where an individual observes other consumers at the cashier. Interestingly, since we controlled for a health-halo, the attributions in our experiment were not influenced by the perceived healthiness of food choices. Hence there must have been other attributes that caused the more positive moral judgments of organic food. Different perceptions of organic food should, therefore, be considered. The prosocial nature of organic food (Batson & Powell, 2003) is likely to be one source behind the positive moral judgments. This quality of organic food has over the last decades been promoted quite extensively, as it is connected to environmental issues and climate change, which have been brought to the forefront over the last decades (Akehurst, Afonso & Martins Gonçalves, 2012). Even though organic products at times have been deemed to be luxury items (Schummeck, 2016) our findings show that there is less negative association with consumers of such products. This could, as proposed above, be explained by the perception that organic consumption benefits society as a whole. Other consumers, therefore, seem to disregard potential negative associations such as a price premium and the potential perception of organic food as merely a status symbol. Another potential reason for disregarding such negative association could be that they simply are not associated with organic food any longer. In the European Union organic food is becoming more and more common (European Parliamentary Research Service, 2015), and in Sweden and Germany the option to purchase non-organic at the large grocery chains, is in some food categories even non-existing (Axfood, 2014).

Furthermore, since people compare themselves with others before making moral judgments (see Section 2.3.2), it is in alignment with social comparison theory (Heider, 2013), necessary to consider the perceiver's own consumption habits in regards to organic food. However, as the

influence of self-perception is not measured in this hypotheses, its effect can naturally not be assessed to any further extent. This will thus instead be discussed in Section 5.1.1.2 and Section 5.1.1.3.

## 5.1.2 The Influence of Income

In our second hypothesis (H2), we investigated how our second independent variable *income* (IV2) with the two conditions (*welfare vs. high income*) influences the relationship between *food choice* (IV1) and *moral judgment* (DV). We predicted that unemployed individuals on welfare are judged as less moral when purchasing organic food (vs. non-organic food) and individuals with a high income are judged as more moral when purchasing organic food, (vs. non-organic food). The results did not support this prediction:

- The income of the judged person does not alter the effect of moral judgments based on food choice.

The moral debate in Germany (see Section 1.1) suggested that income would influence food-based moral judgments. Our obtained results did nonetheless not support such an influence of the income characteristics of the judged individual. That is, whether or not the judged consumer is unemployed and on welfare, or has a high income, did not significantly change the relationship between food choice and moral judgment.

This result is contrasted by the result of the study from Olson et. al (2016) who found an interaction between food choice and income. In order to elaborate on the discussion in Section 5.1.1 above, and bring clarity to what might be potential underpinnings of our results, we will thus reflect on potential reasons behind the contrasting results.

In the study by Olson et al. (2016) high-income earners were perceived as more moral when purchasing organic food than when purchasing non-organic food, whereas the opposite relationship was true for welfare recipients. Participants in their study furthermore judged unemployed individuals as significantly less moral than high-income earners, when both individuals made the identical choice to purchase organic food. (Olson et al., 2016).

That the prosocial nature of organic food is one potential reason for the results in our study was already brought up in Section 5.1.1. The prosocial nature, which was argued for by Batson and Powell (2003) however only has an influence on moral judgment if it is perceived, and perceptions could, of course, differ between populations. In Europe, the per capita consumption of organic food is for example in many cases higher than in America (Organic Food Market: Leading Countries Based on Consumption per Capita, 2015 | Statistic, 2015), potentially indicating that there are differences in perceived importance of purchasing organic. In our European setting, it might thus be said that organic food is perceived to be (relatively) important. Being speculative, one potential reason for why no interaction was found could thus be that the importance of acquiring organic products erased opinions or prejudice that the participants might have had regarding unemployed and high-income earners.

Touching upon the role that income might have played in the obtention of the discussed result, it should also be mentioned that the main effect of income on moral judgments was significant in our study. That is, the income of the judged person by itself, had an impact on moral judgments. Somewhat surprisingly the analysis demonstrated that the main effect of income is advantageous for unemployed individuals on welfare, who were perceived as more moral than people with high income; a finding that indicates a rather positive perception of people on welfare in Europe. Adding to the previous argument, it could thus be that a tolerant environment for individuals from all walks of life, in combination with the perceived importance of organic food, lead to the obtained results.

### 5.1.3 The Influence of Self-perception

In our third hypothesis (H3), we investigated how the relationship between *food choice* (IV1) and our dependent variable *moral judgment* (DV) is influenced by our third independent variable *self-perception* (IV3) with the two conditions (*organic consumer vs. non-organic consumer*). We predicted that people who perceive of themselves as regular consumer of organic food judge others as more moral when purchasing organic food (vs. non-organic food); and people who do not perceive themselves as regular consumer of organic food judge others as less moral when purchasing organic food (vs. non-organic food). However, the results did not support this prediction:

- The self-perception of the perceiver does not affect food-based moral judgments.

This result is contradicting to the findings of Zane et al. (2016), which indicated that less ethical consumers denigrated other consumers who were more ethical. A potential explanation for this is that the experiments carried out by Zane et al. (2016) were not made in contexts related to food, but other ethical products such as ethical backpacks and jeans. As discussed previously, sales in organic food have grown substantially over the last years and (European Parliamentary Research Service, 2015), and by the younger generations, its existence is practically taken for granted (Organic Trade Association, 2016). Ethical clothing, on the other hand, has not yet reached the same level of popularity and might in accordance with the logic of social comparison theory (Lockwood & Kunda, 1997) thus generate more individuals who denigrate other consumers, as ethical clothing could be perceived as threatening to the self-image.

In addition, this finding also indicates that consumers who purchase organic, and in this context are to be considered as more ethical consumers, do not denigrate other consumers who are less ethical. One possible reason for this is that purchasing non-organic still is probable to be perceived as the norm (as indicated by Organic Trade Association, 2016). By judging others one thus risk to fall out of the norm, something which most individuals likely wish to avoid.

### 5.1.4 The Influence of Income and Self-perception

In our fourth hypothesis (H4), we investigated how the *income* (IV2) and our third independent variable *self-perception* (IV3) influence the relationship between *food choice* (IV1) and *moral*

*judgment* (DV). We hypothesized a three-way interaction to occur, but rejected the hypothesis after the Analysis of Covariance. To further discuss the finding in this final hypothesis is thus to go beyond speculation, and will not add any additional value to our study. We therefore simply present the obtained result below.

- The self-perception of the perceiver does not affect moral judgments based on food choice and income.

## 5.2 Conclusion

The purpose of this thesis was to answer how people make moral judgments based on other people's food consumption as well as, how the income of the judged person and the self-perception of the perceiver impact this relationship. A purpose we fulfilled by answering the related research questions and their associated hypotheses. The results from this study can be concluded as follows:

- Controlling for socially desirable responses is relevant in the context of moral judgment based on food choice.
- Controlling for a health-halo is also relevant in the context of moral judgment based on food choice.
- People make moral judgments based on other people's food choice.  
People who purchase organic food are judged to be more moral than people who purchase non-organic food when disregarding the influence of income.
- People make moral judgments based on other people's income.  
People on welfare are judged to be more moral than people with high income when disregarding the influence of food choice.
- The income of a judged person does not alter moral judgments based on his/her food choice.
- People disregard their self-perception when they make judgments based on other people's food choice.
- People also disregard their self-perception when they make moral judgments based on other people's food choice together with income.

The main conclusion can be argued is that, in a European context, people primarily make moral judgments of others based on their food choice separated from the income of the same individual. People's own perceptions further do not influence this moral judgment. The answers to our hypotheses confirm this conclusion.

### 5.2.1 Research Implications

The findings of our study are a result from testing and extending existing theory and have thus important theoretical implications.

First, we apply an existing theoretical model (Olson et al., 2016) and test it in a European context. The model was prior utilized to investigate the influence of a person's income and food choice on moral judgments. In order to test this model, we had to adapt the independent variables income and food choice to a European context with the help of a pre-study. Furthermore, we created questionnaires specifically for Sweden, Germany and France, that required additional adaptations. These necessary adaptations are thus an important contribution for future studies in a similar cultural context. Our findings further show that the income of the judged person is not a boundary condition for food-based moral judgments in our study.

