

# Through the looking glass

*The influence of consumption and affect on product placement in movies*

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## Abstract

Product placement is a promotional device that is now being used by a lot of companies. In this research the different types of product placement and affect are investigated and differences in effectiveness are hypothesized. Effectiveness is expected to significantly discriminate for the type of product placement that was used in a movie that was presented to participants; active product placement was expected to be the most effective means of placement. An interaction effect for affect and active product placement was also expected. Participants' implicit and explicit attitudes were measured before and after they were presented with a short movie in which the manipulations were embedded. Consumption behavior was thereafter also measured by offering the participants a selection of candy bars. It was found that product placement is effective in promoting an alternative brand, as opposed to the brand that was used as product placement. When taking into account the rated attractiveness of the actors by the participants, this effect was found to be even stronger. The hypothesized effects for affect were not found and it is speculated that this may be due to a difference between emotions and moods. Ultimately, product placement as a means of promotion are reaffirmed, but the implementation thereof is put up for discussion. Future research is therefore also recommended to focus specifically on the implementation of the product placements.

*Keywords: Product placement, Affect, Mirror Neuron system, effectiveness, product placement type*

### Samenvatting

Product placement wordt veel gebruikt door bedrijven om hun producten te promoten. In dit onderzoek worden de verschillende typen product placement alsmede affect onderzocht. Verschillen in promotionele effectiviteit worden geanticipeerd voor de verschillende typen product placement die de participanten te zien kregen; er werd verwacht dat actieve product placement de meest efficiënte vorm van placement zou zijn. Een interactie effect betreffende affect en actieve product placement werd tevens geanticipeerd. De impliciete en expliciete attitude van de participanten werd in de studie voor en na een korte film gemeten. In deze film waren de verschillende manipulaties verwerkt. Na dit filmpje werd het consumptiegedrag van de participanten gemeten door hen een vrije keuze voor te leggen tussen een aantal chocoladerepen. In deze studie komt naar voren dat product placement effectief is voor de promotie van een alternatief merk in plaats van het in de product placement gebruikte merk. Dit effect wordt versterkt door de aantrekkelijkheid van de acteurs. De verwachte effecten voor affect werden in deze studie niet gevonden en er wordt gespeculeerd dat dit te wijden is aan een verschil tussen emotie en stemming. Uiteindelijk bevestigt deze studie de positie van product placement als promotie methode, de implementatie hiervan wordt echter ter discussie gesteld en aangedragen als onderwerp voor toekomstig onderzoek.

*Steekwoorden: Product placement, Affect, spiegelneuronen systeem, effectiviteit, product placement type*

## Introduction

Commercials have always been a part of media. Businesses attempt to attract more customers by making their products seem better, cheaper, cooler, or distinguish their product on some other salient quality. This goal has traditionally been pursued by using commercials on different media, television being a popular vehicle. Lately, the interest in explicit commercials on television, or at the movies, has been diverted in favor of a less intrusive method of promotion: product placement.

Product placement is “*a paid product message aimed at influencing movie (or television) audiences via the planned and unobtrusive entry of a branded product into a movie (or television program)*”, (Balasubramanian, 1994). Public attention for product placement was influenced largely by the success of the popular movie *E.T. The Extra-Terrestrial*, the movie featured product placement by Hershey’s Reese’s Pieces which enjoyed a dramatic increase in sales after the movie was released. Today product placement has become quite commonplace, product placements with one brand can be found in every three minutes of programming (La Ferle, & Edward, 2006). Based on the existing body of literature, this study will research the influence of product placement type on brand attitude and consumption behavior on product placement’s effects in conjunction with affect. The mirror neuron system is therein argued as the underlying mechanism explaining different effects.

### *Effects of Product Placement*

Since the success of the product placement by Reese’s Pieces, researchers also became interested in product placement. Product placement has been shown to increase the feeling of realism in viewers if implicated correctly; if product placements are not integrated in the movie correctly; for instance, when a certain product placement such as a computer appears in the middle of a conversation without there being an apparent need for it in the story; the

viewer will dislike the placement (Delorme & Reid, 1999), (d'Astous & Chartier, 2000), (Bhatnagar et. al, 2004).

Positive effects of product placement were found to be influenced by brand familiarity and character identification (Delorme & Reid, 1999), presence of principal actor (d'Astous & Chartier, 2000), modality (visual and auditory presentation) and the connection of a brand within the plot (Russel, 2002) and prominence within a scene and mode (visual and auditory presentation) (Gupta & Lord, 1998), with an explicit auditory mention of a brand within the script leading to better recall than a subtle visual placement. Negative effects of product placement were found and influenced by the repetition of product placement (Gupta & Balasubramanian, 2000) in which the efficiency of a product placement was reduced by repetition, prominence of the product placement on screen (Gupta & Balasubramanian) and perceived manipulative intent of the product placement (Campbell, 1995). In addition, liking of a program was found to have a negative effect on the effectiveness of product placement with a negative brand attitude effect for viewers who liked the program more versus a temporary positive brand attitude effect for viewers who liked the program less (Cowley and Barron, 2008). Also, cultural and gender differences for the effectiveness of product placement have been found with females claiming to purchase based on brands seen in movies (Gould et. al. 2000) as well as differences in effectiveness among different types (such as mini-series/drama and quiz/variety shows) of television programs (d'Astous & Séguin, 1999).

