How Neuromarketing can Help Strengthen the Non-profit Sector: An Eye-tracking Study of Emotional Appeals in Fundraising Communications.
Acknowledgements

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Feeling emotional yet? You see, now I possess plenty of knowledge as how to trigger your emotions. Enjoy!
Executive summary

The following research explores the use of emotional appeals in fundraising communication and if these appeals can lead to a subsequent donation. Charitable and non-profit organizations all over the world, especially the organizations focusing on children’s rights, all dwell on the same communicative issue when it comes to raising funds: do people donate money because we communicate suffering or because we communicate the proof of our work (the ‘solution’)? Donor communication tend to trigger our emotions, however it seems that there is little knowledge among nonprofits in general as to which type of emotional appeals that elicit the strongest reactions - negative or positive?

Based on a deductive approach to research, it was hypothesized that exposure to a fundraising advertisement with positive emotional appeals would have a positive effect on donation behavior, and that repeated exposure to a recently presented fundraising advertisement with positive appeals would have a positive effect on donation behavior. Two hypotheses furthermore claimed that pupil dilation would indicate increased positive emotional arousal in the respondents.

The studies were conducted using an eye-tracker procedure. Respondents (N = 80) were divided into four groups (á 20 respondents per group) and were exposed to different parts of a fundraising advertisement communicated by SOS Children’s Villages accordingly. The fundraising advertisement(s) was disguised by ten regular TV commercials to avoid exposing the purpose of the experiment beforehand.

One-way ANOVAs, two-sample T-test, and a Generalized Linear Model were run, and all four hypotheses were rejected as the results showed that negative, and not positive emotional appeals had a significant effect on pupil dilation and on the subsequent donation behavior. Results also proved that the mean response time for deciding upon donation was shorter for the respondents who were exposed to negative emotional appeals, suggesting an “easier” decision-making process compared to the respondents exposed to positive emotional appeals.

Conclusively, the research suggests managerial implications in terms of changing the focus of SOS Children’s Villages’ fundraising communication to appeal more to the “need” and less to the “solution” when communicating for a charitable cause. Finally, further research in relation to testing the effects of storytelling on emotional arousal and donation behavior is proposed.
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Part 1 Introduction

1.0. The Power of Donor Communications

It is said that we are in a Golden Age for donor communications, thanks to advances in psychology and neuroscience. Donor communications tend to trigger our emotions, and guilt is one of the so-called social emotions often evoked by this type of communication. In his capacity as a successful fundraising copy writer Tom Ahern also postulates that sad images outdo happy images (Ahern, 2012), which in turn is of great interest to any charity organization who work with fundraising communication. In what way do people respond to their social emotions of guilt? According to Hibbert et al. (2007) the desire to reduce feelings of guilt in the context of charitable giving is linked to the egoistic motives for helping.

Social psychologists have long been interested in what they call “helping behavior”, meaning those actions people selflessly take to help others – or what is defined as pure altruism (Merchant et al., 2009; Andreoni, 1990). Most people think it natural to help those in need, but there is a very complex and largely unconscious set of factors controlling people’s willingness and motivation to help others. This is naturally something non-profits and charity organizations, such as SOS Children’s Villages, would like to understand: what influences people to donate money and time to charity? Is it all purely emotional?

Researchers have found that if you want to raise money for a charitable cause it is better to appeal to the heart rather than to the head (Small, Loewenstein, & Slovic, 2007). Based on this assumption and motivated by the research of Burt and Strongman (2004), Small and Verrochi (2009), and Sciulli, Bhagat and Bebko (2012), among others, the following research will question whether emotional appeals truly benefit charitable organizations, if these emotional appeals should be negatively or positively charged, and finally, if emotional reactions (negative or positive) can produce a greater potential for donation.

1.1. Understanding emotions in a neuroscientific perspective

Although emotions were considered a victim of the ‘cognitive revolution’ for a long period of time, the field of neuroscience has once again embraced emotions as an important research area (LeDoux, 2000). Relating to people’s emotions is an important aspect of fundraising communication and
therefore relevant and interesting to consider in a neuroscientific perspective. Assisted by several techniques, such as EEG, eye-tracking, and fMRI, researchers have been able to define areas of the human brain important to emotional reactions, and a number of articles exist on how emotional appeals in advertising affect people’s decision-making process. The use of both positive and negative emotional appeals in charity advertisements can be highly effective, but it can be difficult to determine which emotional appeals that best benefit the organizations at hand. By using techniques from neuroscience it may be possible to partially conclude on this ‘issue’.

1.2. Research question

*Can emotional states, which we are consciously aware of still motivate to human moral behavior?*

Studies in neuromarketing have shown that advertising images can evoke different levels of regional brain activity using EEG methods (Cook, Warren, Pajot, Schairer, & Leuchter, 2011), and that pupillary changes can be measured in terms of emotional arousing pictures (Bradley, Miccoli, Escrig, & Lang, 2008). Finally, Ma, Wang and Han (2011) proved human altruism (and subsequent donation) by measuring neural activity using fMRI methods when subjects were exposed to other people in pain (Ma, Wang, & Han, 2011). Furthermore, pure altruism and the term “warm-glow giving” are tantamount with people’s reasons for donating to charity organizations (Andreoni, 1990).

It has been claimed that as emotional intensity in an advertising message increases together with the respondent’s engagement levels, likeliness to donate may also increase (Bendapundi, Singh, & Bendapundi, 2006). It may therefore be reasonable to assume that the stronger the level of emotional intensity, whether positive or negative, the greater the likelihood that an individual will engage in the advertisement and social cause at hand (Sciulli, Bhagat, & Bebko, 2012). Donation is a personal matter involving emotions and personal judgments, so when wanting to know why people donate it is important to consider emotional images of people used in advertisements for charity organizations (Burt & Strongman, 2004). The main issue that fundraisers in non-profit organizations working with children’s rights face today is whether to show the audience images of sad children or happy children in their communication, as it can be difficult to recognize which of the two emotional appeals that enhance donation behaviors. Images of sad children in need are usually what people are exposed to and the main reason for why people donate both time and money for a cause. On the other hand, a picture of a happy child might as well cause greater
potential donations as it allows the donor to see the results of their donations (Sciulli, Bhagat, & Bebko, 2012).

The potential for the following research lies in that although research has been done in terms of why people donate money to charity, there is limited exploration and understanding of the following:

*Are there any differences in effects between positively and negatively charged emotional appeals used in fundraising communications? And will these differences have a particular effect on a potential subsequent donation?*

### 1.3. Chosen non-profit organization: SOS-Children’s Villages

With a strong conviction that every child needs a family, the Austrian medical student Hermann Gmeiner founded SOS Children's Villages in 1949. SOS Children's Villages is now an international humanitarian organization working in 132 countries with the objective to give all children a safe home. SOS Children’s Villages support families so that they can create a safe and loving environment for their children, and they also provide children who need a new family a safe home in a SOS Children's Village. SOS Children’s Villages thus work with three different types of families; SOS families (in the village) for children who have lost parental care, families of origin (Family Strengthen Programs) so as to strengthen the family surrounding the child, and with foster families. They furthermore offer education and health services, either through their own programs or in cooperation with responsible partners and sponsors. The goal is for children to become independent adults and a resource to their communities (SOS Children's Villages, 2011).

### 1.3.1. SOS Children’s Villages’ Brand Book

SOS Children’s Villages believe that emotional involvement creates commitment, and their brand model is developed to strengthen this in terms of emotional meaning and values. The core domain highlights their vision: “Every child belongs to a family and grows with love, respect and security”, their core promise (Mission): “We build families for children in need, we help them shape their own futures and we share in the development of their communities”, and importantly their differentiating elements which consists of individual child and youth development, a loving family environment, and long term and resilient relationships. The Social Meanings system represents the groundwork of
their day-to-day work on an emotional basis – and this is where they touch people’s hearts (Hanne Rustad, Fundraising and Strategy Advisor, SOS Children’s Villages International).

1.3.2. Case

Even though SOS Children’s Villages believe that emotional involvement creates commitment, they are still struggling with fund-raising. Their fundraising communications has for a long time been focusing on presenting the “solution”, and only on very rare occasions do they express the actual “need”. SOS Children’s Villages have now come to the point where they want to grasp the use of emotional appeals in their fundraising communication, in which the opportunity for this research also reside.

The chosen campaign is “Mouna fra Uganda”, originally developed by SOS Children’s Villages Netherlands (SOS Kinderdorpen) in 2008. The campaign is one of SOS Children’s Villages’ greatest successes and has been run in several countries in Europe, such as the Netherlands, Norway, Sweden and Denmark (Bo Beiskjær, Vice President SOS Children’s Villages Denmark).

1.4. Thesis structure

In addition to the above introduction chapter this thesis is structured in the following manner:

• Methodological approach: This section describes how the thesis applies a deductive approach to research, defines the chosen research strategy of Experiment, and outlines available measurements techniques within neuromarketing. A short notice of this research’ reliability and validity is then reviewed, and the section is concluded with benefits and drawbacks of the chosen methodological approach.

• Literature review: The theoretical framework starts out with a neuromarketing model for understanding consumer choice, followed by a definition of emotions, and where emotions are found in the brain together with a general notion of how this is processed in the brain. Furthermore, the differences between the cognitive and affective approaches to decision-making are reviewed. Antonio Damasio’s “Somatic Marker Hypothesis” is then explained together with how emotions determine rationality, followed by theories and literature within social emotions and how these are used in fundraising. A brief overview of emotional appeals in advertising together with the effects of repetition is outlined, and in terms of branding, brand development for charity organizations is viewed. Finally, brand equity is
considered in relation to the non-profit sector together with a short introduction to marketing of child sponsorship programs. The theory review is concluded with a brief summary as a foundation and existing opportunity for this thesis’ research.

• Research design framework: Hypotheses are outlined based on the related literature and theories described in the previous chapter. The procedure and techniques to test the hypotheses are then reviewed, which consist of an eye-tracking study, a subjective emotional value-rating task and a donation value-rating task.

• Results: The main results of the experiment will be outlined in terms of the defined hypotheses, respondents’ emotional effects and pupillary responses, and finally the value-rating tasks.

• Discussion: The obtained results will be discussed in relation to empirical research found in the literature review, and with respect to the research question and defined hypotheses. The discussion is concluded with suggestions to Managerial Implications.

• Conclusions: Conclusions will be drawn based on preceding results and discussions.

• Limitations and Future Research: The main limitations of the research will be outlined, together with a proposal for potential areas of future research.
Part 2 Methodological approach

2.0. A deductive approach to research

This thesis adopts a deductive approach to research. This is considered a proper methodology given that an experimental research will be conducted to identify how people emotionally respond to a fundraising campaign, and furthermore to discover how effective these emotional appeals can be in terms of convincing people to donate to charity. The deductive approach pass through the following steps:

The process of deduction involves the development of a theory that is subjected to a thorough test, and in order to pursue this principle of scientific thoroughness deduction states that the researcher should be independent of what is being observed (Saunders, Lewis, & Thornhill, 2009). Furthermore, the principles of operationalization, reductionism, and generalization are followed. This indicates that 1) the researched concepts need to be able to be measured quantitatively, 2) that the researched problems are reduced to its simplest forms to be better understood, and 3) that regularities in human social behavior can only be generalized if the sample size is of sufficient numerical size (ibid.).

The purpose of the empirical scientific research is to gain insight into social laws of interaction, such as natural phenomena following the laws of nature (Johannessen, Kristoffersen, & Tufte,
2004). Within the paradigm of epistemology lies the scientific philosophy of positivism. The positivist research ideal assumes that all types of phenomena, including social phenomena, can and should be examined using the same scientific method. The research will concentrate on what is positively given, meaning the phenomena and characteristics that can be measured and recorded. Social phenomena should be studied from the “outside”, without the researcher engaging or participating in the area being studied (ibid.). There is an emphasis on highly structured methodology and on quantifiable observations that lead to statistical analysis (Saunders, Lewis, & Thornhill, 2009). Quantitative data and methods are best suited to pursue such research ideals (Johannessen, Kristoffersen, & Tufte, 2004). Within positivism, the role of theory is to generate viable hypotheses that can be tested (deductively), and researchers use instruments to measure behavioral processes, such as neurological processes for instance (Ringberg, 2012).

2.1. Research strategy: Experiment
Following a deductive approach to research an experiment will be conducted to be able to confirm or reject the stated hypotheses, which are outlined in part 4. An experiment is much featured in social sciences, and psychology in particular (Saunders, Lewis, & Thornhill, 2009).

To conduct the experiment the recruited individuals will be exposed to a television campaign by SOS Children’s Villages Denmark called “Mouna fra Uganda” (SOS Børnebyerne, 2012). Respondents will be grouped into four, in which each group will be exposed to different parts of the campaign (see experiment design, group 1-4). Before, in between, and after the SOS Children’s Villages campaign film, subjects will be exposed to other regular television commercials in order to leave them in a natural TV commercial setting.

2.2. Available measurement technologies
Several measurement technologies exist within the field of neuromarketing, and researchers take use of technologies such as eye-tracking, electroencephalography (EEG), and functional magnetic resonance imaging (fMRI). Although this research only takes use of eye tracking, a review of all three technologies follows next.
2.2.1. Eye-tracking

Eye-tracking is a technology that tracks where a person is looking when being exposed to stimuli. Two types of techniques exist; light and dark spot eye trackers, both safely shining low levels of infrared light on the viewer’s face to identify the location of their pupil. The difference between the two techniques is where the camera is positioned in relation to the infrared light, creating either a light area or a dark area to mark the pupil (Maughan, Glutnikov, & Stevens, 2007). It has been confirmed by recent eye-tracking methodology that images triggering emotions, positive or negative, attract more attention (Rosler, A. et al., 2005; Nummenmaa, L. et al., 2006 in Maughan, L., Gutnikov, S., & Stevens, R., 2007). This attraction to emotional images, however, may depend on other factors, such as age, gender, or type of personality (Moss, G. and Gunn, R., 2007 in Maughan, L., Gutnikov, S., & Stevens, R., 2007). Given almost any visual stimulus, whether it is a webpage, a magazine or a television commercial, the eye tracker is able to identify the specific area a participant is viewing (Maughan, Glutnikov, & Stevens, 2007).