Second, we extended the model of Olson et. al (2016) and added the independent variable self-perception (based on social comparison theory Heider, 2013) and the covariate social desirability (Greenwald And & Satow, 1970). These additions had been found to be applicable in similar contexts (Fisher, 1993; Zane, Irwin & Reczek, 2016) and thus considered relevant to include as additional contextual factors to investigate food-based moral judgments. Although the self-perception of the perceiver did not influence moral judgments in our specific context, it might alter when the context changes. Future research can thus benefit from this enhanced model to capture the complexity behind moral judgments. Including a measure of socially desirable response furthermore showed a significant effect in our study and is hence also recommended to control for in future studies within the research stream.

Third, we found additional support for the law of contagion (Frazer, 1951) and halo effects (Thorndike, 1920), specifically the health-halo of organic food in our study. A finding that further supports the century old idiom *you are what you eat*, meaning that characteristics associated with the food one consumes get transferred to the consumer.

### 5.2.2 Practical Implications

The increased understanding of moral judgments of consumers in relation to organic, respectively non-organic products that the study has provided for a European context can be useful for various actors in society.

First, the lack of interaction effects demonstrated in relation to income and self-perception can guide companies and non-governmental organizations in their actions on the European market. The findings demonstrate cultural differences between Europe and America that should be taken into consideration when producing and marketing products in both continents. They are relevant from a marketing and public relations perspective in order to improve brand image as they can guide companies to transmit the right associations and to avoid transmitting inappropriate signals. The knowledge that other associations than perceived healthiness, related to organic food consumption lead to positive moral judgments in a European context, could for

example, lead to a different approach to market organic food and position a company without emphasizing the aspect.

Second, the findings are perhaps especially important as actors in a European context relying on previous findings from the United States, could have been misguided in their actions.

Third, knowing that self-perception neither alters this positive relationship can further be useful for targeting the right consumer groups. Rather than focusing on groups which already perceive themselves as regular consumers of organic food, one could widen one's horizons and direct efforts to non-regular consumers as well.

Lastly, political parties and policymakers may also benefit from an increased understanding of moral judgment in the context of organic food and employment. In the introductory example from Germany (see 1.1), where a moral debate arose after a proposal to raise unemployment benefits in order to enable people on welfare to purchase organic food, it should be useful for the politicians to recognize that welfare receivers purchasing organic products are not regarded as less moral than high-income earners conducting the same purchases. For policy makers the findings could lead to savings on efforts that were meant to counteract stigmatization of unemployed consumers in relation to food consumption. Resources that instead could be spent more wisely.

### 5.2.3 Future Research

The theory, methods, results and discussion give rise to several directions for future research. Just as we, in this study, draw inspiration from Olson et al. (2016), building on already existing theoretical models and bringing them into other cultural contexts is advisable due to the contextual sensitiveness of the issue (Fischler, 1990). Although globalization and trade agreements might have reduced cultural differences around the world, a comparison between the findings of this study and the study by Olson et al. (2016) made in the United States show that different cultural settings can yield different results.

Future research should furthermore investigate different contextual factors to identify more potential boundary conditions related to food-based moral judgments. Further investigations into how income and self-perception functions as boundary conditions are also needed, as the binary view presented in this study only represents a restricted view of these boundary conditions. Adding and comparing additional groups along the socioeconomic continuum could for example be one option. This could contribute to already existing theory by providing a more complete answer to the moderating role of income in relation to moral judgment due to food consumption. Extending research on the moderating role of income could also be achieved through the division of this boundary condition into two separate variables. It could, for example, be of interest to separate between the source and the amount of income. Deservingness is, as already pointed out in (Olson et al., 2016), closely related to the effect of income. In our experiment, no detailed information regarding the circumstances surrounding the source of income were given to the participants. Future research could also add such additional

information to see whether deservingness is moderating the relationship between food, income and moral judgment.

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# Appendix A

## Questionnaire in English

Welcome!

We are interested in understanding how people make judgments of other people, when they only know a small amount of information about them.

You will be making judgments based on very little information, and there are no “right” answers.

At the end of the survey you have the chance to win a 20€ voucher for an online-shop of your choice.

Your information will be anonymized. If you chose to include your contact details in the end of the survey these will remain confidential.

It is very important that you read the information about the person carefully. We may ask you to recall specific details at the end of the survey.

- I understand these instructions and will read the information carefully

---

Read the following information. Try to project yourself into the situation as far as possible until you can more or less characterize the person who bought the groceries.

*[participants got assigned randomly to one of the following four conditions]*

### **(1.) Shopping receipt of an unemployed individual on welfare:**

- 1 loaf of sliced bread
- ½ kilo of organic carrots
- 1 package of baking powder
- ½ kilo of ground coffee
- 1 liter of organic 1,5% milk
- 12 organic eggs
- 1 box of cereal

**(2.) Shopping receipt of an unemployed individual on welfare:**

- 1 loaf of sliced bread
- ½ kilo of carrots
- 1 package of baking powder
- ½ kilo of ground coffee
- 1 liter of 1,5% milk
- 12 eggs
- 1 box of cereal

**(3.) Shopping receipt of an individual earning 53 200 SEK a month (gross income):**

- 1 loaf of sliced bread
- ½ kilo of organic carrots
- 1 package of baking powder
- ½ kilo of ground coffee
- 1 liter of organic 1,5% milk
- 12 organic eggs
- 1 box of cereal

**(4.) Shopping receipt of an individual earning 53 200 SEK a month (gross income):**

- 1 loaf of sliced bread
  - ½ kilo of carrots
  - 1 package of baking powder
  - ½ kilo of ground coffee
  - 1 liter of 1,5% milk
  - 12 eggs
  - 1 box of cereal
-

Q1. Given this information, how would you evaluate this person on the following dimensions?

(The left arrow takes you back to the description of the person in question and the accompanying shopping receipt)

Uncaring	<input type="radio"/>	Caring						
Unethical	<input type="radio"/>	Ethical						
Intuitive*	<input type="radio"/>	Analytical*						
Cruel	<input type="radio"/>	Kindhearted						
Unspontaneous	<input type="radio"/>	Spontaneous						
Moral*	<input type="radio"/>	Immoral*						
Talkative	<input type="radio"/>	Quiet						
Unpractical*	<input type="radio"/>	Practical*						

*[Items marked with an asterisk are keyed negatively]*

Q2. How would you rate the overall health value of the groceries on the shopping receipt?

Not at all nutritious	<input type="radio"/>	Very nutritious						
Not at all wholesome	<input type="radio"/>	Very wholesome						
Not at all fattening*	<input type="radio"/>	Very fattening*						
Not at all good for you	<input type="radio"/>	Very good for you						

*[Items marked with an asterisk are keyed negatively]*

---

Q3. Did you see any organic products on the shopping receipt?

- Yes
- No
- I do not know

Q4. Was the person in the description unemployed and on welfare?

---

- Yes
  - No
  - I do not know
- 

**Now we would like to ask a few questions about You.**

Q5. What is your gender?

- Female
- Male
- Others \_\_\_\_\_

Q6. What is your age? \_\_\_\_\_

Q7. What is your nationality?

- Swedish
- German
- French
- Other \_\_\_\_\_

Q8. What is your current occupation?

- Student
- Employed

- Self-employed
- Unemployed
- Retired
- Other

Q9. Do you regularly buy food that is labeled as organic food?

- Yes
- No

Q10. Below you will find a list of statements. Please read each statement carefully and decide if that statement describes you or not. If it describes you, check the word "true"; if not, check the word "false".

	True	False
No matter who I'm talking to, I'm always a good listener.	<input type="radio"/>	<input type="radio"/>
I am always courteous, even to people who are disagreeable.	<input type="radio"/>	<input type="radio"/>
I have sometimes taken unfair advantage of another person.*	<input type="radio"/>	<input type="radio"/>
I sometimes try to get even, rather than forgive and forget.*	<input type="radio"/>	<input type="radio"/>

*[Items marked with an asterisk are keyed negatively]*

---

Q11. Please share any comments you might have about this research:

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Thank you for taking your time to participate in this study.  
For participating in the lottery please insert your email below.

