

Increasing Purchase Intention by Prompting Self-commitment

Abstract There is a general consensus today that it is good to act in accordance with socially normative behaviour such as taking care of the environment. But even though most consumers have a positive attitude towards such behaviour, they often fail to convert that attitude into action. With the expansion of an ethical consumption, there is an increased need to understand the variety of consumer motives for engaging in socially normative behaviour.

The purpose of this thesis is to explore whether prompting consumers to commit to buying organic products increases their purchase intention of said products. An increase in purchase intention should, in theory, be caused by an avoidance of cognitive dissonance. Thus, this thesis also investigates if the mechanism behind an increased purchase intention is the avoidance of cognitive dissonance.

An online study with 224 respondents was performed to examine whether prompting consumers to commit to buying organic products increases their purchase intention. Four groups (control, commitment only, self-affirmation & non-affirmation) were used. The results show that prompting consumers to commit to buying organic products tends to increase their purchase intention, and that the underlying mechanism is likely to be the avoidance of experiencing cognitive dissonance. A field experiment with 120 respondents was conducted to examine whether the results of the online study could be replicated in real life. Two groups (control & commitment only) were used, and the results show that the purchase intention tends to increase also in a real life setting.

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A special thanks to

Patric Andersson

For your insightful advice, concrete guidance and for always being
available

PrisXtra

For letting us use your store in our field experiment

All respondents

For taking time out of your lives and making this study possible

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1. Introduction

1.1 Background

Research shows that the social and ethical behaviour of companies are more important than ever before, and marketing offerings that build on these values are constantly growing (White & MacDonnell 2012). Even in times of an economic downturn, many consumers still stress the importance of an ethical consumption (Carrigan & de Pelsmacker 2009). 7 out of 10 Swedish consumers say that they buy organic products on a regular basis, and 2 out of 10 say that they want to increase the amount of organic products they buy in the coming year (KRAV, 2012). Moreover, a report from the Swedish part of the International Federation of Organic Agricultural Movements shows a market increase of 11 % for the Swedish organic food market during 2011. There is a general consensus today that it is good to act in accordance with socially normative behaviour such as taking care of the environment (Jørgensen, 2001). But even though most consumers have a positive attitude towards ethical consumption they often fail to convert that attitude into behaviour (Jägel et al, 2012)¹. With the expansion of ethical consumption, there is an increased need to understand the variety of consumer motives for engaging in socially normative behaviour (Jägel et al, 2012).

There are many ways in which companies can tap into these socially normative behaviour². For instance, it is something marketers often try to exploit in marketing campaigns in order to increase, for example, purchase intention (Drumwright & Murphy 2001). The same phenomenon can also be observed among government agencies and consumer groups who rely on social marketing techniques (Andreasen 1994). Spangenberg et al (2003) have showed how one such technique, self-prophecy, can be particularly effective in changing consumer behaviour in areas of ethical consumption. By prompting people to make a prediction about their intention to undertake a future behaviour it will later on make them likely to act in accordance with that prediction. Spangenberg et al (2003) also shows that this change in behaviour is a result of people striving to avoid the cognitive dissonance that

¹ This attitude – behaviour discrepancy can also be observed in other types of behaviour than ethical consumption.

² For example the Swedish match brand Solstickan, which donates part of their profit to charity.

they would experience if they did not follow through on their prediction. Cognitive dissonance, as described by Festinger (1957) can briefly be explained as a conflict between cognitions. An often used example is that of the person who smokes even though he knows it to be dangerous. To deal with the conflicting cognitions he then finds ways to reduce the dissonance by for example rationalizing his behaviour. The point is that the conflict or incongruity between cognitions is so strong that it will motivate people to behave in ways that reduce the experienced cognitive dissonance:

“The existence of dissonance, being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance” (Festinger, 1957)

Cognitive dissonance is thus interesting for marketers in the same way that any theory explaining or predicting consumer behaviour is. If consumer behaviour can be predicted, changed or even created as a result of people’s motivation to reduce their experienced cognitive dissonance, there must be ways to exploit it in marketing.

1.2 Problematisation

It has been observed that consumers do not always act in accordance with their attitudes and that this type of attitude-behaviour discrepancy is especially common in the area of ethical consumption (Pedersen & Neergaard, 2006)³. Auger & Devinney (2007) calls it the “attitude – behavioural gap” because consumers have a positive attitude towards ethical consumption, yet fail to convert it into an actual purchase. The reasons for the discrepancy vary and are not the topic of this thesis. Instead we focus on ways to eliminate the gap and convert attitude into behaviour.

Techniques such as self-prophecy and induced hypocrisy are proven to be effective in changing people’s behaviour, but there is still a lack of research on whether committing to do something rather than predicting to do it will have the same effect on people’s behaviour. Self-prophecy experiments has, as mentioned above, been shown to function exceptionally well in situations where the predicted behaviour is socially normative. As there is a general consensus that taking care of the environment is good (Jørgensen, 2001), a behaviour that benefits the environment can be seen as socially normative. Therefore,

³ Once again, this type of attitude – behaviour discrepancy is present in other types of situations too.

committing to undertake an ethical consumption behaviour should, in theory, create cognitive dissonance if one doesn't act accordingly. Since people's motivation to avoid cognitive dissonance is so strong, the commitment should make them follow through and alter their behaviour.

Most studies on cognitive dissonance and marketing have focused on investigating its role in post-purchase situations (see section 2.1). A few studies such as Koller & Salzberger (2007) have focused on its role in pre-purchase situations and no studies, to our knowledge, have investigated the relationship between committing to undertake a socially normative behaviour, cognitive dissonance and how it influences the consumer's purchase intention.

One important goal of marketing is to affect consumer behaviour in a way that increases the chances of product purchase. There is a constant need for marketers to find new ways to interact with, and influence their consumers. Any new method in this area can be of high value for marketers in their effort to, not only reach out to the consumers, but also influence their behaviour in a desired direction.

1.3 Purpose

The overall purpose of this thesis is to explore and present a new way of influencing consumers' purchase intention in a pre-purchase situation. More specifically, how one can increase consumers' purchase intention of organic products by prompting them to commit to buying organic products before entering the store. In other words, the main purpose is to test whether an increased purchase intention can be observed when the consumer has to agree or disagree to a statement that positively frames purchasing organic products. The sub purpose of the thesis is to investigate whether the increased purchase intention, if any, can be attributed to an avoidance of experiencing cognitive dissonance.

Our main research question is:

Can the purchase intention of organic products be increased by prompting consumers to commit to buying said products pre-purchase?

In order to answer the main research question we will also investigate the following question:

Is the increased purchase intention, if any, caused by an avoidance of experiencing cognitive dissonance?

1.4 Intended knowledge contribution

There is currently a lack of research and understanding of the impact and usability of cognitive dissonance in pre-purchase situations⁴. Most studies have been aimed at investigating how one can and should reduce the consumers' cognitive dissonance in post-purchase situations in order to make them more satisfied with their purchase. However, there are indications that consumers experience cognitive dissonance in pre-purchase situations too, and that it can be used to change the consumers' decision before they even make it (Spangenberg et al, 2003). Spangenberg et al (2003) had respondents self-predict their future health club attendance and measured the cognitive dissonance that arose as a result of their self-prediction. The experiment showed that the respondents who self-predicted experienced a high level of cognitive dissonance and, as a result, increased their health club attendance. Even though there is research closely related to the topic of this thesis (e.g. self-prophecy, induced hypocrisy), there is, to our knowledge, currently no research regarding the effects on purchase intention of a consumer committing to buying a specific good before the actual purchase situation. If this "self-commitment" is shown to increase purchase intention, the scope and applications, as well as the understanding, of the theory of self-prophecy increase.

Moreover, since the purpose of this thesis is to test purchase intention, it is important for the generalizability of the study that the behaviour is tested under real life circumstances. If the experiment had only been tested in a laboratory setting, the actual applicability of the results could have been questioned. A higher generalizability also implies that different stakeholders can use the result of the study in different ways. For academics it gives further input regarding how one can affect the consumer buying decision process as well as more insight into related theories such as self-prophecy and induced hypocrisy. For

⁴ Most research so far has focused on the impact of cognitive dissonance post purchase. See section 2.1 for clarifications.

practitioners it means that consumer behaviour can be predicted, changed or even created. Thus, the results of this thesis are of great value for anyone planning marketing activities since they, to a greater extent, can understand what drives the consumer in the decision process.

1.5 Delimitations

This thesis has a few delimitations due to a lack of resources, time and money. First of all the thesis only investigates the effect on organic products. No other product categories are investigated and therefore the results of the study only give direct indications regarding the focal product category. This also means that the results cannot be truly generalizable to other product categories than ethical consumption categories, for example fast moving consumer goods.

Secondly, the field experiment was done in only one store in Stockholm, Sweden. This means that the results might only be generalizable to this region and to some extent Sweden. Sweden is also a country in the forefront of ethical consumption which means that results from a similar study in another country might produce different results.

1.6 Thesis outline

As there are two main studies in this thesis, performed in a chronological order, the outline will follow that order. Thus, this thesis begins by discussing relevant theory and the overall methodology. Then it presents the pre-test, the online study and the field experiment. Each study is presented in connection with its respective methodology, results and discussion. The thesis is concluded with a general discussion, implications and directions for further research.

1.7 Definitions and clarifications

This section provides a few clarifications of the terminology used in this thesis. Because the terminology comes from both marketing and psychology it is helpful to the reader if it is clearly defined as it has been used in this thesis.

Ethical consumption – the practice of purchasing products and services which are produced in a way that have a minimal social and/or environmental impact (Holt, 1995).

Socially normative behaviour – the practice of conforming in order to gain approval from others, not necessarily because one actually believes in the things one is doing or saying but because social norms implies that one should do so. (Aronson et al, 2005)

2 Theory

With the purpose to investigate and present a new way of influencing consumers' purchase intention in a pre-purchase situation, several theoretical fields had to be explored. This chapter starts off by presenting the psychological theory of cognitive dissonance and its connection to marketing. Next, it discusses several socio-psychological concepts and theories to cover alternative views of the topic at hand. The chapter ends with the formulation of the main- and sub-hypotheses.

2.1 Cognitive dissonance and its impact on marketing research

Ever since Festinger (1957) introduced the concept of cognitive dissonance, it has not only been a popular subject within psychology but also within marketing. Cognitive dissonance is described by Festinger (1957) as a conflict or incongruity between cognitions. It arises when there are conflicting beliefs, opinions or knowledge about the environment, oneself or one's behaviour. The reason for its impact on psychology (and marketing) is made evident by Festinger's (1957) first hypothesis: *"The existence of dissonance, being psychologically uncomfortable, will motivate the person to try to reduce the dissonance and achieve consonance"*. Cognitive dissonance is interesting for marketers as consumers would be motivated to reduce it and will act accordingly. In other words, consumer behaviour can be predicted, changed or even created if one can set up a scenario in which consumers would experience cognitive dissonance unless they acted in the desired way. The socio-psychological theories of self-prophecy and induced hypocrisy (see section 2.4 and 2.5) exploit these scenarios.