#### *Product Placement & Mirror Neurons*

Though the research on product placement has been extensive, it seems to disregard the more subtle mechanics regarding the effects of product placement. When a person sees a character, on a television show, drink a can of soda that person may be expected to experience more

thirst in contrast when only the product was shown. This plausible idea may be explained by means of the mirror neuron system (MNS) since it is involved in explaining intentions and actions (Rizzolatti, 2005). Mirror neurons are “*a particular class of visuomotor neurons, originally discovered in area F5 of the monkey premotor cortex, that discharge both when the monkey does a particular action and when it observes another individual (monkey or human) doing a similar action*” (Rizzolatti & Craighero, 2004), for a review see: Rizzolatti & Craighero, 2004) To illustrate, when a person sees someone move his leg in a particular way, the same neurons are activated in the perceiver’s brain to perform that action as in the person that is actually moving his leg (Prinz & Barsalou, 2000). Because of this effect, the mirror neuron system may be regarded as a possibly important mechanism, and explanation for differing effects, that should be studied in product placement research. Since actors may or may not consume/use products on screen, product placement may yield different effects.

This effect has indeed been researched (Keuzenkamp, 2008), studying the effects of influence of consumption in movies on perceiver’s thirst. The results of this study were not replicated. The preliminary evidence found by Keuzenkamp (2008) may not have been replicated, they are promising nonetheless. This leads us to the first hypothesis investigated in this study: “*Active product placement (consumption of a product in a movie) will lead to a higher brand attitude and consumption behavior compared to passive product placement (no consumption of a product in a movie).*”

In addition to this basic MNS effect it has been shown that the MNS is also involved in empathy and emotion (Wicker et. al. 2003). In the study by Wicker and colleagues, participants were exposed either to disgusting odorants or to clips of people with a facial expression of disgust. This study showed that the same areas in the brain are activated when a person perceives something as disgusting as well as a different person is seen who expresses disgust. In addition, Knutson et. al. (2008) showed that the social and emotional processing

areas of the brain are activated when different social gestures are shown (waving, raising the arm and a fascist gesture).

This suggests that when people perceive emotions or emotionally charged gestures, they actually *experience* the emotion perceived. Additionally, in a study by Russel & Stern (2006), it was found that when a character in a television show has a strong negative attitude toward a product, it affects the attitude toward that product in the viewer. Within the context of product placement this implies that when the actor expresses a certain facial expression, the emotion expressed by the actor is experienced by the audience. The facial expression will be perceived and the same neurons that fire in the actor's brain are firing in the perceiver's brain, exciting emotional experiences accordingly. If the actor expresses an emotion in a short interval or in conjunction with active product placement it may be expected that the audience attributes the affective experience to the product/brand which may influence attitude toward the brand or even purchase choice. During passive product placement it is expected that the affective experience will not be attributed specifically to the product/brand but more generally to the relevant scene or story since the product is not used in conjunction with the emotional expression. Therefore, an interaction effect for emotion expressed on active product placement is expected for brand attitude and consumption behavior, with positive affect significantly increasing brand attitude and consumption behavior in the active product placement condition but with negative affect decreasing brand attitude and consumption behavior in the active product placement condition.

Furthermore, based on Keuzenkamp (2008) a main effect effect of product placement on hunger experienced is expected, with an increase in hunger for the active product placement condition and no increase for both the passive product placement and the no product placement condition. No effect of product placement or affect is expected on thirst.

### Methods and Procedure

This study uses a 3 (active product placement, passive product placement, no product placement) x 2 (positive affect, negative affect) design, 76 participants were distributed randomly over the conditions. Positive affect is operationalized by smiling and negative affect by frowning.

Participants were recruited from the University of Twente and were told they were participating in series of experiments with the combined duration of 1 hour; participants were not informed about the true goal of the research before participating.

### *Participants*

When participants first came in to participate they were asked to complete a series of tasks on a computer.

### *Controlling Effects & Explicit Attitude Measure*

After filling out some general information, participants were instructed on-screen that they would be answering questions that would investigate the relation of lifestyle and personality facets. In reality the questionnaire was comprised of questions investigating the participant's attitude toward chocolate, need state and some other filler questions that were meant to obscure the true nature of the research (Appendix A). An example measuring chocolate attitude from this list: *"I don't really like chocolate"* [translated from the original Dutch].

After the participants watched a movie with the manipulation, they were presented with another questions about how they liked the movie as well as questions related to need state and questions about identification, liking and similarities with the actors to control for possible changes in effects stemming from these sources, an example may be: *"One (or more) of the actors were pleasant on the eyes"* [translated from the original Dutch] (Appendix B).



All the questions were scored on a Likert scale ranging from 1 (totally disagree) to 5 (totally agree).

The subjects' explicit attitudes towards the products were then quantified by data from questions pertaining to aspects of the snacks (fun, fitness to personality, pleasantness, extend of wanting the product and excitement enticed by product) e.g. "*To what extend do you think Bros is fun*" [translated from the original Dutch] (Appendix C). Factor analysis confirmed that these variables were indications of attitude toward the products with combined alphas of .80, .90 and .79. The averages of these variables per product were used in the analysis.

#### *Product placement in movie*

After these questionnaires, participants were told they were going to participate in a pilot study that investigates whether or not a movie that was shot earlier is appropriate for future research. In reality, the manipulations were embedded in this movie, which was a short discussion between two typical Dutch men whom attend a college or university. The scripts of these movies (Appendix D) are the same except for how the product placement is implemented; the same actors will also be used to insure effects will not be caused by physical attractiveness. The movies have a runtime ranging from 164 seconds to 177 with the product placement visible ranging from a total of 28 to 40 seconds with the active product placement taking longer screen time; product placement was controlled for prominence, centrality and plot connection by putting the products at the same location among the different movies with the same distance from the camera. The products were also implemented with minimal changes to the scripts (Appendix C).