---

## Questionnaire in Swedish

Välkommen!

Vi är intresserade av hur folk bedömer andra när de enbart har tillgång till en begränsad mängd information om dem.

Du kommer att få ge omdömen baserade på enbart en begränsad mängd information och det finns inga "rätta" svar.

I slutet av undersökningen har du möjligheten att delta i utlottningen av ett presentkort till ett värde av 200 kronor hos valfri butik online.

Dina svar kommer att anonymiseras. Om du väljer att fylla i dina kontaktuppgifter i slutet av undersökningen så kommer dessa att förbli privata.

Det är väldigt viktigt att du läser informationen som ges angående personen i fråga noggrant. Vi kommer kanske be dig att erinra dig specifika detaljer i slutet av undersökningen.

- Jag förstår instruktionerna och kommer att aktsamt ta del av informationen

---

Läs den följande informationen. Försök att leva dig in i situationen till så hög utsträckning som möjligt tills du mer eller mindre kan föreställa dig personen som köpt matvarorna.

*[participants got assigned randomly to one of the following four conditions]*

**(1.) Inköpskvitto tillhörandes en arbetslös individ som lever på bidrag:**

- 1 limpa skivat bröd
- 1/2 kilo ekologiska morötter
- 1 packet bakpulver
- 1/2 kilo malet kaffe
- 1 liter ekologisk mjölk 1,5%
- 12 ekologiska ägg
- 1 kartong flingor

**(2.) Inköpskvitto tillhörandes en arbetslös individ som lever på bidrag:**

- 1 limpa skivat bröd
- ½ kilo morötter
- 1 packet bakpulver
- ½ kilo malet kaffe
- 1 liter mjölk 1,5%
- 12 ägg
- 1 kartong flingor

**(3.) Inköpskvitto tillhörandes en individ som tjänar 53 200 kronor i månaden brutto:**

- 1 limpa skivat bröd
- ½ kilo ekologiska morötter
- 1 packet bakpulver
- ½ kilo malet kaffe
- 1 liter ekologisk mjölk 1,5%
- 12 ekologiska ägg
- 1 kartong flingor

**(4.) Inköpskvitto tillhörandes en individ som tjänar 53 200 kronor i månaden brutto:**

- 1 limpa skivat bröd
  - ½ kilo morötter
  - 1 packet bakpulver
  - ½ kilo malet kaffe
  - 1 liter mjölk 1,5%
  - 12 ägg
  - 1 kartong flingor
-

Q1. Med denna information i åtanke, hur skulle du bedöma denna individ enligt de följande kriterierna?

(Bakåtpilen tar dig tillbaka till beskrivningen av personen i fråga och dennes inköpskvitto)

Kallsinnig	<input type="radio"/>	Omtänksam						
Oetisk	<input type="radio"/>	Etisk						
Intuitiv	<input type="radio"/>	Analytisk						
Elak	<input type="radio"/>	Varmhjärtad						
Metodisk	<input type="radio"/>	Spontan						
Moralisk*	<input type="radio"/>	Omoralkisk*						
Pratglad	<input type="radio"/>	Tyst						
Idealistisk	<input type="radio"/>	Practical*						

*[Items marked with an asterisk are keyed negatively]*

Q2. Hur skulle du bedöma inköpskvittot i termer av hälsosamhet?

Inte alls näringsrik	<input type="radio"/>	Väldigt näringsrik						
Inte alls nyttig	<input type="radio"/>	Väldigt nyttig						
Inte alls fettbildande*	<input type="radio"/>	Väldigt fettbildande*						
Inte alls bra för dig	<input type="radio"/>	Väldigt bra för dig						

*[Items marked with an asterisk are keyed negatively]*

---

Q3. Såg du om inköpskvittot bestod av några ekologiska produkter?

- Ja
- Nej
- Jag vet inte

Q4. Var personen i beskrivningen arbetslös och levde på bidrag?

- Ja
- Nej
- Jag vet inte

---

**Nu skulle vi vilja ställa några frågor om dig.**

Q5. Kön:

- Kvinna
- Man
- Annat \_\_\_\_

Q6. Hur gammal är du? \_\_\_\_\_

Q7. Vilket land kommer du ifrån? \_\_\_\_\_

Q8. Sysselsättning:

- Student
- Anställd
- Egenföretagare
- Arbetslös
- Pensionär
- Annan \_\_\_\_\_

Q9. Köper du regelbundet ekologisk mat?

- Ja
- Nej

Q10. Nedan finner du en rad påståenden. Läs igenom dessa med omsorg och ta ställning till om de beskriver dig eller inte. Om ett påstående beskriver dig, så markerar du "stämmer"; om det inte gör det markerar du "stämmer inte".

	Stämmer	Stämmer inte
Oavsett vem jag pratar med så är jag alltid en bra lyssnare.	<input type="radio"/>	<input type="radio"/>
Jag är alltid tillmötesgående även mot människor som är obehagliga.	<input type="radio"/>	<input type="radio"/>
Det har funnits tillfällen då jag har utnyttjat någon.*	<input type="radio"/>	<input type="radio"/>
Ibland vill jag hellre hämnas än förlåta.*	<input type="radio"/>	<input type="radio"/>

*[Items marked with an asterisk are keyed negatively]*

---

Q11. Dela med dig om du har några tankar eller åsikter angående undersökningen:

---

---

---

Tack för att du tog dig tid att delta i undersökningen.

Fyll i din mejladress nedanför för att delta i utlottningen av presentkort.

---

### A.3 Questionnaire in German

Willkommen!

Wir wollen herausfinden, wie Menschen sich ihre Meinungen bilden, wenn ihnen nur wenige Informationen zur Verfügung stehen.

Im Folgenden werden Sie Urteile über eine andere Person machen. Dabei gibt es keine richtige oder falsche Antwort. Alle Angaben werden vertraulich behandelt.

Am Ende der Umfrage haben Sie die Möglichkeit einen 20€ Gutschein für einen Online-Shop Ihrer Wahl zu gewinnen.

Bitte lesen Sie die Information über die Person sehr sorgfältig. Wir werden Sie bitten hierzu spezifische Fragen zu beantworten.

- Ich verstehe diese Anweisung und werde die Informationen sorgfältig lesen

---

Bitte lesen Sie die folgenden Informationen. Versuchen Sie sich so gut wie möglich in die Situation hineinzusetzen, um die Person anhand der gekauften Lebensmittel beschreiben zu können.

*[participants got assigned randomly to one of the following four conditions]*

**(1.) Einkaufsbeleg einer Person die Arbeitslosengeld bezieht:**

- 1 Laib geschnittenes Brot
- 1/2 Kilo Bio-Karotten
- 1 Packung Backpulver
- 1/2 Kilo gemahlener Kaffee
- 1 Liter Bio-Milch 1,5% Fett
- 12 Bio-Eier
- 1 Packung Müsli

**(2.) Einkaufsbeleg einer Person die Arbeitslosengeld bezieht:**

- 1 Laib geschnittenes Brot
- ½ Kilo Karotten
- 1 Packung Backpulver
- ½ Kilo gemahlener Kaffee
- 1 Liter Milch 1,5% Fett
- 12 Eier
- 1 Packung Müsli

**(3.) Einkaufsliste von einer Person mit Nettoeinkommen von 3140 €/Monat :**

- 1 Laib geschnittenes Brot
- ½ Kilo Bio-Karotten
- 1 Packung Backpulver
- ½ Kilo gemahlener Kaffee
- 1 Liter Bio-Milch 1,5% Fett
- 12 Bio-Eier
- 1 Packung Müsli

**(4.) Einkaufsliste von einer Person mit Nettoeinkommen von 3140 €/Monat:**

- ½ Kilo Hähnchenbrust
  - 1 Leib geschnittenes Brot
  - ½ Kilo Karotten
  - 1 Packung Backpulver
  - ½ Kilo gemahlener Kaffee
  - 1 Liter Milch 1,5% Fett
  - 12 Eier
  - 1 Packung Müsli
-

Q1. Bitte bewerten Sie die Person mit Hilfe der Eigenschaften auf der gegebenen Skala.