Most marketing research on the topic of cognitive dissonance so far has dealt with the ways it affects consumers' attitude change rather than behaviour (Cummings & Venkatesan, 1976). It has also, almost exclusively, been focusing on cognitive dissonance post purchase (Koller & Salzberger, 2007; Hasan & Nasreen, 2012). More specifically, it has been focusing on ways to reduce the experienced uncertainty of having made the right choice after a purchase. Koller & Salzberger (2007) prove that cognitive dissonance is present also pre purchase since the risk of making the wrong choice is in fact an

anticipation of future cognitive dissonance. They go on to recommend that marketers should try to reduce it. Sadly, Koller & Salzberger (2007) as well as a few other mentions seem to be all research efforts put towards cognitive dissonance in the pre-purchase decision process. Even though there are a number of articles discussing its role on consumer attitude post purchase, compared to its impact on social psychology, we consider its importance in marketing research to be greatly under-represented.

2.2 Cognitive dissonance in social psychology

In social psychology, as opposed to marketing, research has focused on the behavioural effects of people's motivation to reduce cognitive dissonance (Aronson, 1992). Festinger (1957) explains that cognitive dissonance arises when there is a conflict or discrepancy between a person's self-concept and/or behaviour, and Aronson (1992) argues that, in general, people strive to maintain a self-concept that is: 1. predictable, stable and consistent; 2. competent and 3. morally good. Because most people have a positive self-concept, they are likely to experience cognitive dissonance if they would act in a way that they consider incompetent, inconsistent or immoral (Spangenberg et al, 2003).

Behaviour can thus, to some extent, be predicted when people are confronted with a choice to act in accordance with their self-concept or act contrary to it. This is of interest to us as marketers if we not only can predict, but also stimulate a certain behaviour. It should be pointed out, however, that the reduction of cognitive dissonance does not automatically result in a behaviour change, it could also, for example, manifest as: An attitude change, the adding of consonant cognitions, a derogation of the non-chosen alternative, a degradation of self-esteem, altering the importance of the cognitive elements and/or suppressing thoughts (Schwartz, 2009; Perkins et al, 2008).

Next follows a review of a couple of socio-psychological theories that serves to alter people's behaviour based on cognitive dissonance. We will briefly describe how each one works in practice and how it draws upon the stimulation and reduction of cognitive dissonance. The reason why these specific theories were chosen is that we regard them as useful from a marketing point of view in general, and for the topic of this thesis in particular since they can be used to direct consumer behaviour. There are a vast number of

theories within social psychology, and many of them are based on cognitive dissonance, but there is little point in describing them further if there is no use for them in this thesis.

2.3 Self-concept & consistency

Aronson's (1992) definition of people's self-concept (see section 2.2) can actually be looked upon from two points of views: self-congruity and ideal congruity (Sirgy, 1985). Self-congruity then helps explain Aronson's first point of a self-concept that is predictable, stable and consistent. It works by activating the self-consistency motive, or people's need to act in ways that are consistent with their self-perception (Sirgy, 1985). Ideal congruity, instead, explains Aronson's second and third portions of a self-concept that is competent and morally good. Ideal congruity activates the self-esteem motive, meaning that people act in ways that maintain or increase their self-regard (Sirgy, 1985). Both ideal- and self-congruity help us to understand why there is cognitive dissonance when an individual fail to behave in a way that is consistent, competent or morally good. Doing so would break one's self-consistency and/or self-esteem, and both are undesirable. That one's self-concept is linked to consumer behaviour has been researched in a number of articles (see Sirgy (1982) for a review). But the relation is perhaps defined most clearly by Grubb and Grathwohl (1967) who specify that:

1. Self-concept is of value to the individual, and behaviour will be directed toward the protection and enhancement of the self-concept.
2. The purchase, display and use of goods communicate symbolic meaning to the individual and to others.
3. The consuming behaviour of an individual will be directed toward enhancing the self-concept through the consumption of goods as symbols.

A consumer will, in other words, be motivated to purchase goods that enhance or sustain his/her self-concept. But instead of relying on consumers correctly processing the symbolic meaning of goods, it is actually possible to direct consumer behaviour by giving them overt "reminders" about their self-concept (e.g. self-prophecy or the induced hypocrisy paradigm). Because of the overt nature of the reminders, these methods differs from for

example priming which relies more on subconscious cues (Wyer et al 2009; Wheeler et al, 2007), which is why we will not discuss priming further.

2.4 Self-prophecy

The theory of self-prophecy implies that people's behaviour can be directed by asking them to predict their behaviour in a certain situation (Sherman, 1980; Spangenberg & Greenwald, 1999). Self-prophecy has been proven to work exceptionally well in instances where people are asked to predict their behaviour in a socially normative matter such as attending a health club or recycling waste (Spangenberg et al, 2003). When prompted to predict their behaviour in a socially normative matter, most people are inclined to predict that they will undertake it. If they later on would not, they would experience cognitive dissonance which is why they follow through on their prediction. The simplicity of a self-prophecy experiment can be exemplified by Spangenberg & Sprott (2006) where the manipulated participants were provided with the following information:

“A health and fitness assessment is locally available to you. The assessment will evaluate your overall physical fitness and health and is offered free of charge to you as a student at the university you attend.

Q. Do you predict that:

a. You will not participate in the health and fitness assessment.

b. You will participate in the health and fitness assessment.”

All students were informed of the opportunity to participate in a health and fitness assessment via a memo, and the results showed that there was a higher influence on health assessment commitment in the condition which answered the self-prediction than in the control condition. In other words, after predicting their behaviour in a socially normative matter, the students were more inclined to undertake that behaviour.

The role of cognitive dissonance as a possible underlying motivational factor in self-prophecy is made evident when people are asked to predict their behaviour in a socially normative matter that they usually do not undertake. As people generally see themselves as

morally good, a psychological discomfort arises when the prediction request is also morally good (Perkins et al, 2008; Spangenberg & Sprott, 2006). People are inclined to make positive predictions about a socially normative behaviour as it is in accordance with their ideal self-concept. Furthermore, not choosing to act in accordance with one's prediction would be immoral and inconsistent as it causes a clash between actual and ideal self-concept which is why the prediction request serves to alter people's behaviour. A prediction request also makes people aware of their previous behaviour. In other words, the prediction requests makes people think of what they should do and what they have or have not done in the past (Spangenberg et al. 2003). A discrepancy between these cognitions and a person's self-concept as well as agreeing to the prediction request causes cognitive dissonance which can only be reduced by undertaking the predicted action (Spangenberg et al, 2003; Perkins et al, 2008). As opposed to research on people's self-concept, there has been no real attempts to study self-prophecy in relation to purchase intention. This comes as no surprise as self-prophecy experiments need actual behaviour to work, and you would thus need an actual store, rather than a lab experiment, to test it. A lab environment does not truly reflect the experience in a real store, and people will thus not behave in the same way that they would in a real store.

2.5 Induced hypocrisy

Similar to the theory of self-prophecy is the induced hypocrisy paradigm which also has been proven to alter people's behaviour in socially normative matters (Schwartz, 2009; Stone et al, 1994). Unlike self-prophecy, induced hypocrisy does not require people to make an active choice to do something. Instead, inducing hypocrisy requires you to make people aware of their past failure in a socially normative matter after giving them a possibility to commit to it. Stone et al (1994) used a 2x2 experiment that first made students commit to an anti AIDS campaign by making a short videotaped speech on condom usage, and then mindful of their past failure to use condoms by answering a short survey. Students in the commitment/mindful-group showed a more increased condom-purchasing behaviour than all other groups.

Just as self-prophecy makes people aware of any past failure to act in accordance with their ideal self-concept (a discrepancy between cognitions) and adjust their behaviour

accordingly, induced hypocrisy makes people able to reduce the cognitive dissonance by behaving in accordance with their commitment. Advocating a socially normative behaviour that you have previously failed to undertake does not only create a discrepancy between cognitions, but also between saying and doing, or values and action. When given the chance to reduce the cognitive dissonance and eliminate the discrepancy, people will change their behaviour accordingly (Spangenberg et al, 2003; Schwartz, 2009). The research field of induced hypocrisy is rather small, and just as within self-prophecy research there has been no real attempts to investigate its effect on purchase intention. The closest we get is Stone (1994) whose participants were able to pick up an information pamphlet and purchase condoms at the same time. The purchase intention was however not tested in a natural real life setting as the circumstances of the experiment were set-up by the researchers.

On the premise that a self-prediction will alter people's behaviour in the predicted way if the matter is socially normative, and that the same behaviour will arise when people commit to a cause, it should be possible to increase people's purchase intention of a socially normative good if they first commit to or predict doing so. Buying organic products is considered both socially normative and morally good (Jørgensen, 2001), and should thus be a good example of a behaviour that will create the necessary discrepancy between cognitions to alter people's behaviour after committing to undertake it.

Based on the theory as described above, and the problematization as discussed in the introduction to this thesis our main hypothesis is:

H1: Committing to buying organic products will produce a higher degree of purchase intention of said products than not committing.

2.6 Self-affirmation

We also want to know if the behaviour change is undertaken to reduce cognitive dissonance. To do so we need to test for the influence of cognitive dissonance. This can be done by letting the respondents complete a self-affirmation task prior to answering the purchase intention questions (McQueen & Klein, 2006). Self-affirmation theory is based on the premise that people are motivated to maintain a positive self-concept (Steele, 1988;

McQueen & Klein, 2006). When the self-concept is threatened by, for example, information contrary to one's beliefs, people respond by protecting their self-integrity (Sherman & Cohen, 2006). In the case of H1, this would mean that to protect their self-concept, people would report a high purchase intention of organic products if they first committed to buying organic products. Self-affirmation theory proposes that when facing a threat to one's self-concept, people may also respond to that threat by affirming their self-integrity by reflecting on important aspects in one's life that are unrelated to the threat (Sherman & Cohen, 2006). By, for example, reminding yourself that you have a family that loves you, an unrelated threat to your self-concept will seem less important and you will not need to defend your self-concept to the same extent in that matter.

