

The Future Bias in Marketing

A longitudinal approach

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Abstract

This study set out to explore consumer responses to pre-launch advertising, i.e. the advertising of products prior to launch. According to the construal level theory (CLT) people's representation of future objects and events change with temporal distance. Drawing inferences from CLT to marketing, consumers' attraction towards forthcoming products is explained. Further, using theory on consumer judgments the effects of pre-launch advertising is explored over time.

A longitudinal experimental study using digital photo camera advertisements is used for testing the hypotheses in the paper. The results show that consumers have a statistically significant bias towards forthcoming products compared to identical products that are available now. Moreover, the presence of an initial judgment effect makes this "future bias" endure over time, causing forthcoming products to be preferred over identical current products, even when the former is launched. The results indicate that pre-launch marketing should be included as a means to efficient marketing, and that companies' media scheduling should be extended to also include marketing efforts prior to product launch.

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1. Introduction

In a ChangeWave survey from January 2010, one month *before* Steve Jobs entered the stage in the Yerba Buena Center in San Francisco to announce the iPad tablet, a total of 18 % of the respondents indicated that they were either “*very likely*” or “*somewhat likely*” to buy an iPad (or an iSlate as the rumored forthcoming product was called by the media at that point). 37% of the interested respondents even stated that they were willing to pay at least \$700 for the tablet, if and when it was made available, unacquainted with the features it would hold (Investorplace, 21.01.10). Similarly, Jobs presented the first iPhone almost 6 months before it became available in stores, and the yet-to-be-launched iPhone soon sailed up as the best-liked mobile telephone, preferred by consumers over the cell phones they already owned. People waited in line outside the Apple stores for hours, in fact people camped outside stores overnight, to get hold of the device on the launch day. People even slept in line outside stores that claimed to be confident that they would *not* run short of the product.

Even though product ‘preannouncement’ is not a new term, most studies on advertising focus on optimizing the effects of promotion *after* the product is made available to the consumers. Preannouncements have usually been described as a means for corporations to achieve competitive advantage, as a signaling tool or for demand forecasting (Brockhoff & Rao 1993; Schatzel & Calantone 2006; Su & Rao 2010; Eliashberg & Robertson 1988). Some research have claimed that advertising products prior to launch brings unfortunate effects, particularly in high-tech industries, as they cue competitors on what is waiting down the line and give them time to react (Sorescu et al. 2007; Mohr et al. 2010; Gerhard et al. 2011). In light of several successful preannouncement campaigns, with Apple being the perfect example, it does however seem valuable for marketers to gain insight to the effects of pre-launch advertising, and to maybe shift some of their advertising effort over to advertising products prior to launch.

A wide body of research has provided evidence that an individual’s perception of an event changes systematically with the temporal distance to the event. Trope & Liberman stand out as pioneers within the field with their Construal Level Theory (CLT, 1998; 2003). They show that people construe events in the distant future more abstractly and in a

decontextualized manner compared to near future events. The temporal distance has been shown to affect individuals' weighting of various features so that people's preferences change over time.

Although the CLT has been a popular field of research in psychology through the last decade, little attention has been given to the marketing implications of changing construal levels. As the construal level is found to have impact on preferences and choice, it is interesting to explore the issue in a consumer perspective. A few studies have thus recently addressed the topic of pre-launch advertising in the context of consumer responses. Castaño et al. (2009) argue that advertising should be sensitive to the temporal distance to the product, by focusing on product benefits when the product is still in the distant future before shifting the advertising efforts over to communicating how to overcome barriers and costs as the launch draws closer in time. The most astounding findings on pre-launch advertising are however made by Dahlén, Thorbjørnsen and Sjödin (2010) who demonstrated that future framed advertising cause people to evaluate both the advertisement and the advertised product in a more favorable way than in the case of current framed advertising. Additionally, they showed that future framed advertising prompt elaboration, and increase the level of anticipated post-purchase feelings.

Dahlén (2011) argues that humans have a general bias towards the future. We are programmed to believe that the future will bring amazing things, and that the future will be better than both the past and the present. We believe that the future is going to fulfill all of our dreams, and by making a little effort we will get there. Dahlén further claims that this future orientation is the drive that keeps us going, the reason to get out of bed in the morning. By the same token, Peterson (2000) point out that people need something to look forward to, and that they take joy from savoring and picturing the future. Several psychologists also argue that some degree of future orientation is focal in maintaining personal health and well-being (see Holman & Silver 1998 for a summary). This future orientation applies to products too. We are programmed to think that the forthcoming is better than the current, and thus we believe that future products are better than current products, even when we have no factual support for this. The quality and attractiveness of future products are constantly overrated, and people believe that forthcoming products are

general improvements of the currently available products (Thorbjørnsen & Dahlén 2010). Thus, a product that is advertised as being launched in the future seems more appealing than the exact same product being advertised as currently available.

This study is intended as an extension of the studies conducted by Dahlén et al. (2010), exploring the effects of future framed advertising over time as the temporal distance decreases. If the initial consumer evaluations based on future framed advertising are persistent, meaning that the construal level in the consumers' first meeting with the brand affects choice at launch, the construal level theory has important implications for marketers. More knowledge about preannouncements is therefore valuable as it might be a simple, yet beneficial means to successful marketing.

This thesis will seek answers to the following research questions:

RQ1: Are preannounced products evaluated more favorably than current products?

RQ2: Are the favorable evaluations of preannounced products enduring so that preannounced products are evaluated more favorably at launch than products that are not preannounced?

In this paper you will find an overview of relevant literature, both in terms of CLT, future framed advertising and consumer judgments, and it will outline hypotheses based on presented theory. Thereafter, a presentation of the experiment will follow. The study replicates the findings from Dahlén et al. (2010) and further explores between-subject effects of pre-launch advertising on the evaluation of products when launched. Thereafter an analysis of the findings will be presented, before finishing up with a discussion of the theoretical and managerial implications of the results, limitations and weaknesses that should be paid attention to when reading the results, as well as suggestions and guidelines for future research.

2. Literature review

2.1 Construal level theory (CLT)

2.1.1 Introducing the Construal Level Theory

Lewin (1951 as cited in Kardes et al. 2006) proposed that people's mental representation of an event is dependent on the perceived psychological distance to the event. Various studies have shown that people form construals along various dimensions of perceived distance such as temporal, social, spatial and hypothetical distance. Moreover, these construals affect prediction, evaluation and behavior (Fujita et al. 2006; Trope & Liberman 2003; Kim et al. 2008; Bar-Anan et al. 2006; Henderson et al. 2006). The underlying basis for the CLT (Trope & Liberman 1998) is the link between psychological distance and abstraction. Items, events and people that are perceived as distant are construed in an abstract way, or as high-level concepts. Conversely, they are construed in more concrete terms, or as low-level concepts, when perceived as proximate (Trope & Liberman 2003). Moreover, distant events are based on general information and schematic knowledge about the future event in a decontextualized manner, whereas psychologically near events are context-based and more detailed (Garcia et al. 2010). Put in another way, high-level construes are based on primary aspects of the event, i.e. the perceived essence and core features of the available information. Low-level construes are based on secondary features, and are thus richer and less systematic (Kardes et al. 2006; Trope & Liberman 2003). With psychological distance, people represent actions in superordinate goals, in terms of "why". When the distance is smaller, people seem to focus on subordinate goals, the means to achieving that goal in terms of "how" (Stephan et al. 2010; Liberman et al. 2002). A high-level construal or a superordinate goal related to academics can for instance be 'doing well at school', whereas the corresponding subordinate goal can be 'reading a curriculum article'. Table 1 below gives an overview of the differences in how people construe events based on psychological distance.

Psychologically distant	Psychologically close
Abstract	Concrete
High-level	Low-level
Decontextualized	Context based
General	Detailed
Primary features	Secondary features
Superordinate goals	Subordinate goals
Systematic	Non-systematic
Why	How

Table 1 – Psychological distance construals

2.1.2 Construal level theory as a heuristic

In the hectic everyday life people often lack the time or ability to evaluate alternatives, consequences and risks of each decision they are facing. In order to cope with the complexity of their daily life, people tend to use heuristics. Heuristics are mental rules of thumb that are used by individuals to make shortcuts and simplify making judgments and decisions (Norman, NHH 2009). The body of research within this field has grown tremendously throughout the last decades (e.g. Tversky & Kahneman 1982; Kahneman & Frederick 2002), and Kahneman receiving the Nobel Prize in Economic Science in 2002 for his work within heuristics and biases is a clear sign of the impact and importance of this field.

Based on the construal level theory, people's cognitive representation of an event changes if the perceived distance to the event changes, meaning that the psychological distance will have implications for an individual's evaluation of an event. Applying the theory in terms of temporal distance an event should be construed in a more concrete manner as it grows closer in time (Liberman et al. 2002). Trope & Liberman (2003) propose this to be a heuristic based on people normally acquiring increasingly detailed information as they get closer to the event. Additionally, people are normally able to postpone making a decision until the event

is close in time, and detailed information is therefore normally not required at temporal distance. There has also been observed indications that people do not feel the need to process detailed information about an event when it is in the far distance, even in situations where the same amount of information is available whether the event is distant or close in time (Rim et al. 2009; Trope & Liberman 2003). This can probably best be illustrated by an example of affective behavior. A person might for instance browse menus online and base his choice of restaurant on its wide selection of healthy food pursuing a healthy lifestyle (abstract). When he is reading the menu in the restaurant on the other hand, he might very well choose one of the unhealthy alternatives giving in for his desire for something tasty (concrete), even though the same information (the menu) was available at both times. Similarly, Ariely (2009a) found that male students were capable of conducting behavior they normally found appalling while sexually aroused. This demonstrates that although in conflict with their superordinate goals (e.g. being a good person), they let their subordinate goal of fulfilling an immediate desire shine through, even though the same information about how such behavior is considered by the rest of the society was available at all times.

2.1.3 The different dimensions of psychological distance

Temporal distance

The main focus of the research and empirical testing of construal level theory has been on temporal distance, which refers to “the distance between a reference point (typically today) and the point of occurrence of the event under consideration (e.g., tomorrow, next year)” (Chandran & Menon 2004, p. 376). Compared to events in the near future Liberman, Sagristano and Trope (2002) showed that people expected events in the distant future to be more in cohesion with their representation of the ideal than near future events. Respondents did for instance include both neutral and negative events when asked to describe a good day when the good day was tomorrow, whereas only positive events were mentioned in the description of a good day that would occur next year. When picturing an event in the distant future, people also applied broader categories explaining actions, compared to describing an identical event in the near future. In paper mentioned above, participants were asked to subdivide items needed for a camping trip into as narrow categories as possible. When picturing the camping trip as close in time respondents managed to come up with more

categories than when the camping trip was in the distant future. Moreover, temporal distance has been shown to affect negotiations. Negotiations are more dynamic and integrative when the negotiation issues are abstract. Henderson and his colleagues (2006; 2009) found that negotiations conducted with temporal distance from the negotiated issues caused the negotiators to think about abstract goals instead of concrete details. Temporal distance thus increased the likelihood of logrolling, expanding the negotiation pie, and coming to a good agreement for both parties. In the same notion, Forster, Friedman, and Liberman (2004) found temporal distance to also enhance creativity.

Social distance

A number of studies have been conducted on the effects of social distance on construals. Among the findings are differences in construal levels between self versus other and in-group versus out-group. Liviatan, Trope and Liberman (2008) did for instance find that people judged others that they perceived as similar to themselves more in terms of low-level construals, compared to those people they perceived to be different from themselves. Thus secondary features become increasingly important when judging behavior as the interpersonal resemblance increases. Out-group members are portrayed in more abstract terms, and are perceived as more stereotypical and homogenous than in-group members (Judd et al. 2005; Park & Judd 1990). Moreover, their behavior is also perceived to be more predictable (Linville, Fischer & Yoon 1996). Further, Libby & Eibach (2002) observed that people use more detailed descriptions when imagining an event from a first-person perspective than they do when asked to report from a third-person perspective. Also, people tend to apply an abstract third-person perspective when recalling their previous actions that are not in line with their current self.

Geographical distance

People's evaluation of a person, object or event is also dependent on geographical distance, i.e. whether the event is spatially near or distant. When the participants in a study by Fujita et al. (2006) were shown a video of two students interacting, they used more abstract language describing their actions when they were told that the students in the video were situated in a different city than when told that they were at the same college campus. The increased abstractness of larger psychological distance also causes people to imagine events through

the use of schematics when the distance is large. Henderson et al. (2006) did for instance show that the perceived likelihood of an event outcome is influenced by the combination of whether or not the event outcome is in line with the cognitive schema of the event and the geographical distance between the perceiver and the place of the event. People tend to perceive events they see as prototypical as more likely and events that deviate from the typical as less likely as the spatial distance gets larger. Similar to the negotiation example mentioned in the temporal distance section, negotiations tend to be more dynamic and to result in more optimal outcomes when the negotiators are placed in geographical distance from each other as opposed to in the same room (Henderson 2011). Jia et al. (2009) also found spatial distance to generate more creativity, originality and more fluent responses.

Hypothetical distance

Hypothetical distance refers to whether an event is real or hypothetical, and concerns the individual's perceived probability for the event in question to occur. Rare events are difficult to imagine, and hence people draw the conclusion that events that are hard for them to picture must be unlikely. Hence, detailed descriptions of an event (low-level construals) cause people to see it as more likely than when described in more general terms (Bar-anan et al. 2006; Trope et al. 2007). In research on the perceived likelihood of contracting a disease, Sherman et al. (1985) gave the respondents a list of symptoms one could expect if getting the sham disease Hyposcemia-B. The group of participants who were given a list of easy-to-imagine symptoms (e.g. headache) perceived the probability of being infected by the disease as higher than the participants that were told that the warning signs included inflamed liver and other hard-to-imagine symptoms.

2.1.4 Temporal distance and decision-making

So far we have seen that the psychological distance affects individuals' perceptions and evaluations of events when it comes to temporal, social, geographical and hypothetical distance. For the remainder of this thesis the focus will be on temporal distance.

The CLT argues that the construal level affects the criteria upon which people base their choices (Trope & Liberman 2003). Hence, the basis for making decisions, and the perceived value of products and events, are dependent on the temporal distance. Temporal framing might actually switch people's preferences between two different alternatives. Understanding temporal framing in terms of advertising and selling products does therefore seem valuable. The following section will present temporal distance effects on individuals' preferences and choices and the implications for marketing. This will help explain two biases that are important in order to understand the effects of pre-launch advertising; the optimism bias and affective forecasting.