(Falls Sie sich unsicher sind, können Sie gerne zur Information zurück gehen. Klicken Sie hierzu bitte auf den Pfeil unten links.)

Gefühllos	<input type="radio"/>	Mitfühlend						
Unethisch	<input type="radio"/>	Ethisch						
Intuitiv	<input type="radio"/>	Analytisch						
Grausam	<input type="radio"/>	Gutherzig						
Unspontan	<input type="radio"/>	Spontan						
Moralisch*	<input type="radio"/>	Unmoralisch*						
Gesprächig	<input type="radio"/>	Ruhig						
Unpraktisch	<input type="radio"/>	Praktisch						

*[Items marked with an asterisk are keyed negatively]*

Q2. Wie würden Sie den Nähr-und Gesundheitswert der Einkaufsliste bewerten?

Überhaupt nicht Nährstoffreich	<input type="radio"/>	Sehr Nährstoffreich						
Überhaupt nicht gesund	<input type="radio"/>	Sehr gesund						
Überhaupt nicht dick machend*	<input type="radio"/>	Sehr dick machend*						
Überhaupt nicht gut für mich	<input type="radio"/>	Sehr gut für mich						

*[Items marked with an asterisk are keyed negatively]*

---

Q3. Haben Sie Bio-Produkte im Einkaufsbeleg gesehen?

- Ja
- Nein
- Ich weiß nicht

Q4. Hat die Person in der Beschreibung Arbeitslosengeld bezogen?

- Ja
  - Nein
  - Ich weiß nicht
- 

**Abschließend haben wir noch ein paar Fragen über Sie.**

Q5. Welches Geschlecht haben Sie?

- Weiblich
- Männlich
- Anderes, \_\_\_\_\_

Q6. Wie alt sind Sie? \_\_\_\_\_

Q7. Was ist Ihre Nationalität?

- Schwedisch
- Deutsch
- Französisch
- Andere \_\_\_\_\_

Q8. Was ist ihr Berufsstatus?

- Student/in
- Angestellte/r

- Selbstständige/r
- Arbeitslose/r
- Rentner/in
- Anderer \_\_\_\_\_

Q9. Kaufen Sie regelmäßig Bio-Lebensmittel?

- Ja
- Nein

Q10. Folgend sind verschiedene Behauptungen bezüglich persönlicher Eigenschaften und Einstellungen aufgeführt. Lesen Sie bitte jeden Satz und bestimmen Sie persönlich, ob die Behauptung in Bezug auf Sie selbst richtig oder falsch ist.

	Richtig	Falsch
Ganz gleich, mit wem ich mich unterhalte, ich bin immer ein guter Zuhörer.	<input type="radio"/>	<input type="radio"/>
Ich bin immer höflich, auch zu unangenehmen Leuten.	<input type="radio"/>	<input type="radio"/>
Ich habe gelegentlich mal jemanden ausgenutzt.*	<input type="radio"/>	<input type="radio"/>
Manchmal bestehe ich auf Genugtuung und kann nicht vergeben und vergessen.*	<input type="radio"/>	<input type="radio"/>

*[Items marked with an asterisk are keyed negatively]*

---

Q11. Haben Sie abschließend Kommentare zu dieser Umfrage?

---



---

Vielen Dank für die Teilnahme an dieser Umfrage. Falls Sie an der Verlosung teilnehmen möchten, hinterlassen Sie bitte Ihre E-Mail Adresse.

---

#### A.4 Questionnaire in French

Bonjour,

Dans le cadre de notre mémoire, nous cherchons à comprendre comment jugeons-nous les autres personnes lorsque nous disposons d'un nombre très limité d'informations.

Vous allez donc devoir émettre des jugements avec très peu d'informations, sachant qu'il n'y a aucune réponse « correcte ».

À la fin du questionnaire vous aurez l'opportunité de remporter un chèque de 20€ dans une enseigne en ligne de votre choix.

Toutes vos informations resteront anonymes, et si vous choisissez d'écrire votre adresse e-mail à la fin du questionnaire, celle-ci restera confidentielle.

Il est très important de lire attentivement les renseignements donnés, il se peut que vous deviez vous rappeler de certains détails à la fin du questionnaire.

- J'ai pris connaissance des consignes et je vais lire les renseignements attentivement.

---

Lisez le ticket de caisse ci-dessous. Essayez de vous projeter dans la situation le plus possible jusqu'à pouvoir caractériser la personne ayant acheté ces courses.

*[participants got assigned randomly to one of the following four conditions]*

1. Ticket de caisse d'un individu sans emploi au chômage:

- 500g de café moulu
- 1 paquet de pain de mie
- 1 litre de lait demi-écrémé bio
- 500g de carottes bio
- 12 oeufs bio
- 1 sachet de levure chimique
- 1 boîte de céréales

2. Ticket de caisse d'un individu sans emploi au chômage:

- 1 paquet de pain de mie
- 500g de carottes
- 1 sachet de levure chimique
- 500g de café moulu
- 1 litre de lait demi-écrémé
- 12 oeufs
- 1 boîte de céréales

3. Ticket de caisse d'un individu gagnant 3045€ net par mois:

- 1 paquet de pain de mie
- 500g de carottes bio
- 1 sachet de levure chimique
- 500g de café moulu
- 1 litre de lait demi-écrémé bio
- 12 oeufs bio
- 1 boîte de céréales

4. Ticket de caisse d'un individu gagnant 3045€ net par mois:

- 1 paquet de pain de mie
- 500g de carottes
- 1 sachet de levure chimique
- 500g de café moulu
- 1 litre de lait demi-écrémé
- 12 oeufs
- 1 boîte de céréales

Q1. En considérant les informations données ci-dessus, comment évalueriez-vous la personne sur les critères suivants :

(La flèche de gauche vous renvoie à la description de la personne et au ticket de caisse correspondant).

Antipathique	<input type="radio"/>	Empathique						
Non éthique	<input type="radio"/>	Éthique						
Intuitive	<input type="radio"/>	Analytique						
Cruelle	<input type="radio"/>	Bienveillante						
Méthodique	<input type="radio"/>	Spontanée						
Morale*	<input type="radio"/>	Immorale*						
Bavarde	<input type="radio"/>	Silencieuse						
Idealiste	<input type="radio"/>	Pratique						

*[Items marked with an asterisk are keyed negatively]*

Q2. Comment évalueriez-vous la qualité des aliments présents sur le ticket de caisse en termes de santé?

Pas du tout nutritive	<input type="radio"/>	Très nutritive						
Pas du tout saine	<input type="radio"/>	Très saine						
Pas du tout calorique*	<input type="radio"/>	Très calorique*						
Ne vous convient pas	<input type="radio"/>	Vous convient très bien						

*[Items marked with an asterisk are keyed negatively]*

---

Q3. Avez-vous vu des produits bio sur le ticket de caisse?

- Oui
- Non
- Je ne sais pas

Q4. La personne dans la description était-elle sans emploi au chômage?

---

- Oui
  - Non
  - Je ne sais pas
- 

**Désormais nous aimerions en savoir davantage sur vous :**

Q5. Sexe:

- Féminin
- Masculin
- Autres \_\_\_\_\_

Q6. Âge: \_\_\_\_\_

Q7. Nationalité:

- Suédoise
- Allemande
- Française
- Autre \_\_\_\_\_

Q8. Vous êtes actuellement :

- Étudiant(e)

- Employé(e)
- Travailleur indépendant(e)
- Sans-emploi
- Retraité(e)
- Autre

Q8. Achetez-vous régulièrement des produits certifiés bio ?

- Oui
- Non

Q9. Vous trouverez ci-dessous quatre déclarations. Lisez attentivement chaque déclaration et indiquez si elle vous correspond. Si c'est le cas, cochez la case « vrai » sinon, cochez la case « faux ».