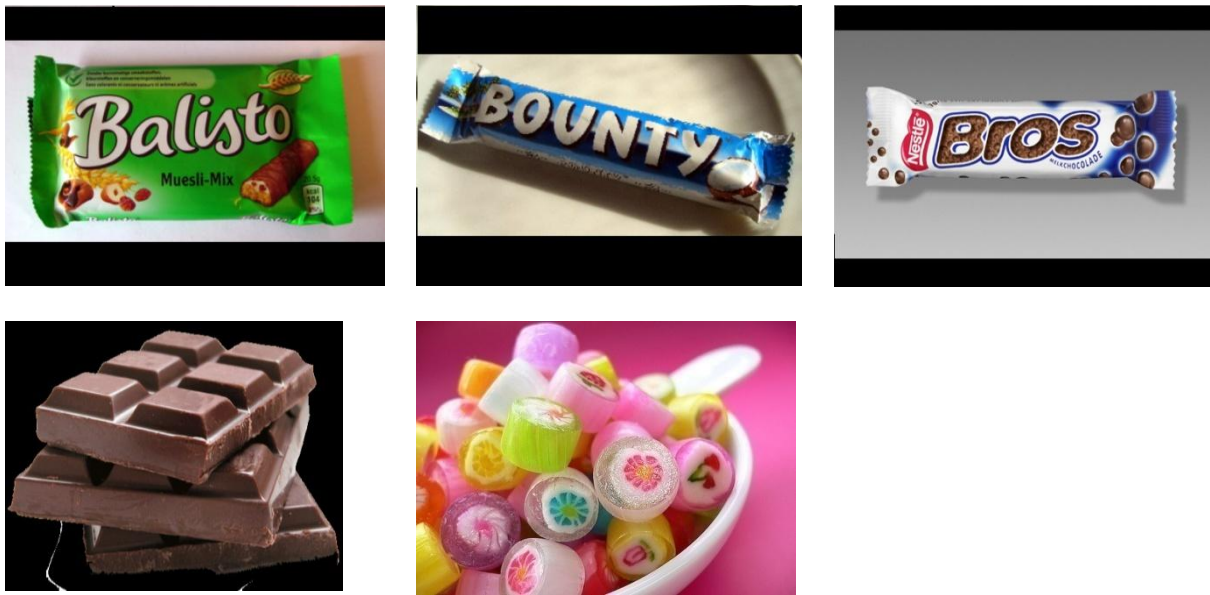
The product placement used was a 'Bros' candy bar, which is a known but not the market leading brand (or its direct competitor). In the positive product placement condition, the actor would actually consume the product, whereas in the passive product placement condition the

actor would just move the bag of Bros on the table. In the ‘no product placement’ condition the actor would not do anything since there was no product to be interacted with. Depending on the affective condition, the actors would either smile or frown in conjunction with handling the product. In the positive active product placement condition an actor would consume the product and smile whereas in the negative active product placement condition, he would frown. These facial expressions were inserted immediately after the product placement in order to insure the affect felt was transferred to the product. This principle is also valid for the passive product placement conditions. In the positive passive product placement condition the actor would smile when moving the bag whereas in the negative passive product placement condition he would frown when moving the bag. In the no product placement the positive emotion (smiling) and negative emotion (frowning) were used at the same lines in the scripts as the active and passive product placement conditions.

#### *Implicit Attitude Measure*

After measuring the participants’ explicit attitudes toward the products (Appendix C), they were asked to perform a reaction time task which, in reality, is an affective priming task used to measure the change in attitude toward the product (for an example see Gibson, 2008). This affective priming task used pictures from the IAPS database of validated pictures (Lang et. al, 2005) (Appendix E) as well as pictures taken of candy bars specific for this study (Appendix F). Participants would be presented with 80 trials in two separate blocks. In each block participants were shown pictures for a period of 250 ms which were either a positive, neutral, negative prime (Appendix E) or a target prime (Appendix F). In each block the participant was shown 40 images, 10 positive, 10 neutral, 10 negative primes and 10 target primes which were 500\*375 pixels. The target primes were 5 images related to candy bars, including Bros (see Figure 1). Each picture was shown twice; once with positive affect and once with

negative affect. After being shown the prime was shown the screen was shown black for 10 ms after which a smiley (Appendix G) was shown prompting the participant to press a button indicating that this was a positive or a negative smiley face. This reaction time was measured for each trial. After each trial was completed, the next would be presented after 1500 ms. The product attitude was then measured again by means of an explicit attitude questionnaire.



**Figure 1:** Target primes used in the affective priming task

### *Behavioral effects*

After performing this task, participants were told the experiment was over and were told to report to the experiment leader who told the participants that, in addition to the credit or money, they were also welcome to choose a candy bar from three alternatives (Ballisto, Bounty and Bros). This task was used to measure the behavioral effects of the product placement in the movie.

## Results

The data was filtered for people who were allergic or had indicated they had a strong dislike of chocolate treats resulting in an  $N = 78$ .

First off, an ANOVA yielded no main effect of product placement on hunger ( $F < 1$ ) thus not confirming the hypothesis predicting the increase of hunger for the active product placement condition. Though this effect was not found, a marginal main effect of affect on hunger ( $F(1, 76) = 3.58, p = .06$ ) was found, with positive affect yielding an increase ( $M = 0.33, SD = 1.61$ ) and negative affect yielding a decrease ( $M = -0.35, SD = 1.49$ ) on hunger.