Time dependent value and future optimism

As a person's mental representation of objects and events changes with the construal level, it is also expected that the perceived value of these objects and events will change as the psychological distance changes. The CLT predicts that product features associated with high-level construals (primary features) will be given a decreasing amount of weight, whereas features associated with low-level construals (secondary features) will become more salient as the temporal distance decreases. This means that the perceived value of a product that has most value associated with its abstract features will be greater with temporal distance, while the opposite is true the product's value is related to low-level, concrete features (Trope & Liberman 2003). Moreover, choices also tend to be based primarily on desirability issues when made in the far distance, whereas they are based on feasibility issues when made in the near future. Liberman & Trope (1998) did for instance show that students preferred an academic assignment that was interesting (desirable option) but challenging if the assignment due date was far ahead when introduced to the choice, while they favored an uninteresting assignment that was less challenging (feasible option) when the due date was close to the date they had to make their choice.

When it comes to the effectiveness of advertising, it is expected that stressing a product's strong performance on its primary attributes is ideal when advertising a future product. Opposite, highlighting positive information about the product's secondary attributes should give stronger effects when promoting a product that is immediately available. Trope & Liberman (2000) demonstrated this using a radio with a primary feature (sound) and a

secondary feature (clock). They showed that a radio set with good sound quality but a poor built-in clock got relatively more attractive with temporal distance, regardless of the low-grade clock. On the other hand, a radio set with poor sound quality but with a well-functioning clock was rated relatively less favorably over temporal distance. At the same time, negative value is subject to steeper time discounting than positive value so that temporal distance increases the weight given to favorable product attributes, while putting less weight to negative product features, not considering whether the features themselves are high-level or low-level construals (Eyal et al. 2004; Trope & Liberman 2000). Accordingly, Trope & Liberman (2000) demonstrated that although consumers' preferences for, and their weighting of different attributes change over time, both radios were rated more favorably as the temporal distance increased. Consistently, Eyal et al. (2004) showed that (high level) pros become more salient when the temporal distance is large, whereas (low level) cons are more salient when the temporal distance is small. Supporting upon this argument, Herzog et al. (2007) showed that people found it easier to generate pros than cons related to an action in the distant future, and conversely when the action was temporally close. Distant events will therefore be evaluated on the basis of its pros (benefits), while both pros and cons (costs) will be included in the evaluation of near future events. As benefits are construed at a higher level than costs, one can argue that products and events will be evaluated more favorably in the distant future than in the near future, as long as it has both positive and negative attributes. This brings us to the optimism bias.

Optimism bias

The optimism bias is the tendency for people to peer at themselves through “rose tinted glasses”, being overly optimistic about the outcome of their planned activities, and was mentioned by Adam Smith as early as in 1776:

“The overweening conceit which the greater part of men have of their abilities is an ancient evil remarked by the philosophers and moralists of all ages. [...] The chance of gain is by every man more or less over-valued and the chance of loss by most men under-valued...”

~ Adam Smith (*The Wealth of Nations* 1776, p. 177)

People are positively biased, and some researchers have gone as far as claiming that the only exceptions to this rule are people who are anxious or depressed (Taylor & Brown 1988 as cited in Peterson 2000). People have a positivity illusion shining through in their language,

memory and thoughts. They estimate the probability of themselves experiencing a positive outcome in the future (e.g. getting a good job or having gifted children) as higher than for the average person. Likewise, they see themselves as less vulnerable than the average person when it comes to experiencing negative events (e.g. getting ill, being involved in a car accident or having a failed marriage) (Ariely 2009b).

In relation to the optimism bias, Mitchell et al. (1997) describe something they call the “Rosy View”. Through several studies they illustrate how people overestimate the value of events both in prospective and retrospective, compared to what they actually feel in the present. For instance, in one of their studies the expectations of participants on a group trip to Europe exceeded their actual experience of the trip. When they came back home, their feelings about the trip did however change back towards the level of their previous expectations. The positivity of their memories increased and negative incidents seemed forgotten. The same tendency has been demonstrated to apply for life satisfaction. People are the least happy with their current life situation and evaluate it to be worse than both how they remember it to have been the past and how they expected it to be in the future. Specifically, they expect their life satisfaction to be better in the distant future than both in the past and in the near future (Dahlen 2008; Garcia et al. 2010), so that the expectations follow the V pattern illustrated below.



Graph 1 (reprinted from Dahlén 2011)

The optimism bias is shown as dependent on temporal distance as people report greater optimism for the distant future than for the near future (Gilovich, Kerr & Medvec 1993). This can largely be explained by CLT and people's tendency to both put more focus on and to weight benefits more heavily compared to costs when at distance, which cause people to have great expectations for the future compared to the present. Hence, events in the future appear more positive than events in the current. This future optimism effect is also applicable in relation to products, and indicates that promoting a product when it is temporally distant will cause consumers to base their evaluation and judgment on the product's benefits, overlooking the corresponding costs. Thus, the initial assessment of a product will be more favorable if the product is evaluated while temporally distant compared to being evaluated when temporally close. Thus, advertising products prior to launch will create positivity and expectations among consumers, and the negative aspects will be undermined in the initial evaluations. As people have a tendency to focus their attention towards the next big thing, companies have the opportunity to introduce new products before the launch in order to increase consumers' interest in the products, and to create more favorable evaluations. Thorbjørnsen & Dahlén (2010) demonstrated this as they found respondents to be more optimistic about a product that would be launched in the future than they were to the same product when told that it was presently available in stores. People evaluated both the product and the product advertisement more favorably, as well as reporting higher purchase intentions, when the product was advertised prior to launch.

Focusing on focal events

Focalism

Changing psychological distance tends to shift people's focus. The temporal distance alters goals and preferences and, in turn, decisions are affected. For psychologically distant, high-level construals, the main focus is the primary goal, whereas more concrete, incidental features get more consideration in psychologically close, low-level construals (Liberian & Trope 1998; Smith & Trope 2006). In the everyday life people seldom make evaluations and decisions only considering the event in question, with no interference of other seemingly unrelated events. The morning meeting at work has to be taken into account when deciding whether to take an early spinning class at the gym, and the time needed for grocery shopping

and cleaning the house must be evaluated when inviting guests over for dinner. At distance people tend to focus solely on a specific event, and fail to acknowledge mitigating effects that might be caused by other events that are not directly connected to the event itself. This tendency of giving focal situations more thought and weight than non-focal situations is called focalism (Wilson et al. 2000; Kruger & Burrus 2004). People picture the event in a vacuum, causing them to only consider the benefits of having friends or family over for a pleasant meal, while failing to evaluate the related costs. These other factors become apparent as one get closer to the event, and intentions stated at temporal distance might therefore not seem so appealing after all as it draws closer in time, popularly called the “Yes...Damn!”-effect (Alexander et al. 2008).

Focalism and affective forecasting

People base most, if not all, their decisions on predictions and evaluations of the consequences of the future outcomes. They ask themselves how they would feel if they for instance went to the new restaurant they heard about, or bought a new car. Making these predictions as accurate as possible is key for making efficient decisions. The previous paragraph does however indicate that we cannot make such an assumption. Along this notion Kahneman and Snell (1992) argued that individuals are unable to correctly predict the utility they will experience from the outcome of a decision, and differentiated between *predicted* utility and *experienced* utility. Moreover, Liberman et al. (2002) found that this divergence was not reserved for the difference between prediction and reality alone. It also occurred between predictions at different points in time (i.e. near versus distant future), as events are often evaluated in vacuum when distant, not accounting for other unrelated events that affect the mood simultaneously (Wilson et al. 2000a). People focus more on the central aspects of the event both before and after the event, than they do during. As such distractions split people’s attention they might hinder people from appreciating the event to the fullest, and the evaluation of an event could be reduced compared to expectations (Mitchell et al. 1997). People tend to have problems forecasting how they will feel and act in a future situation, and to overestimate the happiness (sadness) they will feel in case of success (failure), both in terms of intensity and duration (Ayton et al. 2007; Kahneman & Snell 1990; 1992; Loewenstein & Schkade 1997; Wilson et al. 2000a; Sieff et al. 1999; Gilbert et al. 1998). One example is football fans overestimating the happiness (sadness) they will feel if their team wins (loses) a game. Research on subjective well-being suggests that people's attention

turns quickly to their current concerns, reducing the impact of past events on their happiness, so that winning the game is quickly shadowed by the bus being late on the way home (Wilson et al. 2000a). This can partly be due to some unrelated events being unpredictable, but the same tendency is observed for predictable events (e.g. the dinner party preparations mentioned above). Similarly, people have difficulties predicting how their feelings change over time and how quickly their emotions will adapt to a new situation (Kahneman and Snell 1990; Suedfeld et al. 1982; Weinstein 1982). Both between-subjects and within-subjects studies have for instance shown that people expect life-changing circumstances (e.g. being paralyzed or losing their life partner) to affect their life quality to a much larger extent than people report after having gone through such changes (Loewenstein & Frederick 1997; Sieff et al. 1999; Dahlén 2011). Contrary to traditional studies on consumer learning processes (e.g. Hock & Deighton 1989), Thorbjørnsen and Dahlén (2010) argue that this forecasting bias proves individuals as unable to learn from experience when it comes to predicting their own feelings. People tend to crave for the newest cell phone or ‘it-bag’ without remembering how quickly the excitement wore off last time they bought a phone or handbag. Along this notion, Loewenstein & Frederick (1997) showed that people were unable to forecast future effects on their overall well being in case of changed life circumstances by matching the event with similar events that have previously occurred to them.

Affective forecasting and consumers

Seen in a consumer perspective this forecasting bias implies that people tend to overrate the joy they will feel if they get something new, such as a new car or handbag, and the bias is expected to be stronger for distant products than for close products. Additionally, the feeling is assumed to last longer than it does in reality as new events shift the individual’s attention away from the product. It is therefore expected that consumers will overrate the value they will experience from consuming a future product and thus overestimate their post purchase feelings compared to their actual emotions. Accordingly, Thorbjørnsen & Dahlén (2010) showed that individuals that were subject to a pre-launch advertising stimuli reported stronger forecasted post-purchase feelings than individuals subject to a current framed advertising.

The first part of this study is intended as an attempt to replicate the results of Thorbjørnsen & Dahlén (2010), thus I hypothesize the following:

H1: Future framed advertising has favorable effects on

- a) product evaluation
- b) advertising evaluation
- c) forecasted feelings

Even though favorable effects have been identified there has not, to my knowledge, been conducted any longitudinal studies on the effects of pre-launch advertising on product evaluation. This study replicates the study of Dahlén et al. (2010), while extending it by exploring whether the evaluations of preannounced products are resistant to changes in temporal distance as the time of launch draws closer. In order to determine this it is necessary to understand how evaluations and judgments are stored in the mind, whether the initial judgment of a product has an effect on subsequent judgments about the same or similar products, and if the consumer optimism concerning future framed products is stable over temporal distance.

2.2 Construal level effects over time

Alba et al. (1991) proposed four questions that are essential in order to understand consumers' decision making. One of these questions was related to the way memories of prior decisions alter subsequent choices. Although several studies in consumer psychology have explored the relationship between the initial evaluation or decision and subsequent decisions, the current studies on CLT have mainly focused on single decisions. Thus we know little about which effect the construal level at the time of the initial evaluation has on subsequent choices. As preferences change with temporal distance, and high-level desirability features are put more weight to the larger the temporal distance, an exploration of the question raised by Alba et al. seems very relevant.

2.2.1 Elaboration likelihood and attitude strength

In their famous study of the Elaboration Likelihood Model (ELM), Petty & Cacioppo (1981; 1984; 1986a; 1986b) suggest that extensive cognitive processing will lead consumers to develop overall evaluations about an object or message. One of the main goals for the ELM was to understand the persistence of attitudes, and how attitude changes sustain over time (Haugtvedt & Petty 1992). The elaboration process will cause the new information to connect with existing knowledge and information. The attitudes that are formed through such issue-relevant elaboration are expected to be enduring, and to become an integrated part of the cognitive schema for the object in mind. Moreover, elaborative processing is expected to develop more points of contact in mind than non-elaborative thinking, which improves the probability of further elaboration, prevents the attitudes from decaying quickly, and makes them more stable and accessible compared to attitudes that are not based on cognitive processing (Petty & Cacioppo 1984; Haugtvedt & Petty 1992). As the attitudes are more accessible to the individual they are more likely to come to mind in relevant situations, and are therefore more predictive for the individual's behavior than attitudes formed through less extensive processing (Petty & Cacioppo 1984). Hoyer and Macinnis (2007) mention elaboration as one of the means by which memory can be affected, and pin out that elaboration can be useful in transferring information from the short-term memory to the long-term memory. This is further supported by Greenwald & Leavitt (1984); "Memory of an event depends on the amount and nature of the cognitive activity that accompanies it" (p. 584). Elaborative encoding increases the probability of recalling the evaluations and judgments made about a product, and when an individual has evaluated and judged information he or she is more likely to remember this information than information that is not evaluated and judged (Hyde & Jenkins 1973; Greenwald & Leavitt 1984; Biehal & Chakravarti; Craik & Lockhart 1972 as cited in Haugtvedt & Petty 1992). Additionally, it has been shown that attitudes formed through elaboration are stronger (Haugtvedt & Petty 1992; Haugtvedt & Priester 1997; Loken et al. 2002; Barden & Petty 2008) and more resistant to change (Tellis 2004; Kokkinaki & Lunt 1999) than attitudes formed through less cognitive processing.

Attitude certainty

Attitude certainty is a widely used measure of attitude strength, and it refers to how certain a person is that his or her attitude is right. In line with the mentioned findings for elaborated attitudes, certain attitudes have been shown to be more consequent, both in terms of persistence, resistance and also in forecasting behavior (Briñol et al. 2007; Berger & Mitchell 1989; Petty et al. 1983; Barden & Petty 2008). In addition to demonstrating that elaboration increases attitude certainty, Barden & Petty (2008) showed that attitude certainty is dependent on the number of thoughts, and that the certainty is neither affected by the valence of the thoughts nor whether they are mixed or one-sided. Consistently, Haugtvedt & Petty (1992) argued that all variables increasing the amount of elaboration in attitude formation lead to greater attitude strength.

Pre-launch advertising and elaboration

Positive uncertainty

A common supposition is that individuals seek to reduce uncertainty. This notion is supported by a wide range of behaviors, such as collecting information, the need for generating theories, and making assumptions. In fact, one of the most basic assumptions in economic theory is based on this notion, the assumption of a negative risk-return relationship, meaning that (most) people demand high returns for taking on risk. Uncertainty is often associated with anxiety and worries (Wilson et al. 2005). Nonetheless, recent studies have shown that uncertainty can have positive effects as an event with an uncertain, positive outcome elicits more and longer-lasting positive feelings than a similar event where the outcome is known (Wilson et al. 2005; Lee & Qiu 2009). For instance, in a study by Lowenstein and Linville (1986 as cited in Mitchell et al. 1997) respondents were asked whether they would prefer to kiss their favorite movie star today or to wait for one week. A majority chose to wait, indicating that people feel joy in the process of looking forward to something in the future.