Self-affirmation experiments have on numerous occasions shown that people are more likely to reduce the importance of a threat to their self-concept after completing a self-affirmation task (Sherman & Cohen, 2002).⁵ A typical self-affirmation experiment takes place like this (Martens et al, 2006): Respondents are grouped into three groups; one control, one threat/self-affirmation and one threat/non-affirmation. The test situation in this instance was a maths test and the threat was a stereotype threat that women perform worse in maths than men. Self-affirmation was manipulated by letting respondents rank a list of 11 characteristics and values (for example: humor, creativity, friends, family) in order of personal importance. Next, respondents in the self-affirmation group were asked to write about why their most important value was *personally* important. In the non-affirmation group, respondents were instead asked to write about why their ninth most important value was important to *other* people. The respondents then went on to take the maths test. The results showed that women in the threat/non-affirmation condition performed worse than the control condition and worse than men. Women who self-affirmed did, however, perform better than both the threat/non-affirmation condition and the control condition. In other words, completing the self-affirmation task made female participants affirm their self-concept in an unrelated matter and not as women. Hence, they were not affected by negative stereotype of women being worse at maths than men.

⁵ A review of most self-affirmation experiments since the theory's introduction in the 1980's to 2006 can be found in McQueen & Klein (2006).

Applying a self-affirmation task to the H1 experiment by letting people affirm their self-concept prior to evaluating their purchase intention should reduce the experienced cognitive dissonance resulting from a discrepancy between ideal and actual self-concept. Hence, people who self-affirm should pay less importance to the threat of not increasing their purchase intention, and be less inclined to change their behaviour than those who non-affirm. We therefore hypothesize that:

H2.1: Completing a self-affirmation task after committing to buying organic products will produce a lower degree of purchase intention than completing a non-affirmation task.

People who complete a non-affirmation task after committing to buying organic products will still experience cognitive dissonance and will be inclined to change their behaviour and report a high purchase intention. They should thus have a higher purchase intention than people who do not commit to buying organic products, and we therefore hypothesize that:

H2.2: Completing a non-affirmation task after committing to buying organic products will produce a higher degree of purchase intention than not committing.

By the same logic the people who complete a self-affirmation task after committing to buying organic products will have reduced their cognitive dissonance and consequently their purchase intention. They should thus have a lower purchase intention than people who only commit to buying organic products, and we therefore hypothesize that

H2.3: Completing a self-affirmation task after committing to buying organic products will produce a lower degree of purchase intention than only committing.

3 Methodology

This chapter goes through the initial work where a topic was identified and then moves on to discuss the scientific approach and the general research design. The chapter ends with a discussion of the reliability and validity of the study.

3.1 Initial work

The inspiration to write about the consumer buying process for organic products and how one can affect it came from the authors shared interest in CSR related questions. This interest was used as a springboard in order to identify possible topics to write about. Several meetings were held between the authors and associate professor Patric Andersson from the Department of Marketing and Strategy at the Stockholm School of Economics to discuss and find possible topics in the area of interest. The range of topics was narrowed down to finding out whether consumers' purchase intention of organic products can be increased by first prompting them to commit to buying organic products. This topic included investigating if the purchase intention increased as a result of consumers trying to avoid experiencing the cognitive dissonance that arise as a result of not acting in accordance with one's commitment.

As discussed, this is a topic on which very little research has been performed. The current research on cognitive dissonance and the consumer buying process has, as discussed, almost exclusively been focusing on the role of cognitive dissonance in post-purchase situations.

Related experiments to the one performed in this thesis are found in the theories of self-prophecy, self-affirmation and induced hypocrisy. These theories were thus researched in order to get a better understanding of the topic which helped us define the problem area, research question and the overall aim of the study.

3.2 Scientific approach and overall research design

This thesis investigates whether consumers' purchase intention of organic products can be increased by first prompting them to commit to buying organic products. The thesis also investigates whether or not the increase in purchase intention is caused by an avoidance of cognitive dissonance. As the hypotheses are formulated using existing theories, the thesis uses a deductive approach (Bryman & Bell, 2011). To test the hypotheses, a quantitative approach was deemed to best suit the purpose because the larger the samples of data from consumers become, the more generalizable the results become.

The study takes on a causal nature as the authors use an experiment to investigate the relationship between prompting respondents to commit to buying organic products pre-purchase and the resulting effect on their purchase intention.

According to Bryman and Bell (2011) an experiment can be explained as a manipulation of an independent variable in order to determine whether it has an effect on, or if it influences the dependent variables. In other words, it investigates if a causal relationship can be found. Webster & Sell (2007) states that the greatest benefit of an experimental design is that one can include the independent variable of interest and test several specific dependent variables. This increases the likelihood that the relationship between the independent and the dependent variables are "accurate" (Webster & Sell, 2007). Thus, a number of different variables were used in testing for a possible relationship⁶. Furthermore, performing an experiment can to a greater extent provide more convincing evidence of a causal relationship than for example an exploratory or a descriptive study can which is why these approaches were avoided (Bryman & Bell, 2011).

The authors wished to not only investigate the topic in a laboratory setting as that would only produce an indication as to whether the results would work in practice or not. Therefore, the experiment in this thesis was performed in three steps:

1. A pre-study in order to identify a statement that produces a high level of commitment to buying organic products. The best statement would then be used in the actual experiment.

⁶ A number of variables related to purchase intention were tested for indications of an effect. They were: Willingness to pay, product attributes, attitude, Net Promotion. See the description of the online study for further explanation.

2. An online study in order to investigate whether there are any indications that the purchase intention is increased after committing to buying organic products by answering the selected statement (yes/no). The online study also investigates if the purchase intention is increased as a result of the respondents avoiding to experience cognitive dissonance.
3. A field experiment conducted in a grocery store in order to validate the results from the online study in real life. The field experiment only tests for an increased purchase intention and does not investigate the impact of cognitive dissonance.

3.3 Data quality

Bryman and Bell (2011) stresses the importance of having a proper data quality when conducting research and states that the two most important issues to have in mind are reliability and validity.

Reliability refers to what extent a rating scale produces consistent and/or stable results (Wilson, 2006). By having a high reliability the potential measurement failure is small (Bryman & Bell, 2011). Validity refers to what extent an indicator or a set of indicators measures the intended concept (Bryman & Bell, 2011). Reliability and validity are not two isolated measures, but relate and build upon each other in the way that validity presumes reliability (Bryman & Bell, 2011). The following paragraphs depict how these concepts were handled in this thesis.

3.3.1 Reliability

The aspects of reliability in this thesis concerns internal reliability and stability. In order to achieve a high amount of internal reliability the respondents' answers across sections should correlate and appropriate measures should be taken when using primary and secondary resources. A high stability level is reached if the results from the study are consistent over time (Bryman & Bell, 2011).

To increase the reliability of the study, measures from other articles and studies were examined in order to re-use already established questions and layouts whenever possible (Söderlund, 2005). We strived to find question formulations that were easy to understand and, whenever possible, use question formulations that were already in Swedish as it was

the used language in the questionnaires. The secondary sources in this article are mainly from well-cited journal articles and renowned books. However, some less cited journal articles were used too, in order to fully explore the research area of the thesis. To increase the stability of the study, a pre-test of the questionnaire was done individually with 4 participants where the participants gave feedback on the questionnaire in terms of understandability, the logic of the layout and language errors increasing the likelihood of yielding high quality data if the questionnaire would be sent out again. Since a validation of the online study was done in a field experiment which implies some amount of human interaction between the authors and the respondents, it is important to point out that the stability of the results can be affected negatively as every encounter differ from the others. To be certain about the stability, doing another test at some point in the future would be necessary which however is outside the scope of this thesis.

3.3.2 Validity

Validity can be divided in to internal and external validity. Internal validity refers to whether the examined effects on consumers' responses are caused by the independent variables rather than by other external factors (Bryman & Bell, 2011). External validity refers to the extent that the findings from a specific study can be applicable to other settings (Saunders, Lewis & Thornhill, 2003).

In order to ensure high internal validity, the influence of external factors during an experiment has to be minimized (Bryman & Bell, 2011). To ensure high internal validity of this study the collection of the answers was done during a period of two weeks in order to ensure that the external conditions were as similar as possible. Furthermore, every respondent received the exact same information prior to the study and every respondent in the online study was contacted using Facebook. The questionnaires were kept as short as possible which further increases the internal validity because respondents tire and tend to choose indifferent answer alternatives in longer questionnaires (Malhotra & Birks, 2007). The randomization feature in Qualtrics was used in order to avoid any possible biases from the authors choosing who should respond to which version of the questionnaire. By taking these preliminary cautions, the internal validity of the online study was deemed to be satisfactory by the authors.

The external validity refers to “*whether the cause-and-effect relationship found in the experiment can be generalized beyond the experimental situation*” (Malhotra & Birks, 2007, p. 308). The external validity of the online study results is deemed high as they were validated in a field experiment.

The field experiment was performed during two consecutive weekdays and in the middle of the month in order to avoid any biases by the respondents recently receiving their salary. Moreover, every respondent received the same information prior to filling out the questionnaire, and just as in the online study the questionnaire was kept as short as possible in order to increase the validity (Malhotra & Birks, 2007). According to Kaltcheva and Weitz (2006) most people see the time spent in a grocery store as a must which is why keeping the questionnaire short became extra important in the field experiment.

Because there is a lack of previous research regarding the effect on purchase intention after prompting consumers to commit to buying something in a pre-purchase situation, the results can only be generalized to samples using a Swedish population in the ages between 18 – 66 years old which lowers the external validity. However, by validating the results from the online survey in a field experiment, the external validity of this study should be higher than if the study would have only been done online or in a laboratory setting.

Given the discussion above, and the fact that the results from the study were tested in both an online setting and in a real life setting, the overall reliability and validity of the thesis should be satisfactory and sufficient.

4. Pre-study

The pre-study for the online study (and the field experiment) was done in 2 steps: (i) selection of appropriate statements, (ii) a questionnaire to identify the statement that yielded the highest result. This chapter discusses the process and the results of the pre-study.

4.1 Selection of appropriate statements

Before the pre-study, a selection of different statements was created based on the researched theories in section 2. These statements were then to be tested in the pre-study in order to assess which one of them yielded the highest level of commitment to buying organic products. The chosen statements were based upon the theories of self-prophecy and induced hypocrisy as discussed in the theory section, and adapted to fit the purpose of this thesis. Self-prophecy statements are based upon the fact that the respondent has to make a self-prediction about their behaviour in the future, e.g. *“I will buy more organic products the next time I visit a grocery store”*. Whereas induced hypocrisy requires making people to strongly commit to undertaking a socially normative behaviour and also making them aware of their past failure to do so, thus increasing their experienced cognitive dissonance. The statements for the pre-study were chosen to, in different ways, implicitly make people commit to purchasing organic products. The selected statement would also, in a later stage, supposedly increase the respondents experienced cognitive dissonance unless they acted in accordance with the statement and reported a high purchase intention.

An amount of ten different statements were produced which all differed in their respective touch points and included different perspectives on the buying of organic products. They are presented below:

- I think it is important to buy organic products
- I like to buy organic products
- I think it is important to buy organic products because they are in line with my values.
- I think it is important to buy organic products in order to take responsibility for the earth and the environment.