The graphical representations of the raw data of an eye-tracking experiment can be shown in various ways, but the two most used are gaze plot and heat map. The circles indicate the location of fixation of where the viewer has looked, and the size of a circle represents the duration of a fixation. The lines are saccades1 and track the movement of where a person looks in between the fixations. In appendix 1, there is an example of a heat map. A heat map shows the data of several participants, and indicates features of the stimulus that attract the attention of the participants; the red being the area receiving most attention, the green the least, and black shows no attention at all (Maughan, Glutnikov, & Stevens, 2007).

A recent research that took use of the eye tracking technology was Sciulli, Bhagat, and Bebko (2012), in which eye tracking was used to monitor audience engagement levels with social cause advertising with both positive and negative emotional appeals. The use of eye tracking technology in that particular research proposed that it is helpful in developing a better understanding of what influences individuals to contribute to a social cause, and that marketers are in need of such a technology to develop better promotional strategies that attracts donor participants (Sciulli, Bhagat, & Bebko, 2012).

Eye tracking is a useful method for this particular research as it is very helpful in investigating how positive or negative emotions affect cognition, and it is an effective tool for detection of immediate emotional reactions.

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1 A rapid movement of the eye between fixation points
2 Dornsife Professor of Neuroscience at the University of Southern California, USA
**Pupil dilation as a measure of emotional arousal**

Emotional arousal is a key element in modulating pupillary responses. By viewing whether the pupils are dilated or constricted, research suggests that pupillary changes are larger when viewing emotionally arousing pictures, than neutral pictures (Bradley, Miccoli, Escrig, & Lang, 2008). However, the same research was not able to prove any significant difference in pupil size between pleasant and unpleasant pictures, even though Eckhard Hess already in the 1960’s (Hess & Polt, 1960) reported that the pupil constricted when people viewed unpleasant pictures, and dilated when they viewed pleasant pictures (Bradley, Miccoli, Escrig, & Lang, 2008). Partala and Surakka (2003) tested pupil size variation to emotional stimulus, although with sound instead of pictures. Their results also proved that the pupil size was significantly larger during both emotionally negative and positive stimuli than during neutral stimuli, also suggesting that the autonomic nervous system is sensitive to highly arousing emotional stimuli (Partala & Surakka, 2003).

In terms of fixation, the less time a person spends on processing and encoding stimuli is an indication of a greater emotional stimulus. Furthermore, a person’s interest in the viewed features of a stimulus will determine the order (time to first fixation) and duration (total fixation time) of fixations. There are also individual differences as to what aspects of an image that a subject finds interesting, important, and which will warrant attention (Rupp & Wallen, 2007).

**2.2.2. Electroencephalography (EEG)**

Electroencephalography (EEG) is a brain-imaging method that records the brain’s electrical activity along the scalp. Neural activity in the brain can be picked up on the surface of the head by the EEG sensor. In the field of neuromarketing EEG is typically used to evaluate whether or not a person is engaged or has positive or negative engagement (True Impact Marketing, 2012). One advantage of EEG scans is that they can record a sequence of events over time. The disadvantage, however, is that they measure such a large section of the brain at once that they provide very imprecise information (Du Plessis, 2005). EEG provides marketers and researchers with insight into the electrical activity of the cortex, which is very useful in understanding human emotion and engagement levels.
2.2.3. Functional magnetic resonance imaging (fMRI)

Functional magnetic resonance imaging or functional MRI (fMRI) is an MRI procedure that enables researchers to visualize changes in regional blood oxygenation levels reflective of local brain activity (Cook et al., 2011; Glimcher et al., 2009). To simplify: When an area of the brain is in use, blood flow to that region also increases. fMRI has become one of the most popular methods for visualizing changes in the activation of small subcortical structures as it affords increased spatial resolution (as small as \(1 \text{ mm}^3\)) and substantially increased temporal resolution (seconds instead of minutes), compared to other measures such as EEG (ibid.). Moreover, since blood itself provides for the signals researchers do not have to inject radioactive compounds prior to scanning, making this a safe measure (Glimcher, Camerer, Fehr, & Poldrack, 2009).

2.3. Reliability and Validity of Experiments

Reliability is the extent to which measures provide consistent results over time, and refers to the repeatability of an experiment, meaning that if the experiment were to be conducted again with the same sample population the results would be the same (Zikmund, 2003). Possible threats to reliability of this research lies in subjects misunderstanding the tasks they are asked to perform, or if the experiment were to be conducted again, subjects’ moods might be different than of the first sample population, also referred to as subject error (Saunders, Lewis, & Thornhill, 2009).

Reliability is a necessary condition for validity, and validity refers to the extent to which the findings of this research really are what they seem to be (ibid.). It is easier to control for internal validity than for external validity in a laboratory experiment, and as for this particular research, using eye tracking to measure pupil dilation, certain extraneous factors need to be controlled for. Visual brightness is an example of one of these factors, as bright light can lead to pupil subtraction, rather than dilation (Bradley, Miccoli, Escrig, & Lang, 2008). Bright light will in that case influence the observed results making it difficult to build a valid conclusion about the relationship between the experiment and dependent variable (Zikmund, 2003). External validity refers to the researchers ability to generalize the results of an experiment, meaning if my findings for this research will be equally applicable to other research settings using the same sample population (ibid.). Using nonprobability convenience sampling method the researcher excludes a great proportion of the population, thus preventing generalization. The chosen sample population for this research will not be generalizable for the entire population of charitable donators. It is also imperative to note that
people react differently to emotional appeals, also making the results non-generalizable to the overall population.

There are other threats to validity that need to be taken into consideration when performing an experiment, and below I will briefly touch upon demand characteristics such as experimenter bias and the Hawthorn effect (Zikmund, 2003).

### 2.3.1. Demand characteristics

Demand characteristics refer to when subjects accidentally are provided with hints as to what the purpose of the experiment actually is (Zikmund, 2003). The most prominent characteristic is experimenter bias, meaning that the experimenter’s presence and behavior influence subjects’ behavior, or in the worst case try to lean the subject’s response towards an answer that will benefit the experimenter. Another effect is known as the Hawthorn effect, where subjects will respond differently knowing they are participating in an experiment (ibid.). The Hawthorn effect might not be a major threat in terms of the eye tracking experiment, however it could be a possible threat as to the completion of the value-rating tasks.

Demand characteristics can be reduced by for example disguising the actual purpose of the experiment as something else. This is done for this research by disguising it as an eye-tracking study of neural responses to Danish TV commercials.

### 2.4. Benefits and drawbacks of chosen methodological approach

Usually, a qualitative methodological approach is taken upon to conduct research within the area of branding (Ringberg, 2012), and considering that this paper discusses human behavior this would also indicate a qualitative approach. However, as it is of high interest to get subjective meanings and predictions from the respondents, a positivistic view with quantitative methods is chosen for this thesis.

The deductive approach to research is less widely used than the inductive approach, and has both its benefits and drawbacks. Deductive reasoning does not require thoroughly observing a variety of evidence to reach a conclusion, as conclusions can be deduced by basing it on different axioms, or statements. On the other hand, deductive reasoning can also make errors permanent: if a statement is used to deduce a variety of conclusions, and that statement turns out to be false, then all
conclusions following that statement leaves false results (Johannessen, Kristoffersen, & Tufte, 2004).

Positivism relies on quantitative data in which a positivist believes to be more reliable than quantitative research. Quantitative research is more scientific in its methods than qualitative methods, and thus considered to be trustworthy. Furthermore, positivism follows a well-defined structure during both studies and discussions, believing that there will be minimum room for error. On the other hand, positivism leaves less room for the observation of human behavior and emotions. Positivism is also considered inflexible because they believe that everything can be measured and calculated, leaving no room for creative thinking (Saunders, Lewis, & Thornhill, 2009).
3.0. A Neuromarketing model for understanding consumer choice

In order to understand consumer choice and the process the consumer mind goes through before making a decision, it is relevant to review a model by Plassmann, Ramsøy, and Milosavljevic (2012): “Value signals important for brand decisions”. Consumers are exposed to millions of bits of information every second, and their consumption behavior may be influenced by how they represent, attend to, and perceive all this incoming information.

The first process in the model has to do with representation and attention, where representation is about identifying all the different brands a consumer considers as possible options of choice. Furthermore, the consumer combines information from their internal and external states that drive their brand attention. Attention is when information is preferably selected above all other available information. Attention can also be defined as “the ability to bring something to mind” (Baars & Gage, 2013), and includes the following three components: Bottom-up, Top-down control, and Visual selection. Bottom-up is when the senses decide what should be paid attention to, either through inner (interoception) senses or outer (exteroception) senses (Ramsøy, Lecture 3: Attention, Consciousness & Awareness, 2012). It automatically selects the most significant information from all that is available based on low-level features of the visual input, such as colors, orientation, movement, sizes and shapes, or high-level factors, such as faces, text, novelty, and one’s own name. When consumers are exposed to marketing information bottom-up factors have a strong effect on initial eye movements, as the first four eye-movements are made within the first 2.5 seconds of exposure (Plassmann, Ramsøy, & Milosavljevic, 2012).

Top-down control depends on consumers’ control and power of their own will (Ramsøy, Lecture 3: Attention, Consciousness & Awareness, 2012). Goal setting and goal pursuit can also influence consumer behavior (Bagozzi and Dholakia, 1999; Chartrand et al., 2008), both consciously and unconsciously. The latter was proved by Chartrand et al. (2008) who demonstrated that basic consumer goals can be unconsciously activated, and that these goals operates outside of awareness to influence choices and preferences. Thus, it can be reasonable to assume that wanting to attain a goal will make consumers consciously focus their attention on the brand or product at hand. Activation of brand names as subliminal cues together with an environmental trigger of non-conscious goal pursuit might also affect behavior outside of awareness and intent.
Visual selection is when the most important information from all identified and potential areas based on inputs from the bottom-up process is chosen. During visual selection consumers focus their attention to a chosen area in space and as the number of alternative choices increase, so does gaze selectivity (Glaholt et al. 2010; Plassmann, H. et al., 2012). Visual selection enhances the quality of incoming information (ibid.) and interest and importance is in addition inextricably linked to attention (Medina, 2008).

The second process in consumer decision-making is predicted value, which involves the consumer’s evaluation of how much he or she believes they will enjoy consuming the brands that are available for choice. These predicted values however, might be influenced by brand favorableness, as several studies have shown (Deppe et al., 2005; Deppe et al., 2007; Plassmann, H. et al., 2012).

Experienced value is the “true value”, meaning what should matter the most for value-based decision-making. It is based on the pleasure derived from consuming or using a brand. In determining valence positive experiences are suggested to show activity in OFC (orbitofrontal cortex) areas such as the ventral striatum, which play an important role in reward and pleasure. Defining in which neural systems negative experience are encoded is a bit more devious because there is a problem dissociating negative experiences from intensity. A negative experience might correlate with brain activity in the lateral OFC areas involved in emotions, “the liking spot”, and risk in decision-making (Baars & Gage, 2013).

The fourth process has two parts, namely remembered value and learning. When choosing between two brands an important predictor of choice is the memory of previous exposures to the two brands. This experience furthermore influences retrieval and recognition in the brain. The remembered value consists of both explicit and implicit brand memory of previous consumption experience. Explicit brand memory, or declarative memory, is strongly linked to preference and rely on brain regions such as the hippocampus, the MTL region, and dPFC, and can either be episodic or semantic. Implicit brand memory, or non-declarative memory, engages both the deeper basic structures of the brain and memory regions, such as dPFC, the striatum, and amygdala (Ramsøy, Lecture 5: Learning and memory, 2012). Non-declarative memory applies to habits and skills,
priming, the classical conditioning of emotional responses and skeletal muscles, and non-associative learning such as reflexes (ibid.).

Looking at the dynamic nature of memory, studies have shown that consumers’ beliefs of a brand can be changed unconsciously through advertising, and this is demonstrated by a change in how they recall previous exposures of these beliefs following exposure to advertising (Zaltman, 2000; Plassmann, H. et al., 2012).

3.1. What are emotions?

“We now know that emotion, intuition, long-term memories, and the unconscious make up as 85% of our motivations” – Antonio Damasio

Emotions can be defined as unconscious and uncontrolled responses to external events, such as pictures, sounds, and other kinds of perceptions, as well as responses to inner thoughts and other cognitive processes (Hansen & Christensen, 2007). At a more basic level, emotions can be defined as the initial reactions to stimuli in the environment. The subjective experience of emotion is feeling (Glimcher, Camerer, Fehr, & Poldrack, 2009). Feelings depend upon emotions, and both emotions and feelings influence consumer choices, although in very different ways. It is proposed that studying feelings systematically may allow us to infer about the underlying emotional processes. The terms emotion and feeling are often used interchangeably, but the distinction between emotions and feelings is not necessarily synonymous with the distinction between conscious and unconscious processes: feelings are the consciously accessible and most prominent characteristic of emotion and may also be unconscious, while emotions are always unconscious (Hansen & Christensen, 2007). An example of this is when stimuli are presented subliminally to subjects, and they are unaware of their own emotional response (Tsuchiya & Adolphs, 2007).

The term emotion may also be divided into two other components: the emotion state and the emotion experience (‘feeling’), meaning the functional aspects of an emotion, as suggested by Tsuchiya and Adolphs (2007). According to this article, the ‘feeling’ can contain both the experience of components of the emotion state and the perception of a stimulus or memory that induced that emotion. The emotion state however, relies on an integrated set of neural structures.

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that can coordinate it and includes processes like the evaluation of a situation, emotional responses and thoughts related to an emotion. Components of an emotion state might be similar to a motivation state and ‘wanting’, whereas the emotion experience (‘feeling’) is similar to the components of ‘affect’ and ‘liking’ (Tsuchiya & Adolphs, 2007).