As expected, a main effect was not found of affect on thirst ( $F < 1$ ). A main effect of product placement on thirst ( $F(1, 76) = 3.04, p = .05$ ) however was found, where thirst was lower in the active placement condition ( $M = -0.71, SD = 2.07$ ) than the passive product placement ( $M = 0.23, SD = 1.61$ ) and no product placement condition ( $M = 0.35, SD = 1.35$ ) where thirst was increased. These results are not congruent with the hypothesized absence of effects on thirst for product placement.

### *Explicit Attitude Measure*

No effect of product placement on Bros (target) attitude was found ( $F < 1$ ) thus not confirming the hypothesis predicting a significant increase in target attitude for the active product placement condition in contrast to the passive product; and no product placement condition. Additionally, no effect of affect on Bros attitude ( $F < 1$ ) and no interaction effect of product placement and affect on Bros attitude ( $F < 1$ ) was found thus not confirming the hypothesis predicting a positive interaction effect for active product placement and positive affect and negative interaction effect for active product placement and negative affect on brand attitude.

An effect, however, of product placement on *bounty* attitude ( $F(2, 76) = 3.08, p = .05$ ) was found as well as a marginal effect of affect on bounty attitude ( $F(1, 76) = 3.77, p = .06$ ). In the passive product placement condition ( $M = 4.42, SD = 1.80$ ) and active product placement condition ( $M = 4.39, SD = 1.72$ ), attitudes were more positive than in the no product placement condition ( $M = 3.34, SD = 1.88$ ). In the positive affect condition ( $M = 3.37, SD = 1.83$ ) attitudes were lower than in the negative affect condition ( $M = 4.46, SD = 1.80$ ), see Table 1. No interaction effect was found ( $F < 1$ ).

Additional covariate analysis was done, it was found that judgment of attractiveness of the actors increases the effect of product placement on explicit Bounty attitude ( $F(2, 76) = 4.05, p = .02$ ) from  $p = .05$ . It was also found to increase the effect of affect on Bounty attitude ( $F(1, 76) = 4.01, p = .05$ ) from  $p = .06$ . Still no interaction effect was found.

**Table 1**

*Means and standard deviations per condition for explicit bounty attitude.*

<b>Condition</b>	<b>Mean (M)</b>	<b>Standard Deviation (SD)</b>
Passive product placement	4.42	1.80
Active product placement	4.39	1.72
No product placement	3.34	1.88
Positive affect	3.37	1.83
Negative affect	4.46	1.80

*Implicit Attitude Measure*

An ANOVA did not show a main effect of product placement on positively primed Bros ( $F(2, 76) = 1.44, p = .24$ ) which does not confirm the hypothesis predicting a significant increase in

target attitude for the active product placement in contrast to the passive product; and no product placement condition. Also no main effect of affect ( $F < 1$ ) and no interaction effect of product placement and affect on positively primed Bros ( $F(2, 76) = 1.43, p = .25$ ) were found. These effects were also not found for negatively primed Bros, product placement ( $F < 1$ ), affect ( $F < 1$ ) and interaction ( $F < 1$ ) respectively, thus not confirming the hypothesis predicting a positive interaction effect for active product placement and positive affect and negative interaction effect for active product placement and negative affect on brand attitude.

Based on results from the explicit attitude measure, the implicit attitude effect for Bounty was investigated. These yielded no main effect of product placement on positively primed Bounty ( $F(2, 76) = 1.68, p = .19$ ), no main effect of affect ( $F < 1$ ), as well as no interaction effect ( $F < 1$ ).

Only a marginal effect of product placement on positively primed candy was found ( $F(2, 76) = 2.95, p = .06$ )

#### *Behavioral Measure*

An ANOVA yielded no main effect of product placement on choice behavior ( $F < 1$ ), as well as no main effect of affect on choice behavior ( $F < 1$ ). In addition, no interaction effect of product placement and affect on choice behavior was found ( $F < 1$ ), thus not confirming the hypothesis predicting a positive interaction effect for active product placement and positive affect and a negative interaction effect for active product placement and negative affect on consumption behavior. Covariate analysis did not yield any significant effects on choice behavior.

### Discussion

This study was performed to investigate the influence of different types of product placement (active, passive and no product placement) on brand attitude and consumption behavior in conjunction with affect in an experimental setting.

The results of this study indicate that product placement type and affect do not impact the brand attitude and consumption of the particular product brand that was used in the movie. The results do show it influenced the explicit attitudes for a competitor of the used brand when product placement was used as opposed to no placement. This increase in explicit brand attitude for the competitor was also increased by the rated attractiveness of the actors. A study into the influences of attractiveness of actors on the effectiveness of commercials by van Doorn & Stapel (2010) supports this occurring effect by showing that the implementation of attractiveness may also positively influence evaluations for products that were not advertised. It is argued by van Doorn & Stapel (2010), that this effect can be explained by the way attractiveness is used in a commercial; using it merely as a cue yielded a general, non-brand specific effect. This same effect may very well have been at work in this study, increasing the explicit brand attitude for the competitor while using the attractiveness of the actors as a cue. In addition, both the product that was used in the movie as the non-advertised product share a key characteristic that may have influenced results; the wrappers are both blue and white (see Figure 1). Though these wrappers do not seem to be designed to imitate one of another, this product characteristic may have led to brand confusion in the participants (Loken et. al, 1986; Poiesz & Verhallen, 1989), which can explain the difference in brand attitude. Poiesz & Verhallen (1989) argued that when an advertising message is ambiguous about the nature of a product, product identification is likely to suffer. The product placement in this study may have been experienced as ambiguous in terms of advertising by the participants, which would

result in bad product identification. This may explain the brand attitude difference that was found.