- I think it is important to buy organic products in order to make sure that our children can grow up on a clean planet.
- I buy organic products if I get the chance
- I like to buy organic products in order to take care of the environment
- I think it is important to buy organic products in order to take care of our planet.
- I am willing to pay more for an organic product
- I like to buy organic products because they have less impact on the environment

4.2 Questionnaire

A questionnaire was created with the use of the Qualtrics Survey Software, and a total of 44 respondents participated. The participants were chosen using a convenience sample as the authors used their respective social network in order to find participants. The respondents participating in the pre-study were later on not asked to participate in the online study or the grocery store field experiment in order to avoid any biased results.

The questionnaire was kept short and simple with the purpose of identifying the statement that yielded the highest amount of commitment and thus able to create the highest amount of cognitive dissonance in a later stage. A structured design for the questions was used since unstructured questions are not as appropriate for online surveys (Malhotra, 2004). In a structured research design the questions may be dichotomous, multiple choice or a scale (Malhotra, 2010, p. 344), and the pre-study consisted of questions answered on a likert scale from 1-7. The range of 1-7 was chosen in order to give the participants a good range of degrees to choose from as well as the alternative of staying neutral (4). A scale with a neutral alternative was chosen as it was important that the highest scoring statement scored higher than neutral. This requirement was necessary as the statement would be answered on a yes/no basis in the online study and the field experiment and a big portion of “yes” was desired. The seven-point scale used in the pre-study had two bipolar adjectives in each end as recommended by Söderlund (2005). The value to the left (1) represented a negative answer “I do not agree at all” and the right side of the scale (7) represented a positive answer “I completely agree”. By using the same scale with two bipolar alternatives for all ten statements, it allowed for easy comparison between the results of the different statements.

4.3 Results

The ten different statements scored mean values ranging from 3.08 to 4.61 and are presented below⁷. The highest scoring statement was *“I think it is important to purchase organic goods in order to take responsibility for our planet and environment”* (M=4.61). It also had one of the smallest, but not the smallest, standard deviations ($\sigma=2.15$). A one sample t-test was run to test if the highest scoring statement was statistically different than 4,00 which it was ($t_{35}=1.701$; $p=0.049$)

Table 1. Mean values and standard deviations of the 10 statements of the pre-study.

Statement	Mean	Standard deviation
I think it is important to buy organic products	4,47	2,38
I like to buy organic products	4,28	2,20
I think it is important to buy organic products because they are in line with my values.	3,94	2,18
I think it is important to buy organic products in order to take responsibility for the earth and the environment.	4,61	2,15
I think it is important to buy organic products in order to make sure that our children can grow up on a clean planet.	4,33	2,10
I buy organic products if I get the chance	3,08	2,08
I like to buy organic products in order to take care of the environment	4,17	2,17
I think it is important to buy organic products in order to take care of our planet	4,03	2,32
I am willing to pay more for an organic product	4,03	2,02
I like to buy organic products because they have less impact on the environment	3,58	2,12

4.4 Discussion

The purpose of this thesis was to investigate whether prompting consumers to commit to buying organic products increases their purchase intention of said products, and the point of the pre-study was to assess which statement yielded the highest mean. The fact that the highest scoring statement also scored a statistically significant higher mean than 4.00 on a 7 point scale indicates that people, on average, are more inclined than not to accept such a

⁷ The mean values are close to the mid-point of the scales which potentially could mean that the respondents did not understand the question and answered “don’t know”.

statement if it is measured on a yes/no basis. As discussed in the method, the prerequisite for a successful pre-study was that it yielded a statement that scored higher than 4.00 (neutral). Since the highest scoring statement scored a mean value of 4.61, the results of the pre-study met the necessary requirements and proceeding with the online study was justified.

5 Online Study

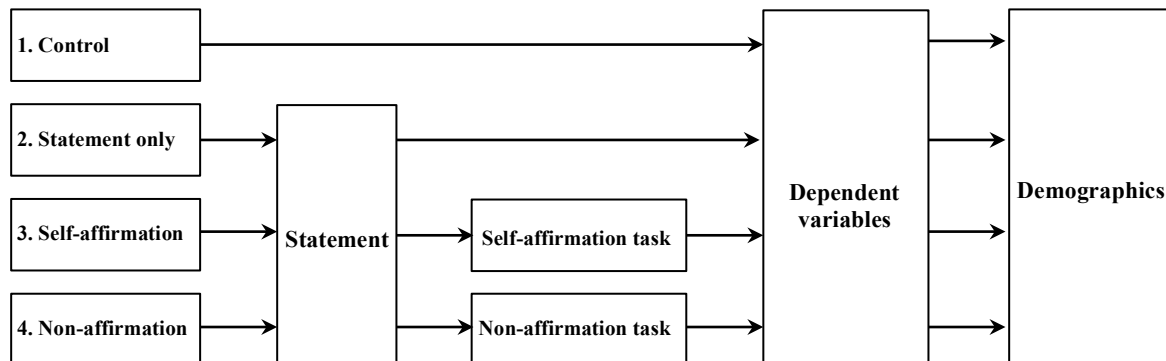
This chapter goes through all parts directly related to the online study. It starts off with a short presentation on how the questionnaire was created. Then it moves on to discuss the results and finishes off with a discussion regarding the results and how they relate to the thesis' purpose and hypotheses.

5.1 Survey design

A total of four groups were needed in order to answer our four hypotheses: one control condition who did not answer the statement nor did the self-affirmation or non-affirmation task (1), one condition answering the statement only (2), one condition answering the statement and the self-affirmation task (3) and lastly one condition which answered the statement and the non-affirmation task (4).

The structure of the online survey is presented in Figure 1 below.

Figure 1. Structure of the online survey distributed using the Qualtrics Survey Software.



The survey was carried out using the Qualtrics Survey Software. The respondents were sent a link on Facebook that lead them to the survey. The same link was used for all respondents and a randomization feature in Qualtrics was used to assign each respondent to one of the four conditions. This was done in order to ensure that the sample was as random as possible and to avoid any possible biases by selecting the respondents for each group ourselves.

A total of 224 respondents answered the survey and 88 % of the surveys were deemed of satisfactory quality. The questionnaires that were excluded were either partially filled in,

didn't have any variation at all in the answers or in the case of those who were exposed to self-/non-affirmation had written something like "I don't care" or "surveys are boring". The average amounts of respondents for each group was 47 where group 4 (non-affirmation) had the lowest amount of respondent, 44, and group 1 (control) had the highest amount of respondent, 56. The variation in the response rate was due the randomization used when the sending out the survey link and that in some groups more surveys were excluded since they didn't meet a satisfactory quality level.

All questions in the survey were marked as mandatory in order to minimize the amount of incomplete surveys. As an incentive to participate in the study, the respondents were informed upon receiving the link that if they completed the survey they had a chance to win 1 out of 5 SF Bio gift voucher worth 200 SEK each as long as they entered their email address at the end of the survey.

The results from Qualtrics were then transferred to the statistical analysis computer program SPSS in order to analyze the data and draw conclusions from it.

0.4 % of the respondents were younger than 20 years old, and 2.2 % were older than 60 years. 73.2 % of the respondents were of the ages 20 – 29 years old. 51 % of the respondents were men (and 49 % of the respondents were women).

5.2 Pre-test of the questionnaire

According to Bryman & Bell (2011), a questionnaire should not be used in the field before being pre-tested on a small sample in order to ensure that the questionnaire is of high quality and not in any way ambiguous. Therefore a pre-test with 4 respondents where we had a personal session which each one of them to go through the survey thoroughly was performed. This helped identifying parts and questions where misinterpretations or misunderstandings were likely, as well as spelling mistakes. Valuable feedback was received and minor reformulations, correction of spelling and reordering of certain questions in order to achieve a better flow in the survey was undertaken. Lastly we had a final discussion about the questionnaire with Patric Andersson, associate professor at the Stockholm School of Economics for some final feedback and a few minor corrections to the survey was done.

5.3 Questionnaire

Structured question designs such as dichotomous and likert scale were mainly used in the online questionnaire as recommended by Malhotra and Birks (2007). These types of questions are frequently used in quantitative studies since they facilitate the analysis of the data (Bryman & Bell, 2011). The questions were taken from previous research whenever possible in order to increase the reliability of the answers and facilitate comparison between this and other studies.

The questionnaire consisted of 22 questions and had the following four sections: (i) committing to buying organic products by agreeing or disagreeing to the socially normative statement, (ii) self-affirmation or non-affirmation, (iii) dependent variables and (iv) demographics.

(i) Committing to buying organic products

In this section the respondents had to agree or disagree to the statement “*I think it is important to buy organic products in order to take responsibility for the earth and the environment*”, and a dichotomous question type was used where the respondent could either answer yes or no. The dichotomous type was chosen as the respondents needed to make an active commitment in order to experience cognitive dissonance at a later stage. Had a scale been used, the commitment would have been a lot weaker as the “yes” answers would have been spread out over a range from neutral to the highest degree on that scale.

(ii) The self-affirmation or non-affirmation section

These two sections started with an ordinal scale question where the respondent had to rank 11 different values from 1 to 11 where 1 represented the most important value to the respondent and 11 represented the least important value to the respondent. The 11 alternatives chosen were: friends, family, religion, beauty, politics, art, work, money, health, humor and creativity. These alternatives were chosen based upon self-affirmation experiments in recent research (Spangenberg et. al, 2003; Martens et al, 2004; Crocker, Niiya & Mischkowski, 2008; Sherman & Cohen, 2002). The 11 values were randomized for each respondent using the Qualtrics Survey Software randomization feature in order to eliminate the risk of any selection bias.

The second and last section in these two questions was of an open ended nature. The respondents who answered the self-affirmation questions had to write 5 – 10 sentences about a situation when the alternative they ranked as number 1 was important to *them*. The respondents who answered the non-affirmation question had to write 5 – 10 sentences about a situation when the alternative they ranked as number 11 might be important to *someone else*. The point of the self-affirmation task was to decrease the experienced cognitive dissonance in such a way that the purchase intention was later on not increased. In that way, the impact of cognitive dissonance could be mapped across all conditions. It is important to point out that the ranking of the values as well as the open ended descriptions were not to be analyzed since the sole point of the self-affirmation task was to serve as a cognitive dissonance reducing distraction.

(iii) The dependent variables section

The dependent variable section consisted mainly of likert scale questions. A range of 0-9 was chosen in order to give the participants a high range of answers to choose from and eliminating the alternative of staying neutral. The ten-point scale had two bipolar adjectives in each end such as good and bad. The value to left (0) represented a negative answer “I do not agree at all” and the right side of the scale (9) represented a positive answer “I completely agree”, as recommended by Söderlund (2005). Apart from the purchase intention questions (the main focus of the study), a number of other types of questions related to purchase intention were included as dependent variables in order to test for a possible effect.