It is however important to stress that the favorable effects we observe under uncertainty are only present if the prospects of the resolution is positive. If the uncertainty has a potential

negative outcome, the uncertainty can make unpleasant events even more unpleasant (Wilson 2005; Bar-Anan et al. 2009). The uncertainty related to waiting for the test results of an HIV test will for instance not lead to any favorable feelings as the outcome in case of testing positive can seem horrendous, whereas testing negative will likely not lead to pleasure but rather just a sigh of relief. In a consumer perspective, the uncertainty is however likely to concern events with positive outcomes, such as potential prizes or new product releases. Hence uncertainty related to consumer goods is expected to generate positive effects of savoring, which in turn might spill over to positive feelings about the product.

Preannouncement effect on elaboration

Dahlen et al. (2010) demonstrated that advertising for future products evokes a greater number of thoughts, and is thus elaborated more extensively, rather than advertising for a current product. The uncertainty surrounding future products is expected to give consumers joy from savoring, and individuals in a positive mood tend to form more favorable product evaluations and give more weight to positive product attributes in comparison to consumers in a neutral or negative mood (Petty & Briñol 2010; Hoyer & Macinnis 2007; Ajzen & Sexton 1999). Attitudes that are formed in a positive mood also score higher on attitude certainty than attitudes formed in a negative mood (Briñol, Petty & Barden 2007). Hence positively charged uncertainty appears as a means to increase the amount of elaboration on a product, and the positive feelings towards a future product are expected to be stronger and more enduring compared to feelings for a current product (Lee & Qiu 2009). Attitudes that are formed based on future framed promotion activities are expected to be stronger, more persistent, stable, resistant to change and more predictive of behavior than attitudes based on current framed promotion. Thus although the elaboration process is expected to dwindle, and emotions are expected to be adjusted as the uncertain outcome of a future product or event is resolved, the future-based attitudes are anticipated to remain more favorable as a consequence of elaboration.

2.2.2 Initial judgment effect

Research on consumer judgments has to a large extent been carried out in a manner where subjects are asked to choose their preferred product among several alternatives while still

examining the products, or immediately after examination. These studies fail to acknowledge that most real-life judgments are based on information stored in the memory. This is especially relevant in situations where the products are unavailable for the consumer to examine directly, as for instance in the case of pre-launch advertising.

Introducing the initial judgment effect

Attitudes that are highly accessible to an individual will come to mind in relevant situations and might guide the individual's behavior automatically (Petty & Wegener 1999; Fazio et al. 1986 as cited in Wilson et al. 2000b). Additionally, accessible attitudes about an object might influence how sequential information concerning that object is evaluated (Fazio 1995 as cited in Petty & Wegener 1999). This is similar to a halo-effect, where people apply correlational inferences and evaluate information about individuals they like in a more favorable light, and assign those individuals extra, favorable features (Thorbjørnsen, NHH 2009). Wyer et al. (1984) presented the "*initial judgment effect*", arguing that early judgment of a product influences subsequent decisions about the same product (Carlston 1980a; Kardes 1986; Lynch & Zauberger 2007). Carlston (1980b) demonstrated that when respondents were asked to judge a product while solely focusing on positive product information prior to receiving negative product information, they had a tendency of evaluating the product more favorably than respondents who received the negative information first. Carlston drew the conclusion that the cognitive process that is taking place after presentation of the stimulus influences an individual's retrieval of initial evaluations when making subsequent judgments. In his studies, Carlston (1980a; 1980b) explains the initial judgment effect with a version of the dual coding theory, where he suggests that product information can either be stored in memory as attribute-based representations or as evaluation-based representations. By the same token, Brewer (1988 as cited in Brewer & Feinstein 1999) illustrates the impression construction as a sculpturing process, and proposes two different modes for the formation. In the first mode one starts with a frame, into which one can insert new component elements, but the final product will be constrained by the structure of the frame. New information will therefore only be included in the person's judgment if it fits into his or her existing evaluation of the object. In the second mode individual pieces are placed together in new ways, only limited by the structural relationships between the various parts, i.e. the various nodes must be connected in mind.

Initial judgment effect and subsequent decisions

Only as little as 5% of all cognition occurs in higher consciousness, whereas 95% occurs below awareness (Thorbjørnsen, NHH 2009). Haines (1974 as cited in Petty et al. 1983) argued that consumers seek to avoid processing data that is unnecessary in order to make decisions, and several studies have correspondingly argued that consumers will retrieve specific features and facts about the product only in lack of an already available summary judgment (Lichtenstein & Srull 1985, Carlston 1980b, Hastie & Park 1986). Jones and Goethals (1972 as cited in Kardes & Herr 1990) argued that an initial judgment effect would be likely to occur when new information is continuously integrated with existing information rather than processed independently. This has been explained by overall evaluations being more accessible for the individual (Feldman & Lynch 1988 as cited in Lynch et al. 1988), and overall evaluations tending to persist while specific details grow fainter over time (Biehal & Chakravarti 1983; Carlston 1980b; Feldman & Lynch 1988). Cacioppo & Petty (1984; 1986b) claim that individuals form overall evaluations and attitudes based on elaboration.

Questioning the initial judgment effect

The research on the initial judgment effect has not gone by without criticism. Biehal & Chakravarti (1983) did for instance show that brand choices were strongly affected by participants' recollection of specific product attributes. Haugtvedt & Wegener (1994) provide us with a possible explanation for this finding when demonstrating that primacy effects occur when the attitude is based on elaboration, whereas recency effects seem to occur in the absence of elaboration. Shetowsky et al.'s (1998 as cited in Wegener et al. 2004) replication of this study obtained matching results. Thus, recollection of attributes might influence choice when a person has not engaged in elaborate thinking. Furthermore, Alba et al. (1991) argue that the occurrence of correlational inferences is contingent on the availability of inference rules, and thus the individual's product category knowledge. Research on psychological newness (Alexander et al. 2008; Alexander 2008) supports this argument, indicating that the message receiver (i.e. consumer) will engage in less elaborate thinking when skeptic to the message. However, the consumer's curiosity will induce elaboration. Nonetheless it is important to stress that products marketed as radical innovations (e.g. the Segway and PDAs) often are less successful than products that are

marketed as incrementally new products (e.g. iPhone) (Alexander et al. 2008), indicating that availability of inference rules is an essential factor in marketing new products.

Alba and colleagues also criticize the research for ignoring the mediating effects of differing situational dimensions between the time of forming overall evaluations and the time of making a later decision. However, Kardes (1986) did take this into account when separating global and discrete memory based judgments. He showed that evaluation-based representations are retrieved for use in making global memory-based judgments, while it seems like attribute-based representations are retrieved when making discrete memory-based judgments. This means that the initial overall evaluation seems to be used for making subsequent judgments about the product in general, whereas attribute-based evaluations are used for judging specific product features.

As preannouncements are shown to increase elaboration, it is expected that it leads to an initial judgment effect, and thus I anticipate that after a delay, individuals will provide fewer and more abstract thoughts about a product that is advertised in a future frame compared to a product that is promoted in a current frame.

H2: Future framed advertising causes an initial judgment effect, leading to fewer and more abstract thoughts about the advertised product than current framed advertising does

According to the CLT, abstract, overall considerations of an event or product are construed at temporal distance, whereas more detailed and concrete construes are created for events and products that are temporally close. Thus, we can draw presumptions that an individual will store information about a temporally distant product as evaluation-based representations. Similarly, we can assume that information will be saved as attribute-based representations for a product that is temporally close. This implies that elaborating on information concerning a future product will cause consumers to develop overall judgments about the product that will be employed when making subsequent judgments about that product. This is in line with Biehal & Chakravarti (1983) who found that accessible

evaluations were more susceptible to being used in sequential decisions. Additionally, Haugtvedt & Wegener (1994) propose that an initial judgment effect occurs when attitudes are formed under high-elaboration condition. Furthermore, they suggest that there is little or no relation between the memory for recently presented arguments and final attitude for individuals under high elaboration, meaning that information acquired post attitude formation will not be remembered as well by the individual.

Based on the information above, the initial optimistic evaluation of a future product should be applied by the individual in later situations when making subsequent evaluations. Additionally, the in-depth elaboration caused by the expectations surrounding the forthcoming product increases the chance of the judgments being recalled at later times. Thus, the future bias is expected to last even when the temporal distance decreases.

2.2.3 Diminishing optimism

Several movie plots revolve around a groom or a bride getting “cold feet” on the wedding day, starting to question what he or she is about to do. Moreover, students tend to become less confident about their performance on an upcoming exam when the day of the exam is impending as opposed to in the beginning of the semester (Gilovich et al. 1993). By the same token, a study on college graduates showed that seniors show lower expectations concerning their post-graduate salary as graduation draws close than their fellow students at the junior level do (Shepperd et al. 1996). Shepperd also demonstrated that people waiting to get the results back on a (negative) HIV test rated how certain they were on testing positive as 10 or more on a scale from 1 to 10, and reported that their certainty increased rapidly after taking the test (Shepperd et al. 1996). There are numerous examples that are parallel to these, implying correlation between an individual’s confidence that a desired outcome will occur and temporal distance to the result is revealed. We also observe such diminishing optimism in relation to products. Individuals tend to lower their expectations to a product as the time to experience it, or the “moment of truth” is approaching (Gilovich, Kerr & Medvec 1993). This might be a result of people being disconfirmation sensitive, meaning that they are sensitive to the gap between expectations and performance (Kopalle et al. (in press); Monga & Houston 2006). The degree of disconfirmation sensitivity has been proposed to be

individual, and increasing sensitivity gives individuals incentives to strategically lower their expectations (Kopalle & Lehmann 2001, Monga & Houston 2006). The *self-handicapping theory* proposed by Berglas and Jones (1978) is a more extreme version of the diminishing optimism, showing that students intentionally under-prepare for exams in order to be able to blame bad exam results on the lack of studying.

Diminishing optimism and choices

Most of the studies that explore the diminishing optimism phenomenon do not study it in light of a choice situation, like the case of buying a product. However, Monga & Houston (2006) found that diminishing optimism occurred between *choice* and *disclosure*, giving the curve for expectations an inverted U-shape where the maximum point is at the time of *choice*. After making a choice, it seems like consumers start to brace themselves for the possibility that the performance will not meet their high expectations, and the discomforting feeling of dissonance, by adjusting their optimistic anticipations, similar to the studies in a non-choice perspective. The findings do however indicate that the diminishing optimism will not occur until *after* the product is chosen. Thus, the optimism we observe related to future products is expected to cause consumers to develop favorable product evaluations compared to current products, and the effect is anticipated to last at least beyond the time of choice. Further, Dahlén et al. (2010) showed that respondents preferred a new mineral water yet to be launched to an existing brand in a taste sample that was carried out one week after being exposed to advertisements of both products. Although this study explored respondents' *preferences* when choosing between two similar alternatives, differing from attitudes in the sense that they are relative evaluations, the result gives us an indication of the preannouncement effect being at least somewhat resistant to changes in temporal distance.

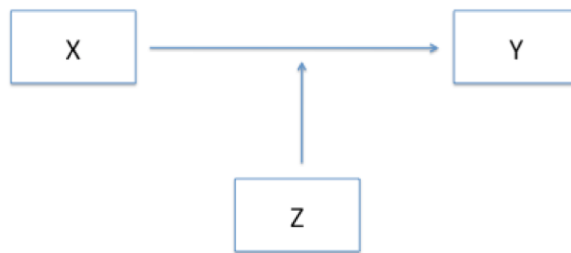
Accordingly, I believe that the feelings that are produced in a future time frame are persistent, and that preannounced products therefore will be evaluated more favorably than non-preannounced products at the time of launch.

H3: Future framed advertising leads to more positive feelings towards the product at the time of launch than advertising for a current product does.

H4: The forecasted feelings evoked by future framed advertising are more positive at the time of the product launch, than the forecasted feelings evoked by current framed advertising.

2.3 Personality characteristics as possible moderators

Moderation is when the relationship between an independent variable (X) and a dependent variable (Y) is affected by a third variable (Z), the *moderator*.



Graph 2 - The moderating effect of Z on the relationship between X and Y

In the following I will present three personality characteristics that might moderate the effect of future framed advertising, and that I thus would like to control for in the analysis.

2.3.1 Temporal orientation

Martin, Gnoth & Strong (2009) demonstrate the moderating role of individual differences in temporal orientation on temporal construal, causing people to respond differently to temporally framed messages. Temporal orientation is constant individual differences in time perspective, relating to a person's tendency to focus on the past, present or future (Holman & Silver 1998). Differences in temporal orientation are seen as predictive of an individual's behavior and decisions in the everyday life (Zimbardo & Boyd 1999).

Future oriented individuals are found to feel more responsible for their future, and engage in planning activities to a larger extent than people with a present orientation (Bergadaà 1990; Walsh 1995; Das 1987). Strathman et al. (1994) showed that there are individual differences

in the way people consider future consequences, which again affect consumer attitudes. Individuals with a future orientation tend to be more thought-out consumers who are concerned by the future outcome of their actions, often consuming in order to avoid future regret for foregone opportunities (Walsh 1995; Strathman et al. 1994). Present oriented individuals, on the other hand, take a more reactive approach to life, and are generally more likely to engage in spontaneous consumption (Walsh 1995). Present oriented individuals also value social relationships over academic success (Lasane & Jones 2000 as cited in Pezzo et al. 2006) and take on more risk than future oriented people (Keough, Zimbardo & Boyd 1999). Moreover, differences in purchasing behavior (Chetthamrongchai & Davies 2000, Bergadaà 1990), recycling behavior (Lindsay & Strathman 1997), the likelihood of taking a cancer screening (Orbell, Perugini, & Rakow 2004) and substance use (Keough, Zimbardo & Boyd 1999) have been proved affected by temporal orientation.

Although research on temporal orientation in marketing is limited, temporal orientation is found to moderate both the effects of temporal framing in cause-related marketing (Tangari et al. 2010) and framing of goal pursuit strategies in advertising (Kees et al. 2010). Additionally, the effects that are observed on consumer attitude and behavior are expected to be relevant in a marketing perspective as well. Accordingly, it is expected that individuals' temporal orientation will work as a moderator on the effects of preannouncements.

2.3.2 Optimism

Although the optimism bias is widely acknowledged as a general bias applicable to most people, several researchers have argued that the degree of optimism is an individual characteristic. The two views are compatible; all humans possess a baseline of optimism, but there are individual differences in how little or how much optimism one shows (Peterson 2000). The level of dispositional optimism has been shown to guide people's behavior, and is for instance negatively correlated with smoking and alcohol consumption. The degree of optimism is also positively correlated with pursuing a healthy lifestyle (Giltay et al. 2007). Moreover, optimistic individuals generally tend to like uncertainty more than less optimistic individuals, as optimists expect the outcome to be positive (Wakker 1990). As the future bias

is based on individuals' optimism about the future, it is possible that the level of dispositional optimism will moderate the effect of pre-launch advertising.