	Vrai	Faux
Peu importe à qui je parle, j'ai toujours une bonne écoute.	<input type="radio"/>	<input type="radio"/>
Je suis toujours poli(e), même avec les personnes désagréables.	<input type="radio"/>	<input type="radio"/>
Il m'est arrivé(e) de profiter de quelqu'un.*	<input type="radio"/>	<input type="radio"/>
J'essaye parfois de me venger plutôt que de pardonner et d'oublier.*	<input type="radio"/>	<input type="radio"/>

*[Items marked with an asterisk are keyed negatively]*

Q10. Merci de nous faire part de vos commentaires sur ce questionnaire si vous le souhaitez:

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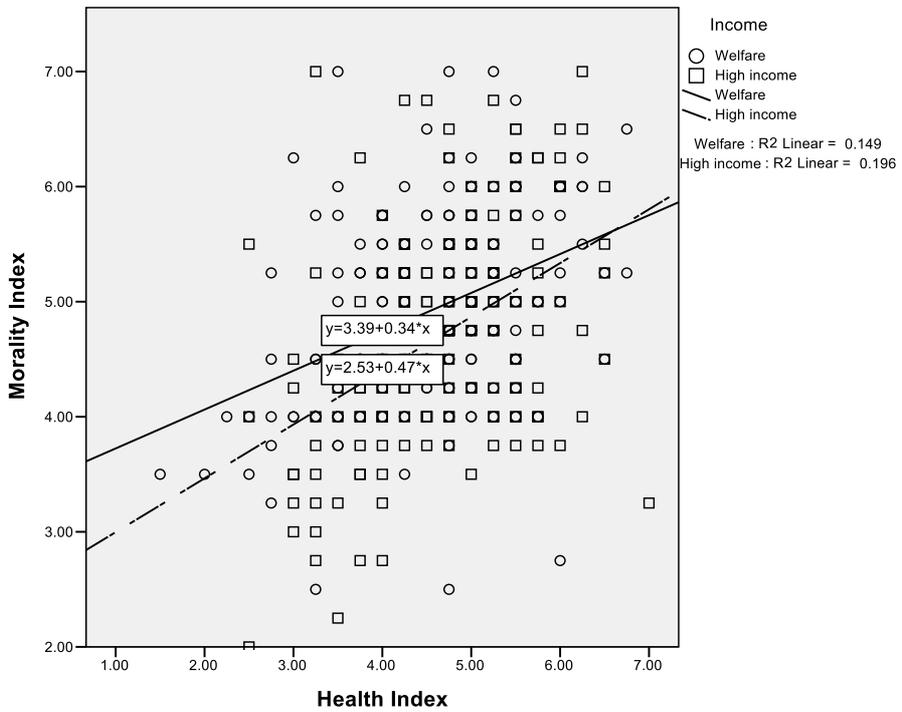
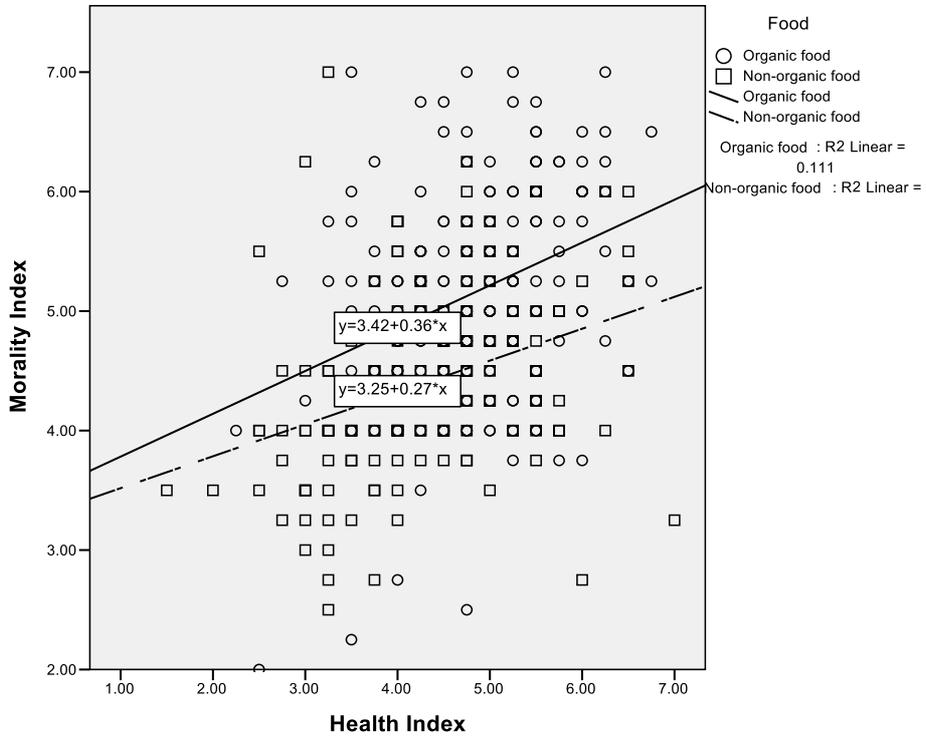
Merci d'avoir pris le temps de répondre à ce questionnaire.

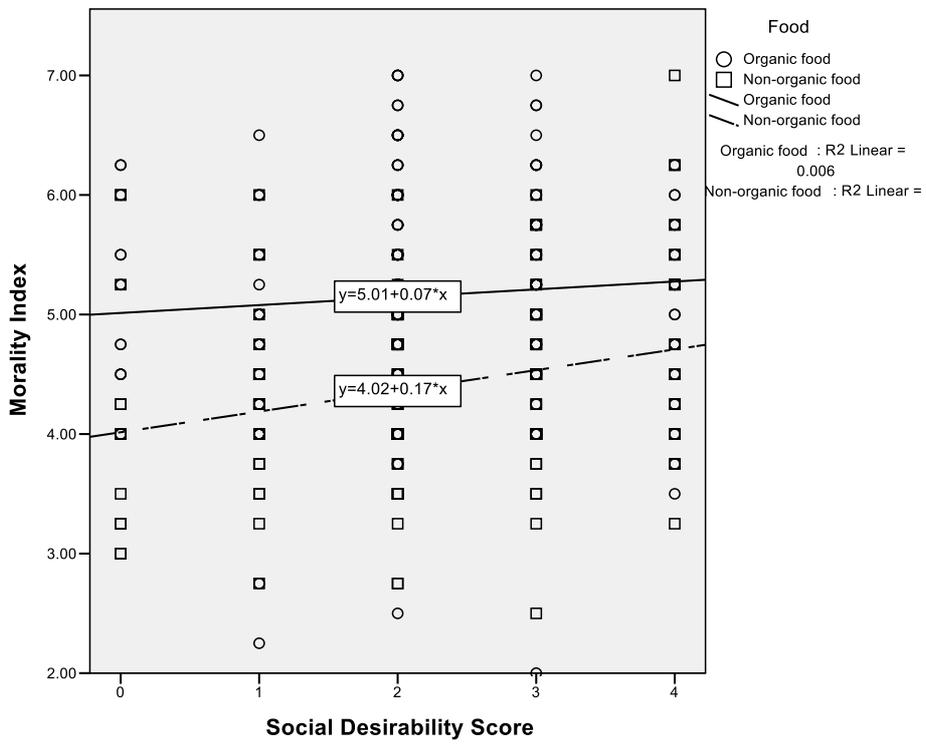
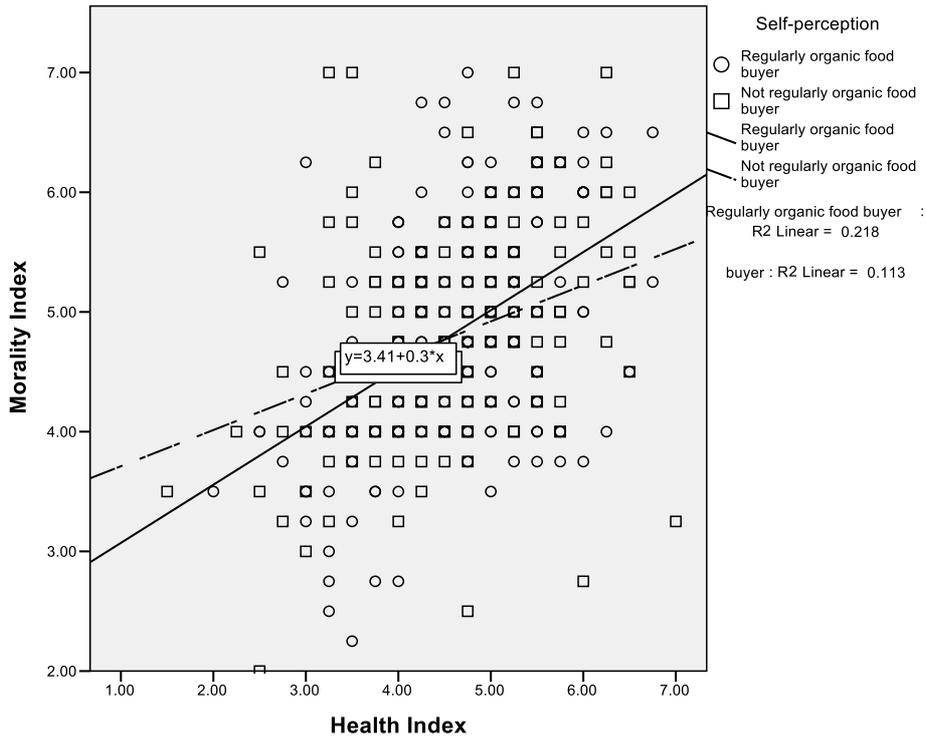
Pour participer au tirage au sort, merci de laisser votre adresse e-mail ci-dessous :