5.3.1 Measures chosen for hypothesis testing

It is important to point out that even though the main hypothesis of this thesis (H1) concerns purchase intention, a number of other measures were included⁸. The reasoning behind this choice was that the chosen measures are, arguably, related to purchase intention (Eagleman & Krohn, 2012), and to test for an effect as broadly as possible. Some of the questions also served as a check that the respondents were familiar with the researched product category.

⁸ Willingness to pay, attitude, product category attributes, recommendation.

Purchase intention. In order to measure purchase intention the respondents were asked four different questions. The first three were likert scale questions: “*How likely is that you will buy an organic product the next time you visit a grocery store*”, “*I would like to buy an organic product the next time I visit a grocery store*” and “*I intend to buy an organic product the next time I visit a grocery store*” (Smith & Swinyard, 1983; Söderlund & Öhman, 2003). The first question of the three had a likert scale where the value 0 on the left side represented “Not likely at all” and the value 9 on the right side represented “Very likely” and the last two questions had a likert scale where the value 0 on the left side represented “I do not agree at all” and the value 9 on the right side represented “I completely agree”.

The last question was of a dichotomous nature where the respondents were shown two pictures of yogurt, one of organic and one regular, and asked “which one of these two products would you buy?”. The product yogurt was chosen as it is a common item in any grocery store and is available as both organic and regular yoghurt and both products are made by the same well-known brand. The internal consistency of the first three questions was checked with a Cronbach’s alpha test with a result of 0.911.

Willingness to pay. In order to measure willingness to pay for organic products, the respondents were asked a question of a closed ended nature in which they were shown two pictures of orange juice, one of organic orange juice and one of regular orange juice. They were then asked to enter the price they would be willing to pay for each product, using a pre-set range of alternatives from 0 to 50 SEK. The product orange juice was chosen since it is a common item in any grocery store and is available both as an organic product and as a regular product made by the same well-known brand. A discussion was held between the authors concerning if yogurt could have been used in this question too, but to avoid any possible biases or disturbances in the results it was decided to use two different products as a safety measure.

Attitude towards the product category

In order to measure attitude towards organic products the respondents were asked three questions: “*Buying organic food is: good*”, “*Buying organic food is: smart*” and “*Buying organic food is: important*” (Magnusson et al, 2001). The questions were measured on a

likert scale where the value 0 on the left side represented “I do not agree at all” and the value 9 on the right side represented “I completely agree”. The internal consistency was checked with a Cronbach’s alpha test with a result of 0.824.

Product category attributes

A total of five questions were asked about organic product attributes, and in in this case organic yogurt was used in order to exemplify the attributes. The five questions were: “*Organic yogurt contains less fat than regular yogurt*”, “*Organic yogurt is healthier than regular yoghurt*”, “*Organic yogurt contains less fat than regular yogurt*”, “*Organic yogurt have a longer shelf-life than regular yogurt*” and “*Organic yogurt is more locally produced than regular yogurt*” (Magnusson et al, 2001). The questions were measured on a likert scale where the value 0 on the left side represented “I do not agree at all” and the value 9 on the right side represented “I completely agree”. It is important to point out that the “right” answers for these five questions would be clustered at the lower end of the scale. The attributes questions were not only included to test for an effect as a result of committing to buying organic products, but also to serve as a check that the respondents seemed to know what they were talking about. In other words, had the answers for these questions been clustered towards the high end of the scale, there would be indications that the respondents were not familiar with the researched product category and the answer quality could have been questioned. The internal consistency was checked with a Cronbach’s alpha test with a result of 0.694.

Recommendation. Lastly, in order to measure the likeliness that the respondents would recommend buying organic products to a friend they were asked: “*How likely is it that you will recommend a friend to buy organic food*” (Reichheld, 2003). The question was measured on a likert scale where the value 0 on the left side represented “Not likely at all” and the value 9 on the right side represented “Very likely”.

(iv) Demographics

The final part of the questionnaire consisted of four questions about the respondent: Sex, age, the highest level of education completed and the respondents e-mail address (for the gift voucher lottery).

5.4 Results

The purpose of the online survey was to find indications that: (i) prompting consumers to commit to buying organic products will increase their purchase intention, and (ii) an increased purchase intention, if any, is caused by an avoidance of cognitive dissonance. This section will first present the results of the former, then the latter and finally some other observations.

(i) Commitment increases purchase intention

A MANOVA with the three purchase intention questions as the dependent variables and the four conditions as the independent variable was run. This model showed significant differences between the conditions ($F_{3,552}=3.708$; $p=0.000$). Next, separate ANOVAs with each purchase intention question as the dependent variable and the four conditions as the independent variable were run revealing that in fact only one of them (Q2) had statistically significant mean differences across all four conditions: *“I would like to purchase an organic product the next time I go grocery shopping”* ($F_{3,184}=2.207$; $p=0.089$). For this question, the control condition scored a lower mean value ($M=5.73$) than the statement only condition ($M=6.65$). The self-affirmation condition scored a lower mean ($M=5.77$) than the non-affirmation condition ($M=6.72$). A post-hoc test using Fisher’s Least Significant Difference (LSD) was run and revealed a statistically significant difference between the control and the statement only conditions ($t_{98}=-1.814$; $p=0.037$), thus providing empirical support for Hypothesis 1.

The question *“How likely is it that you will purchase an organic product the next time you go grocery shopping?”* (Q1) did not produce any statistically significant differences between the four conditions ($F_{3,184}=1.063$; $p=0.366$)⁹. Nor did *“I intend to purchase an organic product the next time I go grocery shopping”* (Q3) ($F_{3,184}=0.173$; $p=0.915$). The means for the three purchase intention questions are reported in Table 2 below. When analyzing purchase intention, the question where respondents chose between buying regular or organic yogurt was also included (Q4). A Chi-square test of which type of

⁹ A post-hoc test (LSD) did however reveal statistically significant differences between some of the conditions as discussed in section ii.

product respondents would purchase (A=yogurt, B=organic yogurt) did not reveal any statistically significant differences between the four conditions ($\chi^2_{df=3}=1.161$; $p=0.762$).

Table 2. Mean values (and standard deviations) for the purchase intention questions.

	Control	Statement only	Self-affirmation	Non-affirmation	Sig.
Q1	4.95 (2.96)	5.50 (2.98)	4.84 (2.98)	5.77 (3.22)	0.366*
Q2	5.73 (2.56)	6.66 (2.50)	5.77 (2.49)	6.73 (2.48)	0.089*
Q3	4.83 (3.13)	4.84 (3.15)	4.91 (3.23)	4.48 (3.39)	0.915*

*One way ANOVA.

The respondent's willingness to pay¹⁰ for a regular and an organic orange juice was tested using the Kruskal-Wallis one way analysis of variance with willingness to pay as the dependent variable and the four conditions as the independent variable. A non-parametric test was chosen as the prices that the respondents are prepared to pay can be seen as a ranked order. Furthermore, non-parametric methods rely on fewer assumptions and are thus more robust than their parametric counterparts (Corder & Foreman, 2009). The Kruskal-Wallis test did not reveal any statistically significant differences between the four conditions for organic juice (Q5) ($\chi^2_{df=3}= 5.377$; $p=0.146$) nor for regular juice (Q6) ($\chi^2_{df=3}=3.329$; $p=0.344$). However, the mean ranks for Q5 (reported in Table 3) differed quite a bit between the conditions which justified moving forward with pairwise comparisons.

Table 3. Mean ranks for the willingness to pay for an organic and a regular orange juice.

	Control	Statement only	Self-affirmation	Non-affirmation
Q5	81.69	106.32	96.72	96.77
Q5.a	88.01	108.56	94.07	89.14
Q6	86.41	99.86	90.08	103.85

The pairwise comparisons was performed running multiple Mann-Whitney U tests with the willingness to pay as the independent variable and each pair of conditions (statement vs. control, self-affirmation vs. non-affirmation, non-affirmation vs. control, self-affirmation vs. statement) as the independent variable. The tests revealed statistically significant differences in willingness to pay between the control (M=19.96) and the statement only

¹⁰ Organic juice: M=20.91, Max=50.00, Min=10.00, StDev=5.16; Regular juice: M=17.39, Max=46.00, Min=0.00, StDev=4.69.

($M=21.66$) conditions ($z=-2.189$; $p=0.029$) providing empirical support for Hypothesis 1. A statistically significant difference in willingness to pay was not repeated between any of the other conditions. For regular juice, pairwise comparison did not show any significant differences between the conditions. The willingness to pay for an organic and a regular orange juice is reported in Table 4.

Table 4. Mean values (and standard deviations) for the willingness to pay for an orange juice.

	Control	Statement only	Self-affirmation	Non-affirmation	Sig.
Q5	19.96 (4.82)	21.66 (4.82)	21.16 (5.71)	21.14 (5.34)	0.146*
Q5.a	2.83 (3.43)	4.02 (3.67)	3.86 (4.70)	3.54 (5.22)	0.236*
Q6	17.13 (4.76)	17.63 (4.74)	17.30 (5.44)	17.59 (5.03)	0.344*

*Kruskal-Wallis one way ANOVA.