2.3.3 Curiosity

“Curiosity is the intrinsic desire for new information that will stimulate interest or relieve uncertainty” (Litman, in press). Curiosity is a universal characteristic that all people develop as infants but, just like optimism, the degree of curiosity is individual. Novelty and uncertainty are two factors that induce curiosity (Kashdan 2004). Individuals with a high level of curiosity are expected to have a stronger preference for complex, ambiguous and novel advertisements compared to individuals that are less curious (Steenkamp & Baumgartner 1992). Hence, the uncertainty people are presented to by a pre-launch advertisement might seem more appealing and elicit more elaboration in a curious person than in a less curious person. Thus, it is possible that curious consumers will be more susceptible to future framed advertising.

Accordingly, I hypothesize that personality characteristics have a moderating effect on pre-launch advertising.

H5: Individual personality characteristics moderate the effects of future framed advertising.

3. Experimental Study

The aim of this study was to investigate the cause and effect relationship between preannouncements and product evaluations, as well as exploring whether this effect is enduring over time or if it decays. The best-suited approach was thus using a causal design (Churchill and Iacobucci, 2005) with a 2 (preannounced vs. not pre-announced) x 2 (future vs. current) design. The study was conducted as an experiment using an online survey supported by Questback. Moreover, it was conducted as a longitudinal design (with two observations) exploring between-subject differences over time.

3.1 Participants

The first part of the online survey was distributed to 1424 individuals, and a 7,2% response rate of was obtained (completing both sessions). All subjects were students at the Norwegian School of Economics and Business Administration (NHH) at various levels, who were randomly selected among all the Norwegian speaking full-time students at the school. Among the 102 final respondents, 47 were female and 55 were men, and the average age was 24 ($Age_{min}=19$, $Age_{max}=37$). The participants were asked to participate in the study by filling out an online survey that was carried out as part of a master thesis. The survey invitations were sent out by e-mail, and e-mail reminders were sent out three days after the initial invitation. The respondents were informed that the study would consist of two sessions in their initial invitation in order to minimize the fall-out rate between the first and second session. Further, as an incentive to complete the survey, respondents who finished both questionnaires were offered a chance to join a lucky draw of two gift cards (each with a value of 500 NOK) by submitting their e-mail address in the very end. Furthermore, the respondents were told that their e-mail address would not be linked to their answers. Questback secured the anonymity of the participants who did not participate in the draw.

3.2 Stimuli and procedure

A printed online ad was used as stimuli, and the respondents decided themselves when to proceed from the ad to the next step of the survey. The survey was programmed to restrict participants from going back to previous steps of the survey once they clicked their way to the next step. Additionally, the program required the respondents to answer all questions in each step in order to continue to the next step.

3.2.1 Stimuli and procedure at T1

Two experimental conditions were used; future framed and current framed advertisements. The participants were randomly assigned to one of the two conditions. They were shown an advertisement for a digital photo camera picturing a family lined up for a photograph in a narrow Mediterranean looking street. The picture was taken at dusk, when the lighting is typically difficult for photographing. Surrounding the family were four men pointing floodlights at them. In the forefront of the picture was a hand holding a digital camera, with a picture of the family with perfect lighting showing on the screen of the camera. The text in the ad was “Not your usual camera. Invisible assistance with every photograph. [Ikke som ditt vanlige kamera. Usynlig assistanse ved alle bilder]”.¹ For manipulative purposes, the current framed condition read “Available NOW [i salg NÅ!]”, while the future condition read “Available from May 2011 [i salg fra mai 2011]”. The first part of the experiment was conducted mid April 2011. The ads included censored logos both in the upper and lower right corner in order to mask the sender.

The Norwegian market for digital cameras is a market with many operators, and without one apparent market leader. The product category was chosen in order to prevent existing brand preferences for a dominant market operator to intervene with the results. The product category is under continuous improvements, and rapid innovations (Carranza 2010). The advertisement implied that the featured camera had a new function making it easier for the photographer to take good pictures (especially in situations with difficult lighting as directly

¹ Norwegian terms in brackets

illustrated in the ad). Thus, the advertised product represented an incrementally new product (Alexander et al. 2008). Moreover, most people have at least some knowledge about digital cameras, which is a prerequisite for being able to engage in issue-relevant elaboration (Alba et al. 1991). 96,1% of the participants reported that they either owned or had access to a digital photo camera. Moreover, on the question "how would you characterize your knowledge about digital photo cameras compared to the average" only four respondents reported a value of 2 (no one chose 1) on a scale from 1-7 (7 representing "much greater than average"). The mean score on this question was 4,34, with no difference between men and women.

3.2.2 Stimuli and procedure at T₂

Two weeks (14 days) after the first questionnaire was distributed, I followed up by sending out the second questionnaire to the individuals who had submitted their response. In order to compare the longitudinal effect of future framed advertising to the effect of current framed advertising, both respondent groups were assigned to a current framed condition at T₂. Both groups were exposed to the same advertisement stimulus as the current condition group in the first session. Hence, the group assigned to the current condition at T₁ was shown the same advertisement as before, whereas the group previously assigned to the future condition were exposed to an advertisement informing them that the advertised forthcoming product was now available in stores.

Table 2 provides a summary of the stimuli each of the groups was subject to at each of the experimental sessions.

	T ₁	T ₂
Group 1	Future product	Current product
Group 2	Current product	Current product

Table 2 – Stimuli overview

3.3 Measurements

Both of the experimental groups were asked the same questions in each of the sessions, only the stimulation (future/current) differed between the groups. The questions in the first questionnaire were related to evaluation of both the ad and the product as well as forecasted feelings. The second questionnaire was an extended version of the first questionnaire. The extensions were a thought protocol and a list of personality measures for the purpose of testing H2 and H5 respectively.

The majority of the questions were given as statements that were to be answered on a seven-point Likert scale ranging from completely disagree (1) to completely agree (7). The questionnaires are provided in the appendix (appendix A2 and A3). In the end of the first questionnaire, subjects were asked some questions concerning demographics and their product category knowledge. In the end of the second questionnaire respondents were asked whether they had any idea about the purpose of the survey. None of the participants were able to provide a correct answer to this question.

Categorizing construal level

In order to test H2, the questionnaire at T2 included a thought protocol. According to the hypothesis, participants assigned to the future condition in the first session were expected to have developed an initial judgment of the ad and the product, and were thus expected to report fewer thoughts at a later point of time. Additionally, the thoughts reported by the future condition group were expected to be more abstract than those reported by the current condition group. Two objective third-party persons with no knowledge about the purpose of the study were asked to count the number of thoughts provided by each respondent, and to categorize each thought as either concrete or abstract. Inter-judge agreement was 87% and disagreements were resolved through discussion.

Advertisement evaluation

Advertisement evaluation was measured using two dimensions. *Ad attitude* comprised of the four items “good [bra]”, “pleasant” [trivelig], “favorable [liker den]” “deceptive

[villedende]" (reversed scale) and "exciting [spennende]". The items were adopted from MacKenzie & Lutz (1989), who obtained a Cronbach's $\alpha=0,88$. *Ad credibility* consisted of the four items "convincing [overbevisende]", "believable [troverdige]", "unbiased [upartisk]" and "honest [ærlig]". Except from "honest", all items were adopted from MacKenzie & Lutz (1989), Cronbach's $\alpha=0,71$. The item "honest" was included based on the reports of Goldberg & Hartwick (1990). All answers were recorded on a seven-point Likert scale.

Product evaluation

Product evaluation was measured through three dimensions; perceived quality, product attractiveness and purchase intentions. *Perceived quality* contained the four items "flawless [fritt for feil]", "good product [godt produkt]", "better than average [bedre enn gjennomsnittet]" and "high quality [av høy kvalitet]". The items were the same as used by Dahlén et al. (2010), with the exception of "flawless", which was proposed by Stone-Romeo and Stone (1997). Dahlén et al. obtained a Cronbach's $\alpha=0,89$. *Product attractiveness* comprised of the four items "like the product [liker produktet]", "desirable [attraktivt]", "satisfactory [tilfredsstillende]", "appealing [appellerende]". The items were adopted from Bruner (2009). *Purchase intentions* comprised the four items "would like to try [ønsker å prøve]", "want to buy [ønsker å kjøpe]", "interested in [interessert i]" and "not for me [passer ikke for meg]" (reversed scale). I adopted the first three items from Dahlén et al. (2010), Cronbach's $\alpha=0,90$, and "not for me" was added from Bruner (2009). All answers were recorded on a seven-point Likert scale.

Forecasted feelings

In order to measure forecasted feelings the participants were asked to picture having bought the product in the ad, and asked to rate how they thought they would feel using some selected adjectives. Forecasted feelings were measured through the five items "Excited [entusiastisk and opprømt]", "happy [glad]", "satisfied [fornøyd]" and "feels good [føles bra]". The items excited, happy and satisfied were adopted from Dahlén et al. (2010) with Cronbach's $\alpha=0,80$. Feels good was adapted from Shiv & Huber (2000), who also included the items happy and satisfied when measuring anticipated satisfaction of future purchase. Answers were recorded on a seven-point Likert scale.

Temporal orientation

Based on studies on temporal orientation (e.g. Zimbardo & Boyd 1999, Keough, Zimbardo & Boyd 1999, Zimbardo, Keough & Boyd 1997), a scale for measuring temporal orientation was developed, the Zimbardo Time Perspective Inventory (ZTPI). This scale has been widely used for this purpose. Originally, the scale consisted of 56 items measuring past-, present- and future orientation. However, several studies have used the scale in various reduced forms (e.g. Martin et al. 2009, Holman & Silver 1998, Keough, Zimbardo & Boyd 1999). By the same token, this study used an 11 items measurement, reduced from ZTPI's original 56 items. Specifically, the items reflecting past orientation were left out as it is outside the scope of this experiment. Martin et al. (2009) also points out present- and future orientation as the most relevant dimensions in a consumer perspective. Temporal orientation depends on various demographic variables, such as age, sex, social status, educational level (Bergadaà 1990) and culture (see Legohérel et al. 2009 for an overview). Zimbardo et al. (1999) developed the ZTPI index based on participants at various colleges in the USA (mean ages ranging from 16,5-23,6), which is similar to the population in this experiment, both in terms of age and level of education. Additionally, Torres et al. (2009) found no difference in temporal orientation between American and Norwegian students. The ZTPI scale is thus expected to be a good fit for this study. The items in the study were chosen from the short form of ZTPI proposed by Keough et al. (1999) through refinement of the original scale. The items with the heaviest factor loadings on the present and future factors were chosen as items in the study. Of the 11 items used in the study, 6 measured present orientation and 5 measured future orientation. Participants were asked to answer “*how true each statement is of you as a person*” as honestly as possible on a five-point Likert scale (1=very untrue, 5=very true). The personality measures were placed in the very end of the questionnaire at T₂ to avoid priming effects on the rest of the questions.

Optimism

Optimism was measured as a possible moderating factor using items from The Revised Life Orientation Test (LOT-R, Scheier et al. 1994). The test originally consists of six items (Chronbach's $\alpha = 0,78$) and four filler items, but only three items were adopted in the experiment in order to prevent the questionnaire from becoming too time consuming. The

three optimism items were; “I rarely count on good things happening to me [Jeg antar sjelden at bra ting skal hende meg]” (reversed scale), “Overall, I expect more good things to happen to me than bad [Alt i alt forventer jeg at flere gode ting enn dårlige ting skal hende meg]” and “I hardly ever expect things to go my way [Jeg forventer sjelden at ting skal gå i min favør]” (reversed scale). The chosen items were the ones with the heaviest factor loadings in the original study (loadings= 0,74, 0,72 and 0,79 respectively). As the optimism items were incorporated into the temporal orientation section, additional filler items were redundant and were therefore not included. Answers were recorded on a five-point Likert scale (1=very untrue, 5=very true).

Curiosity

The last personality characteristic I wanted to control for was individual differences in curiosity, which was measured using the “stretching items” from The Curiosity and Exploration inventory-II index by Kashdan et al. (2009). Again, in order to prevent the questionnaire to be too time consuming for the experiment participants only the three (out of five) items with the highest factor loadings were included in the study (loadings= 0,77, 0,70 and 0,73 respectively). Thus, the three items measuring curiosity were; “I view challenging situations as an opportunity to grow and learn [Jeg ser på utfordrende situasjoner som en mulighet til å utvikle meg og lære]”, “I am always looking for experiences that challenge how I think about myself and the world [Jeg er alltid på utkikk etter erfaringer som vil utfordre måten jeg ser meg selv og resten av verden]” and “I frequently seek out opportunities to challenge myself and grow as a person [Jeg søker ofte muligheter til å utfordre meg selv og utvikle meg som person]”. Answers were recorded on a five-point Likert scale (1=very untrue, 5=very true).

Covariates

Two covariates were measured in order to control for extrinsic influence in the data: product category knowledge and gender. According to CLT, people rely on schemas to a larger degree when temporal distance increases. Similar, schema based processing and evaluations are also more likely to be applied when people have great category knowledge than when new to the category (Kalyuga 1999). I measured (subjective) category knowledge on a seven-point Likert scale (“how would you characterize your knowledge about digital photo

cameras compared to the average?") ranging from 1="well below average" to 7="well above average". Similarly, the selectivity model proposed by Meyers-Levy (1989) presents important differences between males and females when it comes to processing. Men tend to base their evaluations on heuristics and often miss more subtle cues, whereas women process more thoroughly, including both subjective and objective product attributes (Meyers-Levy & Maheswaran 1991; Darley & Smith 1995). Correlation matrices showed that both covariates were correlated with dependent variables (appendix B1). Thus, I controlled for both category knowledge (knowl) and gender (sex) in the analysis (Hair et al. 1998).

3.4 Factor analysis and data reduction

Before I started to analyze the results, I performed exploratory factor analyses with principal component extraction and oblimin rotation on the reported answers in the questionnaires at T_1 and T_2 . This was in order to explore how the questions were interrelated in the participant's minds. In order to compare the results for T_1 and T_2 it was important to find a factor structure that was stable across time. Because of the large number of measured variables, compared to the number of respondents, I separated the questions into advertisement related items and moderating items (the personality measures, questions 2.5a-2.5q) when performing factor analysis for the answers obtained from the questionnaire at T_2 . The respondent-variable ratio affects the stability of the factors, and as there were seventeen personality measures included in the questionnaire I chose to keep these separate in the factor analysis in order to increase the stability of the results. A full list of the questions in the questionnaires is provided in appendix A4.