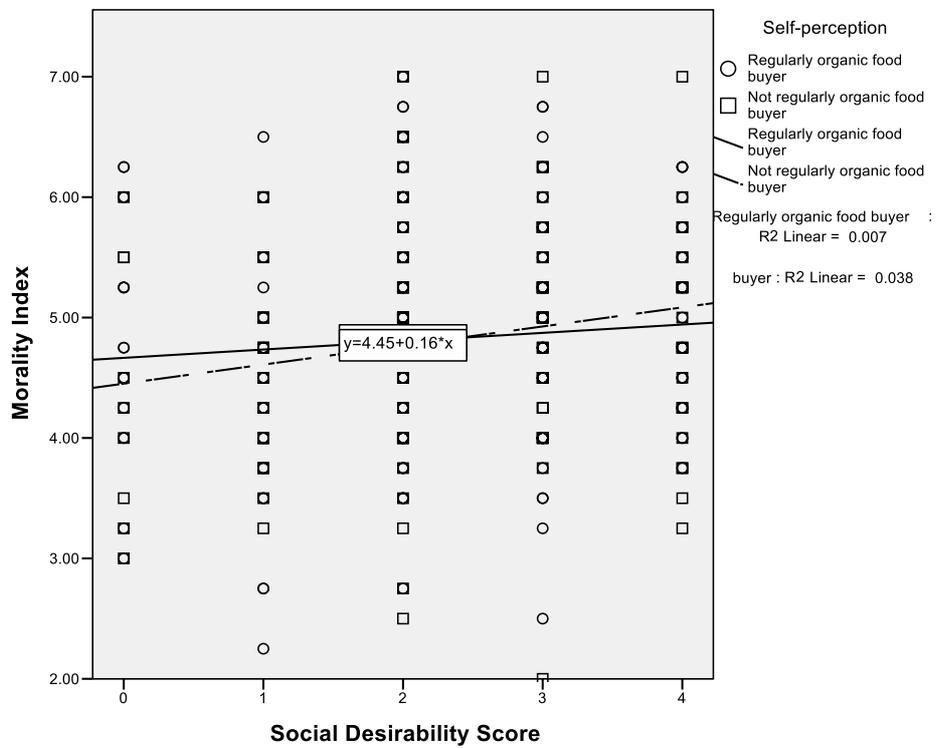
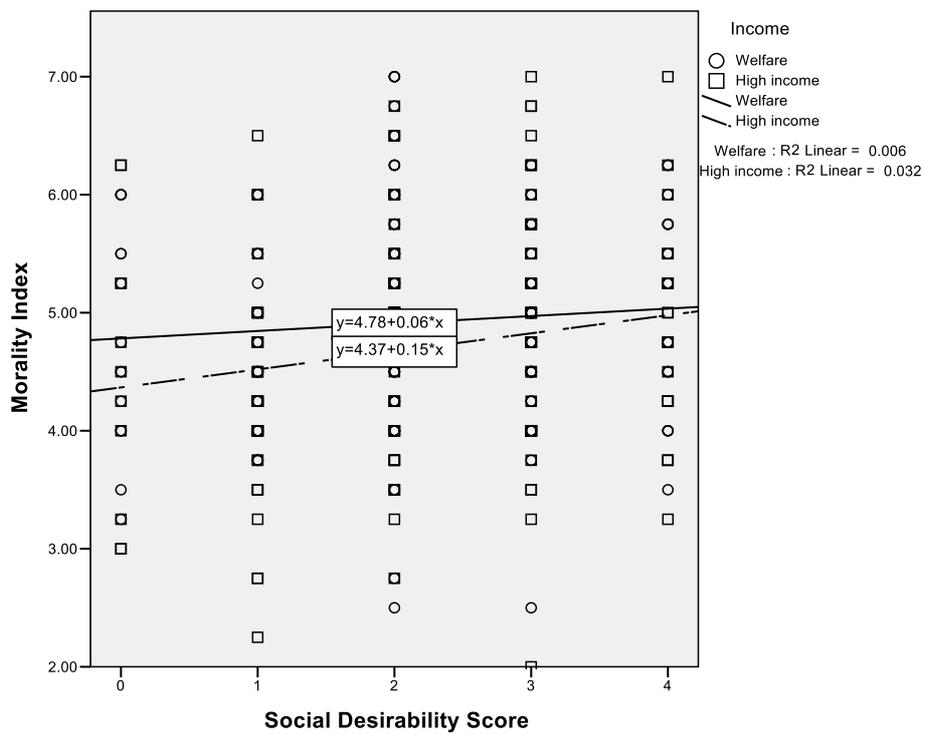
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# Appendix B

Assumption: Linearity







### Assumption Homogeneity of Regression Slopes

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	88.358 <sup>a</sup>	11	8.033	13.351	0.000
Intercept	112.207	1	112.207	186.503	0.000
Food	0.183	1	0.183	0.304	0.582
Income	2.445	1	2.445	4.064	0.045
Self-perception	0.153	1	0.153	0.254	0.615
Health Index	26.124	1	26.124	43.422	0.000
Social Desirability Score	4.073	1	4.073	6.770	0.010
Food * Health Index	0.751	1	0.751	1.248	0.265
Income * Health Index	1.078	1	1.078	1.792	0.182
Self-perception * Health Index	0.355	1	0.355	0.591	0.443
Food * Social Desirability Score	0.475	1	0.475	0.789	0.375
Income * Social Desirability Score	0.190	1	0.190	0.316	0.574
Self-perception * Social Desirability Score	0.368	1	0.368	0.612	0.435
Error	203.353	338	0.602		
Total	8396.563	350			
Corrected Total	291.711	349			

a. R Squared = ,303 (Adjusted R Squared = ,280)

### Assumption: Absence of outliers

Results with 347 cases (cases +/-3 removed):

Tests of Between-Subjects Effects

Dependent Variable:

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	90.306 <sup>a</sup>	11	8.210	15.001	0.000	0.330
Intercept	109.293	1	109.293	199.702	0.000	0.373
Food	32.600	1	32.600	59.568	0.000	0.151
Income	5.637	1	5.637	10.299	0.001	0.030
Self-perception	0.092	1	0.092	0.167	0.683	0.000
Food * Income	0.440	1	0.440	0.805	0.370	0.002
Food * Self-perception	0.263	1	0.263	0.481	0.488	0.001
Income * Self-perception	0.549	1	0.549	1.002	0.317	0.003