The expected interaction of product placement and affect on brand attitude and consumption behavior was not found for the product that was used in the movie as well as the alternative product. Interestingly, negative affect shown in the movie influenced the alternative brand attitude positively. This indicated that the process of affect influencing brand attitude may be expected to work quite different than via the MNS as was expected. Perhaps emotions shown in a movie can influence affect but can leave mood unaffected. The latter has been shown to influence access to positive associations, which can influence evaluations (Isen & Shalke, 1982; Gardner, 1985).

In addition, it was confirmed that affect did not influence the thirst experienced. However, it was found that the type of product placement did influence thirst experience in which the active placement yielded lower expressed thirst than the passive and no placement conditions. This effect of placement was not found for hunger, positive affect was in turn shown to positively influence hunger. Although it has been shown that negative emotions increase food consumption (Canetti et. al, 2002), it can also be possible for people with positive affect to increase food consumption (Tice et. al, 2001). In their study, Tice and colleagues (2001) found that happy participants would believe that eating would be a good affect regulation strategy when they were made to believe that their current mood would be preserved by eating. A similar effect may explain the results in this study, participants could have been led to believe that eating would not change their mood but merely preserve it. This would result in participants with a positive mood to want to eat more and participants in a negative mood to want to eat less. This change in desire to eat may have exhibited itself as hunger. Furthermore, it may be speculated that the type of product placement influenced thirst because the participants associations of thirst and eating a chocolate bar were elicited. Perhaps



participants were mouth watering at the look of the chocolate bar, which in turn may have been perceived as thirst.

Future research should focus on controlling for attractiveness of actors and the inducement of moods. The indiscriminate effect of product placement when attractiveness is involved has great managerial implications for the implementations of product placement. Furthermore, a more elaborate way of inducing affect may be used in future research by inducing a feeling of failure or accomplishment through a prior task or experience for example. Effort should be invested in producing movie clips of high quality in which the different implementations of product placement should be carefully controlled for exposure time, prominence and other important variables whilst the movie clips should still be interesting and should not be artificial. External validity of the experiment should always be taken into account in an early stage; past research has shown the precarious balance of isolating the influencing factors of product placement whilst ensuring the manipulation will still be believable as well as uniform.

This study adds to the existing body of product placement research by researching the influence and effectiveness of different types of product placement and affect. The results of this study help to advance the field in recognizing the subtle differences between moods and emotions and the disparity in influence that stem from them. Ultimately, the effectiveness of product placement as a means of product promotion is challenged by results showing the indiscriminate influence of attractiveness on product placement.

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## Appendix A

*Explicit Attitude Questionnaire*

## Tekst:

Welkom bij dit experiment, je zult zometeen vragen gaan beantwoorden over lifestyle en persoonlijkheid. Probeer deze vragen zo goed en eerlijk mogelijk te beantwoorden.

## Questions:

Geen aan op een schaal van 1 tot 5 in hoeverre je het eens bent met de stelling.

1 = Helemaal oneens, 2 = een beetje oneens, 3 = neutraal, 4 = een beetje mee eens, 5 =

Helemaal eens

Ik hou ervan om te snoepen

Ik snoep niet erg veel

Als ik snack dan kies ik graag voor chocola

Ik vind sport leuk en belangrijk in mijn leven

Ik hou ervan om op de bank te hangen als ik vrij heb

Wanneer ik tijd over heb, studeer ik graag

Ik hou ervan om gezonde snacks te eten

Ik ben van plan om in de komende week koekjes te kopen

Ik vind het leuk om nieuwe mensen te ontmoeten

Ik ben van plan om in de komende week chocola te kopen

Koekjes vind ik erg lekker

Ik hou ervan om mensen die ik niet ken te helpen

Als ik studeer, eet ik vaak er iets naast

Ik ben van plan om in de komende week een gezonde snack te kopen

Als ik een snack moet kopen dan kies ik voor koekjes

Ik vind chocolade niet erg lekker

Ik hou ervan om met vrienden af te spreken

Films kijken vind ik het leukste wat er is

Wanneer ik snoep dan kies ik niet graag voor gezonde snacks

Op dit moment heb ik honger

Op dit moment ben ik dorstig

Tekst:

Dank je wel voor je deelname

## Appendix B

*Covariable Questionnaire*

Tekst:

Het filmpje wat je net gezien hebt willen wij gebruiken in een onderzoek, de vragen die je gaat beantwoorden helpen ons met eventuele verbeteringen.

Vragen:

Op schaal van 1 tot 5;

1 = Helemaal oneens, 2 = een beetje oneens, 3 = neutraal, 4 = een beetje mee eens, 5 = Helemaal eens

De acteurs in de film speelden goed

De setting van het filmpje was saai

Ik vond de acteurs aantrekkelijk om te zien

Ik werd niet afgeleid van het gesprek in de film

Het verhaal in de film was interessant

Ik kon mij goed identificeren met een (of meerdere) van de acteur

Hoeveel dorst ervaart u op dit moment

Hoeveel honger ervaart u op dit moment

Tekst:

Dank je wel voor je deelname

## Appendix C

*Product attitude questionnaire*

Tekst:

Je bent nu bijna aan het einde van dit onderdeel gekomen. Tot slot volgen er nog een aantal vragen over chocoladeproducten.