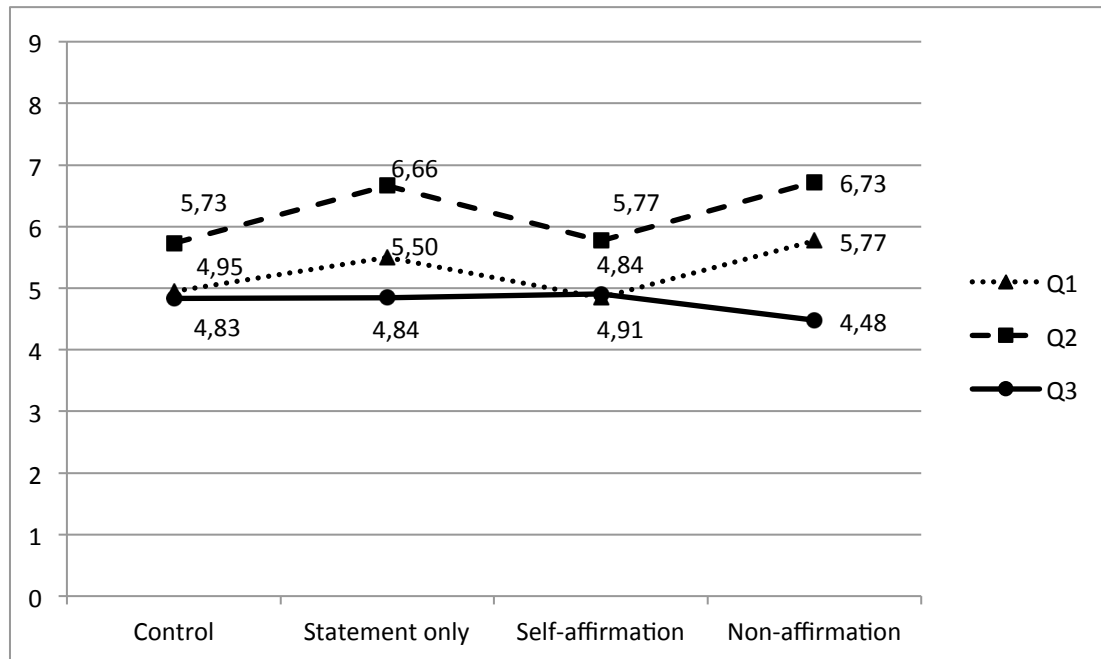
A new variable (Q5.a) consisting of the difference in willingness to pay for organic and regular orange juice (organic price minus regular price) was created in order to test if the respondents were prepared to pay relatively more for an organic juice compared to a regular one. A Kruskal-Wallis one way analysis of variance with the new variable as the dependent variable and the four conditions as the independent variable did not reveal any statistically significant differences between the conditions ($\chi^2_{df=3}=4.346$; $p=0.236$). But as the mean ranks differed in the same pattern as the willingness to pay for an organic juice (reported in Table 3), pairwise comparison was performed. Multiple Mann-Whitney U test were run and revealed a statistically significant difference between the control ($M=2.83$) and the statement only ($M=4.02$) conditions ($z=-2.124$; $p=0.034$), providing empirical support for Hypothesis 1. The result was not replicated between the self-affirmation and the non-affirmation conditions ($z=-0.435$; $p=0.664$).

(ii) The presence of cognitive dissonance

An increase in purchase intention caused by answering the statement as reported above should not be present after completing a self-affirmation task since it should reduce the experienced cognitive dissonance associated with a conflict between actual and ideal self-concept. The direct results of the self-affirmation task (i.e. the ranked values and the free text answers) were not analyzed as they are irrelevant to the purpose of this thesis because the only point of the self-affirmation task was to serve as a cognitive dissonance reducing distraction. As described above, one way ANOVAs with the purchase intention questions

as the dependent variables and the four conditions as the independent variable did only reveal a statistically significant mean difference in purchase intention between the four conditions for the question *“I would like to purchase an organic product the next time I go grocery shopping”* ($F_{3,184}=2.207$; $p=0.089$). Post-hoc tests were performed using t-tests to compare the conditions two at a time (statement vs. control, self-affirmation vs. non-affirmation, non-affirmation vs. control, self-affirmation vs. statement). The purchase intention was significantly higher in the non-affirmation condition ($M=6.73$) compared to the self-affirmation condition ($M=5.77$) ($t_{86}=-1.803$; $p=0.038$) which provides empirical support for Hypothesis 2.1. There was also a significant difference between the non-affirmation ($M=6.73$) and the control ($M=5.73$) conditions ($t_{98}=-1.952$; $p=0.027$), providing empirical support for Hypothesis 2.2. Lastly, there was a significant difference between the self-affirmation ($M=5.77$) and the statement only ($M=6.66$) conditions ($t_{86}=1.669$; $p=0.050$) which provides empirical support for Hypothesis 2.3.

As reported above, none of the other two purchase intention questions (Q1 and Q3) scored significant mean differences between the conditions (when running ANOVAs). Nor did the question where respondents chose whether they would purchase organic or regular yogurt (Q4). Q1 (*“How likely is it that you will purchase an organic product the next time you go grocery shopping?”*) did however score means that followed the same pattern as Q2 (control: $M=4.95$; statement only: $M=5.50$; self-affirmation: $M=4.84$; non-affirmation: $M=5.77$). Because the hypotheses H2.1, H2.2 and H2.3 have a single direction and a result in the opposite direction has no practical importance, one-tailed t-tests are appropriate when performing pairwise comparisons. T-tests then reveal a statistically significant difference between the self-affirmation ($M=4.84$) and the non-affirmation ($M=5.77$) conditions ($t_{86}=1.409$; $p=0.081$), providing empirical support for H2.1 also for Q1. A t-test also reveals a statistically significant difference between the non-affirmation ($M=5.77$) and the control ($M=4.95$) conditions ($t_{86}=1.449$; $p=0.076$), providing empirical support for H2.2 also for Q1. A t-test did not reveal a statistically significant difference between the self-affirmation ($M=4.84$) and the statement only ($M=5.50$) conditions ($t_{98}=1.063$; $p=0.145$). The means of the three purchase intention questions are presented in Figure 2 below.

Figure 2. Graphical representation of the mean values for the three purchase intention questions.

As reported above, the willingness to pay for an organic orange (Q4) juice produced significantly different prices between the control ($M=19.96$) and the statement only ($M=21.66$) conditions ($z=-2.189$; $p=0.015$). A significant difference was however not replicated between the self-affirmation ($M=21.16$) and the non-affirmation ($M=21.14$) conditions ($z=-0.008$; $p=0.497$). Nor was it replicated between the self-affirmation ($M=21.16$) and the statement only ($M=21.66$) conditions ($z=-0.856$; $p=0.196$). There was however also a statistically significant difference between the non-affirmation ($M=21.14$) and the control ($M=19.96$) conditions ($z=-1.417$; $p=0.079$).

5.4.1 Other observations

The data consisted of 224 respondents ($N=224$) out of which 49 % were women and 51 % men. In general, t-tests revealed that women scored higher means on all but the attribute questions although the differences were only significant for a couple of questions. For the question: “*To buy organic food is: smart*” women ($M=6.46$) scored a significantly higher mean than men ($M=5.63$) ($t_{186}=2.243$; $p=0.026$). For the question: “*To buy organic food is: important*” women ($M=7.01$) also scored a significantly higher mean than men ($M=6.32$) ($t_{186}=1.917$; $p=0.057$). Women ($M=3.81$) also scored a significantly lower mean than men ($M=4.80$) for the attribute question: “*Organic yogurt is more locally produced*”.

than regular yogurt” ($t_{186}=-2.232$; $p=0.027$). Willingness to pay for an organic product was tested using a Mann-Whitney U test and women scored a price of 21.91 compared to 19.93 for men ($z=-2.516$; $p=0.012$). 73 % of the respondents were of the ages 20-29. Since that left so few respondents in the other age groups, further analysis on differences between ages was not performed.

The initial statement of “*I think it is important to buy organic products in order to take responsibility for our planet and environment*” was answered by all but the control condition. In the statement only condition 72 % of respondents agreed to the statement, in the self-affirmation condition 70 % agreed and in the non-affirmation condition 66 % agreed. A Chi-square test revealed no statistically significant differences between these three groups as expected ($\chi^2_{df=2}=0.840$; $p=0.657$). The high number of agreements indicates that the pre-test successfully singled out a good statement. A one way ANOVA with the final control question “*I usually buy organic food when it is possible*” as the dependent variable and the four conditions as the independent variable was run and also revealed no statistically significant differences between the conditions as expected ($F_{3,184}=0.561$; $p=0.641$). It was merely included to test if differing results between the conditions could be attributed to respondents in a specific condition buying organic food more often.

A MANOVA with the product attribute questions (Q7 – Q11) as the dependent variables and the four conditions as the independent variable was run and did not reveal any statistically significant differences between the conditions ($F_{3,546}=0.971$; $p=0.485$). The MANOVA was replicated with the attitude questions (Q12 – Q14) as the independent variables and did not reveal any statistically significant differences between the conditions ($F_{3,552}=0.770$; $p=0.645$). An ANOVA with the NPS question (Q15) as the independent variable and the four conditions as the independent variable was run and did not reveal a statistically significant difference between the conditions ($F_{3,184}=0.817$; $p=0.486$). The mean values of the product attributes, attitude and the NPS questions are presented in Table 5 below.

Table 5. Mean values (and standard deviations) for the product attribute, attitude and NPS questions.

	Control	Statement only	Self-affirmation	Non-affirmation	Sig.
Q7	1.29 (2.14)	1.30 (1.71)	1.20 (2.21)	0.82 (1.74)	0.622*
Q8	3.55 (3.14)	3.15 (3.11)	2.82 (2.81)	2.84 (2.86)	0.572*
Q9	2.84 (3.13)	2.91 (3.10)	3.34 (3.19)	2.61 (2.82)	0.746*
Q10	1.29 (1.76)	1.77 (2.12)	1.45 (2.12)	1.39 (1.90)	0.656*
Q11	4.48 (3.06)	4.43 (3.07)	4.82 (3.07)	3.45 (3.38)	0.185*
Q12	7.50 (1.76)	7.68 (2.02)	7.43 (2.34)	7.36 (2.04)	0.897*
Q13	6.27 (2.74)	5.88 (2.55)	6.13 (2.58)	5.82 (2.38)	0.806*
Q14	6.88 (2.48)	6.68 (2.46)	6.98 (2.48)	6.07 (2.50)	0.298*
Q15	4.79 (3.36)	4.93 (3.04)	4.95 (3.23)	4.02 (3.28)	0.486*

Q7-Q11: Product attributes; Q12-Q14: Attitude; Q15: NPS.

*One way ANOVA.

5.4.2 Conclusion

In conclusion, one (Q2) out of the three purchase intention questions as well as the willingness to pay (Q4) showed an increased purchase intention after answering the statement, providing empirical support for H1. Completing a self-affirmation task mitigated the effect of answering the statement for Q2, providing empirical support for H2.1, H2.2 and H2.3. This result was not replicated for the willingness to pay (Q4). Furthermore, Q1 follows the same pattern as Q2 providing further indications that the hypotheses are supported, even though the mean differences across the conditions were not significant for all hypotheses. In fact, only H2.1 and H2.2 were supported for Q1.

5.5 Discussion

Overall, the results of the online study are somewhat inconclusive. Out of the three questions directly related to purchase intention, only one (Q2) showed significant mean differences across all four conditions caused by answering the statement. For the one that did (Q2), though, the difference between the control and statement only conditions was mitigated by completing a self-affirmation task which indicates that the effect indeed is caused by an avoidance of cognitive dissonance. This result is in line with the research performed by Spangenberg et al (2003) as discussed in the theory section of this thesis. When given an opportunity to affirm values that are important for oneself, the cognitive dissonance of acting opposite to one's ideal self-concept is reduced and there is no need to

affirm the self-concept by reporting a high purchase intention. When not given an opportunity to affirm one's self-concept, the cognitive dissonance of acting opposite to one's ideal self-concept is avoided by acting in line with it and consequently reporting a high purchase intention. Together, these findings are congruent with the arguments presented in the theoretical section of this thesis explaining that people, in general, strive to maintain a self-concept that is consistent and morally good (Aronson, 1992). By completing a self-affirmation task, the respondents were thus able to affirm their self-concept before evaluating their purchase intention. The non-affirmation condition did not have this opportunity which is why the respondents in this condition still reported a high purchase intention.