3.1.1. Valence and arousal

Dimensional theories of emotion say that emotions have two to three underlying dimensions, in which the two most common are valence and arousal. The valence dimension is usually conceptualized as ranging from unpleasant or negative to pleasant or positive, while the arousal dimension ranges from high to low in terms of feeling "energized, excited, and alert" to "calm, drowsy, or peaceful" (Lang, Dhillon, & Dong, 1995). To be more precise, in terms of valence, emotions referred to as negative (e.g. anger and fear) have a “negative valence”, whilst positive emotions (joy) have a “positive valence”, and they are evoked by positively valenced events, objects, or situations (ibid.). Emotional arousal on the other hand, can have the same level of intensity regardless of whether the event creating the arousal is negative or positive (Ford, Addis, & Giovanello, 2012). Arousal can also lead to better memory encoding and a study found, by using “The Self-Assessment Mannequin”\(^3\), that arousing slides are much better remembered than non-arousing slides (Lang, Dhillon, & Dong, 1995). However, when the arousal dimension of emotion was controlled for there was little effect of valence on memory (ibid.). According to Kensinger (2004) there are also reasons to believe that valence and arousal may contribute differently to memory formation and retrieval. It has furthermore been shown that not only emotional arousal but also emotional valence has effect on memory. The studies found that emotional valence alone can enhance memory, indicating that non-arousing items with negative or positive valence can be better remembered than neutral items. Several studies have also proved that negative messages tend to be better remembered than positive ones (Lang, Dhillon, & Dong, 1995). fMRI studies have in addition suggested that positive emotions tend to reduce amygdala activation, and that the principal role of the amygdala in emotion is in the information processing related to negative valenced emotions (Burgdorf & Panksepp, 2006).

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\(^3\) The Self-Assessment Manikin (SAM) is a non-verbal pictorial assessment technique that directly measures the pleasure, arousal, and dominance associated with a person's affective reaction to a wide variety of stimuli (Lang, Dhillon, & Dong, 1995).
3.2. Where to find emotions in the brain

There are certain areas of the brain that are of importance when we talk about emotions and areas within the limbic system in particular, such as the amygdala and hippocampus (Hansen & Christensen, 2007). The limbic system as a whole is associated with the control of pleasure and pain, which indicates two systems in a tug-of-war in the brain: the Ventromedial prefrontal cortex (vmPFC) and ventral striatum controlling positive emotions, and the amygdala being responsible for processing negative emotions (Ramsøy, Lecture 4: Emotions and Feelings, 2012). The limbic system is sometimes referred to as the “reward center”, and other times called the “lizard brain” as the limbic system is a very primitive part of the brain, which is found in all animals, even reptiles (Du Plessis, 2005). The almond-shaped amygdala is very central to memory and emotion, including anger and fear, but also trust and social bonding, while the hippocampus plays an important role in the consolidation of information from short-term memory to long-term memory (Baars & Gage, 2013).

The reward system in our brain is responsible for driving our feelings of motivation, reward and behavior, and the major neurochemical pathways in the brain include the mesolimbic and mesocortical pathways. The mesolimbic pathway plays a big role here and goes from the ventral tegmental area, important in cognition, motivation and drug addictions, and to the nucleus accumbens, which is an important area to emotional intelligence of pleasure including laughter, reward, and reinforcement learning (Berridge & Kringelbach, 2008). Moll et al. (2006) did an fMRI study of respondents either making charitable donations or opposing charitable organizations, and they were able to show that the mesolimbic reward system was engaged by charitable donations much like it is when monetary rewards are achieved (Moll, Krueger, Zahn, Pardini, de Oliveira-Souza, & Grafman, 2006). The reward system is thus a completely central area that must be activated in order to make the donor motivated to feel good.
The illustrations below show what parts of the brain that are important for the emotional state (blue), and the feeling of emotion (red). The green areas illustrate which parts the brain that is important for the level of consciousness. The illustration to the left show that the hypothalamus, amygdala, brainstem nuclei, orbitofrontal cortex and anterior cingulate cortex are important for the expression of emotion (blue), whereas the anterior and posterior cingulate, and orbitofrontal cortex are important for the experience of emotion (red) (Tsuchiya & Adolphs, 2007).

To explain how particularly fear stimulation controls behavior, we usually speak of LeDoux’s ‘high road’ and ‘low road’ (Figure 4) (Baars & Gage, 2013). The direct thalamo-amygdala (‘low road’) processing enables automatic, unconscious reactions to the broad outlines of potentially dangerous stimuli before we have time to think about our responses (ibid.). Stimulation from the environment is transmitted extremely fast and unconsciously to the amygdala of the oldest inner part of the brain, which in turn elicits behavioral response (Hansen & Christensen, 2007). The longer thalamo-cortico-amygdala pathway (‘high road’) is when information goes through the cerebral cortex and
gives rise to, possibly conscious cognitive processes, which in turn might adjust the initial behavior generated by the low road (ibid.). The ‘high road’ is more influenced by social and personal decision-making processes and can therefore reflect culture-specific emotional responses (Baars & Gage, 2013).

Our interpretation of stimuli is based on memories of past experiences, including memories of feeling connected with these experiences. This means that a classification of the emotions "I like" and "I do not like" has occurred in this process and has been "marked" in the memories for future interpretation. This is referred to as a "somatic marker" in Damasio's terminology (please see chapter 3.4 for a review of “the somatic marker hypothesis”). Only when a stimulus has been positively or negatively evaluated may this influence future evaluation (Hansen & Christensen, 2007).

3.2.1 The Zurich Model of Social Motivation

The Zurich Model of Social Motivation founded by Norbert Bischof (1989) postulates three basic motivational systems that guide all humans through life: Security, Arousal, and Autonomy. Security defines people’s innate need for consistency, stability, security and equilibrium. It is furthermore outlined as the feeling of intimacy, warmth and protection one usually obtains from being close to a familiar person. Arousal is when people seek new stimulation and want to break out of the ordinary, and consist the feelings of interest, fascination, and curiosity as well as alarming and fearful feelings. The autonomy system can be described as feeling competent, strong and powerful, and having influence, prestige and authority (Schneider, 2001).
Each motivational system furthermore consists of a negative and a positive side, in which we as human beings seek the good and avoid the bad. This is driven by the brain’s limbic system and will guide us to avoid fear and insecurity and seek security and comfort, avoid defeats, trouble and rage and seek superiority, triumph and praise, and finally avoid boredom and rather seek enjoyment, fun and thrill (ibid.).

3.2.2. Brain regions involved in “Theory of Mind”
Guilt is a central social emotion due to its link to norm violations, and therefore it naturally affects both individuals and society. The feeling of guilt requires the anticipation and ability to explain and predict the thoughts and intentions of other people’s behavior, and this is known as having a “Theory of Mind” (ToM) (Wagner et al., 2011; Gallagher & Frith, 2003). Brain regions associated with “Theory of Mind” are anterior paracingulate cortex, the superior temporal sulci, and both the temporal poles, areas important in determining the direction of others’ emotions (Gallagher & Frith, 2003). Guilt might not be measurable along the same axis to the conscious mind, but the limbic system reacts to the memory of how a person felt in similar situations, and sends the message out as a basic plus or minus (Du Plessis, 2005).

Studies have suggested that activation in the orbitofrontal cortex and ventromedial prefrontal cortex is related to affective processing guiding social conduct, indicating that it is implicated in guilt-related affective processing as well (Wagner, N’Diaye, Ethofer, & Vuilleumier, 2011). Wagner et al. (2011) used fMRI to point out the involvement of specific prefrontal brain areas in guilt and other social emotions, such as shame. The results demonstrated that guilt episodes specifically activated a region in the right orbitofrontal cortex, while guilt-specific activity was observed in the paracingulate dorsomedial prefrontal cortex, which is a region critical to “Theory of Mind”. Takahashi et al. (2004) also did an fMRI study on the social emotions of guilt and embarrassment, where they measured regional brain activation during an emotional judgment task. The study demonstrated that both guilt and embarrassment conditions activated regions such as the medial prefrontal cortex, left posterior superior temporal sulcus, and visual cortex, all which are regions also important to “Theory of Mind” (Takahashi, Yahata, Koeda, Matsuda, Asai, & Okubo, 2004).
3.3. The rational and emotional approach to decision-making

“The essential difference between emotion and reason is that emotion leads to action while reason leads to conclusions” – Donald Calne

There are two separate human decision-making processes that over the years have been widely discussed (Cook, Warren, Pajot, Schairer, & Leuchter, 2011). Stanovich and West (2000) categorized these two processes into System 1 and System 2, in which System 1 is characterized as intuitive, fast, parallel, automatic, effortless, associative, and emotional, while System 2 is characterized as reasoning, slow, serial, controlled, effortful, rule governed, and neutral (ibid.). The processes of System 2 is thus like the cognitive approach and System 1 like the affective approach to human decision-making.

3.3.1. The cognitive approach

The main focus of the cognitive perspective is primarily a conscious information processing where the consumer "solve problems" and where information and alternatives affect the final decision. Cognitive theories propose that we systematize the stimulus we are exposed to by categorizing individual cognitive elements. These elements are then formed through learning and are furthermore generalized so that new elements can be recorded and classified in a category even if you have never been exposed to a similar cognitive component (Hansen & Christensen, 2007). Thus, cognitive elements can be considered as specific pieces of information that are stored in the brain. This way of thinking represents a computer-like model of the human brain. The information we receive from our senses is readily available in our short-term memory. However, because we need to interpret all incoming sensory information in order to decide what information we want to pay attention to we need to collect information from our long-term memory, which consists of already learned cognitive elements (Du Plessis, 2005).

Rationality

René Descartes, the founding father of many of today’s philosophical thinking speculated on the ‘rational’ and ‘emotional’ as two separates. This was an issue that he unfortunately had wrong and it is his theories on rationality and the emotional as two opposites that has led to one of the initial

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approaches to the cognitive perspective on consumer behavior and decision-making (Du Plessis, 2005). Antonio Damasio (1994) has for instance written an entire book on “Descartes’ error” where he argues that Descartes’ error was the dualist separation of mind and body, rationality and emotion. Another issue that dates back to Descartes’ theories is “the brain hemispheric theories”, which emerged in the 60’s as a result of an epileptic research. “The brain hemispheric theories” deals, as the name implies, with the two hemispheres the brain is said to be divided into: the left hemisphere, which specializes on rational, verbal, and analytical tasks, and the right hemisphere, which specializes in the non-verbal, emotional and holistic, and focuses on musical, spacious and pictorial impressions (Hansen, 1987).

It is to today quite certain that all processes within the brain happen with interaction between the two hemispheres. The difference between the two hemispheres has however been brought up for debate several times in the marketing and advertising world in terms of which hemisphere that is most effective communicating to – the emotional or the rational (Du Plessis, 2005; Hansen, 1987)? Some researchers have regarded the cognitive and affective perspectives as two parallel approaches that should be studied separately (Hansen & Christensen, 2007). Other researchers have viewed them as two perspectives interacting with each other and not as two contradictions (Shiv & Fedorikhin, 1999).

3.3.2. The affective approach
The affective approach with its notions of ‘emotions’ and ‘feelings’ and their differences will provide a good understanding of how decision-making in the consumer mind happens. The assumption today is that emotions play a very independent and important role in the decision-making process, which is different from earlier theories within consumer behavior (Hansen & Christensen, 2007).

Emotions
As previously mentioned, the area of the brain that involves emotions is the limbic system (Du Plessis, 2005). Emotions usually evoke a positive or negative psychological reaction and different physical expressions that are often involuntary. Emotions can be seen as physiological and unconscious mechanisms that are responses to stimuli in the environment and changes in the
internal states of the body's needs and cognitive activity. This means that we can arouse emotions derived from cognitive activity by thinking about something. A person may not be aware of the emotions that he or she has and it can influence the conscious and unconscious cognitive processes - especially in terms of feelings (Hansen & Christensen, 2007). Emotions are thus unconscious mechanisms that control both simple decisions and influence the more complex decisions.

**Feelings**

Feelings are cognitively conscious or unconscious counterparts to the underlying basic physiological emotions (Hansen & Christensen, 2007). When positive or negative encodings derived from the limbic system passes to the upper hemisphere of the brain more complex thought processes are set in motion, and this can be defined as ‘feelings’. According to Damasio (1999) feelings are, in contrast to the traditional scientific view as cognitive as other perceptions. They are neither impalpable nor fleeting.

**3.4. Damasio’s “Somatic Marker Hypothesis”**

The assumption that emotions independently play a role in decision-making and that it does not necessarily rely on cognitive mechanisms (Jensen & Skov, 2007) arose on the basis of Antonio Damasio’s "somatic marker hypothesis" (Damasio, 1994). The “somatic marker hypothesis” deals with how the body signals to the brain about what emotional state you are in. Damasio put forward the hypothesis as a possible explanation for the paradox that occurred when he examined a patient, which pseudonym was Elliot, in the late 1970s (Jensen & Skov, 2007). In short it turned out that Elliot after having had brain surgery had no problems with his cognitive abilities; however, he was unable to make use of these skills in social decision-making situations. Damasio was sure that this defect had a connection to a reduced emotional responsiveness and feel. He began to see a connection between lack of emotion and disturbed behavior and that this correlation might say something about the biological mechanisms of common sense (Damasio, 1999). These observations led to the “somatic marker hypothesis”, where Damasio argues that emotions provide both a positive and a necessary contribution to the brain's decision-making process (Damasio, 1994; Damasio, 1999).
Another important aspect of Damasio’s “somatic marker hypothesis” is that it proves that emotional processes can be very complex. Emotions do not solely arise in the presence of stimuli; emotions can also arise from memories of experiences from past stimuli. In a given situation a certain stimuli can trigger an emotion that previously has been associated with another stimuli. This Damasio refers to as the “As if body loop”. Thus, we can experience an emotion from an associative memory rather than from any direct stimuli within the environment at that moment in time (Damasio, 1994).