3.4.1 Factor analysis at T_1

The initial factor analysis at T_1 was cluttered with apparent need for dimension reduction, which I performed by removing items with high cross-loadings one by one. The final factor structure for T_1 includes 15 of the original 26 variables, and the variables are distributed over four factors (table 3). The variables 4d and 4e concerning forecasted feelings had somewhat high cross-loadings, loading both on the same factor as the remainder forecasted feelings items and on the factor regarding product quality. According to Singh (1991) overlapping

constructs can be included in the analysis if there is a conceptual difference between them. Both forecasted feelings and product quality seem rooted in consumers' anticipated satisfaction related to a product, and it is intuitive that the feelings people expect from buying a product is correlated with the attitude they hold towards the product. The two measures are however still different. Evaluation of perceived product quality is to a large extent an objective measure, whereas the forecasted feelings also involve feelings about the self. Therefore, a consumer might be completely uninterested in a product even though s/he perceives it as a high quality product. Hence, I decided to keep the two variables in factor 3 and see how they fit in the reliability analysis. Further, based on the latent roots criterion, where the amount explained by a factor must be greater than 1 in order to be included (Churchill & Iacobucci 2005), only 3 factors were to be included in the analysis. However, with an Eigenvalue of 0,994 I decided to include the fourth factor as well, and created average indices for the items in each factor. The subsequent reliability tests supported my decision to keep the four-factor solution. The Cronbach's alphas are reported in table 5, while the factor analysis is provided in the appendix B2.

Pattern matrix^a

	Component			
	1	2	3	4
3g) Satisfactory	.793			
3d) High quality	.763			
3c) Better than average	.722			
3e) Good product	.707			
2c) Want to buy		.889		
2b) Would like to try		.886		
2a) Interested in		.859		
4c) Happy			-.837	
4e) Feels good	.328		-.740	
4a) Excited (entusiastisk)			-.708	
4b) Excited (opprømt)			-.694	
4d) Satisfied	.425		-.668	
1d) Convincing				.977
1e) Believable				.846
1a) Good (ad)				.603

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 10 iterations

Table 3 – Factor structure at T₁

Questions 3c, 3d, 3e and 3g, which formed the first factor, were all related to product quality (PQ). Questions 2a, 2b and 2c measured purchase intentions (PI). They were clearly related and composed the second factor. The third factor was related to forecasted feelings (Forec1) and consisted of questions 4a-4e. Questions 1a, 1d and 1e related to advertisement attitude and made up the fourth and final factor (Att_ad).

3.4.2 Factor analysis at T2 (main factors)

The same procedure was used to obtain a suitable factor structure for the items at T₂ (appendix B3). As it was vital to find a factor structure that was valid across both questionnaires, a four-factor structure was accepted although the Eigenvalue of the fourth factor was 0,789. When I later performed reliability tests on the four factors that were obtained through the dimension reduction, they all satisfied Nunnally's (1978) strict limit of Cronbach's $\alpha \geq 0,7$ (the Cronbach's α are reported in table 5). Additionally, all measures used in the questionnaires were established measures that have previously been proven successful. Thus, I decided to use the factor structure that was the best fit across time. Hence, the final factor structure at T₂ included the same items and was corresponding to the factor structure at T₁.

Pattern matrix^a

	Component			
	1	2	3	4
2.3e) Good product	.870			
2.3d) High quality	.789			
2.3c) Better than average	.735			
2.3g) Satisfactory	.702			
2.4c) Happy		.893		
2.4b) Excited (opprømt)		.835		
2.4d) Satisfied	.325	.802		
2.4a) Excited (entusiastisk)		.725		
2.4e) Feels good		.692		
2.2c) Want to buy			.872	
2.2a) Interested in			.770	
2.2b) Would like to try			.732	
2.1e) Believable				.918
2.1d) Convincing				.885
2.1a) Good (ad)				.694

Extraction Method: Principal Component Analysis.
 Rotation Method: Oblimin with Kaiser Normalization.
 a. Rotation converged in 9 iterations

Table 4 – Factor structure at T2

3.4.3 Reliability analysis

I performed reliability analyses in order to see how the items in each of the averaged indices were related to each other. All the main factors at both T₁ and T₂ had satisfactory internal consistency with Cronbach's alphas well above 0,6. The factor structure suggested from the factor analyses was therefore accepted. One should however also be aware that alpha values well above 0,9 can be an indication of redundant variables (Streiner & Norman 1989). The Cronbach's alpha for product quality at T₁ and Forecasted feelings at T₂ were rather high (0,915 and 0,913 respectively), and although $\alpha=0,95$ seems to be a common threshold I performed inter-item correlation tests on these items to identify whether there were any duplicate items (Streiner & Norman 1989). For product quality, the correlation between questions 3d and 3e (high quality and good product) was the highest ($\rho_{3d,3e}=0,886$, $\rho_{2.3d,2.3e}=0,857$). In Forecasted feelings, question 2.4e (feels good) correlated rather highly

with both 2.4c (happy) and 2.4d (satisfied), ($\rho_{2.4e,2.4ce}=0,793$, $\rho_{2.4e,2.4d}=0,789$). I decided to keep the items in the analysis as the correlations were not alarmingly high.

The final factor structure for the main factors is presented in the table below:

Factor	Measure	T ₁ /T ₂	Name	Cronbach's alpha	Questions				
1	Purchase intentions	T ₁	PI	0.909	2a	2b	2c		
		T ₂	PI2	0.890	2.2a	2.2b	2.2c		
2	Product quality	T ₁	PQ	0,915	3c	3d	3e	3g	
		T ₂	PQ2	0.905	2.3c	2.3d	2.3e	2.3g	
3	Advertisement attitude	T ₁	Att_ad	0.831	1a	1d	1e		
		T ₂	Att_ad2	0.870	2.1a	2.1d	2.1e		
4	Forecasted feelings	T ₁	Forec1	0.882	4a	4b	4c	4d	4e
		T ₂	Forec2	0.913	2.4a	2.4b	2.4c	2.4d	2.4e

Table 5 – Summary of product related factors

3.4.4 Factor analysis of personality variables

I performed dimension reduction on the items measuring personality traits, removing variables with high cross-loadings one by one. Distributed across four factors, the final factor structure contained eleven of the original seventeen items. Questions 2.5q, 2.5e and 2.5j were all questions intended to measure curiosity. They formed the first factor along with 2.5c (important to be with friends). The second factor composed of 2.h and 2.5k regarding present orientation, while the third factor contained questions 2.5d and 2.5m measuring optimism. Last, the fourth factor contained questions intended to measure future orientation, 2.5i, 2.5g and 2.5n.

Pattern matrix^a

	Component			
	1	2	3	4
2.5c) Meet friends	.707			
2.5q) See challenges as a way to learn	.706			
2.5e) Looking for challenging experiences	.650			
2.5j) Seek challenges	.648			
2.5k) Not if not good now		.809		
2.5h) One day at a time		.783		
2.5d) Rarely expect good things			.936	
2.5m) Rarely expect to go my way			.853	
2.5i) Picture of the future				.752
2.5g) Set goals				.749
2.5n) Think about future				.656

Extraction Method: Principal Component Analysis.
 Rotation Method: Oblimin with Kaiser Normalization.
 a. Rotation converged in 11 iterations

Table 6 – Factor structure, personality measures

The personality trait measures showed weaker reliability than the previous measures, with Cronbach's alpha ranging from 0,579 to 0,77. However, several studies have accepted scales with alpha values below the limit set by Nunnally (1978), and it is widely accepted to use 0,6 as threshold (Sturmey et al. 2005). Moss et al. (1998 as cited in Sturmey et al. 2005) mention that few items in the analysis can sometimes explain low alpha values, so the low reliability measures might be partially due to the low number of items in the scales. I decided to still include the personality measures in the analysis, but cautiousness should be applied when interpreting the results.

Thus, the final factor structure for the personality measures is the following:

Factor	Measure	Name	Cronbach's alpha	Questions			
1	Curiosity	Curiosity	0.656	2.5c	2.5q	2.5e	2.5j
2	Present orientation	Ori_P	0.579	2.5k	2.5h		
3	Optimism	Optimism	0.770	2.5d	2.5m		
4	Future orientation	Ori_F	0.599	2.5i	2.5g	2.5n	

Table 7 – Summary of personality related factors

4. Results

In this section, I will start by presenting the results from One-way ANOVA tests on each of the main factors at T₁, in order to see whether the future framed advertising had any effects on the reported answers (H1). Further, I will explore the effect of future framed advertising on construal level (H2). Thereafter I will perform the same tests for the main factors at T₂ (H3, H4). I will also explore whether the measured personality traits have moderating effects on the future bias (H5). Last I will perform mediation tests in order to explore forecasted feelings and construal level as mediators for the obtained results.

4.1 Descriptives

Descriptive statistics

	T ₁				T ₂			
	Purchase intentions	Product quality	Advertisement attitude	Forecasted feelings	Purchase intentions	Product quality	Advertisement attitude	Forecasted feelings
	PI	PQ	Att_ad	Forec1	PI2	PQ2	Att_ad2	Forec2
N	102	102	102	102	102	102	102	102
Mean	3.9085	4.3693	4.0458	4.6054	3.9314	4.4346	4.0490	4.4755
Median	4.0000	4.3333	4.3333	4.5000	4.3333	4.6667	4.3333	3.5000
Std. Deviation	1.42132	.97596	1.07787	1.10827	1.31951	.96220	1.17865	1.06212
Variance	2.020	.952	1.162	1.228	1.741	.926	1.389	1.128
Skewness	-.218	-.050	-.706	-.528	-.538	-.187	-.510	-.606
Std. Error of Skewness	.239	.239	.239	.239	.239	.239	.239	.239
Kurtosis	-.699	.285	.311	.811	-.456	-.135	-.096	.266
Std. Error of Kurtosis	.474	.474	.474	.474	.474	.474	.474	.474
Minimum	1.00	1.67	1.00	1.00	1.00	2.00	1.00	1.50
Maximum	7.00	7.00	6.00	7.00	6.33	6.67	6.33	6.75

Table 8 – Descriptive statistics

In order to decide whether it is appropriate to apply tests that assume normal distribution when analyzing the data, the skewness and kurtosis for each measure has to be analyzed. All the factors have negative skewness, indicating that respondents have a tendency to use the

upper part of the scale in their evaluations. This is not unexpected as all respondents were shown an advertisement for the evaluated product, with the intentions of altering their opinions in a positive direction, prior to making their evaluations. All factors have both skewness and kurtosis $< +/-1$, implying that the deviations from normal distribution are within the acceptable limit (e.g. Chan 2003; Upadhyay 2009).

4.2 Hypotheses testing

4.2.1 Test of H1: Future framed advertising has favorable effects on evaluations

Hypothesis 1: Future framed advertising has favorable effects on a) product evaluations, b) advertisement evaluations, c) forecasted feelings.

I performed one-way ANOVA tests with each of the factors as dependent variables and stimuli condition (current/future) as the independent variable. There are significant differences between the two groups when it comes to both of the measures for product evaluation; purchase intentions ($PI[M_{\text{current}}]=3,628$, $PI[M_{\text{future}}]=4,19$, $F=4,64$, $p=0,034$) and product quality ($PQ[M_{\text{current}}]=4,218$, $PQ[M_{\text{future}}]=4,613$, $F=4,84$, $p=0,03$). Both effects are in the anticipated direction. Further, there is a tendency for the forecasted feelings to be reported at a higher level for the future condition group compared to the current condition group ($Forec1[M_{\text{current}}]=4,490$, $Forec1[M_{\text{future}}]=4,812$, $F=2,20$, $p=0,141$). This effect is however non-significant.

Tests of Between-Subject Effects

	Dependent variable	Independent variable (condition)	N	df	Mean	Std.dev	F-value	p-value
Purchase intentions, T ₁	PI	Current	51	1	3.6275	1.41680	4.639	.034**
		Future	51		4.1895	1.38284		
Product quality, T ₁	PQ	Current	51	1	4.2157	.86894	4.835	.030**
		Future	51		4.6127	.99664		
Advertisement attitude, T ₁	Att_ad	Current	51	1	4.0196	1.12430	.059	.808
		Future	51		4.0719	1.03990		
<i>Forecasted feelings, T₁</i>	<i>Forec1</i>	<i>Current</i>	<i>51</i>	<i>1</i>	<i>4.4902</i>	<i>1.13512</i>	<i>2.196</i>	<i>.141</i>
		<i>Future</i>	<i>51</i>		<i>4.8118</i>	<i>1.05483</i>		

*indicates significance at 10% level, ** indicates significance at 5% level.

Italic illustrates non-significant tendencies that are in line with H1.

Table 9 - Testing H1

Hypothesis 1 is **partially supported**. It is supported for a) product evaluations, but not for b) advertisement evaluations or c) forecasted feelings.

4.2.2 Test of H2: Initial judgment effect

Hypothesis 2: *Future framed advertising causes an initial judgment effect, leading to fewer and more abstract thoughts than current framed advertising.*

The thoughts that the respondents reported in the questionnaire at T₂ were used in order to test H2. A One-way ANOVA test with the total number of thoughts as dependent variable and framing condition as dependent variable showed significant differences between the two experimental groups. In line with the hypothesis, respondents in the current condition provided a larger number of thoughts about the product and advertisement than did the respondents in the future condition (Number of thoughts[M_{current}]=3,521, Number of thoughts[M_{future}]=2,739, F=5,575, p=0,020). I further measured the abstractness of the thoughts by computing an abstractness ratio, *Abstract thoughts=(number of abstract thoughts/total number of thoughts)*. The difference between the two groups was significant at a 10% significance level (Abstract thoughts[M_{current}]=0,067, Abstract thoughts[M_{future}]=0,176, F=2,86, p=0,094).

Tests of Between-Subject Effects								
	Dependent variable	Condition	N	Df	Mean	Std.dev	F-value	p-value
Number of thoughts	Thoughts_tot	Current	48	1	3.5208	1.85644	5.575	0.020**
		Future	46		2.7391	1.28987		
Abstract thoughts	Abs_Tot	Current	48	1	0.0667	0.17273	2.862	0.094*
		Future	46		0.1764	0.41360		

*indicates significance at 10% level, ** indicates significance at 5% level

Table 10 – Testing H2

Hypothesis 2 is *supported*.

4.2.3 Testing H3: Product evaluations after launch

Hypothesis 3: *Future framed advertising leads to more positive feelings towards the product at the time of launch than advertising for a current product does.*

In order to test H3 I used the same procedure as for testing H1. One-way ANOVA tests show that the differences between the two condition groups remain over time. However, the difference in the reported purchase intentions are somewhat weaker than in the first session and is only significant on a 10% significance level ($PI2[M_{current}] = 3,712$, $PI2[M_{future}] = 4,150$, $F = 2,86$, $p = 0,092$). The future frame effect on PQ2 is on the other hand still significant at a 5% significance level ($PQ2[M_{current}] = 4,294$, $PQ2[M_{future}] = 4,676$, $F = 4,26$, $p = 0,042$).

Tests of Between-Subject Effects								
	Dependent variable	Condition	N	Df	Mean	Std.dev	F-value	p-value
Purchase intentions, T ₂	PI2	Current	51	1	3.7124	1.44533	2.895	0.092*
		Future	51		4.1503	1.15338		
Product quality, T ₂	PQ2	Current	51	1	4.2941	.89402	4.260	0.042**
		Future	51		4.6765	1.01031		

*indicates significance at 10% level, ** indicates significance at 5% level

Table 11 – Testing H3

Hypothesis 3 is *supported*.