However, a self-affirmation task was merely included in the study to back the theory and provide a basis for the arguments. The main purpose of this thesis: to investigate whether committing to undertake a socially normative behaviour, such as buying organic products, increases purchase intention was also empirically supported for Q2 as hypothesized in the theory section of this thesis. Although Q1 did not score significant mean differences between the four conditions for all hypotheses, the results still point in the same direction as Q2 (see Figure 2 for reference). The patterns of both questions are close to perfect as the statement only condition scored a higher purchase intention than the control condition at the same time that the self-affirmation task had the desired effect of lowering the purchase intention, indicating that the mechanism that increases purchase intention is an avoidance of cognitive dissonance (Sherman & Cohen, 2006). Q3, however, did not result in any effect whatsoever. The reason might very well be that it was much stricter than Q1 and Q2. Even though you might want to purchase an organic product, you might not intend to do it exactly the next time you go grocery shopping.

However, the Q3 statement is the statement that is the one that is the most similar to the statement of a self-prophecy experiment which makes the lack of an effect surprising (Spangenberg & Sprott, 2006). Overall, the results of the three purchase intention questions provide indications that the experiment has the desired effect: Prompting consumers to commit to buying organic products (by answering a statement that positively frames buying organic products) prior to evaluating their purchase intention of said products increases their purchase intention. Furthermore, an increase in purchase intention

is not present when given the opportunity to affirm one's self-concept prior to evaluating purchase intention, which indicates that the increase in purchase intention is caused by an avoidance of cognitive dissonance.

Q4 (choosing between buying regular or organic yogurt) did not produce a significant difference between the groups. It is somewhat surprising as two out of the other three purchase intention questions as well as the related willingness to pay question produced a result. The lack of an effect might be attributed to the question being product specific rather than category specific like most other questions in the study. Furthermore, it is possible that the respondents did not care if their yogurt was organic, and that another product as the example would have produced a different result.

For the willingness to pay, completing a self-affirmation task did not affect the reported price levels, indicating that the self-affirmation task did not work to reduce any experienced cognitive dissonance that might have arisen when evaluating one's willingness to pay. All statement conditions did however report a higher price than the control condition indicating that the experiment also works to increase consumers' willingness to pay. Furthermore, comparing the difference between the organic and the non-organic price showed that the respondents in the statement conditions were prepared to pay relatively more for an organic product. The resulting price levels in these two questions also showed that the respondents, in general, had a good image of what the products actually cost in store (see Table 4). This is in line with the, in general, low means on the attributes questions which of course are correct as an organic yogurt is not more healthy (for example) than its regular counterpart. Even though this question did not produce differences between the conditions they served as a control that the respondents knew enough about organic food products for their answers to be taken seriously.

The other dependent variables¹¹ were not affected by answering the statement which, following the arguments in the theoretical approach of this thesis, comes as no real surprise since the initial statement was positively framing purchase intention rather than attitude, product attributes or anything else. They were however included to test for a possible effect as they are, arguably, related to purchase intention. It also comes as no surprise that

¹¹ Attitude, Attributes, NPS

the variables unaffected by answering the statement were also not affected by completing a self-affirmation task as there was no cognitive dissonance to reduce.

The attitude questions scored high means ($M=5.88$ to $M=7.68$) for all four conditions but there were no significant differences. The only conclusion that can be drawn from these results (apart from the experiment not affecting attitude) is that even though people have a positive attitude towards organic products, they do not necessarily purchase them. And while a positive attitude most likely is necessary for a high purchase intention, it is not automatically a prediction for purchase intention. As mentioned in the other observations paragraph, women scored significantly higher means for both “*Smart*” and “*Important*”. It was expected that women would score higher and this result is in line with current research on attitude towards organic food between gender (Urena, Bernabéu & Olmeda, 2007).

Overall, the results of the online study are somewhat inconclusive. Both when it comes to whether committing to buying organic products pre purchase increases the purchase intention of said products, but also if the increased purchase intention is caused by an avoidance of cognitive dissonance. After analyzing the results of the online study, it can only be concluded that all hypotheses were partially supported. However, since the results provide indications that the experiment increases purchase intention, moving forward and testing this thesis’ main hypothesis (H1) in a field experiment is justified. The field experiment will not test H2.1, H2.2 and H2.3 any further because of a number of practical issues: Completing a self-affirmation task in store would be asking too much of the respondents as the task require a few minutes to complete (Söderlund, 2006). Furthermore, there is no real benefit from testing attitude and attributes again since these variables, unlike purchase, do not need to be tested in a field experiment - they can just as well be tested online. Price sensitivity is probably more accurately tested in a field experiment, but setting up such an experiment and make it look real is tricky and beyond the scope of this thesis. At this point, since they cannot be fully accepted nor rejected, and will not be tested further, we are therefore forced to conclude that H2.1, H2.2 and H2.3 are partially accepted.

6. Field Experiment

This chapter discusses all parts directly related to the field experiment. It starts off with a discussion of why some of the measures from the online survey were excluded in the field experiment. Then it moves on to describe the layout of the questionnaire which is followed by description of the experiment design. The chapter is concluded with a presentation and a discussion of the results.

6.1 Relation to the online study

Because the main purpose of the thesis was not optimally tested as an experiment in an online study, the authors also wished to validate the results from the online study in a real life situation in a grocery store. In this field experiment, all sections from the online study except for the first one, where the respondents had to agree or disagree to the statement “*I think it is important to buy organic products in order to take responsibility for the earth and the environment*”, purchase intention and the section with the demographical questions were excluded. The reasoning behind this was that the excluded questions (attitude, willingness to pay, product attributes and NPS) could be tested just as well in an online survey. In fact, they are probably better tested in an online survey than in a grocery store where people are in a rush. Purchase intention, however, is best tested when an actual purchase can be made which is why the field experiment was performed.

According to Kaltcheva and Weitz (2006) most people see the time spent in a grocery store as a must and therefore strive to spend as short time as possible in-store. So with the aim to increase the response-rate and the decrease the risk of having the respondents filling out the questionnaire without giving any thought to the questions, the questionnaire was kept as short and understandable as possible (Söderlund, 2005). Because of the reasons mentioned above and in the discussion of the online study results, H2.1, H2.2 and H2.3 will not be tested in the field experiment. It will only test this thesis’ main hypothesis H1: Committing to buying organic products, will produce a higher purchase intention of said products than not committing.

6.2 Field experiment design

The validation of the online study results regarding purchase intention was conducted at PrisXtra, a large grocery store in Stockholm, Sweden from April 10th to April 11th. The store in question was chosen since one of the authors had previously worked there which made it easy to get permission to perform the experiment in that particular store. A total of two groups were needed in order to be able to validate or discard the result from the online survey: one control condition that did not answer the statement but only answered the second part of the questionnaire (1), and one manipulated condition which answered both parts of the questionnaire (2). The control condition which only answered part two of the survey was interviewed on the 10th of April and the manipulated condition which answered both parts of the survey was interviewed 11th of April. The reasoning behind having two different dates for the two conditions was that getting enough answers from both conditions on one single day was not possible and it also made it easier to not mix up the filled in questionnaires.

It is important to point out that the self-affirmation task used in the online study testing the presence of cognitive dissonance was left out since it would be both impractical to have a consumer perform that task in a grocery store. Especially since most people see the time spent in a grocery store as a must and thus rushes their visit (Kaltcheva and Weitz, 2006).

The shoppers in the manipulated condition were asked before they entered the store if they would be willing to participate in a study. The respondents were informed that they would have to answer two short questionnaires. One before they entered the store and a second follow-up questionnaire when they exited the store and were done shopping. The respondents were not told the purpose of the study or what kinds of questions they had to answer in the second part of the study in order to minimize the effect on their decision-making

A total of 131 people participated and 120 responses were collected that were deemed satisfactory. 5 % of the total number of respondents was not willing to share what they had bought and did therefore not qualify to be included in the result and 3 % of the respondents forgot to contact us when they were exiting the store.

The authors decided to not control the shoppers' receipts since it would be on the boundary of crossing the average person's personal integrity line. However, this decision also made it possible for the respondents to lie about having bought any organic products. In the end, the authors deemed the risk of the respondents lying to be rather low, and just having them answer the question if they had bought any organic products was satisfactory enough.

The responses from the field experiment were manually transferred to the statistical analysis computer program SPSS in order to be able to analyze the data and draw conclusions from it. While transferring the responses to SPSS, the authors were also able to make a quality check of the answers and exclude any surveys that were deemed to be of unsatisfactory quality by for example being partly filled in.

The respondents' ages varied from 18 years to 66 years, and the age of the average participant was 41 years old. 49 % of the respondents were men (51 % of the respondents were women). The difference in the amount of male and female respondents was unintentional and the reason behind it is unclear.

6.3 Questionnaire

The grocery store questionnaire had two parts. The first part consisted of prompting the respondents to commit to buying organic products by agreeing or disagreeing to the statement from the online study *"I think it is important to buy organic products in order to take responsibility for the earth and the environment"*. This part was done before they entered the store. A dichotomous question type was used where the respondent could either answer yes or no.

The second part consisted of two questions. In the first question the respondents had to answer whether they had bought any organic products or not. A dichotomous question type was used where the respondent could either answer yes or no. In the second question the respondents had to answer how much money they had spent on their entire purchase. This was asked in order to potentially eliminate respondents who had spent outside the range of a "normal purchase" (later on this exclusion of respondents was deemed unnecessary). In the end, the respondents answered the same demographical questions as used in the online

study. The second part of the questionnaire was answered when the respondents exited the store.

6.4 Results

The narrow scope of the field experiment made the analysis quite straightforward. A Chi-square test with purchase (yes/no) as the dependent variable and the two conditions (control and statement) as the independent variable was run to assess the differences in purchased organic products between the control and the statement conditions. The test revealed a statistically significant difference ($\chi^2_{df=1}=2.828$; $p=0.074$) between the two conditions. In the control condition, 12 % of respondents reported to have bought at least one organic product. In the manipulated condition the same number was 23 %. The outcome of the experiment is reported in Table 6. These findings provide empirical support for Hypothesis 1 also in a field experiment. The results of the online study, as well as current research, indicates that women, in general, are more positive towards organic products. Therefore, it is important to point out that there were more women in the manipulated condition. In the entire sample there were 51 % women (and 49% men). In the control condition, that were not prompted to commit to buying organic products, there was 45 % women (and 55 % men), and in the manipulated condition there was 57 % women (and 43 % men). However, a Chi-square test revealed no statistically significant difference in gender between the two conditions ($\chi^2_{df=1}=1.634$; $p=0.201$).