3.5. Emotions determine rationality

It can be said that emotions are the underlying basis of decision-making, and that they support and guide the rational decision-making process (Du Plessis, 2005; Hansen and Christensen, 2007). Based on Damasio's hypothesis and neurologists understanding of how we show attention put forward the theory of "emotions determining rationality". This new way of looking at emotions and rationality argues that "you are rational because you are emotional" and that your perception thus is your reality (Du Plessis, 2007b in Reffstrup and Steffensen, 2008). This means that emotions determine "how to think" and not the other way around. If emotions determine how we think and that is the underlying basis of the decision-making process, then emotions affect the process in which someone chooses or not chooses to make a donation to an organization like SOS Children's Villages. When communicating towards potential donators this new way of viewing emotions and rationality is highly relevant, as the use of communication material could be a way of altering the potential donators’ perceptions (Reffstrup & Steffensen, 2008).

3.6. Social emotions in fundraising communication

3.6.1. Social emotions

Just as emotions move along between being positively and negatively loaded, emotions can also vary along a sociality dimension varying between being non-social and social (Britton, Phan, Taylor, Welsh, Berridge, & Liberzon, 2005). Social emotions require the representation of another person’s mental state, or having a “Theory of Mind”. It is in contrast to basic emotions such as happiness and sadness, which only require the awareness of one’s own somatic state. Examples of social emotions can be embarrassment, guilt, shame and pride. These emotions occur in response to moral violation and promote moral behavior, and are categorized in the same ‘emotion family’: Self-conscious emotions - “Self-conscious emotions are emotions founded in social relationship
and arise from concerns about others' opinions of self or the behavior of self” (Takahashi, Yahata, Koeda, Matsuda, Asai, & Okubo, 2004, s. 967). Britton et al. (2005) did an fMRI study where they induced and tried to maintain four emotions of positive/negative social (joy/amusement and sadness) and non-social (appetite and disgust) character. The authors aimed at identifying regions involved in processing the sociality dimension of emotions, and identifying regions processing emotional valence. The results demonstrated that joy/amusement and sadness (social emotions) activated extended amygdala, superior temporal gyrus, hippocampus and posterior cingulate, while appetite and disgust (non-social emotions) activated posterior insula and visual cortex (Britton, Phan, Taylor, Welsh, Berridge, & Liberzon, 2005).

Following is a brief description of the social emotions empathy, sympathy, shame, pity and love, all deemed important to fundraising communications.

Empathy, the ability to perceive and share another person's emotional state has for a long time been associated with activation of the anterior insular and the interior cingulate cortices, regions of the brain thought to regulate feelings. Previous studies support the general notion that the same brain regions may be involved in processing one’s own emotions and others’ emotions. However, in 2012, Gu et al. were able to reveal that only the anterior insular cortex play a critical role in empathetic pain processing (Gu, et al., 2012). Sympathy is an emotion that is often used interchangeably with empathy, and happens when feeling sorrow for someone else’s misfortune. This response is in other words a key ingredient in making the decision of helping others in need. To get an experience of feeling sympathetic, Dickert and Slovic (2009) suggest that the condition of believing that a person or group is in a state of need must occur (Dickert & Slovic, 2009). The authors also state that attention is extremely important in generating sympathy (ibid.).

Shame is considered a violation of cultural or social values, however it does not involve the action of public humiliation (like embarrassment might do). Shame is often used interchangeably with guilt, as shame-inducing situations are similar to those of guilt, such as failing to help out another person (Tangney, Miller, Flicker, & Barlow, 1996). Lewis (1971) pin-pointed that the main difference between shame and guilt is the way the emotion is avoided, in which when feeling shame a person will try to escape from it by hiding, whilst with guilt the person is often motivated to attempt to undo the harm done (Lewis, 1971 in Tangney, Miller, Flicker, & Barlow, 1996).
Pity is defined as “the feeling of sorrow and compassion caused by the suffering and misfortunes of others”, and this feeling of pity is something human beings usually would want to be relieved from, by for instance showing mercy. Pitying someone or something is furthermore a form of “feeling sorry” for someone else (Gerdes, 2011). Pity is often used in a comparable sense to sympathy and empathy, although this is considered a misunderstanding – empathy and sympathy are positive social emotions that can be a helpful emotional reaction, whilst pity is a negative social emotion which is seen as more condescending than caring (ibid.).

Finally, love, the root of all emotion represents human kindness, compassion and affection for other people, and is defined as “the unselfish loyal and benevolent concern for the good of another” (Merriam-Webster Dictionary, 2013). Love may also describe compassionate and affectionate actions towards other humans, one’s self or animals (Fromm, 1956). Human beings are moved by the love of something, and every response we have is based on the love for something. Love is what qualifies our feelings, and it is in addition considered tantamount with showing empathy, since we then feel another person’s emotions and concern. Love can also reside in pity because we feel someone else’s suffering misfortune, which makes us want to help them. Finally, love can make us feel sympathy for another person if we ‘take on’ their particular feelings or circumstances (Eisenberg, 2000).

3.6.2. Emotions in fundraising communication
Emotions in terms of fundraising communication are often related to social emotions such as guilt, and there are at least three primary types of guilt: reactive, anticipatory, and existential (Huhmann & Botherton, 1997). Reactive guilt is when one’s own standards of acceptable behavior are infringed, such as failing to point out that an item has been missed off the bill at a restaurant. Anticipatory guilt refers to experienced guilt due to going against one’s own standards of acceptable behavior, like calling in sick when you are completely healthy. Existential guilt is when a person feels more fortunate than others, resulting in feelings of empathy when for example seeing a homeless person (Hibbert, Smith, Davies, & Ireland, 2007). This can also be seen in relation to Miceli’s (1992) two essential ingredients for guilt induction: responsibility and harm (Basil, Ridgway, & Basil, 2006). The first requisite, responsibility, is that one will not feel guilty about something for which he or she does not feel responsible. The second requisite for guilt however, is that the action, or lack thereof causes harm. Failing to make a charitable donation may lead to a lack
of food or other necessities for people in need, and this would cause harm (ibid.). Miceli and Castlefranchi (1998) proposed several ways to induce guilt and noted that empathy could be a very effective tool. Basil, Ridgway, and Basil (2006) built upon this notion in their research and examined whether empathy was an effective mean of inducing guilt response in the context of charitable appeals (Basil, Ridgway, & Basil, 2006). Their study proved that empathy could be used to enhance guilt appeals, which served as an effective tool for creating guilt without engendering reactions (ibid.).

Emotions are motivating and humans have internal biological needs that motivate us to perform a certain way. These needs are by Clark Hull (1943, 1952) defined as internal states of arousal or tension that must be reduced, and referred to as Arousal Theory (Heffner, 2001). This theory can be adapted to social emotions as well, as people try to reduce negative social emotions and rather repeat positive social emotions. Although social emotions can motivate to change negative emotions may result in people turning away, looking away, or walking away rather than reducing the negative emotion by acting morally for a social change. There is a general notion of research into guilt appeals that when guilt is aroused there is a threshold at which guilt can no longer be tolerated, and in the context of charitable giving there is a desire to reduce this feeling of guilt. This eventually leads to the egoistic motive of helping (Hibbert, Smith, Davies, & Ireland, 2007).

Hibbert and Chuah (2009) found that other donor motives that trigger giving were reinforcement of altruistic and moral self-identity, personal and political values, social approval and reputation, and personal gain. Bekker and Wiepking (2007) also suggested that donor responses are an almost automatic reaction driven by the impulse to attain a positive mood, avoid guilty feelings and reduce aversive arousal (Hibbert & Chuah, 2009). Merchant, Ford, & Sargeant (2009) however, found that motives for giving are not necessarily all altruistic. The negative state relief model of Cialdini et al. (1987) argues that people tend to help others more as a means to repair their own negative mood states. This implies that a person helps another to overcome the sadness or other negative emotions that he or she might be experiencing. Marchand and Filiatrault (2002) found that negative emotions with an opportunity for positive emotional outcome actually influenced behavioral intentions (Merchant, Ford, & Sargeant, 2009). Therefore, the authors suggested that consumers should be encouraged to take actions to overcome their negative emotions in anticipation of experiencing positive emotions.
It is uncertain whether guilt appeals used in advertising should be low, moderate or high in its intensity. Fundraising communication clearly benefit from high intensity appeals of guilt, as they afterwards can emphasize a guilt-reducing course of action. On the other hand, Coulter and Pinto (1995) found that moderate levels of guilt were more effective than very low or very high guilt appeals. High intensity in guilt appeals was shown to arouse feelings of anger, annoyance, and irritation, whereas moderately intense guilt appeals aroused more felt guilt than high or low intensity appeals (ibid.).

### 3.6.3. Theory of Warm-Glow Giving

In 1988 Andreoni generalized the theory that large economies virtually never gave to the public good making non-profit organizations such as The Red Cross and the Salvation Army nearly impossible to run (Andreoni, 1990). When people donate to charity or non-profit organizations, the underlying motives may be so much more than pure altruism. Andreoni (1990) proposed that other motives for deciding to donate were social pressure, sympathy, guilt, or simply the desire for a “warm-glow” feeling. Andreoni furthermore claimed that there are three types of donating individuals: 1) An individual is purely altruistic when he/she cares nothing for the private good of giving, 2) an individual is purely egoistic when he/she is only motivated by the feeling of a “warm-glow”, and 3) an individual is impurely altruistic when he/she cares for both the private and public good of giving. The theory of “warm-glow giving” is an attempt to explain why people give to charity by proposing that people engage in impure altruism, meaning, like mentioned above that the donator is motivated by both an interest in the welfare of the recipient and by the utility one will receive from the act of giving (the “warm glow”) (Andreoni, 1990). Kahneman and Knetsch (1992) have termed Andreoni’s terminology “warm-glow” the purchase of “moral satisfaction” (Chilton & Hutchinson, 2000). Ma, Wang, and Han (2011) studied empathetic capabilities and altruistic behaviors in terms of individuals with different socioeconomic status. On the basis of neural activity in brain regions associated with perceived pain in others suggested contributions of empathy-related neural mechanisms to human altruistic behaviors (e.g. donations) (Ma, Wang, & Han, 2011). Finally, Harbaugh, Mayr, and Burghart (2007) did an fMRI study to get neural evidence of the relative importance of altruism and “warm glow” motivations for charitable giving. They found that voluntary transfers (compared to mandatory tax-like transfers) to charity elicited increased neural activity in areas linked to reward processing, which is consistent with the theory of warm-glow giving.
3.7. Emotional images’ effect on donation

When communicating for charity it is usually as an attempt to evoke sympathy for a cause, and the victims that are illustrated for the particular cause appeal to elicit responses in the viewers that are believed to give rise to pro-social behavior. Pictures evoke emotions, however the emotional response from a viewer (potential donor) will depend on the nature of the picture shown (Small & Verrochi, 2009). In relation to this, Small and Verrochi (2009) tested how facial expressions of emotion displayed in pictures in charity advertisements were a critical determinant of 1) giving, and 2) sympathy, and furthermore proposed that emotion expression on charitable appeals might be an important variable that could affect donations. Since the focus of this thesis is on charitable donation I will only focus on a recap of Small and Verrochi’s first test and third test that had to do with demonstrating how emotional expression of a victim pictured on a charity advertisement affected observers’ willingness to give, and how including information in the advertisement would moderate the effects of emotion.

Study 1 tested whether people would donate more to a charity when the picture on the advertisement featured a sad-faced child compared to featuring a neutral-faced or happy-faced child together with the magnitude of donating. The results showed that 77.4% of the respondents in the sad expression condition donated, while the proportion of the respondents in the happy condition who donated was 52.1%, and 52.0% in the neutral condition. Thus, giving was greater for the sad expression than for each of the other two expressions indicating a theory that charity advertisements featuring a child expressing sadness increases donations compared with happy or neutral facial expressions (ibid.). For the third study Small and Verrochi (2009) predicted that including information in the charity advertisements would moderate the effects of emotion expression on sympathy and the results showed that participants who read a description of the child’s illness were more sympathetic than participants who did not read a description. However, a sad face elicited more sympathy than the happy face when information was absent, but not when the information was present. This proposes a theory that when respondents are able to receive information about a victim’s difficulties this will enhance sympathy, but the emotional expression will then be of less importance.

Burt and Strongman (2004) also did studies on images used in charity advertisements in which four experiments were conducted in total to be able to answer the following research question: “Can a
charity increase compliance rate and amount donated by selecting a particular type of image to use in their advertising?” (Burt & Strongman, 2004). The results of the experiments proved that 1) images of children used by charities could provoke emotional reactions, 2) images of children that evoked negative reactions appeared to produce more and greater potential donations than those that evoked positive emotions, and 3) the stronger the negative emotion evoked by an image of a child, the greater the level of stated potential donating (ibid.). This led to a conclusion of charities having to carefully select images for advertisements that show negative emotions, such as sadness. On the other hand, a picture of a happy child might as well cause greater potential donations as it allows the donor to see the results of donations. In other words, the result showed that emotional intensity of images was proven to be a stimulant for donations including time and money (Sciulli, Bhagat, & Bebko, 2012).

3.7.1. Emotional appeals in advertising

“The level of an emotion is its intensity during exposure to the advertisement” (Moore, Harris, & Chen, 1995).

According to Taute, McQuitty, and Sautter (2011) the emotional appeal of an advertisement is either positive or negative in which both positive and negative valenced emotions are considered to be advertising response stimulants. “Positive emotions stimulate a respondent’s desire to approach worthwhile enticements. On the other hand, negative emotions generally prompt tendencies to avoid or reject unwanted affective stimuli” (Ohman, Flykt, & Esteves, 2001). In a more recent research, Sciulli, Bhagat, and Bebko (2012) presented a framework for exploring the type and intensity level of emotional appeals employed by social cause print advertisements using both positive and negative emotional appeal strategies. The authors wanted to investigate the relationship between advertisement engagement levels and donor responses to these print advertisements by using eye-tracking technology. Results showed how social cause advertisements with both negative and positive emotional appeals might encourage audience attention and furthermore what influences individuals in participating in a particular social cause (Sciulli, Bhagat, & Bebko, 2012).