4.2.4 Testing H4: Forecasted feelings after launch

Hypothesis 4: *The forecasted feelings evoked by future framed advertising are more positive at the time of the product launch, than the forecasted feelings evoked by current framed advertising.*

Although the effect of future framed advertising on forecasted feelings proved to be non-significant at T_1 , I decided to test whether the same tendencies were present at T_2 . Testing the effects of future framed advertising after launch provides us with similar results as before the launch; from a one-way ANOVA test we observe a tendency for respondents in the future framed condition to report higher levels of forecasted feelings than respondents in the current framed condition ($\text{Forec2}[M_{\text{current}}]=4,380$, $\text{Forec2}[M_{\text{future}}]=4,667$, $F=1,92$, $p=0,169$). However, parallel to the tendency seen at T_1 , the effect is non-significant.

Tests of Between-Subject Effects

	Dependent variable	Condition	N	Df	Mean	Std.dev	F-value	p-value
Forecasted feelings, T_2	Forec2	Current	51	1	4.3804	1.11302	1.918	.169
		Future	51		4.6667	.95638		

Table 12 – Testing H4

Hypothesis 4 is *not supported*.

4.2.5 Testing Hypothesis 5: The moderating effect of personality characteristics

Hypothesis 5: *Individual personality characteristics moderate the effects of future framed advertising.*

The moderating effects of personality characteristics were measured through one-way ANOVAs with each of the main factors as dependent variables, and both advertising

condition and personality measures as independent variables. I performed separate analyses for each of the personality measures, testing the following equation:

$$Y = a + bX + cZ + dX*Z$$

E.g. moderating effect of present orientation on product quality:

$$\text{Product quality} = a + b \text{ Condition} + c \text{ Ori_P} + d \text{ Ori_P} * \text{Condition} + \text{knowl} + \text{sex}$$

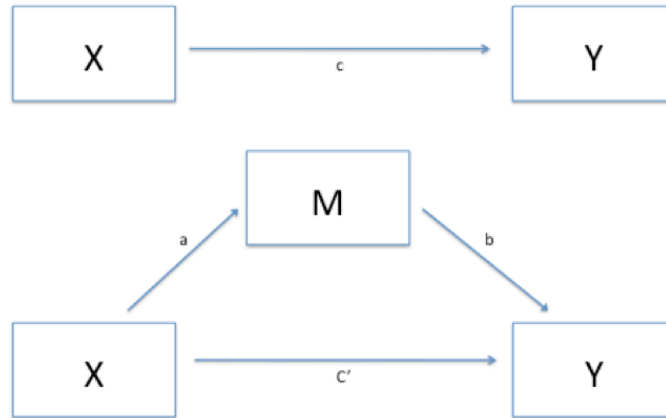
The analyses generated significant results for curiosity on purchase intentions ($F=2.664$, $p=0,009$), indicating that curious individuals are somewhat more inclined to try, and to purchase, a pre-launch advertised product than less curious individuals. None of the other personality characteristics were significant moderators. A summary of the moderation analysis is provided in appendix B9.

Hypethesis 5 is only *partially supported*. It is only supported for curiosity.

4.2.6 Test of mediation with a single mediator

Furthermore, I wanted to explore whether I could identify the underlying mechanisms causing the influence of advertisement framing on product evaluations. To test the mediating effect I followed Preacher & Hayes' (2004) framework for assessing mediation, and I performed indirect tests with bootstrapping using the SPSS macro suggested by the mentioned authors². I used the indirect test in order to control for covariates, which is not possible using the Sobel test. Moreover, I preferred to use bootstrap confidence intervals rather than the traditional Sobel test when exploring the mediation effects. This is recommended when the raw data is accessible because of the conservative (and unrealistic) assumptions the Sobel test makes about the normal distribution of the indirect effect (afhayes.com, Sobel documentation). The model measures the various variable relationships illustrated in the model below.

² The indirect macro can be found on Hayes webpage, afhayes.com



Graph 3 Illustration of mediating effect

Two possible mediators were tested, forecasted feelings and construal level (measured through the number of thoughts). The experimental condition was used as independent factor and the measures for product evaluations (product quality and purchase intentions) as dependent variables. The analysis showed significant effects for construal level as a mediator in the relationship between pre-launch advertising and product quality evaluations ($p < 0,05$). No mediating effect was found on the relationship of future framed advertising and any of the dependent variables. A summary of the results is provided in appendix B11.

5. General discussion

5.1 Summary of findings

H1: Future framed advertising has favorable effects on a) product evaluations, b) advertisement evaluations, c) forecasted feelings.

H1 test results: H1 is only supported for a) product evaluations, not for b) advertisement evaluations or c) forecasted feelings.

H2: Future framed advertising causes an initial judgment effect, leading to fewer and more abstract thoughts than current framed advertising.

H2 test results: H2 is supported.

H3: Future framed advertising leads to more positive feelings towards the product at the time of launch than advertising for a current product does.

H3 test results: H3 is supported.

H4: The forecasted feelings evoked by future framed advertising are more positive at the time of the product launch, than the forecasted feelings evoked by current framed advertising.

H4 test results: H4 is not supported.

H5: Individual personality characteristics moderate the effects of future framed advertising.

H5 test results: H5 is only supported for curiosity, not for optimism, future orientation or present orientation.

This study explores the effects of future framed advertising on a consumer's product evaluations, both before and after the advertised product is made available in stores. The purpose of the study was to examine the persistence of the future bias. Additionally, I wanted to explore whether the bias was moderated by different personality traits. This section will discuss theoretical and managerial implications of the findings.

The results of the study indicate that future framed advertising has a positive effect on people's evaluation of products. There was also a tendency for people to report more extreme forecasted feelings when subject to future framed advertising than when subject to current framed advertising, although this finding was not significant. The results are in line with the study of Dahlén et al. (2010), and also in cohesion with the construal level theory, by which all products are evaluated more favorably at distance (Trope & Liberman 2003). Further, the study explored whether individual differences in motivational constructs moderated the future bias. Only one of the measured personality traits (curiosity) had significant effect on the preference of forthcoming products.

5.2 Theoretical contribution

This study makes several contributions to the existing body of theory on advertising forthcoming products, as it provides new insight about the effect on construal level effects over time. The hypotheses were tested on a technology-based product using "printed" advertisements as temporal distance primers. Overall, the results show that temporal framing in advertising have the ability to alter consumer evaluations, also as the temporal distance changes. The biased preference for forthcoming products is shown to be universal, and valid for most people regardless of personal characteristics.

The results showing that future products are evaluated more favorably than current products (table 9) illustrate a replication of earlier findings on pre-launch advertising (e.g. Dahlén et al. 2010; Liberman & Trope 2003). They are in line with theoretical expectations from construal level theory, suggesting that temporal distance causes consumers to evaluate a product more favorably as positive attributes become more salient at distance, whereas negative aspects related to the product are suppressed. Moreover, individuals tend to mitigate future, unrelated factors that could occur and interfere with the experience of the product, causing people to be more optimistic about events in the future than immediate events (Trope & Liberman 2003).

Furthermore, the results indicating that individuals who were subject to the future framed condition in the experiment had fewer brand and ad related thoughts after a time lag than the

individuals subject to the current framed condition did are interesting (table 10). This indicates that advertising for future products leads people to develop an initial judgment about the advertised product. Initial judgments are likely to be used for making subsequent evaluations and decisions about the product. Moreover, the thoughts reported by the future condition subjects were more abstract than the thoughts reported by subjects in the current condition. This is in line with the construal level theory, by which temporal distance leads people to develop more abstract evaluations. The results therefore indicate that the respondents in the future condition formed overall judgments about the product while it was still distant.

The last notable result, and the most important result of this study is how future framed advertising has a lasting effect. Results in the study show that the respondents in the future framed condition evaluated the product more favorably *after* the product was released (T_2) than the respondents in the current framed condition (table 11). The fact that this bias was present even after a time lag, and after both experimental groups were exposed to the same advertisement at T_2 (current condition stimulation), indicates that the future framed condition group based their evaluations on previously processed information. Moreover, it shows that this information was not altered by the new information about the recent availability of the product. The findings are directly supported by literature on the initial judgment effect, which argues that individuals will only process information in lack of an available overall evaluation (Lichtenstein & Srull 1985, Carlston 1980b, Hastie & Park 1986). This means that initial judgments about an object will be employed when making subsequent decisions about the same object. The finding also implies that the initial judgment effect suppresses the construal level effect. The fact that the construal level effect is overrun by the initial judgment effect has important implications as it indicates that altering the construal level, combined with stimuli that prompt elaboration, can influence feelings and evaluations.

The mediation test in the study was of limited success, and only gave indications of a construal level mediator for product quality evaluations (appendix B11). This might be due to forecasting feelings not being significantly different in the two experimental groups, contrary to earlier findings (Dahlén et al. 2010). Therefore I do not have adequate results for concluding whether or not the observed favorable evaluation effects of pre-launch

advertising can partly be attributed to consumers having more extreme expectations about post-purchase feelings.

Marketing forthcoming products has earlier been seen as a tool used either for signaling stockholders or for demand forecasting purposes, e.g. the fashion industry (Brockhoff & Rao 1993; Schatzel & Calantone 2006; Su & Rao 2010; Eliashberg & Robertson 1988). Researchers have even advised companies against advertising their forthcoming products for strategic purposes as competitors will be given time to react to the new product before it hits the shelves (e.g. Sorescu et al. 2007). This study does however present temporal framing as a valuable tool in marketing as it can increase value of the product as perceived by the consumer. Wilson et al. (2005) found that people enjoy positively framed uncertainty. Moreover, Dahlén and colleagues suggest that a product is at its most valuable in the phase between being announced and being launched. Thus, advertising products prior to launch brings value-added to the consumer in terms of positive uncertainty, and to the company behind the brand in terms of more favorably evaluated products and increased purchase intentions that will hopefully transfer into increased sales as the effect can still be observed at launch.

The findings also add to the theory on media scheduling, according to which consumers should be exposed to advertising as close in time to the purchase situation as possible (Hutchinson & Moore 1984) because people's memory decay rather quickly (Stewart et al. 2002; Burke & Srull 1988). The results from this study do however indicate that this is not always true. First, the future framed condition led to more favorable product evaluations than the current framed condition after a time lag, suggesting that the effect of pre-launch advertising is persistent. Second, we observe an initial judgment effect of pre-launch advertising. Initial judgments are likely to be stored in the long-term memory (Hoyer & Macinnis 2007), and elaboration leads to rich association networks about the product, making it more accessible in mind of the consumer (Keller 1987). Additionally, individuals perceive judgments that are based on elaboration as more accurate than other judgments (Payne et al. 1993 as cited in Meyers-Levy & Malaviya 1999). Hence, judgments based on future framed advertising should not only be more favorable than judgments based on current frame advertising, they should also be stronger, more accessible and decay slower (Petty & Cacioppo 1984; Haugtvedt & Petty 1992; Loftus & Loftus 1980). Thus, advertising

a product prior to launch seems valuable rather than wasteful. It is however important to point out that because of people's limited capacity to retrieve information from memory (Cowan 2001), advertising after product launch is still important and will keep the product judgment accessible in mind. Nonetheless, one can expect that less post-launch advertising is necessary if the product has been advertised prior to launch than if not. Hence, the purpose of the post-launch advertising will be to sustain the accessibility of the product judgment in the consumers' minds. The findings in the study illustrate that companies might miss out on extra value by only including post release marketing efforts in their media schedule and not considering advertising products prior to launch as part of the marketing strategy.

5.3 Managerial implications

This research has implications that are relevant for managers as it shows that consumer attitudes can be affected by advertising a product as available some time in the future, as opposed to it being immediately available. The results from the study suggest that temporal framing can be used successfully as a marketing tool for improving consumers' evaluations of products and to generate interest in the product. Up until now, preannouncements have mostly been used by large, leading companies (e.g. Apple, Lexus, Coca Cola), most of which have been within innovative industries such as electronics and the auto industry. Generating word of mouth around the company's next product seems to have been the main goal. This study and the rest of the recent theoretical contributions on advertising forthcoming products have however shown that pre-launch advertising can, in itself, generate favorable product evaluations. The effect is present even when the sender is masked or when using sham brands, illustrating that pre-launch advertising is not a tool reserved only for the most powerful brands. As the findings show that the future bias is persistent, causing people to favor preannounced products over non-preannounced products, future framed advertising seems to be an unexploited tool for increasing the value of a new product. Hence, I suggest that managers should not solely focus on advertising products after their release like traditional advertising theory recommend, but rather to shift some of the marketing effort to the earlier phases (i.e. prior to product release), and make pre-launch marketing a natural part of the marketing plan.

Furthermore, the future bias appears to be universal. It is valid across various personality traits and is not dependent on a high level of prior knowledge about the advertised product (as long as it is marketed as an incrementally new product). The bias is also equally applicable to both men and women. Hence, companies can expose target audience with pre-launch advertising without segmenting based on such characteristics.

When a company choose to include pre-launch advertising as an integrated part of the marketing schedule, it is however important to keep one thing in mind. As the consumer tend to have higher expectations for forthcoming products than they have for current products, the possible height of fall when expectations are not met is also greater. In a society where the use of social media like Twitter, Facebook and blogs seems to be ever increasing, it has never been easier to share one's opinions about products and services. In relation to this it is important to offer products that is at least as good as the similar products that are currently available (satisfy the necessary points of parity within the product category) when advertising prior to launch, in order to curb consumers' disappointment, and thus to avoid negative word of mouth and to facilitate repeated purchases

6. Limitations and validity

As this paper is written as a master thesis it does not cover all areas of interest within the field. Because of the limited scope there are naturally several limitations and weaknesses in the study. The purpose of this section is thus to illuminate the most salient limitations of the current research.

6.1 Experiment and participants

Using an experimental approach to the study gives good internal validity, as one is able to control for other factors that might affect an individual in real life and that would potentially intervene with the results (Churchill and Iacobucci, 2005). There are however still some factors that might cause the results in the study to deviate from real life effects.

The first and most apparent weakness of the study is the fact that participants were informed about the second session of the experiment before answering the first questionnaire. The information was given because participants who answered both questionnaires were offered a chance to win a gift certificate in order to secure a higher response rate and to prevent a large drop-out rate. The information might however have provided subjects with a cue implying that the experiment involved a memory task causing them to rehearse the information they gave in the first session in order to appear consistent. Kardes (1986) mentioned that participants might even expect that the study is conducted in order to test the consistency of their responses. Accordingly, several respondents reported that they thought the intention was to measure the consistency in their answers when asked about the purpose of the study. Miron (1961 as cited in Heise 1970) showed that participants might recall their previous ratings when the delay between two subsequent measurements is short. Equivalent forms is a proposed method in order to avoid this repeated measurement problem (Heise 1970). However, making two equivalent measurements means developing twice the number of scales, which seemed too comprehensive considering the scope of the study. I solved the problem by conducting the second session after a two-week delay, which is the norm for retesting in order to prevent subjects from remembering their first-time responses (Churchill & Iacobucci 2005, p. 296).