Vragen:

Op schaal van 1 tot 5;

1 = Helemaal oneens, 2 = een beetje oneens, 3 = neutraal, 4 = een beetje mee eens, 5 =

Helemaal eens

In hoeverre vind je Bounty bij je passen

In hoeverre vind je Bounty plezierig

In hoeverre vind je Bounty spannend

In hoeverre vind je Bounty leuk

In hoeverre vind je Bounty leuk om te hebben

In hoeverre vind je Balisto leuk om te hebben

In hoeverre vind je Balisto plezierig

In hoeverre vind je Balisto leuk

In hoeverre vind je Balisto bij je passen

In hoeverre vind je Balisto spannend

In hoeverre vind je Bros plezierig

In hoeverre vind je Bros plezierig



In hoeverre vind je Bros leuk

In hoeverre vind je Bros bij je passen

In hoeverre vind je Bros spannend

In hoeverre bent u bekend met het merk Bros

In hoeverre bent u bekend met het merk Bounty

In hoeverre bent u bekend met het merk Balisto

## Appendix D

*(Manipulation) Movie Scripts*

Active product placement (positive and negative affect) – text in bold are not spoken but instructions for the director and actors

**[In een kamer zitten twee vrienden aan tafel hun weekeind te bespreken, de camera begint met een 1 seconde shot van beide personen aan tafel] – [camera pakt een shot van alleen de persoon aan het woord tenzij anders vermeld] – [indien iemand een snoepje neemt is ook een lamp zichtbaar]**

JAN: Zeg, heb jij nog iets leuks gedaan dit weekeind?

KEES: Nah, niks bijzonders, ik was bij mijn ouders en ben langs gegaan bij een feestje van een oude vriend.

JAN: Oh tof, was het een leuk feest?

KEES: Ja het was wel leuk, gewoon standaard **[KEES pakt tijdens het zeggen hiervan een snoepje, haalt hem rustig uit de verpakking en eet hem op; totaal 2 seconden]** **[INDIEN**

**POS: een lach hierna, INDIEN NEG: een frons hierna]** **[met volle mond]**beetje

rondhangen en muziek luisteren. **[Einde facial expression]**

JAN: Tof, ik ken het wel, ik had laatst hier in de stad ook een feestje.

KEES: Oh? Was het leuk?

JAN: Ja was wel leuk, het was een dispuutsfeestje van een vriend van me **[JAN pakt hierbij een snoepje gedurende 2 seconde]** **[INDIEN POS: een lach hierna, INDIEN NEG: een frons hierna]**

KEES: Wie ken jij bij een dispuut dan?

JAN: **[JAN neemt het uitgekakte snoepje en eet deze] [met volle mond]** Erik, je weet wel, van dinges. **[Einde facial expression]**

KEES: Dinges?

JAN: Ja eh, huisgenoot van Fleur.

KEES: aaaah, díe Erik. Die heb ik zelf ook wel eens gezien, wat studeert hij eigenlijk??

JAN: Ja eh, volgens mij doet hij bedrijfskunde, maar ik kan me ook wel vergissen. Ik weet het eigenlijk ook niet echt zeker.

KEES: Haha, goede vriend ben jij weer **[KEES geeft JAN een klein duwtje tegen zijn schouder]**

JAN: Ja lach maar, volgens mij heb jij Erik ook wel eens gezien.

KEES: Kan zijn maar ik ben niet naar zijn dispuutsfeestje geweest, sowieso kom je echt elke week bij Fleur langs dus dan spreek je ook echt wel met d'r huisgenoten.

JAN: Haha, ja ok whatever, verder nog iets boeiends gedaan?

KEES: Nee. Jij wel?

JAN: Ja, ik heb dit weekeind wel wat gedaan.

KEES: Nog iets leuks dan? Of heb je echt alleen maar gestudeerd?

JAN: Ja, ik heb wel best wel veel gestudeerd, dat tentamen van volgende week is echt vet naar.

KEES: Ja inderdaad, snap jij er wat van?

JAN: Ja, opzich nu wel. Het is best wel lastige stof, je moet er goed je hoofd bij houden wil je het echt allemaal snappen en vooral onthouden.

KEES: Haha, nou dat geeft me lekker veel hoop. Ik snap er tot dusver maar weinig van, al die formules en regeltjes, jij bent zeker een echte beta student?

JAN: Nah, valt opzich wel mee, ik vond wiskunde nooit echt niet leuk maar ik was er nou ook weer niet een held in ofzo

KEES: Naja dat zal dan wel, ik was vroeger wel heel erg alpha, ik vond geschiedenis vooral het leukste

JAN: Geschiedenis is ook wel tof, hadden jullie ook een beetje een leuke leraar in dat dorp van je?

KEES: ja opzich wel, echt zo'n leraar die ervan houdt om verhalen te gaan vertellen voor de klas.

JAN: Leuk, ja wij hadden ook wel zo'n leraar, maar die ging redelijk snel met pensioen

KEES: Jammer, leuke leraren maken het leren altijd wel een stuk gemakkelijker, wat vindt je van de leraren op de Universiteit dan?