Engagement in a social cause is thus influenced by the level of emotional appeals communicated by the specific advertisement (Lennon and Rentfro, 2010; Bagozzi, Gopinath, and Nyer, 1999 in Sciulli et al., 2012). If a respondent elicits a strong positive emotion for a social cause advertisement, which indicates a positive response to the outcome of helping a child, then that
person might be more inclined to encourage such activities in the future. Agreeing to this, if a social cause advertisement elicits strong negative emotions, due to the horrible consequences of for instance poverty, the respondent will act in a manner in which reduces such illness in the future (Sciulli, Bhagat, & Bebko, 2012).

3.7.2. Repetition effects in advertising
The influence repetitions have on the effects of advertising and communications has become an important research area (Campbell & Keller, 2003). One of the leading theories within repetition effects is based on Berlyne’s (1970) two-factor theory that proposes a two-phase process of how message repetition influences responses. The phenomena of ‘wearin’ and ‘wearout’ typically refer to the effectiveness of an advertising campaign. The first phase (‘wearin’) is when message repetition reduces negative responses to an unknown stimulus, which increases the effectiveness at a low level – also known as habituation. The second phase (‘wearout’) is when continuous repetition eventually leads to a state of boredom, also referred to as a state of tedium, which in turn results in decrease in message effectiveness. Thus, it is believed that message effectiveness increase when repetition is low and decreases as message repetition increases (Campbell & Keller, 2003; Berlyne, 1970). Kirmani (1997, p. 84), who did a study of the effects of repetition on brand quality, agrees to this by expressing “if an ad is too insistent or repetitive, it signals that ‘something must be wrong’”. Pechmann and Stewart (1992) reviewed all studies done on ‘wearin’ and ‘wearout’ effects and found that advertisements that use emotional appeals wear out more slowly than advertisements using argumentative appeals (Tellis, 2004). The same findings have been established for ‘wearin’ effects as well: for advertisements using emotional appeals the ‘wearin’ effects occur more slowly relative to arguments (Tellis & Ambler, 2007).

In addition, repetition effectiveness also plays an important role in determining brand familiarity. Campbell and Keller (2003) found that repetition of advertising of an unfamiliar brand showed decrease in effectiveness, whilst the opposite was found for a familiar brand in which Berlyne’s ‘wearout’ phase materializes more quickly for unfamiliar brands than for familiar brands. Research previous to the one by Campbell and Keller (2003) have on the other hand failed to support the curvilinear relationship between repetition and effectiveness, but then again they have also only taken use of familiar brands (ibid.). Hitchon and Thorson (1995) did a study on the effects of emotions and product involvement when commercials were repeated and found that both variables
showed good effects on brand name recall, attitudes, and purchase intention (Hitchon & Thorson, 1995).

In relation to the repetition of fundraising advertisements, effects are assumed to be the same, based on a study of the effects of repetition of shock advertisements, which suggested that after several repetitions the effects simply wear out (Schoenbachler & Whittler, 1996 cited in Hastings, Stead, & Webb, 2004).

3.8. Branding for non-profit organizations

“Charities are the product of a desire to change the world” (Saxton, 2008)

Branding has become increasingly important to many nonprofit organizations (Napoli, 2006). However, nonprofits have very different brand personalities than those of commercial brands due to the absence of a tangible product or service (Saxton, 2008). Having no tangible product or service makes it difficult to place a nonprofit on the product-service continuum. It has therefore been suggested to add an additional feature to this continuum: Beliefs, making it a Product-Service-Beliefs (PSB) triangle for nonprofit brands. The triangle represents the different types of contributions existing within a nonprofit, and for this case SOS Children’s Villages.

![Diagram of Product-Service-Beliefs triangle with non-profits examples](Saxton, 2008)

For SOS Children’s Villages sponsoring a child or a village comes closest to determining their “Product”. Their “Service” is based on what they are able to offer in times of a crisis, such as after the earthquake in Haiti in 2010, in which immediate helping services were offered to those who were in need of their help. Finally the organization’s “Beliefs” (their vision) reside in creating a safe
home and family for every child, making them belong to a family consisting love, respect and security. The PSB triangle works as an important foundation in creating a charity brand since the beliefs of a nonprofit is what forms the basis of their brand and personality (ibid.). Furthermore, it has been discussed how a charity brand can be communicated by appealing to people’s motivations, and the effects of the communications in the PSB triangle can be seen through “The Hierarchy of Motivations” figure below.

<table>
<thead>
<tr>
<th>Motivation level</th>
<th>Key supporter phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity/vision</td>
<td>“A loving home for every child”</td>
</tr>
<tr>
<td>Beliefs/values</td>
<td>“Every child belongs to a family and grows with love, respect and security”</td>
</tr>
<tr>
<td>Capability (to deliver)</td>
<td>“We build families for children in need, we help them shape their own futures and we share in the development of their communities”</td>
</tr>
<tr>
<td>Behavior/specific action</td>
<td>“For under 7 kroners a day you can give a homeless child like Mouna a home, a family and a safe childhood”</td>
</tr>
<tr>
<td>Immediate environment</td>
<td>“Engage locally by collecting money for homeless children and orphans”</td>
</tr>
</tbody>
</table>

Figure 6: “The Hierarchy of Motivations”, adapted from Saxton, 2008

vision (“Every child belongs to a family and grows with love, respect and security”.), their core promise, i.e. mission (We build families for children in need, we help them shape their own futures and we share in the development of their communities)

Described briefly, the simplest way to motivate people is by appealing to their surroundings and local environment, implicating that because “their peers donate money, they will also donate money”. The next motivation level is to create a relationship and motivate the receivers by giving them certain offers while still communicating emotions and their brand. Capability (to deliver) is a way to prove to the receivers that action is in fact being taken. It serves as a practical demonstration of what the charity believes in combined with a demonstration that it can deliver. Beliefs are at the center of why charities exist and are one of the most accessible parts of a charity brand. Finally the charity’s vision is an important part of their brand communication. It is a combination of an organization’s beliefs together with a statement of how they think the world should be (Saxton, 2008). In addition, several sources see a need for nonprofits to correlate between branding and the
ability to influence giving behavior to develop even further, as the market for organizational giving is limited and very competitive, also making differentiation an essential element (Gartner, Schneider, Templin, Schlueter, Meyer, & Bengston, 2013).

3.8.1. Brand equity in the nonprofit sector

“Around the world, nonprofits are the only institutions trusted by more than 50% of informed publics” (2009 Edelman Trust Barometer; Edelman, 2009 in Kylander, 2013).

In recent times, research has turned toward examining brand equity in the non-profit sector, especially focusing on charity organizations. For instance, it is evident that donor attitudes toward charities depend to a large extent on the brand image of the charity organization at hand, as the brand image shapes stakeholder attitudes and actions (Bendapundi, Singh, & Bendapundi, 2006; Napoli, 2006). Creating a strong charity brand has also been an important area of research, in which four areas have been deemed critical: 1) Understanding stakeholders’ brand perceptions, 2) creating a unique brand identity, 3) selection of the right brand position, and 4) communicating the chosen brand position to the stakeholders (Napoli, 2006).

Classical brand equity theory state that brand equity is “the set of brand assets and liabilities linked to the brand, its name, and symbol, that adds or subtracts values to a product or service for a firm/or its customers” (Aaker, 1991, s. 15). Feldwick (1996) defined brand equity as used in three different senses: 1) The total (financial) value of a brand as an asset, 2) a measure of the strength of consumers’ attachment to the brand, and 3) a description of the associations and beliefs the consumer has about the brand (Laidler-Kylander & Simonin, 2009). Today, however it is deemed that brands are to a less degree controlled by managers and a greater degree shaped by consumers, and furthermore that social media has helped fuel this development. This though does not mean that managers and brand builders are deprived of all opportunity to influence brand equity, but rather that it is far more challenging than it was before.

There exist plenty of brand equity models for for-profit brands and organizations. In these models brand equity is a measure of brand strength from the consumers’ perspectives, and the usual components include consumer awareness, loyalty, consumer-relationships, and consumer perceptions of a brand. On the contrary, there is very little written about the variables that drive the
brand equity of international nonprofit organizations (Haigh & Gilbert, 2005). The economic brand value of a nonprofit can be difficult to measure. Missions are usually what drive non-profit organizations, and because there does not exist a real connection to the users of nonprofits’ products or services, the users (donors) rely on their trust in the nonprofits’ abilities to carry out their missions successfully (Laidler-Kylander, Quelch, & Simonin, 2007).

In their dissertation, Laidler-Kylander and Simonin (2009) created a brand equity model for international nonprofit organizations. The authors proposed a brand equity model composed of five key variables: Consistency, Focus, Trust, Partnerships, and Internal branding, together with 11 specific recommendations for international nonprofit brand managers (Laidler-Kylander & Simonin, 2009).

FOR CONSISTENCY

1) Increase internal coordination in order to enhance consistency throughout the organization and between operations and messaging
2) Concentrate external messaging efforts to increase communication consistency

FOR FOCUS

3) Strive for operational focus despite the pressures of growth and fundraising
4) Stick closely to the mission

FOR TRUST

5) Endeavor to differentiate the organization through strong brand positioning
6) Raise visibility and recognition through messaging and presence in the field
7) Promote organizational integrity through workshops as well as the implementation of standards and best practices

FOR PARTNERSHIPS

8) Select partners that provide the best fit with organizational values and activities
9) Proactively manage relationships and the portfolio of relationships

INTERNAL BRANDING

10) Recognize and embrace the powerful internal role of the brand and promote the brand to internal audiences
11) Encourage internal brand ambassadors

Figure 7: Recommendations to International Nonprofit Brand Managers. For Building and Managing Brand Equity (Laidler-Kylander & Simonin, 2009).
3.8.2. Marketing of Child Sponsorship Programs

Amongst non-profit organizations working to promote children’s rights, it is widely accepted that child sponsorships is by far the most successful fundraising product. The field of fundraising and child sponsorship programs go many years back, and various communication forms have been employed in which the most common since the 1970s have been print advertisement, direct mail, digital advertising, and TV spots. Fundraising communications has furthermore continuously focused on a one-to-one sponsorship model known to be very effective in terms of creating personal connections and making the donors feeling individual responsibility (Mittelmann & Neilson, 2011). Criticism of how sponsorship programs are communicated have also emerged, where organizations have been accused of misleading communications in terms of creating another reality of their field operations relative to what it is really like (ibid.). Images and visuals used in fundraising communications have also been up for critical debate, in which illustrations of poverty is said to have resulted in stereotyping, which has given rise to comments like “the entire continent of Africa being rife with poverty, disease, and malnourishment” (Goldfinger, 2006 cited in Mittelmann & Neilson, 2011), indicating that without the support from the western world, the entire development world will perish from disease and starvation. This, according to Sankore (2005) fosters racist stereotypes and encourages prejudice of the entire population (ibid.). It is therefore evident that sponsorship programs like those of SOS Children’s Villages have to balance its fundraising communications to avoid future criticism.

3.9. Theoretical summary: The basis for empirical research

Based on the previous literature review with its corresponding empirical research it is evident that by triggering social emotions such a guilt, embarrassment, sympathy and empathy, areas of the brain important to “Theory of Mind” are activated. Evidence furthermore shows that high levels of the social emotion guilt leads to a greater possibility of a charitable donation, as people want to reduce this feeling. Hence, they donate money to charity to reduce guilt whilst they receive a feeling of “warm glow” by engaging in impure altruism at the same time.

When communicating for charity it is usually as an attempt to evoke sympathy for a cause and pictures evoke emotions, which in turn give rise to the pro-social behavior of donating. The nature of the picture does play a role though, in terms of the emotional response elicited in the observer. Small and Verrochi (2009) found that the major part of their respondents donated money to a
charitable cause when the picture featured a face with a sad expression, compared to a happy or a neutral expression. Images of children also evoke emotions, and especially if the image at hand induce a negative reaction in the viewer, which in turn leads to a greater possibility of donation (Burt & Strongman, 2004). Charities and non-profit organizations therefore need to be careful in selecting images for their advertisements, as it is apparent that negative images lead to donation. On the other hand, an image eliciting positive emotions might as well lead to a great donation potential, as it allows the sponsor to see the results of the donations made. Emotional appeals in advertising might therefore lead to engagement in a social cause (Lennon and Rentfro, 2010; Bagozzi, Gopinath, and Nyer, 1999 in Sciulli et al., 2012). If a respondent elicits strong positive emotions for a social cause advertisement then that person might be more inclined to encourage such activities in the future. Agreeing to this, if a social cause advertisement elicits strong negative emotions then that person might act in a manner in which reduces such illness in the future (Sciulli, Bhagat, & Bebko, 2012).

In addition to this, it is said that emotions determine how we think, making it the underlying process for our decision-making. Agreeing to this, it is our emotions that will affect our decision-making processes when someone is deciding upon donating or not donating money to a social cause.

As it is evident that the interest of branding in the non-profit sector has increased in recent years, brand identity, positioning, communications to stakeholders, and differentiation are deemed just as important focus areas for a non-profit brand as it is for a for-profit brand (Napoli, 2006; Laidler-Kylander & Simonin, 2009; Saxton, 2008). These are important variables that drive non-profit brand equity, together with donators’ trust in that the organization will fulfill its set missions.

In conclusion, there exists an opportunity for this research to investigate if the differences between negative and positive emotional appeals in fundraising communication truly does lead to disparities in donation behavior.
Part 4 Research design framework

The objective of the experiment is to explore emotional effects when respondents are exposed to a fundraising campaign communicated by the non-profit organization SOS Children’s Villages, and how this affects the act of a possible donation. More specifically, the experiment will focus on the difference between a negative and a positive aspect to the campaign, repetition of the campaign, and whether or not this negatively or positively influences a subsequent donation. The experiment will be executed in four test groups in which the different groups will be exposed to different aspects of the advertisement.