Secondly, all participants in the experiment were students at NHH, median age being 24. Several studies have argued that young people, having the majority of their life in front of them, are more oriented towards the future than elderly people are. The future bias might therefore be stronger for the younger part of the population. Additionally, future orientation is proved related to educational level, so that individuals with higher education tend to be more future oriented than others (Bergadaà 1990). Hence, the results in the study might be inflated compared to the population as a total.

Furthermore, the personality measurement composed the end of the second questionnaire, meaning that they were measured after the manipulation, which could cause subjects in the future condition group to be cued on the future. There were two reasons why I chose to deviate from this rule. First, the questions concerning a person's optimism and future perspective were expected to have priming effects on subsequent answers. Second, as the study was conducted as a longitudinal design it seemed appropriate to place the most comprehensive questionnaire in the second session. A short questionnaire in the first session would hopefully motivate participants to respond, and when the last questions in the second questionnaire came as a surprise, subjects would have invested too much time and effort into answering the survey to skip the last part (and thus lose the opportunity to win a prize).

A seven-point Likert scale was applied throughout the study. On several measures there was a tendency for respondents to use the upper half of the scale. This was especially true for the forecasted feelings measures. People generally hold positive feelings when purchasing new items, and the seven-point scale might therefore not have been able to capture the difference between the two experimental groups correctly. It is therefore possible that using a wider scale (i.e. a nine-point Likert scale) would provide a larger variety in reported feelings, and the results might thus have been clearer.

Moreover, the measurements in the questionnaires were based on previously developed and used scales. However, all scales were developed in English and were translated to Norwegian for the purpose of this study. Some scales might therefore have failed to completely recreate the indices and measurements that were originally developed and tested in English, causing varying results.

6.2 Experimental stimuli

The hypotheses in the study were only tested using one single product in order to secure a satisfying number of respondents. This does initially not give grounds for generalization of the results across other products. However, the results at T_1 are parallel to earlier findings in similar studies on both CLT (e.g. Trope & Liberman 2002; 2003), and studies linked directly to future framed advertising (Dahlén et al. 2010; Martin et al. 2009). Nonetheless, the results at T_2 should still be re-tested using other product categories, especially using product categories that are associated with a low degree of innovation, before concluding that the observed effects are applicable across various products. The external validity of the study does have important weaknesses and the study should therefore be replicated.

7. Closing remarks and future research

The available research on pre-launch advertising is limited, and there are several new areas that it would be interesting to explore. This section will propose some of the areas that are of particular interest in light of this study.

The results from this study show that pre-launch advertising brings favorable consumer product evaluations. The hypotheses were tested using a two-week time frame, and previous studies have used time frames of one month and one year. The results in this study did obtain somewhat weaker results than previous studies. Specifically the difference in forecasted feelings between the two experimental groups was not significant, and no difference was found in advertisement evaluations. A potential explanation might be the short time perspective in the study, i.e. the future product might have been too close in time. Still, the different studies cannot be compared directly drawing conclusions on this matter. It has to my knowledge not been conducted any research comparing the effects using different time frames, and it would be interesting to see whether a longer time frame leads to more extreme future bias effects than a shorter time frame. This would give companies valuable information and might serve as an indicator of an optimal time specter for a pre-launch advertising campaign.

One of the mentioned weaknesses of the study was that the hypotheses were tested only on one product. The study should therefore be replicated in order to see whether the results can be generalized to other product categories. Thorbjørnsen & Dahlén (2010) found the future bias to apply for bottled water that was advertised prior to launch, a product category with rare developments. It would therefore be of particular interest to re-test the hypotheses using product categories that are associated with a low degree of innovation.

The advertisement stimuli used in the survey contained no specific details about the advertised product. This design was chosen in order to directly extend the research by Dahlén et al. (2010), and because of the limited scope of the thesis. It would however be interesting to explore the future bias using other stimuli designs as well. Using an advertisement that contains information about product features, where questions concerning the weighting of different attributes, would for instance be valuable. This would also serve

as an interesting replication of the initial judgment effect as one would see whether people subject to future framed advertising weight the various attributes different than people subject to current framed advertising. Further, Martin et al. (2009) used stimuli that presented product features of various abstractness and found differences in the effect based on people's temporal orientation. No such connection was found in this study, and it would thus be interesting to explore the effect of the product features' construal levels on the population as a total.

Finally, as far as I am concerned all research conducted on pre-launch advertising has been carried out in western societies. The western society is more future oriented than for instance most Asian countries. For example, several Asian languages does not conjugate verbs (e.g. Mandarin and Thai), and it would thus be interesting to see whether the future bias is applicable even in less time oriented cultures.

8. References

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9. Appendices

Appendix A – Experimental study

Appendix A1: Invitation to survey

Hei,

I forbindelse med masteroppgaven min gjennomfører jeg en undersøkelse angående markedsføring av digitalkamera. Undersøkelsen har to deler der del 1 (denne delen) skal besvares innen 15. april, mens del 2 blir distribuert uken etter påske. Alle som besvarer *begge delene* av undersøkelsen er med i trekningen om to sentrumsgavekort à 500kr*. Del 1 tar ca 3-5 minutter å gjennomføre.

Ettersom undersøkelsen har flere deler ber jeg deg om å ikke diskutere undersøkelsen eller din besvarelse med andre.

Det hadde vært til stor hjelp om du hadde tatt deg tid til å besvare undersøkelsen min.

På forhånd tusen takk.

Mvh,

Anne Omland

*Sentrumsgavekortet er et elektronisk gavekort med over 350 brukersteder innen shopping, kultur, restauranter, opplevelser og alle de andre tilbudene Bergen sentrum byr på. Gavekortet har gyldighet i ett år fra utstedelsesdato.

Appendix A2: Questionnaire at T₁ – Future framed advertisement

The following are screenshots from each of the “sheets” in the survey for the future framed condition at T₁. All questions, except question 9, were coded as mandatory, meaning that respondents were unable to continue to the next page until all questions on the current page were answered.

Din identitet vil holdes skjult
Les om [retningslinjer for personvern](#). (Åpnes i nytt vindu)

Denne spørreundersøkelsen er en viktig del av masteroppgaven min og jeg er svært takknemlig for at du tar deg tid til å svare. Undersøkelsen består av to deler, og del 2 vil bli distribuert i løpet av uken etter påske. Alle som besvarer begge delene av undersøkelsen er med i trekningen om to sentrumsgavekort à 500kr*.

Prøv å svare så ærlig og nøyaktig som mulig på spørsmålene. Det er ingen riktige svar, det er din personlige mening jeg er ute etter.

Besvarelsen din vil være anonymisert, og du velger selv om du vil oppgi e-mailadressen din til slutt i undersøkelsen for å være med i trekningen om gavekort. Ettersom undersøkelsen har flere deler ber jeg deg om å ikke diskutere undersøkelsen og din besvarelse med andre.

*Sentrumsgavekortet er et elektronisk gavekort med over 350 brukersteder innen shopping, kultur, restauranter, opplevelser og alle de andre tilbudene Bergen sentrum byr på. Gavekortet har gyldighet i ett år fra utstedelsesdato.

Neste >>

13 % fullført

Se nøye på reklameannonsen under før du fortsetter til neste del av undersøkelsen. Du vil ikke ha anledning til å gå tilbake for å se annonsen på nytt.



Neste >>

25 % fullført

1) Hvor godt beskriver hvert av utsagnene under tanker dine om reklameannonsen du nettopp så?

Vennligst les listen nøye og kryss av på skalaen fra 1 til 7, (der 1=beskriver svært dårlig og 7=beskriver svært godt).

	1	2	3	4	5	6	7
Reklamen er bra	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reklamen er trivelig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reklamen er spennende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reklamen er overbevisende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reklamen er troverdig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reklamen er villedende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reklamen er upartisk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reklamen er ærlig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg liker reklamen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Neste >>

50 % fullført

2) Hvor enig er du i hvert av de følgende utsagnene om produktet i reklameannonseren?

Vennligst les listen nøye og angi hvor enig du er fra 1 til 7 (der 1=svært uenig i utsagnet, 7=svært enig i utsagnet)

	1	2	3	4	5	6	7
Jeg er interessert i produktet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg ønsker å prøve produktet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg ønsker å kjøpe produktet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Produktet passer ikke for meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg ønsker å kjøpe produktet 1	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Neste >>

63 % fullført

3) Hvor enig er du i hvert av de følgende utsagnene om produktet?

Vennligst les listen nøye og kryss av hvor enig du er fra 1 til 7 (der 1 = svært uenig, 7 = svært enig)

	1	2	3	4	5	6	7
Produktet er fritt for feil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Produktet er attraktivt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Produktet er bedre enn gjennomsnittet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Produktet er av høy kvalitet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det er et godt produkt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Produktet er appellerende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Produktet er tilfredsstillende	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg liker produktet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Neste >>

75 % fullført

4) Forestill deg at du har kjøpt produktet i reklamen. Hvor godt beskriver hvert av ordene under de følelsene du tror du ville hatt?

Vennligst les listen nøye og kryss av fra 1 til 7 (der 1=beskriver svært dårlig og 7=beskriver svært godt)

	1	2	3	4	5	6	7
Entusiastisk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opprømt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Glad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fornøyd	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Føles bra	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Neste >>

88 % fullført

5) Kjønn

Mann Kvinne

6) Alder

6) Alder

7) Hvordan vil du klassifisere din kunnskap om digitalkamera i forhold til gjennomsnittet?

(1=langt under gjennomsnittet, 7=langt over gjennomsnittet)

1 2 3 4 5 6 7

8) Eier du et digitalkamera?

Ja Nei Nei, men har tilgang på et

9) E-mailadresse

E-mailadressen vil bare benyttes for å trekke premievinnerne, og vil ikke settes i sammenheng med din besvarelse av undersøkelsen. Du trenger ikke å fylle ut e-mailadressen din dersom du ikke ønsker å være med i trekningen.

Send

100 % fullført

Tusen takk for din deltakelse. Du vil bli tilsendt del 2 av undersøkelsen i uke 17.

The respondents in the current framed experimental group were exposed to this advertisement at T₁. The same advertisement was used in the survey at T₂ for both experimental groups.

Se nøye på reklameannonsen under før du fortsetter til neste del av undersøkelsen. Du vil ikke ha anledning til å gå tilbake for å se annonsen på nytt.



Ikke som ditt vanlige kamera.
Usynlig assistanse ved alle bilder

i salg NÅ!

Appendix A3: Supplementary questions at T₂

1) Hvilke tanker har du om reklamen og produktet i reklamen?

Du kan skrive så mange eller så få tanker du selv ønsker, og du står fritt til å disponere så mye tid du ønsker på oppgaven.

6) Hvor riktig er hvert av de følgende utsagnene for deg?

Vennligst les listen nøye og angi hvor godt hvert utsagn beskriver deg fra 1 til 5 (der 1 = svært lite riktig, 5 = svært riktig). Prøv å være så ærlig og nøyaktig som mulig i dine vurderinger.

	1	2	3	4	5
Jeg lager lister over ting jeg må gjøre	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Det plager meg når jeg kommer for sent til en avtale	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg synes en av livets viktigste gleder er å treffe vennene mine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg antar sjelden at bra ting skal hende meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg er alltid på utkikk etter erfaringer som vil utfordre måten jeg ser meg selv og resten av verden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg tar ofte impulsive avgjørelser	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Når jeg ønsker å oppnå noe setter jeg meg mål og vurderer hvordan jeg skal nå disse målene	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg prøver å ta en dag av gangen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg har et klart bilde av fremtiden min	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg søker ofte muligheter til å utfordre meg selv og utvikle meg som person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg gjør ikke ting som vil være bra for meg dersom det ikke føles bra akkurat nå	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg prioriterer morgendagens frister fremfor dagens moro	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg forventer sjelden at ting skal gå i min favør	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jeg synes det er hyggelig å tenke på fremtiden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Cont. Question 6)

- | | | | | | |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Jeg synes det er viktigere å trives med det man gjør enn å få arbeidet ferdig i tide | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Alt i alt forventer jeg at flere gode ting enn dårlige ting skal hende meg | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Jeg ser på utfordrende situasjoner som en mulighet til å utvikle meg og lære | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

[Neste >>](#)

9 % fullført

8) Har du noen formening om hva som er formålet til denne undersøkelsen?

[Send](#)

100 % fullført

Appendix A4: List of question terms used in analysis

From T₁:

1.

- a) Reklamen er bra
- b) Reklamen er trivelig
- c) Reklamen er spennende
- d) Reklamen er overbevisende
- e) Reklamen er troverdig
- f) Reklamen er villedende
- g) Reklamen er upartisk
- h) Reklamen er ærlig
- i) Jeg liker reklamen

2.

- a) Jer er interessert i produktet
- b) Jeg ønsker å prøve produktet
- c) Jeg ønsker å kjøpe produktet
- d) Produktet passer ikke for meg

3.

- a) Produktet er fritt for feil
- b) Produktet er attraktivt
- c) Produktet er bedre enn gjennomsnittet
- d) Produktet er av høy kvalitet
- e) Det er et godt produkt
- f) Produktet er appellerende
- g) Produktet er tilfredsstillende
- h) Jeg liker produktet

4.

- a) Entusiastisk
- b) Opprømt
- c) Glad
- d) Fornøyd
- e) Føles bra

From T₂:

2.1.

- a) Reklamen er bra
- b) Reklamen er trivelig
- c) Reklamen er spennende
- d) Reklamen er overbevisende
- e) Reklamen er troverdig
- f) Reklamen er villedende
- g) Reklamen er upartisk
- h) Reklamen er ærlig
- i) Jeg liker reklamen

2.2.

- a) Jer er interessert i produktet
- b) Jeg ønsker å prøve produktet
- c) Jeg ønsker å kjøpe produktet
- d) Produktet passer ikke for meg

2.3.

- a) Produktet er fritt for feil
- b) Produktet er attraktivt
- c) Produktet er bedre enn gjennomsnittet
- d) Produktet er av høy kvalitet
- e) Det er et godt produkt
- f) Produktet er appellerende
- g) Produktet er tilfredsstillende
- h) Jeg liker produktet

2.4.

- a) Entusiastisk
- b) Opprømt
- c) Glad
- d) Fornøyd
- e) Føles bra

2.5.