JAN: Ja, eigenlijk ook wel goed, moet wel zeggen dat het studeren wel zelfstandiger is dan op de middelbare maar goed

KEES: Ja, ik snap wel wat je zegt **[bij het zeggen hiervan pakt KEES een snoepje en stopt die in zijn mond; totale periode 2 seconden]** **[INDIEN POS: een lach hierna, INDIEN NEG: een frons hierna][met volle mond]** op de middelbare school was alles een stuk vrijblijvender en kon je soms best wel wat leerstof missen heb ik het idee

JAN: Ja naja, we moeten een keer volwassen worden hè?

KEES: Ja inderdaad, zeg wat doe jij volgende week dan?

JAN: Nou ik had eigenlijk wel weer zin in een feestje, ik ga namelijk weer naar mijn ouders om wat klusjes te doen en...**[fade out to black]**

Passive product placement (positive and negative affect) – text in bold are not spoken but instructions for the director and actors

**[In een kamer zitten twee vrienden aan tafel hun weekeind te bespreken, de camera begint met een 1 seconde shot van beide personen aan tafel] – [camera pakt een shot van**

**alleen de persoon aan het woord tenzij anders vermeld] – [indien iemand een snoepje neemt is ook een lamp zichtbaar]**

JAN: Zeg, heb jij nog iets leuks gedaan dit weekeind?

KEES: Nah, niks bijzonders, ik was bij mijn ouders en ben langs gegaan bij een feestje van een oude vriend.

JAN: Oh tof, was het een leuk feest?

KEES: Ja het was wel leuk, gewoon standaard **[KEES pakt hierbij een snoepje uit de verpakking en legt deze daarna op het middel van de tafel; totaal 2 seconden]** **[INDIEN POS: een lach hierna, INDIEN NEG: een frons hierna]** beetje rondhangen en muziek luisteren. **[Einde facial expression]**

JAN: Tof, ik ken het wel, ik had laatst hier in de stad ook een feestje.

KEES: Oh? Was het leuk?

JAN: Ja was wel leuk, het was een dispuutsfeestje van een vriend van me **[JAN pakt hierbij het snoepje van het midden van de tafel en legt deze terug in de verpakking gedurende 2 seconde]** **[INDIEN POS: een lach hierna, INDIEN NEG: een frons hierna]**

KEES: Wie ken jij bij een dispuut dan?

JAN: Erik, je weet wel, van dinges. **[Einde facial expression]**

KEES: Dinges?

JAN: Ja eh, huisgenoot van Fleur.

KEES: aaaah, dfe Erik. Die heb ik zelf ook wel eens gezien, wat studeert hij eigenlijk??

JAN: Ja eh, volgens mij doet hij bedrijfskunde, maar ik kan me ook wel vergissen. Ik weet het eigenlijk ook niet echt zeker.

KEES: Haha, goede vriend ben jij weer **[KEES geeft JAN een klein duwtje tegen zijn schouder]**

JAN: Ja lach maar, volgens mij heb jij Erik ook wel eens gezien.

KEES: Kan zijn maar ik ben niet naar zijn dispuutsfeestje geweest, sowieso kom je echt elke week bij Fleur langs dus dan spreek je ook echt wel met d'r huisgenoten.

JAN: Haha, ja ok whatever, verder nog iets boeiends gedaan?

JAN: Ja, ik heb dit weekeind wel wat gedaan.

KEES: Nog iets leuks dan? Of heb je echt alleen maar gestudeerd?

JAN: Ja, ik heb wel best wel veel gestudeerd, dat tentamen van volgende week is echt vet naar.

KEES: Ja inderdaad, snap jij er wat van?

JAN: Ja, opzich nu wel. Het is best wel lastige stof, je moet er goed je hoofd bij houden wil je het echt allemaal snappen en vooral onthouden.

KEES: Haha, nou dat geeft me lekker veel hoop. Ik snap er tot dusver maar weinig van, al die formules en regeltjes, jij bent zeker een echte beta student?

JAN: Nah, valt opzich wel mee, ik vond wiskunde nooit echt niet leuk maar ik was er nou ook weer niet een held in ofzo

KEES: Naja dat zal dan wel, ik was vroeger wel heel erg alpha, ik vond geschiedenis vooral het leukste

JAN: Geschiedenis is ook wel tof, hadden jullie ook een beetje een leuke leraar in dat dorp van je?

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JAN: Leuk, ja wij hadden ook wel zo'n leraar, maar die ging redelijk snel met pensioen

KEES: Jammer, leuke leraren maken het leren altijd wel een stuk gemakkelijker, wat vindt je van de leraren op de Universiteit dan?

JAN: Ja, eigenlijk ook wel goed, moet wel zeggen dat het studeren wel zelfstandiger is dan op de middelbare maar goed

KEES: Ja, ik snap wel wat je zegt **[bij het zeggen hiervan pakt KEES een snoepje uit de verpakking en legt deze bij JAN neer; totale periode 2 seconden]** **[INDIEN POS: een lach hierna, INDIEN NEG: een frons hierna]** op de middelbare school was alles een stuk vrijblijvender en kon je soms best wel wat leerstof missen heb ik het idee

JAN: Ja naja, we moeten een keer volwassen worden hè?

KEES: Ja inderdaad, zeg wat doe jij volgende week dan?

JAN: Nou ik had eigenlijk wel weer zin in een feestje, ik ga namelijk weer naar mijn ouders om wat klusjes te doen en....**[fade out to black]**

No product placement/Control condition (positive and negative affect) – text in bold are not spoken but instructions for the director and actors

**[In een kamer zitten twee vrienden aan tafel hun weekend te bespreken, de camera begint met een 1 seconde shot van beide personen aan tafel] – [camera pakt een shot van alleen de persoon aan het woord tenzij anders vermeld] – [indien iemand een snoepje neemt is ook een lamp zichtbaar]**

JAN: Zeg, heb jij nog iets leuks gedaan dit weekend?