The chosen stimuli are assumed to elicit both non-social and social emotions in which the valence ranges from negative to positive. To control for human forms and figures in non-social and social situations (Britton, Phan, Taylor, Welsh, Berridge, & Liberzon, 2005) the other commercials shown before, in between and after the SOS campaign contain different stimuli compared to the relatively emotional stimuli in “Mouna fra Uganda”. These are advertisements communicated by both Danish and International companies, such as Zalando.dk, Louis Nielsen, SAS, Coca-Cola, and Star Tour. The spoken language is Danish for all commercials.

4.0. Hypothesis definition

Based on the above literature findings, four hypotheses assume the following effects when subjects are presented to a fundraising advertisement:

\( H_1: \) Exposure to a fundraising advertisement with positive appeals has a significant positive effect on donation behavior.

\( H_{01}: \) Exposure to a fundraising advertisement with positive appeals has no significant effect on donation behavior.

\( H_2: \) Pupil dilation responses is significantly linked to positive donation behavior when subjects are exposed to a fundraising advertisement with positive appeals.

\( H_{2a}: \) Dilated pupils are an indication of increased positive emotional arousal, which in turn has a greater effect on donation behavior, compared to an advertisement with negative appeals.

\( H_{02}: \) Pupil dilation responses are not significantly linked to positive donation behavior when subjects are exposed to a fundraising advertisement with positive appeals.
H3: Repeated exposure to a recently presented fundraising advertisement with positive appeals has a significant positive effect on donation behavior.

H03: Repeated exposure to a recently presented fundraising advertisement with positive appeals has no significant effect on donation behavior.

H4: Pupil dilation responses is significantly linked to positive donation behavior when subjects are repeatedly exposed to a fundraising advertisement with positive appeals.

H4a: Dilated pupils are an indication of increased positive emotional arousal, leading to a greater effect on donation behavior, compared to an advertisement with negative appeals.

H04: Pupil dilation responses are not significantly linked to positive donation behavior when subjects are repeatedly exposed to a fundraising advertisement with positive appeals.

### 4.1. Variables

Following is a summary of concepts that are referred to throughout the study:

<table>
<thead>
<tr>
<th>Term</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional value- rating</td>
<td>Rating scale from -3 to +3, where -3 equals not at all and +3 equals very much</td>
</tr>
<tr>
<td>Donation value- rating</td>
<td>Rating scale from -3 to +3 where -3 equals not probable and +3 equals highly probable</td>
</tr>
<tr>
<td>Pupil dilation (pupil right)</td>
<td>Eye tracking: While looking at stimuli the pupil diameter size is counted in millimeters. The greater the pupil dilation, the greater emotional arousal.</td>
</tr>
<tr>
<td>Distance (distance right)</td>
<td>Eye tracking: The distance to the screen measured in millimeters and determines the respondents’ interest in what is presented to them during the experiment. The smaller the distance, the greater the interest.</td>
</tr>
</tbody>
</table>

Table 1: Variables
4.2. Research methods

Visual attention and emotional arousal responses to stimuli are measured using an eye-tracking procedure. Emotions are furthermore measured through a subjective emotional value-rating task in which experienced negative and positive social and non-social emotions are to be evaluated. Finally a subjective value-rating task in terms of possible donations will be executed. The study was run at the Decision Neuroscience Research Group (DNRG) SenseLab at Copenhagen Business School (CBS).

4.2.1. Stimuli

Since social emotions usually emerge in social interaction with other individuals and typically are embedded in structures of social relationships, intentionality, and meaning, the stimuli needed when aiming at triggering emotions in the social dimension will have to rely on the presence and absence of human forms and figures, or depict social scenes to elicit emotions (Britton, Phan, Taylor, Welsh, Berridge, & Liberzon, 2005). Therefore, the chosen stimuli consist of human figures (children) in specific social scenes to elicit emotions. More specific, the chosen stimuli contain children in either positive or negative settings to elicit positive or negative emotions. The campaign film “Mouna fra Uganda” presents a two-year-old girl, Mouna lying on the street with no one paying attention to or helping her (negative social emotions). Later, the campaign film shows that Mouna has arrived at a SOS Children’s Village where she has a caring mom and siblings and is able to go to school, have food on the table everyday and sleep in a nice bed (positive social emotions).

4.3. Experiment design

To test the hypotheses experiments consisting of one eye-tracking study and two value-rating tasks are employed to four groups. The first two test groups will only be exposed to either the negative or the positive parts of the campaign in relation to testing $H_1$ and $H_2$, while groups 3 and 4 will be exposed to repetition of the campaign in order to test $H_3$ and $H_4$. Following the experiment subjects will be asked to do an emotional value-rating task and a possible donation value-rating task.
4.3.1. Group 1

Testing H₁ and H₂:
Test 1 explores respondents’ emotional arousal to a charity advertisement when only negative emotional appeals are featured.

4.3.2. Group 2

Testing H₁ and H₂:
Test 2 explores respondents’ emotional arousal to a charity advertisement when only positive emotional appeals are featured.

4.3.3. Group 3

Testing H₃ and H₄:
Test 3 explores respondents’ emotional arousal when they first are exposed to a fundraising advertisement with positive emotional appeals, for then to be exposed to repetition of a fundraising advertisement running from negative to positive emotional appeals.
4.3.4. Group 4
Testing H₃ and H₄:
Test 4 explores respondents’ emotional arousal when they first are exposed to a fundraising advertisement with negative emotional appeals, for then to be exposed to repetition of a fundraising advertisement running from negative to positive emotional appeals.

4.3.5. Subjective value-rating of emotions
To do a manipulation check, a self-report measure of respondents’ own emotions will be executed. The respondents are asked to rate their own felt emotions after having been exposed to the different parts of the campaign. The value- rating goes through social negative and positive, and non-social negative and positive emotions, and subjects will rate on a scale from -3 to +3 (-3 being not at all and +3 being very much) as to how they experience the following emotions:

**Social/moral negative emotions:** Guilt, shame, embarrassment, disgust, contempt, hatred, and pity.

**Social/moral positive emotions:** Pride, gratitude, admiration, empathy, sympathy, and love.

**Non-social/-moral negative emotions:** Sadness, fear, hurt, and anger.

**Non-social/-moral positive emotions:** Happiness, joy, pleasure, satisfaction, relief, and hope.
Although this method is often used, there is a weakness to it. The methodology raises the question of whether people always are honest or accurate in terms of recalling past felt emotions, as some studies suggest the opposite (Levine & Pizarro, 2004; Levine, 1997). These studies however, did self-report measures up to several months after the initial felt emotions (Levine & Pizarro, 2004), which is not the case for this thesis’ research.

4.3.6. Donation value-rating

To be able to explore whether exposure to a charity advertisement can lead to a subsequent donation and how the different versions of the campaign might have an effect on this matter, subjects are asked to rate on a scale from -3 to +3 (-3 being not probable and +3 being highly probable) to what extent they would consider donating money to SOS Children’s Villages. This task will be hidden amongst value- rating tasks for the other shown TV commercials in which the answers of those will be irrelevant for this thesis. This was done to avoid exposing the purpose of the experiment.

![Donation value-rating](image)

4.4. Sample population

80 respondents (68 women) with an average age of 25.6 living in Copenhagen or the Copenhagen area were recruited to the experiment. Nonprobability convenience sampling method was employed for the sample selection. Convenience samples are usually prone to bias as the respondents only appear in the sample due to the ease of obtaining them (Saunders, Lewis, & Thornhill, 2009). Women were the preferred gender for this particular experiment because they are considered more emotional than men, or at least that is what they believe themselves and these believes will be important when the emotional self-reporting is to be conducted (Robinson & Barrett, 2010). However, men were also recruited to the experiment to generate a certain balance, as it is not only
women who are exposed to TV commercials for charities and overall men and women give similar ratings to TV advertisements (Millward Brown: Knowledge Point, 2011).

The invitation to the experiment was done through personal networks, mouth-to-mouth, and with assistance from my supervisor who spread the word to his Neuromarketing students. The social media platform Facebook was also used to post the event in which people were invited and could also invite people in their own networks.

4.5. Testing procedure
The experiment is based on a positivistic view indicating a highly structured methodology (Saunders, Lewis, & Thornhill, 2009) and therefore a guideline of the testing procedure was followed (see appendix 2). First of all, the respondent was welcomed and asked to take a seat in front of the eye-tracker while an introduction of the procedure was given (see appendix 3 for the registration form). The eye-tracking study was then commenced where the respondent was exposed to a fundraising advertisement disguised by 10 other regular TV commercials. Afterwards the respondent was asked to do an emotional self-report measure of felt emotions. The value-rating consisted of both non-social and social negative and positive emotions. Finally, the respondent was invited to rate the probability of them subsequently donating money to SOS Children’s Villages. The study lasted approximately 10 minutes, depending on the respondent and another 5 minutes were added to fill in the registration form and the debriefing document. The respondent was then shortly debriefed and thanked (see appendix 4-7 for debriefing documents).
Part 5 Results

First of all it is imperative to point out that the other commercials but the one for SOS Children’s Villages merely worked as distractors. Hence, results from the eye-tracking study and the following discussion will solely focus on the commercial(s) for SOS Children’s Villages and questions related to those, respectively.

The next sections will first illustrate the general results of the emotional value-rating task per group, for then to display the results of pupillary responses as emotional arousal and shown interest (distance) in the fundraising advertisement. Following this, donation behavior between the groups is viewed, and all four hypotheses will be either accepted or rejected in line with this. Finally, respondents’ “willingness to donate” is illustrated through ‘mean response time’ per group in terms of the donation value-rating task.

5.0. Emotional effects and differences

The results of guilt, shame, pity, empathy, sympathy and love are the social emotions that will be focused on in this section. The reason for this is based on the results of the emotion value-rating task together with findings from the literature review. The results from the value rating of non-social emotions will not be taken into consideration here as these emotions only require awareness of one’s own somatic state, and therefore these emotions do not go under the concept of having a “Theory of Mind”, as is described in the literature review.

To uncover if there were significant differences between the four test groups in terms of the negative social emotions guilt, shame, and pity, and the positive social emotions empathy, sympathy and love, a one-way ANOVA means test was run for each of the six chosen emotions. The four test groups functioned as the independent variable (x) and the six different emotions as the dependent variables (y).

Based on this test, the results for Guilt are significant ($F = 4.3716, p = 0.0068$). $R^2$ is 0.147169, indicating that the model explains 15% of the variance of the data (Doane & Seward, 2013). The results also showed significant difference for group 4 in comparison to groups 1, 2 and 3; however, there is no significant difference between groups 1, 2 and 3 in relation to each other. A Student’s t-test was also run to compare the means, and these results also proved a significant difference for
group 4. Figure 13 shows the graphical presentation of the ANOVA for Guilt, and table 8 show the Analysis of Variance for the same emotion.

![Figure 13: One-way ANOVA Guilt](image)

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Ratio</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>3</td>
<td>36,93750</td>
<td>12,3125</td>
<td>4.3716</td>
<td>0.0068*</td>
</tr>
<tr>
<td>Error</td>
<td>76</td>
<td>214,05000</td>
<td>2,8164</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Total</td>
<td>79</td>
<td>250,98750</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Analysis of Variance Guilt

The results for Shame are not statistically significant (F = 0.2273, p = 0.8871), indicating that there are no significant differences between the four test groups in terms of this emotion (see appendix 8 for results).

The results for Pity are significant (F = 3.8156, p = 0.0133). The model furthermore explains 13% of the variance of the data (R² = 0.1309). In figure 14 the graph illustrates through both the one-way ANOVA and the Student’s t-test that groups 3 and 4 share close to the same means, and group 1 is considered to show significant difference from the three other groups in relation to feeling less Pity than the other groups. Table 9 provides results of the Analysis of Variance for the same emotion.
The results for *Empathy* are not significant ($F = 1.4572$, $p = 0.2330$), and there are no significant differences between the four groups in terms of this emotion (see appendix 8 for results).

The results for *Sympathy* are significant ($F = 2.8293$, $p = 0.0440$), and with an $R^2$ of 0.100461, the model explains 10.5% of the data variance. There are significant differences between group 4 and groups 1, 2 and 3, and group 1 in comparison to groups 2, 3 and 4, while groups 2 and 3 share close to the same means for *Sympathy*. This is illustrated in the graphical presentation in figure 15, and the Analysis of Variance for the same emotion can be seen in table 10.
The results for *Love* are significant (F = 4.2760, p = 0.0076) and the model explains 14% of the variance of the data (R² = 0.14413). Group 3 are significantly different from the three other groups in relation to this emotion, although in expressing less *Love* than the rest. Figure 16 illustrates this, and table 11 show the analysis of the variance for the same emotion.
## Analysis of Variance

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Ratio</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>3</td>
<td>23,53750</td>
<td>7,84583</td>
<td>4,2760</td>
<td>0,0076*</td>
</tr>
<tr>
<td>Error</td>
<td>76</td>
<td>139,45000</td>
<td>1,89487</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Total</td>
<td>79</td>
<td>162,98750</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Analysis of Variance Love

Table 12 displays the “Summary of Fit” for all emotions, and in appendix 8 illustrations and the analysis for the non-significant results for Empathy and Shame can be viewed.