- a) Jeg lager lister over ting jeg må gjøre
- b) Det plager meg når jeg kommer for sent til en avtale
- c) Jeg synes en av livets viktigste gleder er å treffe vennene mine
- d) Jeg antar sjelden at bra ting skal hende meg
- e) Jeg er alltid på utkikk etter erfaringer som vil utfordre måten jeg ser meg selv og resten av verden

- f) Jeg tar ofte impulsive avgjørelser
- g) Når jeg ønsker å oppnå noe setter jeg meg mål og vurderer hvordan jeg skal nå disse målene
- h) Jeg prøver å ta en dag av gangen
- i) Jeg har et klart bilde av fremtiden min
- j) Jeg søker ofte muligheter til å utfordre meg selv og utvikle meg selv som person
- k) Jeg gjør ikke ting som vil være bra for meg dersom det ikke føles bra akkurat nå
- l) Jeg prioriterer morgendagens frister fremfor dagens moro
- m) Jeg forventer sjelden at ting skal gå i min favør
- n) Jeg synes det er hyggelig å tenke på fremtiden
- o) Jeg synes det er viktigere å trives med det man gjør enn å få arbeidet ferdig i tide
- p) Alt i alt forventer jeg at flere gode ting enn dårlige ting skal hende meg
- q) Jeg ser på utfordrende situasjoner som en mulighet til å utvikle meg og lære

Appendix B – Tables

Appendix B1: correlation table covariates/dependent variables

Correlation matrix

		Sex	Knowledge
Sex	Pearson correlation	1	-.087
	Sig. (2-tailed)	-	.384
Knowledge	Pearson correlation	-.087	1
	Sig. (2-tailed)	.384	-
Purchase intentions, T ₁	Pearson correlation	.213*	.234*
	Sig. (2-tailed)	.032	.018
Product quality, T ₁	Pearson correlation	.240*	.168
	Sig. (2-tailed)	.015	.092
Advertisement attitude, T ₁	Pearson correlation	.028	.219*
	Sig. (2-tailed)	.781	.027
Forecasted feelings, T ₁	Pearson correlation	.237*	.134
	Sig. (2-tailed)	.017	.178
Purchase intentions, T ₂	Pearson correlation	.233*	.142
	Sig. (2-tailed)	.018	.154
Product quality, T ₂	Pearson correlation	.131	.145
	Sig. (2-tailed)	.188	.146
Advertisement attitude, T ₂	Pearson correlation	-.005	.074
	Sig. (2-tailed)	.959	.459
Forecasted feelings, T ₂	Pearson correlation	.224*	.131
	Sig. (2-tailed)	.024	.189

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

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

Appendix B2: Factor analysis main factors at T₁

Communalities		
	Initial	Extraction
1a	1.000	.657
1d	1.000	.860
1e	1.000	.792
2a	1.000	.849
2b	1.000	.869
2c	1.000	.802
3c	1.000	.757
3d	1.000	.823
3e	1.000	.820
3g	1.000	.719
4a	1.000	.765
4b	1.000	.709
4c	1.000	.786
4d	1.000	.753
4e	1.000	.823

Total Variance Explained							
	Initial Eigenvalues			Extraction Sums of squared loadings			Rotation sums of squared loadings ^a
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	7.634	50.891	50.891	7.634	50.891	50.891	4.875
2	1.833	12.219	63.110	1.833	12.219	63.110	4.485
3	1.324	8.827	71.936	1.324	8.827	71.936	5.063
4	.994	6.626	78.562	.994	6.626	78.562	4.470
5	.679	4.525	83.087				
6	.506	3.371	86.458				
7	.391	2.607	89.065				
8	.319	2.126	91.192				
9	.288	1.918	93.110				
10	.282	1.878	94.987				
11	.233	1.551	96.538				
12	.177	1.183	97.721				
13	.155	1.035	98.756				
14	.105	.700	99.456				
15	.082	.544	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Appendix B3: Factor analysis main factors at T_2

	Initial	Extraction
2.1a	1.000	.722
2.1d	1.000	.884
2.1e	1.000	.824
2.2a	1.000	.851
2.2b	1.000	.776
2.2c	1.000	.830
2.3c	1.000	.750
2.3d	1.000	.866
2.3e	1.000	.849
2.3g	1.000	.644
2.4a	1.000	.703
2.4b	1.000	.761
2.4c	1.000	.836
2.4d	1.000	.797
2.4e	1.000	.813

Component	Initial Eigenvalues			Extraction Sums of squared loadings			Rotation sums of squared loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	8.641	57.605	57.605	8.641	57.605	57.605	6.017
2	1.396	9.307	66.911	1.396	9.307	66.911	6.381
3	1.080	7.197	74.108	1.080	7.197	74.108	5.015
4	.789	5.262	79.370	.789	5.262	79.370	5.905
5	.625	4.166	83.536				
6	.474	3.162	86.698				
7	.414	2.760	89.458				
8	.303	2.021	91.479				
9	.262	1.749	93.228				
10	.242	1.613	94.840				
11	.193	1.284	96.124				
12	.180	1.201	97.325				
13	.162	1.078	98.404				
14	.130	.866	99.270				
15	.110	.730	100.000				

Extraction Method: Principal Component Analysis.

a. When components are correlated, sums of squared loadings cannot be added to obtain a total variance.

Appendix B5: Reliability analysis at T_1

	Cronbach's alpha						
Purchase intentions	0,909	Question	2a	2b	2c		
		Cronbach's α if deleted	0.847	0.856	0.898		
Product quality	0,915	Question	3c	3d	3e	3g	
		Cronbach's α if deleted	0.894	0.867	0.877	0.920	
Advertisement attitude	0,831	Question	1a	1d	1e		
		Cronbach's α if deleted	0.834	0.708	0.748		
Forecasted feelings	0,882	Question	4a	4b	4c	4d	4e
		Cronbach's α if deleted	0.860	0.873	0.844	0.862	0.840

Appendix B5b: Correlation matrix Product quality items

Inter-Item Correlation Matrix

	3c	3d	3e	3g
3c	1.000	.777	.730	.667
3d	.777	1.000	.886	.667
3e	.730	.886	1.000	.669
3g	.667	.667	.669	1.000

Appendix B6: Reliability analysis at T_2

	Cronbach's α						
Purchase intentions	0,890	Question	2.2a	2.2b	2.2c		
		Cronbach's α if deleted	0.810	0.841	0.873		
Product quality	0,905	Question	2.3c	2.3d	2.3e	2.3g	
		Cronbach's α if deleted	0.878	0.845	0.859	0.918	
Advertisement attitude	0,870	Question	2.1a	2.1d	2.1e		
		Cronbach's α if deleted	0.866	0.741	0.834		
Forecasted feelings	0,913	Question	2.4a	2.4b	2.4c	2.4d	2.4e
		Cronbach's α if deleted	0.905	0.897	0.882	0.899	0.887

Appendix B6b: Correlation matrix Forec 2 items

Inter-Item Correlation Matrix

	2.4a	2.4b	2.4c	2.4d	2.4e
2.4a	1.000	.745	.665	.571	.617
2.4b	.745	1.000	.699	.566	.662
2.4c	.665	.699	1.000	.762	.793
2.4d	.571	.566	.762	1.000	.789
2.4e	.617	.662	.793	.789	1.000

Appendix B7: Effect of future framed advertising at T_1

Descriptive statistics

	Condition	N	Mean	Std.dev.	Std.error	95% confidence interval		Min	Max
						Lower bound	Upper bound		
Purchase intentions (PI)	Current	51	3.6275	1.41680	.196	3.239	4.016	1.00	6.00
	Future	51	4.1895	1.38284	.196	3.801	4.578	1.00	7.00
	Total	102	3.9085	1.42132					
Product quality (PQ)	Current	51	4.2157	.86894	.126	3.968	4.468	2.00	5.75
	Future	51	4.6127	.99664	.126	4.360	4.860	2.00	7.00
	Total	102	4.4142	.95148					
Advertisement attitude (Att_ad)	Current	51	4.0196	1.12430	.152	3.719	4.320	1.00	6.00
	Future	51	4.0719	1.03990	.152	3.771	4.373	1.00	6.00
	Total	102	4.0458	1.07787					
Forecasted feelings (Forec1)	Current	51	4.4902	1.13512	.153	4.186	4.795	1.60	7.00
	Future	51	4.8118	1.05483	.153	4.507	5.116	1.00	6.60
	Total	102	4.6510	1.10218					

ANOVA

Dependent variable	Independent variable	Sum of squares	df.	Mean square	F	p-value
Purchase intentions (PI)	Experimental condition	8.210	1	8.210	4.639	.034**
Product quality (PQ)	Experimental condition	3.898	1	3.898	4.835	.030**
Advertisement attitude (Att_ad)	Experimental condition	.070	1	.070	.059	.808
<i>Forecasted feelings (Forec1)</i>	<i>Experimental condition</i>	<i>2.637</i>	<i>1</i>	<i>2.637</i>	<i>2.196</i>	<i>.141</i>

*Significant at the 10% level, **Significant at the 5% level

Appendix B8: Effect of future framed advertising at T_2

Descriptive statistics

	Condition	N	Mean	Std.dev.	Std. error	95% confidence interval		Min	Max
						Lower bound	Upper bound		
						Purchase intentions (PI2)	Current		
	Future	51	.1503	1.15338	.178	3.793	4.498	1.33	6.00
	Total	102	3.9314	1.31951					
Product quality (PQ2)	Current	51	4.2941	.89402	.132	4.030	4.554	2.25	6.50
	Future	51	4.6765	1.01031	.132	4.416	4.941	2.00	6.75
	Total	102	4.4853	.96845					
Advertisement attitude (Att_ad2)	Current	51	4.0261	1.21261	.167	3.689	4.353	1.00	6.33
	Future	51	4.0719	1.15530	.167	3.745	4.409	1.00	6.00
	Total	102	4.0490	1.17865					
Forecasted feelings (Forec2)	Current	51	4.3804	1.11302	.142	4.104	4.666	2.00	6.80
	Future	51	4.6667	.95638	.142	4.381	4.943	1.60	6.00
	Total	102	4.5235	1.04248					

ANOVA

Dependent variable	Independent variable	Sum of squares	df.	Mean square	F	p-value
Purchase intentions (PI2)	Experimental condition	4.637	1	4.637	2.895	.092*
Product quality (PQ2)	Experimental condition	3.781	1	3.781	4.260	.042**
Advertisement attitude (Att_ad2)	Experimental condition	.080	1	.080	.056	.813
<i>Forecasted feelings (Forec2)</i>	<i>Experimental condition</i>	<i>1.954</i>	<i>1</i>	<i>1.954</i>	<i>1.918</i>	<i>.169</i>

*Significant at the 10% level, **Significant at the 5% level

Appendix B9: Moderating effects of personality characteristics

		Moderator	Sum of squares	df.	Mean square	F	p-value
T₁	Purchase intentions (PI)	Present orientation	15.760	7	2.251	1.228	.297
		Future orientation	7.858	7	1.123	.583	.768
		Optimism	6.765	6	1.128	.587	.740
		Curiosity	36.556	9	4.062	2.664	.009***
	Product quality (PQ)	Present orientation	3.290	7	.470	.583	.768
		Future orientation	5.297	7	.757	.868	.535
		Optimism	4.924	6	.821	1.044	.403
		Curiosity	8.586	9	.954	1.134	.349
T₂	Purchase intentions (PI2)	Present orientation	7.240	7	1.034	.606	.749
		Future orientation	13.954	7	1.993	1.239	.291
		Optimism	6.084	6	1.014	.597	.732
		Curiosity	20.652	9	2.295	1.399	.203
	Product quality (PQ2)	Present orientation	5.492	7	.785	.841	.557
		Future orientation	3.827	7	.547	.573	.776
		Optimism	6.003	6	1.001	1.116	.360
		Curiosity	6.180	9	.687	.696	.711

*Significant at the 10% level, **Significant at the 5% level, ***Significant at the 1% level

Appendix B10: Moderating effects of gender and knowledge

		Moderator	Sum of squares	df.	Mean square	F	p-value
T₁	Purchase intentions (PI)	Sex	0,888	1	0,888	0,466	0,496
		Knowledge	18,557	5	3,711	2,310	0,051*
	Product quality (PQ)	Sex	0,316	1	0,316	0,376	0,541
		Knowledge	3,181	5	0,636	0,749	0,589
T₂	Purchase intentions (PI2)	Sex	0,142	1	0,142	0,086	0,770
		Knowledge	6,176	5	1,235	0,815	0,542
	Product quality (PQ2)	Sex	0,023	1	0,023	0,025	0,876
		Knowledge	2,727	5	0,545	0,617	0,687

*Significant at the 10% level, **Significant at the 5% level

Appendix B11: Mediation effect

Mediator	Dependent variable	Independent variable (s.d)	Mediating variable (s.d.)	90% CI		Sign.
				Lower bound	Upper bound	
Number of thoughts	Product quality	0,4237 (0,2023)	-0,7817 (0,3311)	-0,2194	-0,0020	< 0,05
	Purchase intentions	0,5137 (0,2971)	-0,7817 (0,3311)	-0,1126	0,1814	> 0,10
Forecasted feelings	Product quality	0,2755 (0,1639)	0,2990 (0,2185)	-0,0153	0,3149	> 0,10
	Purchase intentions	0,3422 (0,2292)	0,2990 (0,2185)	-0,0465	0,4809	> 0,10

Appendix B12: General Linear Models – repeated measures

Measure		Type III Sum of squares	df	Mean Square	F	p-value
Purchase intentions	Within groups	0,027	1	0,027	0,044	0,833
	Between groups	12,750	1	12,750	4,155	0,044
Product quality	Within groups	0,258	1	0,258	1,248	0,267
	Between groups	7,745	1	7,745	4,909	0,029
Advertisement attitude	Within groups	0,001	1	0,001	0,001	0,969
	Between groups	0,123	1	0,123	0,056	0,814
Forecasted feelings	Within groups	0,828	1	0,828	2,832	0,096
	Between groups	4,711	1	4,711	2,373	0,127

Descriptive statistics

	Measure	Condition	Mean	Std. Deviation	N
T ₁	Forecasted feelings, (Forec1)	Current	4,4902	1,13512	51
		Future	4,8118	1,05483	51
		Total	4,6510	1,10218	102
T ₂	Forecasted feelings, (Forec2)	Current	4,3804	1,11302	51
		Future	4,6667	0,95638	51
		Total	4,5235	1,04248	102

Measure		Type III Sum of squares	df	Mean Square	F	p-value
Forecasted feelings	Within groups	0,828	1	0,828	2,832	0,096
	Within*condition	0,016	1	0,016	0,054	0,816

From the first table above one can see that most of the measures have no difference between the reported answers at T₁ and the answers at T₂. Only the within-effect of forecasted feelings is significant at a 10% significance level. As illustrated by the middle table, people had somewhat less extreme forecasted feelings at T₂ than they did at T₁. The same effect is observed for both experimental groups. From the bottom table we can see that the observed effect is not conditional on experimental stimuli, the forecasted feelings do not change more for the future condition group than for the current condition group ($F_{\text{within*condition}}=0,054$, $p=0,816$).