Food * Income * Self-perception	0.477	1	0.477	0.872	0.351	0.003
Nationality	0.098	2	0.049	0.090	0.914	0.001
Social Desirability Score	2.635	1	2.635	4.815	0.029	0.014
Health Index	22.035	1	22.035	40.262	0.000	0.107
Error	183.339	335	0.547			
Total	8337.313	347				
Corrected Total	273.645	346				

a. R Squared = ,330 (Adjusted R Squared = ,308)

Results with 350 cases (no outliers removed):

Tests of Between-Subjects Effects

Dependent Variable:

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	86.664 <sup>a</sup>	11	7.879	12.987	0.000	0.297
Intercept	108.038	1	108.038	178.090	0.000	0.345
Food	27.958	1	27.958	46.086	0.000	0.120
Income	5.008	1	5.008	8.256	0.004	0.024
Self-perception	0.025	1	0.025	0.042	0.838	0.000
Food * Income	0.271	1	0.271	0.447	0.504	0.001
Food * Self-perception	0.012	1	0.012	0.020	0.888	0.000
Income * Self-perception	0.819	1	0.819	1.350	0.246	0.004
Food * Income * Self-perception	0.688	1	0.688	1.134	0.288	0.003
Nationality	0.180	2	0.090	0.148	0.862	0.001
Health Index	23.300	1	23.300	38.407	0.000	0.102
Social Desirability Score	3.178	1	3.178	5.238	0.023	0.015
Error	205.047	338	0.607			
Total	8396.563	350				
Corrected Total	291.711	349				

a. R Squared = ,297 (Adjusted R Squared = ,274)

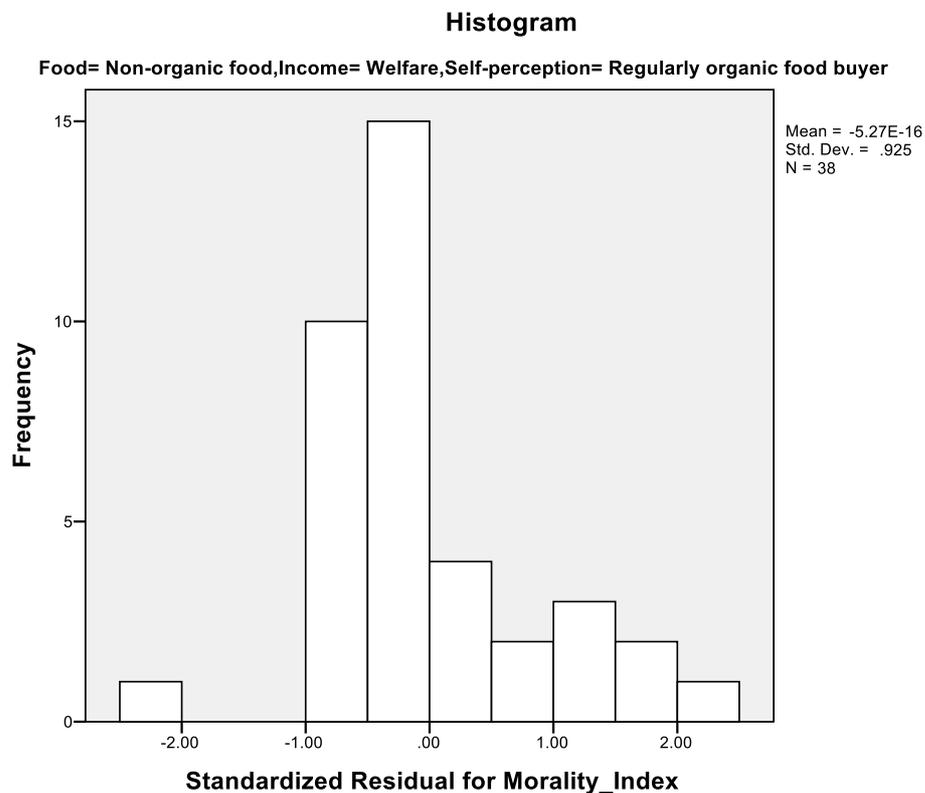
## Assumption Approximately Normal Distribution

### Tests of Normality

				Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
Income				Statistic	df	Sig.	Statistic	df	Sig.
Welfare	Organic-consumer	Standardized Residual for Morality Index	Organic food	0.076	51	.200 <sup>*</sup>	0.990	51	0.942
			Non-organic food	0.193	38	0.001	0.914	38	0.006
	Non-organic consumer	Standardized Residual for Morality Index	Organic food	0.085	42	.200 <sup>*</sup>	0.965	42	0.228
			Non-organic food	0.126	38	0.134	0.939	38	0.040
High income	Organic-consumer	Standardized Residual for Morality Index	Organic food	0.090	57	.200 <sup>*</sup>	0.982	57	0.551
			Non-organic food	0.091	42	.200 <sup>*</sup>	0.963	42	0.195
	Non-organic consumer	Standardized Residual for Morality Index	Organic food	0.086	39	.200 <sup>*</sup>	0.961	39	0.194
			Non-organic food	0.115	43	0.182	0.930	43	0.012

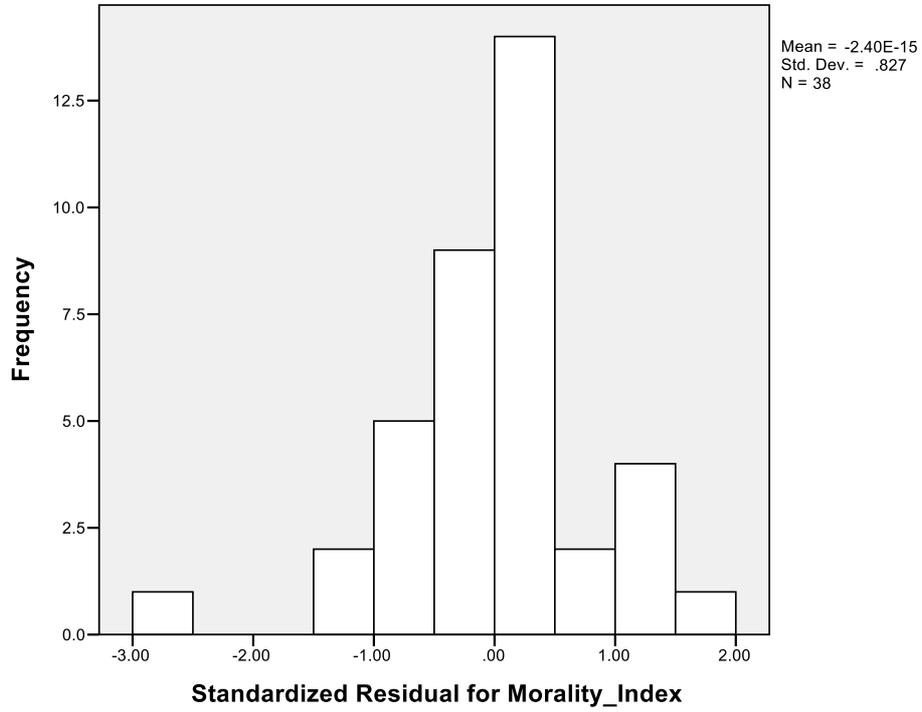
\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction



### Histogram

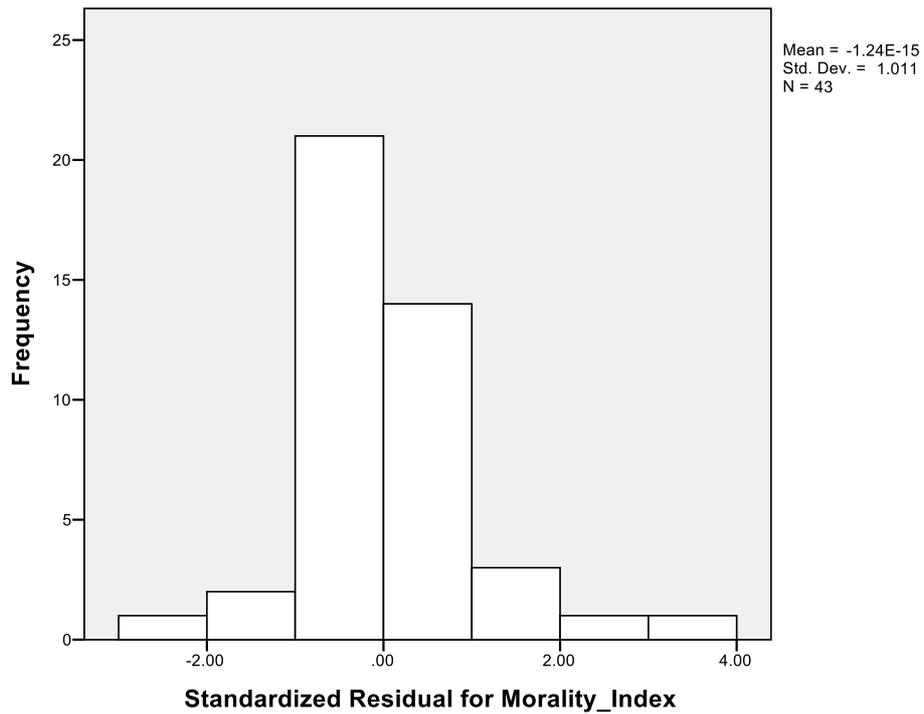
Food= Non-organic food,Income= Welfare,Self-perception= Not regularly organic food buyer



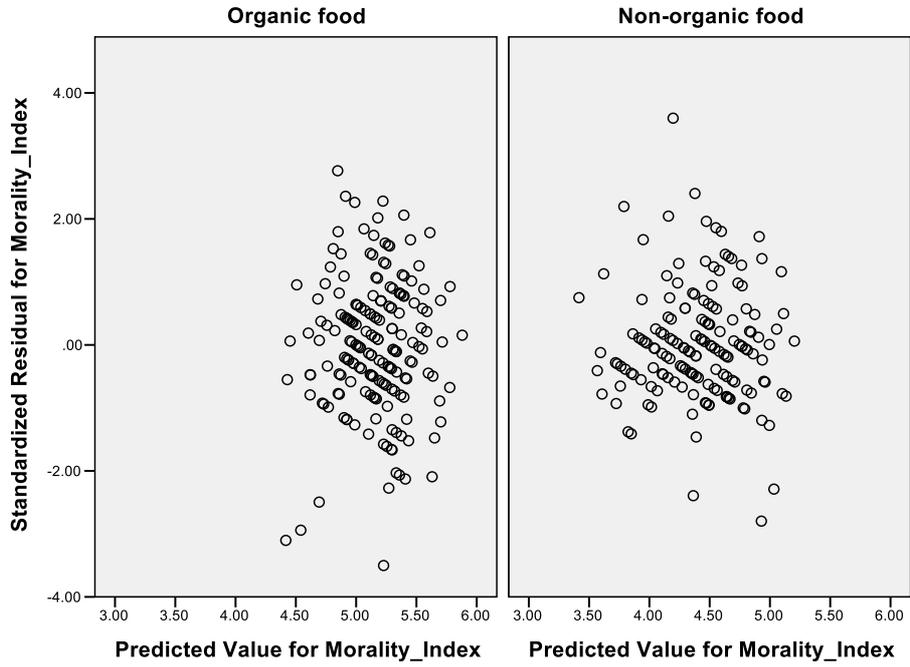
### Assumption: Homoscedasticity

### Histogram

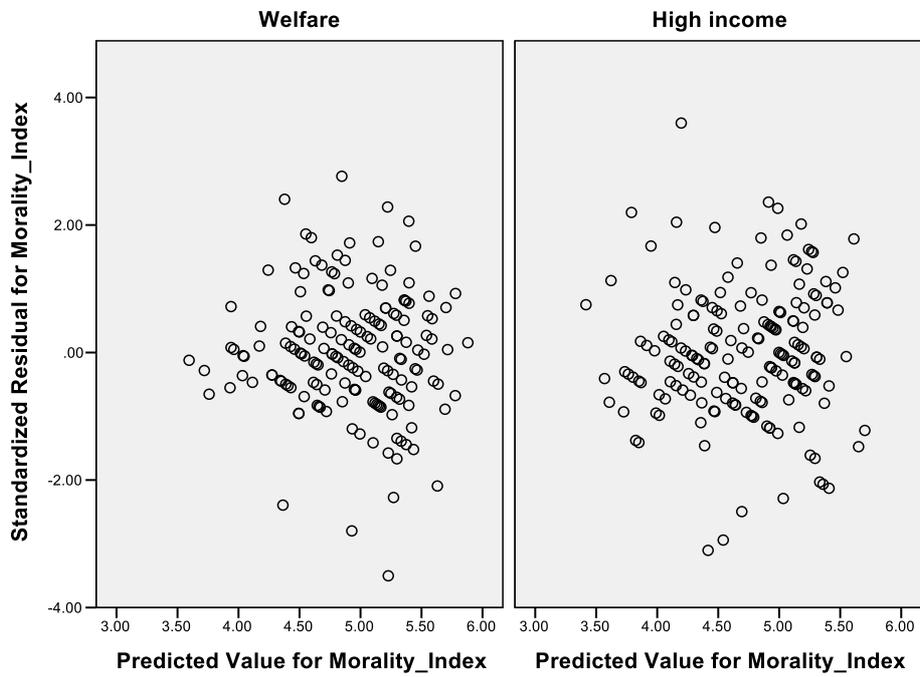
Food= Non-organic food,Income= High income,Self-perception= Not regularly organic food buyer

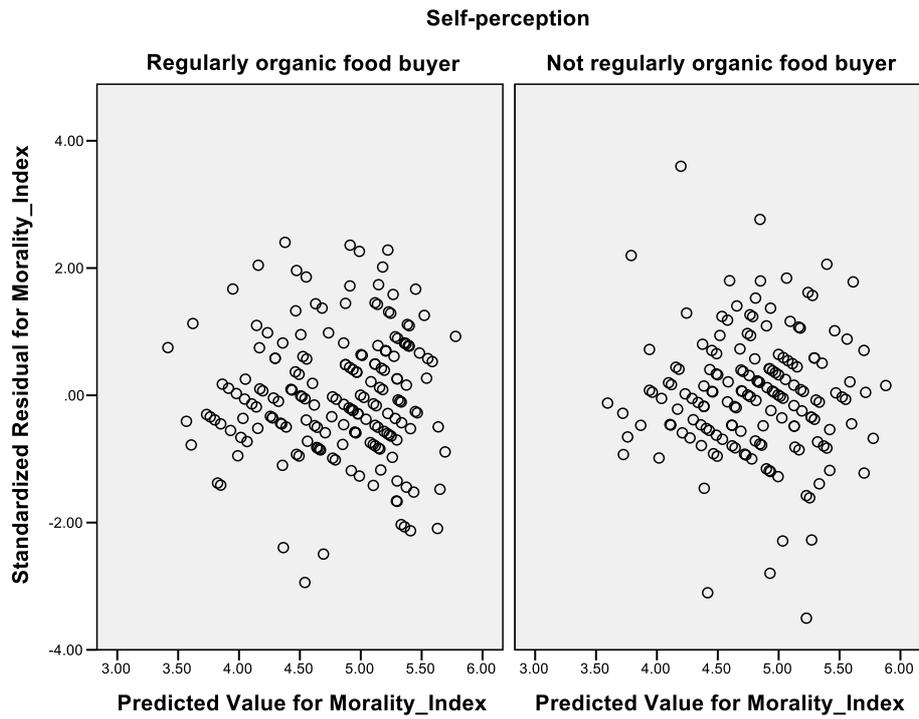


**Food**



**Income**





**Assumption: Homogeneity of variances**

Levene's Test of Equality of Error Variances<sup>a</sup>

Dependent Variable:

F	df1	df2	Sig.
0.884	23	326	0.621

a. Design: Intercept + Food + Income + Self-perception + Food \* Income + Food \* Self-perception + Income \* Self-perception + Food \* Income \* Self-perception + Nationality + Health Index + Social Desirability Score