Table 6. The number of purchases of organic products per condition.

	Control	Statement
Bought	7 (10.5*)	14 (10.5*)
Did not buy	53 (49.5*)	46 (49.5*)

*Chi-square test expected count.

6.5 Discussion

The field experiment provides empirical support for our main hypothesis (H1: Committing to buying organic products, will produce a higher purchase intention of said products than not committing) also in a field experiment, and highlights the importance of testing

behavioural experiments in a real or at least a lab setting as opposed to an online study. The results also show that the performed experiment holds merit when it comes to influencing actual purchase and not only purchase intention. Prompting consumers to commit to buying organic products by answering a statement that positively frames purchasing organic products before entering the store will increase the purchase intention of said products. Drawing on the results from the online study, it is also likely that the increase in purchase intention is caused by an avoidance of the cognitive dissonance that consumers would otherwise experience as a result of conflicting self-concepts (Aronson, 1992).

7. General Discussion

The main purpose of this thesis was to investigate whether prompting consumers to commit to buying organic products would increase their purchase intention of said products. The sub-purpose of this thesis was to investigate whether the increased purchase intention, if any, was caused by an avoidance of experiencing cognitive dissonance. Why the field experiment produced clearer results than the online study can be attributed to three different factors.

First of all there was a human interaction at the store which simply could not be achieved in the online study. Telling a human being that you intend to do something and then not do it is, arguably, harder than lying to a computer. Similar experiments has been shown to work also online (Spangenberg et al, 2003; McQueen & Klein, 2006), but for the most part they are actually carried out in a lab setting with human interaction.

Secondly, however, we did put a lot of trust in respondents as we simply asked them if they had bought something organic. There is the obvious risk of them lying to avoid the embarrassment of having to say no. The respondents could have been asked to show their receipt or the product, but that would have imposed too much on their privacy.

Thirdly, there were more women in the test condition than in the control condition although not significantly so. The online study (and other studies too) showed that women are more positive towards organic products than men, and this may have influenced the results. All in all, the clear results of the field experiment compared to the somewhat inconclusive results of the online study emphasizes the importance of actually performing behavioural experiments in as real situations as possible. It would be fine to, for example, test different attitudes online but when it comes to purchasing a product, an online experiment comes nowhere close to a real one. In an actual store, people intend to buy something and there is a myriad of different products to choose from. This might help explain why the online study showed no significant difference in preference towards organic over regular yogurt. Perhaps a lot of respondents did not really care about their yogurt being organic, but do care about their milk or pasta being organic. In the field

experiment, every respondent could choose the exact product that he/she liked which of course increased the chance of people purchasing the organic counterpart.

Overall, we can say that the experiment performed in this thesis does in fact increase purchase intention, which provides empirical support for Hypothesis 1. When committing to buying organic products before entering the store, the consumers' purchase intention of organic products increases. Whether or not the increased purchase intention is caused by an avoidance of cognitive dissonance remains unclear. In fact, Hypotheses 2.1 – 2.3 could only be partially accepted since the effect of the self-affirmation task in the online study only had significant results on some of the questions. There are however good indications that the increased purchase intention is indeed caused by an avoidance of cognitive dissonance, and we will leave it at that. The results of this thesis thus meet its purpose as far as the main research question is concerned. The second research question (investigating the role of cognitive dissonance) cannot be completely answered after analyzing the results, and thus requires more research.

7.1 Implications

The results from the studies performed in this thesis showed that prompting consumers to commit to buying organic products before entering the store will increase their purchase intention of organic products. The most obvious implication is that the experiment performed in this thesis can be used to stimulate purchase intention for organic products. In accordance with the similar theories of self-prophecy and induced hypocrisy (as discussed in the theory section of this thesis), it is possible that the experiment also works for other types of goods as long as there is a normative pressure to buy said good. In practice, however, the logistics of the experiment limit its use. Asking people one by one, as they enter a store, if they think it is important to purchase Good X, is not an efficient marketing tool for large scale operations. It could however be useful in personal selling. The benefits of using a similar experiment in personal selling are also highlighted by the field study. A stronger result than in the online survey indicates that a human to human interaction could be important to achieve the desired effect.

The online study did however produce good results, both in the form of an increased purchase intention and an increased willingness to pay. The fact that these effects were recorded in an online environment indicates that an approach similar to the experiment in this thesis might be useful as a tool for online stores. There, marketers have the benefit of not being limited by a labour intensive field work. Instead, a large number of potential customers can be reached simultaneously and with low cost. Furthermore, answering a questionnaire also seems much more reasonable to the customers online than in real life as number of online stores already use similar questionnaires in their marketing activities, for example Amazon.com.

An approach similar to the experiment performed in this thesis might also be useful in advertising. Including the statement in the ad copy might possibly have the same effect on people as when answering a survey. A mass communicated self-prophecy experiment performed by Spangenberg et al (2003) showed that the experiment had the desired effect, and as the similarities between a self-prophecy experiment and the one performed in this thesis are many, it is possible that it will also work in mass communication. Especially charity ads might benefit from using a similar statement as the ad copy due to the socially normative pressure to contribute to charity.

This thesis also shows that one does not need to follow the exact process of a self-prophecy experiment to alter consumer behaviour. The same effect can be reached by having consumers commit to a behaviour rather than predict their behaviour. Further research is necessary before we can coin the theory of “self-commitment”, but the result of this thesis should broaden the scope of self-prophecy experiments as you no longer are limited by the need for participants to make a prediction.

7.2 Critique

When writing this thesis we quickly realized that it would not be as easy as we initially thought. There is a reason why the scientific journal articles we read are spot on and without errors, and that is because the authors of those articles are professionals - we are not. There are a few shortcomings that we would like to point out. First of all, the sample sizes used in both studies were relatively small. Big enough to analyze, but still small.

Obtaining a bigger sample might have reduced the variances and led to better results. It would probably not have mattered for most questions, but for those that pointed in the same direction as our hypotheses without being significant, it might have helped.

There is also the drawback of only analyzing a specific product category. Ultimately we would have wanted to test the experiment on a number of product categories to make our results more general. Unfortunately we did not have the time or the resources to do so, and the fact that we chose a product category and not a specific product as the target of our experiment should make it a bit more generalizable.

Lastly, we are also forced to admit that the experiment might be somewhat impractical in real life. We discussed this in the implications paragraphs. The well-informed reader might criticize the experiment for being impractical due to it being labour and time intensive, but our hope is that further research proves that it can be replicated online or in mass communication which would alleviate this issue. Due to the experiment being impractical, the results of this thesis might be more useful for academics than practitioners.

7.3 Directions for future research

Because the results from the online study are somewhat inconclusive as to whether or not the increased purchase intention is caused by an avoidance of cognitive dissonance, more research is needed. Further research could potentially focus on measuring the experienced level of cognitive dissonance rather than on the effect of the experiment itself which was the main point of this thesis. Measuring cognitive dissonance by presenting respondents with questionnaires on experienced psychological discomfort is probably more accurate than a self-affirmation task, and could be done both right after the initial statement is answered as well as after the desired action. Just because cognitive dissonance is reduced when participants decide to take the desired action does not mean that it cannot arise again afterwards.

Furthermore, since the experiment in this thesis is impractical in large scale operations (except online), there is a need to test whether or not it can be replicated in a mass communicated media such as print or television advertising. If so, its potential does not only increase for products that benefit from a socially normative pressure to buy them, but

also for all brands that use CSR as brand promotion. Consider for example if a FMCG brand teamed up with WWF and presented the following ad copy: “Do you also think it is important to save the orangutans? - buy Brand X and 1% of our profit goes towards saving the orangutans”. It can, and should, of course be questioned if brands should use CSR to promote themselves but that is beside the point of this thesis.

We would also encourage researchers to test a similar experiment in a “real” online setting such as an online food store. This approach was discussed prior to writing this thesis, but there was not enough time and resources to undertake it. However, answering a questionnaire should feel much more natural in an online store than in a real one, and the obvious time and labour intensive task of handing out questionnaires disappear online. The potential drawbacks of an online experiment might instead be that there is no human interaction which, as discussed, might be an important part of the experiment.

Yet another area to research is how this experiment functions over time. Is the experienced purchase intention decaying over time? How long does the effect last, and are there ways to sustain it? The applications of a similar experiment are many, but most of all we would like to encourage marketing researchers to implement more social psychology theories into their research. Understanding the minds of consumers is something all marketers should strive to do and with the results of this thesis we are one step closer!

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Appendix

A – List of questions in the online study

Q1: How likely is it that you will purchase an organic product the next time you go grocery shopping?

Q2: I intend to purchase an organic product the next time I go grocery shopping.

Q3: I would like to purchase an organic product the next time I go grocery shopping.

Q4: Which one of these products would you buy?

Q5: How much would you be prepared to pay for these products? A – Organic orange juice

Q6: How much would you be prepared to pay for these products? B – Regular orange juice

Q7: Organic yogurt: Contains less fat than regular yogurt.

Q8: Organic yogurt: Is healthier than regular yogurt.

Q9: Organic yogurt: Tastes better than regular yogurt.

Q10: Organic yogurt: Has a longer shelf-life than regular yogurt.

Q11: Organic yogurt: Is more locally produced than regular yogurt.

Q12: To buy organic food is: Good.

Q13: To buy organic food is: Smart.

Q14: To buy organic food is: Important.

Q15: How likely is it that you would recommend a friend to buy organic food?

Initial statement: I think it is important to buy organic products in order to take responsibility for the earth and the environment.

Self-affirmation ranking: Rank the following values in the order that they are important to you.

Self-affirmation task: Write 5 – 10 sentences about a situation in life when your most important value was important to you.

Non-affirmation task: Write 5 – 10 sentences about a situation in life when your least important value could be important to someone else.

Demographic 1: Gender

Demographic 2: Age

Demographic 3: Which is your highest completed level of education?

Control: I usually buy organic food whenever I have the opportunity.

Email: Enter your email address if you want to enter the lottery for cinema gift vouchers.

B – List of tables and figures

Table 1: Mean values and standard deviations of the 10 statements in the pre-study.

Table 2: Mean values (and standard deviations) for the purchase intention questions.

Table 3: Mean ranks for the willingness to pay for an organic and a regular orange juice.

Table 4: Mean values (and standard deviations) for the willingness to pay for an organic and a regular orange juice.

Table 5: Mean values (and standard deviations) for the product attribute, attitude and NPS questions.

Table 6: The number of purchases of organic products per condition.

Figure 1: Structure of the online survey distributed using the Qualtrics Survey Software.

Figure 2: Graphical representation of the mean values for the three purchase intention questions.