KEES: Nah, niks bijzonders, ik was bij mijn ouders en ben langs gegaan bij een feestje van een oude vriend.

JAN: Oh tof, was het een leuk feest?

KEES: Ja het was wel leuk, gewoon standaard [**hier gedurende 2 seconden even niks zeggen**] [**INDIEN POS: een lach hierna, INDIEN NEG: een frons hierna**] [**met volle mond**]beetje rondhangen en muziek luisteren. [**Einde facial expression**]

JAN: Tof, ik ken het wel, ik had laatst hier in de stad ook een feestje.

KEES: Oh? Was het leuk?

JAN: Ja was wel leuk, het was een dispuutsfeestje van een vriend van me [**hier gedurende 2 seconde niks zeggen**] [**INDIEN POS: een lach hierna, INDIEN NEG: een frons hierna**]

KEES: Wie ken jij bij een dispuut dan?

JAN: Erik, je weet wel, van dinges. [**Einde facial expression**]

KEES: Dinges?

JAN: Ja eh, huisgenoot van Fleur.

KEES: aaaah, die Erik. Die heb ik zelf ook wel eens gezien, wat studeert hij eigenlijk??

JAN: Ja eh, volgens mij doet hij bedrijfskunde, maar ik kan me ook wel vergissen. Ik weet het eigenlijk ook niet echt zeker.

KEES: Haha, goede vriend ben jij weer [**KEES geeft JAN een klein duwtje tegen zijn schouder**]

JAN: Ja lach maar, volgens mij heb jij Erik ook wel eens gezien.

KEES: Kan zijn maar ik ben niet naar zijn dispuutsfeestje geweest, sowieso kom je echt elke week bij Fleur langs dus dan spreek je ook echt wel met d'r huisgenoten.

JAN: Haha, ja ok whatever, verder nog iets boeiends gedaan?

KEES: Nee. Jij wel?

JAN: Ja, ik heb dit weekeind wel wat gedaan.

KEES: Nog iets leuks dan? Of heb je echt alleen maar gestudeerd?

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JAN: Leuk, ja wij hadden ook wel zo'n leraar, maar die ging redelijk snel met pensioen

KEES: Jammer, leuke leraren maken het leren altijd wel een stuk gemakkelijker, wat vindt je van de leraren op de Universiteit dan?

JAN: Ja, eigenlijk ook wel goed, moet wel zeggen dat het studeren wel zelfstandiger is dan op de middelbare maar goed

KEES: Ja, ik snap wel wat je zegt **[hierbij niks doen verder]** **[INDIEN POS: een lach hierna, INDIEN NEG: een frons hierna]**

**[met volle mond]** op de middelbare school was alles een stuk vrijblijvender en kon je soms best wel wat leerstof missen heb ik het idee

JAN: Ja naja, we moeten een keer volwassen worden hè?

KEES: Ja inderdaad, zeg wat doe jij volgende week dan?

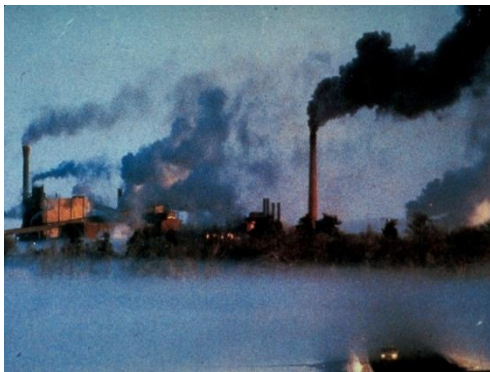
JAN: Nou ik had eigenlijk wel weer zin in een feestje, ik ga namelijk weer naar mijn ouders om wat klusjes te doen en....**[fade out to black]**

## Appendix E

*IAPS database pictures*

The numbers depicted underneath each picture is the IAPS ID for that particular picture.

## Negative pictures:



9280



9560

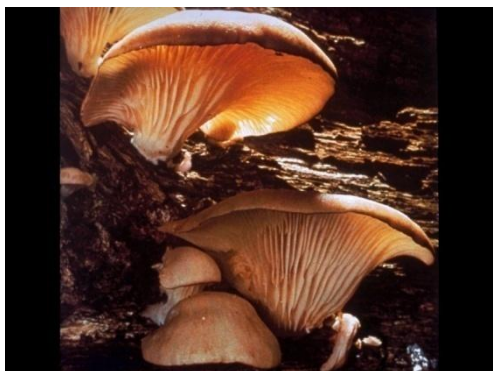


9600



9830

Neutral pictures:



5533



6150



7055



7175



7235

Positive pictures:



1440



5010



5760



5836



8510

Appendix F

*Pictures of candy bars for this study.*



Balisto



Bounty



Bros



Chocolate



Candy

Appendix G

*Smiley used in the affective priming paradigm*



Positive



Negative

Table 1

*Means and standard deviation per condition for explicit bounty attitude.*

<b>Condition</b>	<b>Mean (M)</b>	<b>Standard Deviation (SD)</b>
Passive product placement	4.42	1.80
Active product placement	4.39	1.72
No product placement	3.34	1.88
Positive affect	3.37	1.83
Negative affect	4.46	1.80



Figure Captions

*Figure 1.* Target primes used in the affective priming task

Figure 1