<table>
<thead>
<tr>
<th></th>
<th>Guilt</th>
<th>Shame</th>
<th>Pity</th>
<th>Empathy</th>
<th>Sympathy</th>
<th>Love</th>
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</thead>
<tbody>
<tr>
<td>R²</td>
<td>0,147169</td>
<td>0,008892</td>
<td>0,1309</td>
<td>0,054391</td>
<td>0,100461</td>
<td>0,144413</td>
</tr>
<tr>
<td>Adj R²</td>
<td>0,113504</td>
<td>-0,03023</td>
<td>0,096593</td>
<td>0,017064</td>
<td>0,064953</td>
<td>0,11064</td>
</tr>
<tr>
<td>Root Mean Square Error</td>
<td>1,678227</td>
<td>1,380789</td>
<td>1,761055</td>
<td>1,268806</td>
<td>0,997035</td>
<td>1,354573</td>
</tr>
<tr>
<td>Mean of Response</td>
<td>-1,0125</td>
<td>-1,85</td>
<td>0,1</td>
<td>1,5875</td>
<td>1,5125</td>
<td>0,9875</td>
</tr>
<tr>
<td>Observations</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>80</td>
<td>80</td>
</tr>
</tbody>
</table>

Table 6: “Summary of Fit” all emotions, all groups

### 5.1. Results pupil dilation

The following figure displays encouraging results in terms of pupil dilation relative to emotional arousal.
It is evident that group 1 express strong emotional arousal. In addition they also show the greatest “motivation” and interest in the presented fundraising advertisement, compared to group 2, which express both less emotional arousal and less “motivation” and interest. Group 3 and 4 only differ in terms of emotional reactions. However, these groups compared show that group 4 expresses the strongest emotional arousal. Convincingly, the fundraising advertisements featuring negative emotional appeals seem to elicit the strongest emotions, although the opposite was initially hypothesized.

5.2. Emotional appeals and its effects on donation behavior
All of the 80 recruited respondents were asked to what degree they would consider donating money to SOS Children’s Villages after exposure to the 10 selected commercials. To explore the differences between the four test groups relative to the mean results, a one-way ANOVA F-test was run and the results are significant (F = 5.4423 and p = 0.0019). The model explains 18% of the data of the variance (R² = 0.176837). To compare the means, a Student’s t-test was also run and this confirmed that group 4 is significantly different from groups 1, 2 and 3 in terms of expressing their
willingness to donate money to SOS Children’s Villages. This is graphically presented in figure 17 and the Analysis of Variance can be seen in table 7.

![Figure 18: One-way ANOVA Donation](image)

**Analysis of Variance**

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F Ratio</th>
<th>Prob &gt; F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groups</td>
<td>3</td>
<td>44,73750</td>
<td>14,9125</td>
<td>5,4423</td>
<td>0,0019*</td>
</tr>
<tr>
<td>Error</td>
<td>76</td>
<td>208,25000</td>
<td>2,7401</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Total</td>
<td>79</td>
<td>252,98750</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Analysis of Variance Donation

5.2.1. Results of H₁

In order to accept or reject H₁, the impact positive emotional appeals had on the respondents’ donation behavior is explored. The presented results will show if there are significant differences between group 1 and group 2, which in turn will determine if H₁ is accepted or denied. The results of a two-sample t-test are presented in figure 18 and table 8 below.
The t-test proves that there are no statistically significant differences in the means of the two groups in terms of donation behavior, indicating that fundraising advertisements featuring positive emotional appeals (group 2) have no positive significant effects on donation behavior. Thus, $H_1$ is rejected.

5.2.2. Results of $H_2$

Figure 17 displayed above shows that the respondents of group 1 expressed the strongest emotional reactions and interest in the fundraising advertisement based on their pupillary responses (dilated pupils) and distance to the screen. First of all, these results display the opposite of what is described in $H_{2a}$, which initially would suggest that the respondents of group 2 expressed the strongest emotional reactions. The mean pupil dilation and distance of group 2 however, proved this wrong. Second of all, the rejection of $H_1$ demonstrated that positive emotional appeals had no significant effects on donation behavior. Based on this, $H_2$ is also rejected. Pupil dilation responses are not significantly linked to positive donation behavior when subjects have been exposed to a fundraising advertisements with positive emotional appeals.
5.3. Repetition of emotional appeals and its effects on donation behavior

5.3.1. Results of H₃

In order to reject or accept H₃, a two-sample t-test was run to explore whether there was significant evidence of repeated positive emotional appeals affecting the outcome of donation. Group 2 (positive appeals, no repetition) and group 3 (positive appeals, repetition), and their response were used as variables for the t-test. Figure 20 and table 9 present the results.

![Figure 20: Two-sample t-Test H₃](image)

<table>
<thead>
<tr>
<th>t Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 3-Group 2</td>
</tr>
<tr>
<td>Assuming equal variances</td>
</tr>
<tr>
<td>Difference        -0.9500</td>
</tr>
<tr>
<td>Std Err Dif   0.5665</td>
</tr>
<tr>
<td>Upper CL Dif    0.1968</td>
</tr>
<tr>
<td>Lower CL Dif   -2.0968</td>
</tr>
<tr>
<td>Confidence      0.95</td>
</tr>
</tbody>
</table>

The t-test shows no significant effects of repeated positive emotional appeals on donation behavior, compared to non-repeated positive emotional appeals, and therefore H₃ is rejected. Repeated exposure to a recently presented fundraising advertisement with positive appeals thus has no significant effect on donation behavior.

5.3.2. Results of H₄

To analyze the main effects of repetition and emotions and their interactions, a 2x2 factorial design (repetition/no repetition x negative emotions/positive emotions) was set up, and a Generalized Linear Model analysis was carried out. The whole model is highly significant ($\chi^2 = 2907.902$ and p
= .001) and shows statistical significance in terms of the effects of “no repetition” (p < .001), “negative emotions” (p < .001) and the interactions between the two variables (repetition*emotion p < .001).

In other words and in relation to H₄, it is evident that a fundraising advertisement that is not repeated and features negative emotional appeals has the greatest effect on pupil dilation. To furthermore conclude on H₄ and H₄ₐ, this hypothesis is rejected based on the following: the respondents of group 4 showed more dilated pupils compared to group 3 (see figure 17), suggesting an increase in emotional arousal due to negative emotional appeals instead of positive emotional appeals, as was hypothesized. Moreover, according to figure 18 and table 7 above, group 4 expressed more willingness to donate than group 1, 2 and 3. Adding this together with the results from the Generalized Linear Model insinuates that pupil dilation responses are not linked to positive donation behavior when subjects are repeatedly exposed to a fundraising advertisement with positive appeals.

“Willingness to donate”
The following figure further explains the main effects of repetition (no repetition) and emotions (negative or positive) on the respondents’ “Willingness to Donate” (WTD).
The model is significant (F = 5.4423, p = 0.0019), and it explains 18% of the variance of the data (R² = 0.176837). The model furthermore shows statistical significance for the effects of “negative emotion” (p = 0.0022) and the interaction between the variables “negative emotion” and “no repetition” (p = 0.0146) on donation behavior, however no significant effects were found for “no repetition” alone (p = 0.9463). It is, once more, evident that repetition of negative emotional appeals (group 4) has a great effect on the respondents’ donation motivation.

There is also a relationship between the response time and selection of choice (WTD) when deciding upon donating, and how this is modulated by the emotions in the fundraising advertisement(s). Results show that negative emotional appeals contribute to making an “easier choice”, meaning that the respondents made faster (and easier) choices when they were exposed to the negative emotional appeals (red line) rather than the positive emotional appeals (blue line). Figure 23 illustrates the effects.
Figure 23: Response time and WTD
Part 6 Discussion

This section will focus on discussing the obtained results in relation to relevant empirical research found in the literature review. The discussion is divided into four parts, covering pupil dilation and emotional arousal, donation behavior and the repetition effect. The objective of this research was to investigate 1) if there were any significant differences in effects between positively and negatively charged emotional appeals used in fundraising communications, and 2) whether these differences would have a particular effect on a potential subsequent donation. It was hypothesized that positive emotional appeals would lead to positive donation behavior, and that pupil dilation would be an indicator of increased positive emotional arousal, which in turn would result in a greater potential for donation behavior. Furthermore, it was hypothesized that repetition of positive emotional appeals would have a greater effect on pupil dilation and in turn donation behavior. Following this, the subjective value-rated emotional measures together with the individual value-rating of a possible subsequent donation supported the results from the eye-tracking study.

6.0. Pupil dilation as indicator of increased emotional arousal

Results from the eye-tracking study showed pupil dilation as an indicator of increased emotional arousal, although not relative to positive emotional appeals as was initially hypothesized. With reference to Hess & Polt (1960), this shows the opposite of what their results demonstrated. There were clearly differences in pupil dilation between the two first groups in which increased emotional arousal was proven to be mostly prominent for negative emotional appeals. The two last groups also differed in pupil dilation where arousal also proved to be greatest due to negative emotional appeals. Results in total showed that respondents who were exposed to fundraising communication without repetition and featuring negative emotional appeals had the most noticeable effects on pupil dilation.

In relation to the self-reported emotional measures there was significant evidence of differences between the four test groups in terms of the social emotions guilt, pity, sympathy and love, although not for the emotions shame and empathy (see appendix 8 for ANOVA results for shame and empathy). The following discussion will nevertheless take both shame and empathy into consideration.
The group who expressed guilt to a greater extent was the respondents of group 4, indicating that they have a “Theory of Mind” (Wagner et al., 2011; Gallagher & Frith, 2003); an emotional reaction to the moral violations they were exposed to in the fundraising advertisement which in turn is believed to promote the moral behavior of donation. A minor connection can be seen in the standings of the relation between existential guilt and empathy for this specific group (Hibbert, Smith, Davies, & Ireland, 2007). No correlation can however be seen for groups 1, 2 and 3 in terms of guilt and empathy, as they in fact stated that they did not feel guilt, but they did express empathy to a certain degree. Hence, this research shows no evidence of empathy having an effect on inducing existential guilt (Miceli and Castlefranchi, 1998; Basil, Ridgway, and Basil, 2006).

Furthermore, for all four groups the mean response of negative social emotions is to a large degree negative (closer to ‘not at all’), while the mean response for positive social emotions are positive (closer to ‘very much’). This note might suggest that all groups, irrespective of which part of the charity campaign they were exposed to, are subject to wanting to reduce negative social emotions and rather repeat positive social emotions (Heffner, 2001). Arousal theory hereby supports the respondents’ choice of emotional value rating, and might suggest that they unconsciously chose to be more positive to the positive social emotions in order to reduce the feeling of negative emotions.

Sympathy is one of the positive social emotions that generated a positive response across all groups, with a mean of response of 1.5. These results may insinuate that attention to the person in need (Mouna) was good (Dickert & Slovic, 2009), especially amongst the respondents of group 4, where sympathy was rated the highest (mean of 2.0). Shame is on the other hand one of the negative social emotions that generated a general negative response across all groups with a mean of response of -1.85 (although no significant differences were found). Results found in this research seem to imply that situations considered inducing of shame are also inducing of guilt (Tangney, Miller, Flicker, & Barlow, 1996), although neither of the groups (except for group 4 in terms of guilt) seemed to feel guilt or shame after the exposure to the fundraising advertisement(s). It will later on be determined whether the reported states of guilt and shame has affected the groups to donate to SOS Children’s Villages, which is considered a solution in terms of reducing negative social emotions (Lewis, 1971 in Tangney, Miller, Flicker, & Barlow, 1996).

The reported measures of pity revealed that groups 3 and 4 were more inclined to feel this emotion than groups 1 and 2. The results do not seem to give an indication of a correlation between pity,
empathy and sympathy, which accordingly is in line with the common misunderstanding of the correspondence between these three social emotions (Gerdes, 2011). Love, with a mean of response of 0.99 across the four test groups proved that groups 1, 2 and 4 expressed more loving emotions than group 3. For group 3, compared to empathy, sympathy and pity, there is no evidence of love corresponding to these three emotions. Group 4 conversely express both pity, empathy, sympathy and love to a greater extent, suggesting that these respondents were significantly more influenced by the fundraising advertisement, which again should have resulted in convincing evidence of emotional arousal through pupil dilation.

Thus, it is debatable that the respondents who express both negative and positive social emotions to the greater extent (group 4) are not part of the group with the greatest mean of pupil dilation (group 1). One may argue that this is due to the repetition effect, which group 4 was subject to, although results showed that repetition had no significant effect on pupil dilation and this is discussed later on in this chapter.

6.1. Donation behavior as a result of increased emotional arousal

Research results clearly established that negative emotional appeals are more motivating to the possible act of donation than positive emotional appeals, and that group 4 was more prone to donate money than the other groups. Theories state that although social emotions can motivate to change, negative emotions may result in people ‘looking the other way’ rather than reducing the negative felt emotions by acting morally for a social change (Hull, 1943, 1952; Heffner, 2001; Hibbert et al., 2007; Hibbert & Chuah, 2009; Merchant, Ford & Sargeant, 2009). This however, does not correspond with results from the eye-tracking study, as the negative emotions experienced by the respondents (particularly in group 4) determined what actually motivated to social change through them expressing their interest in donating. Group four’s behavior can consequently be explained by Merchand and Filiatrault’s (2004) outcomes, which revealed that negative emotions with the opportunity for a positive emotional outcome influences behavioral intentions, such as a donation. The respondents of group 4 thus want to take action to overcome their negative emotions in anticipation of experiencing positive emotions (Merchant, Ford, & Sargeant, 2009).

As previously mentioned, group 4 expressed the feeling of “guilt” to a great extent. This emotional arousal of guilt corresponds with the respondents’ motivation to give to charity, relative to research
by Hibbert, Smith, Davies, and Ireland (2007). It may also be reasonable to assume that there exist other motives for expressing their will to donate, such as feeling sympathetic, moral self-identity or having a desire for a “warm-glow” feeling (Hibbert & Chuah, 2009; Andreoni, 1990). The theory of “warm-glow” giving implies that if the respondents in fact chose to physically donate money, it would be due to a desire for a “warm-glow” feeling (Andreoni, 1990). Positive emotional appeals used in SOS Children’s Villages’ fundraising advertisements are intended to elicit positive emotions in the viewer because he or she is able to see what their donations go to (the “solution”). Much proof however, exists in terms of stating the exact opposite: that negative emotional appeals (the “need”) elicit negative emotions in the observer, persuading him or her to donate to that particular social cause. It is therefore assumed that Andreoni’s desire for a “warm-glow” feeling is not introduced before donation, but rather that the “warm-glow feeling” occurs after the donation has been made as a result of the felt negative social emotions.

In contrast, group 3 expressed the least interest in charitable giving, which might suggest that the respondents thought the guilt appeals in the charity advertisements were too high in its intensity (Coulter & Pinto, 1995). On the other hand, this group was exposed to positive emotional appeals merely showing the “solution” for then to be shown the campaign from “need” to “solution”. As advertising repetition has proved to be less efficient in this research it is reasonable to assume that group 3 expressed the least interest in donating simply because they were exposed to positive emotional appeals, rather than negative appeals.

Following this, there is reason to believe that group four’s motivation to donate to SOS Children’s Villages is connected to the fact that they were exposed to a fundraising advertisement containing negative emotions and children with sad expressions, which can be seen in comparison with the research done by Small and Verrochi (2009). It is apparent that the nature of the presented images in the advertising affected the respondents’ emotional response in terms of showing sympathy and giving rise to potential donations. Giving has proved to be greater for the respondents exposed to sad expressions, supporting Small and Verrochi’s study. Furthermore, all test groups in the current research were exposed to fundraising advertisements featuring children. Group 1 also expressed a possibility of donating (mean of results of 0,75), and it is consequently evident, and in relation to research by Burt and Strongman (2004), that the use of images of children in a setting aimed at evoking negative emotional reactions lead to a greater potential for donation. This may also be
connected to our brain’s reward systems, which are parts important to activate in terms of motivating the potential donators and sponsors. This is relative to the study by Moll et al. (2006), who determined that the act of donation showed activation in the brain’s reward systems. The reward a person feels after a charitable donation is a feeling the donor will seek, and it should be a feeling in which the charity organization should attempt to communicate.

6.2. Repetition of fundraising advertisement result in greater donation behavior

Although there were no significant effects of repeating positive emotional appeals on donation behavior, group 4, who were subject to repetition, was still most inclined to act morally through donation. This is also considering the fact that exposure to a fundraising advertisement with no repetition and featuring negative emotional appeals had the greatest effects on pupil dilation. Respondents in the two last groups were only subject to repetition twice, which is likely to be less than in the studies by Campbell and Keller (2003), for instance. If repetition were to be more frequent in the current research, it is expected that Berlyne’s ‘wearout’ effect (1970) would eventually kick in, with reference to the study of shock effects by Schoenbachler and Whittler (1996, cited in Hastings, Stead, & Webb, 2004).

Repetition as a determinant of advertising effectiveness is likely to be based on a long-term campaign and not necessarily times of repetition in the course of one commercial break (Tellis, 2004). The “Mouna” campaign is a very successful campaign that has been running for several years in different European countries, including Denmark. Hence it is more probable that the ‘wearout’ effect will occur in connection with the campaign overall, and it is highly likely that many of the respondents have seen the campaign before exposure(s) in the eye-tracking experiment. Following this thought, considering the advertisement’s use of emotional appeals both the ‘wearin’ and ‘wearout’ effects are deemed to be of slow character (Tellis, 2004; Tellis & Ambler, 2007). The fact that the ‘wearout’ effect occurs more slowly to an advertisement with emotional appeals might provide a brief explanation as to why group 4 was more motivated to donate than the other groups. Even though pupil dilation results proved the opposite in terms of emotional arousal, the slow repetition ‘wearout’ effect could have influenced the respondents’ donation motivation.

In addition, knowing that SOS Children’s Villages is a quite familiar international brand, research suggests that the ‘wearout’ effect won’t appear as swiftly as it would do if the brand was of less familiar kind (Campbell & Keller, 2003; Berlyne, 1970).
One important issue still remains to be discussed: if repetition of the fundraising advertisement did not show any significant effects on pupil dilation and thus emotional arousal, this suggests that the negative emotional appeals were the main triggers both in terms of emotional arousal and the subsequent donation. This furthermore indicates that the use of negative emotional appeals is to a great extent effective when used in fundraising communications, and that repetition of the advertisement not necessarily contributes that much to the effectiveness of the advertisement. On the other hand, group 4 are still the respondents most motivated to donate, and if the negative emotional appeals were to be the sole factor affecting the outcome, it would suggest that the respondents of group 1 also would be highly motivated to donate. The respondents of group 1 were motivated to donate, just not as motivated as group 4, which would suggest that the repetition effect has in fact influenced the respondents to a certain degree.

6.2.1. “Willingness to donate”
Respondents’ willingness to donate in relation to the results above showed that the respondents who were exposed to negative emotional appeals had a shorter response time than those of positive emotional appeals. The faster response time indicates that it was an “easier” choice to make for the respective respondents, suggesting that negative emotional appeals affected the respondents to a greater degree and that less time was spent dwelling as to whether or not a donation was to be made. This notion is of importance for a nonprofit organization considering that a TV advertisement like the “Mouna” campaign is preferably to result in new potential donors being affected once they are exposed to the ad, leading them to immediately call to either make a single donation or become a long-time sponsor.

6.3. Effects on brand equity for nonprofits
As SOS Children’s Villages is a nongovernmental social development organization it is imperative to create a solid foundation based on their beliefs, which in turn is meant to motivate people to become potential donors. The research results would suggest that their fundraising communications should increase their focus area on communicating the “need” in a current social situation. The “solution” to the problem is an important determinant as well, if the non-profit organization at hand is able to convince potential donors that they can offer the solution to the problem. That way, the
non-profit organization can communicate the ‘solution’ by showing what they do (Mission) and how they solve the problem (Unique Selling Proposition).

SOS Children’s Villages’ brand equity may not be measured in financial terms, however an increase in money raised, villages built, children saved, and volunteers and donors acquired surely are valuable variables to the brand. In order to acquire donors, though, the basis of how and in what order they communicate might be in line for a slight change. It is suggested that the organization is a “look-at-you” brand, rather than a “look-at-me” brand, which recognizes that the donors actually give for action to be taken and not just to give to the organization at hand. The ‘right’ emotions, in this case negative social emotions, need to be triggered first, leading potential donors to take action. When donors and long-time sponsors are obtained, the ‘solution’ to the problem can be presented in which the organization can educate and deliver their promised missions by showing obtained results.

6.4. Managerial implications

The results from the study have implications for the managerial practices of SOS Children’s Villages and other non-profit organizations. The research contributes to a better understanding of how fundraising communications can develop in order to increase the number of donations and long-time sponsors. The research demonstrates the differences in effects that negative and positive emotional appeals have on emotional arousal, as well as how this affects the outcome of donor action.

When deciding upon an appropriate fundraising strategy the organization needs to select a way of communicating most effective to reach their set missions. This research suggests that focusing on communicating the “need” and appealing to peoples’ negative social emotions, the organization will have the capability to increase donations and number of donors and sponsors. In order to build brand equity it is furthermore important to build an episodic memory in the minds of the donors during the course of the donor journey (i.e. donor life- time), supporting and building the brand by telling various stories in a coherent manner, all starting from their unique selling proposition as described in their core domain.

The managerial implications apply to SOS Children’s Villages and other non-profit organizations,
however the general knowledge that we today hold about emotions and how this affects our
decision-making is knowledge that can be used across all industries and sectors, from
communication development in political parties to retail. Communicating through emotions is
fundamental, whether you are raising money for a good cause or branding perfume.
Part 7 Conclusions

With the support from neuroscience and psychology donor communications have reached its Golden Age (Ahern, 2012). Moral violations tend to trigger our emotions and when explored in relation to fundraising communications it often results in monetary and timely donations. The neuroscientific rationale behind this is that emotions determine our rationality, meaning that emotions regulate how we think. Our emotions affect our decision-making processes in relation to evaluating whether or not e.g. monetary donations to charity should be made.

Based on previous research and literature this thesis has focused on the use of emotional appeals in fundraising communications. The campaign “Mouna fra Uganda” by SOS Children’s Villages was used as stimuli in an eye-tracking experiment in order to be able to answer the following research question: “Are there any differences in effects between positively and negatively charged emotional appeals used in fundraising communications? And will these differences have a particular effect on a potential subsequent donation?”

Results from the eye-tracking experiment revealed that pupil dilation, as an indicator of increased emotional arousal was greatest for negative emotional appeals. Furthermore, pupil dilation responses are most noticeable as a reaction to fundraising advertisements without repetition and containing negative emotional appeals. Finally, exposures to fundraising communication with negative emotional appeals are causative for a potential subsequent donation. In other words, all of the four initial hypotheses were rejected.

Plenty of literature exists in this area and has assisted in building a ground framework for this research (Burt & Strongman, 2004; Small, Loewenstein, & Slovic, 2007; Small & Verrochi, 2009; Sciulli, Bhagat, & Bebko, 2012). The current study has provided relevant insights that can benefit the way SOS Children’s Villages and other nonprofit organizations structure their fundraising communications. First of all, it is imperative that the organization understands the fact that emotions drive motivation in relation to charitable donations, because most people “give from the heart” (Ahern, 2007). This supports the discussed notion of emotions determining how we think, which thus affects our decision-making process. Second of all, the organization must recognize that communicating the “solution” lone is not necessarily contributory to donation. Negative emotional appeals communicating the “need” are deemed most effective in relation to emotional arousal, and
these negative emotional appeals have subsequently resulted in a greater willingness to donate to SOS Children’s Villages. Conclusively, in order for nonprofits and SOS Children’s Villages in particular to obtain commitment through emotional involvement, their communications focus should express the true “need”, which might improve donor motivation and action.

7.0. Limitations and further research

One limitation to this research is that the respondents were not asked about their initial perception of SOS Children’s Villages, which could have provided the research with better insight as to why some chose to donate and others not. A second limitation is how the respondents understood the emotional value-rating task, as some said they found it a little confusing. A better set-up to this task could have altered the results. Thirdly, although SOS Children’s Villages’ biggest donors are women with children, the recruited respondents to the study were mostly graduates in the age range of 21-26 who do not have children. Solely recruiting women with children could possibly have made differences to the results. Following this, dividing the number of genders in each group differently (e.g. equally) could also have had an impact on the results. Finally, the respondents were only asked to what degree they would consider donating to SOS Children’s Villages, and not how much they would be willing to donate. An estimated amount per group could have given an ever better indication of the respondents’ “willingness to donate”.

Although the research finds negative emotional appeals to be most effective in terms of donor action, it does not provide specific guidance as to how this can be designed. One suggestion to further research is therefore to apply the effect of storytelling in fundraising communications. The research can study the difference between using and not using storytelling in advertisements and determine its impact on emotions and subsequent donations. The results could determine what function storytelling has, as a means to both address why (the ‘need’) with emotional images and further to build the non-profit brand in the long term.

Another suggestion to further research is to relate these results or other to brand equity to an even greater extent. This could for instance be seen in relation to the CBBE (Consumer Based Brand Equity) model, as there is scarce literature and research in terms of nonprofits and this recognized brand equity model.
Bibliography


Beiskjær, B. (2013). Vice President SOS Children’s Villages Denmark. (T. Bergerud, Interviewer)


Appendices

Appendix 1: Heat map
Appendix 2: Experiment guidelines

1. Recruitment
The respondents are invited to participate in an eye-tracking experiment. They are only told that they will be viewing and evaluating TV commercials.

2. Introduction and registration
The respondents are informed about their participation rights, how long the experiment will take and about foreseeable factors, and that the collected data will be handled anonymous. They are then asked to sign off on the written statements. Furthermore, the respondents will be asked to fill out a registration form containing personal information.

3. Instructions of experiment procedure
The respondents are introduced to the study and its procedure, and to the eye-tracker and its functions.
After the experiment, the respondents will be asked to fill out a debriefing document, which also reveals the purpose of the experiment, and kindly asks the respondents not to further expose information about the experiment to their peers.
Appendix 3: Registration form

Log Number ______________________

*Participation in eye-tracking study in SenseLab, DNRG, CBS*

1. As a respondent in this study you have the right to decline participation and to withdraw from the research before and during the test. The test will take approximately 15 minutes.

2. There are no reasonably foreseeable factors that may be expected to influence your willingness to participate, such as potential risks, discomfort, or adverse effects.

3. The collected data will be anonymous.

*I have read and understood the statements above; I have received satisfactory information about the study and I accept the participation in it.*

Signature: ____________________________________________________________
Demographics

Age: ____

Gender:
☐ Female
☐ Male

Country of origin: ______________________

Country of residence: ________________

If living in Denmark; postal code: _______

Highest level of education completed within this year:
☐ Junior high school or lower
☐ High school (Gymnasium) or equivalent
☐ Some college, no degree
☐ Bachelor’s degree
☐ Master’s degree
☐ Post-graduate degree

Main current occupation:
☐ Studying:  Discipline: ________________  Institution: ________________
☐ Working:  Profession: ________________  Employer: ________________
☐ Other: ______________________________

Native language: ________________

Any secondary languages: ____________________________________________
Appendix 4: Debriefing Group 1

Log Number ________________

Debriefing Group 1

Please check one of the boxes, and/or comment your opinion(s) below

**Did you experience troubles with concentration?**

☐ Yes  ☐ No

*If yes, please note down the specific reason if you are aware of it:*

___________________________________________________________________
___________________________________________________________________

*What do you think that this study was about?*

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________

*Any comments you may have:*

___________________________________________________________________
___________________________________________________________________
___________________________________________________________________
If you would like to get the report later on, please write your e-mail address below, and I will come back to you with more information regarding the study.

__________________________________________________________________________

e-mail address

Information about the study

This experiment is trying to uncover what it is that makes people donate money to charity by exposing respondents to a fundraising advertisement(s). The other commercials were only there to leave you in a natural TV setting. The experiment is conducted in four groups, and you have been part of a group in which the main focus was to expose you to fundraising advertisement meant to only trigger negative social emotions (guilt, embarrassment etc.). Our results will hopefully leave us with representative differences between the four groups, so it will be possible to determine what types of fundraising advertisements that work “the best”.

We kindly ask you not to reveal this information to your peers as this might affect the results of the experiment.

Thank you for participating!
Appendix 5: Debriefing Group 2

Log Number ________________

Debriefing Group 2

Please check one of the boxes, and/or comment your opinion(s) below

Did you experience troubles with concentration?  ☐  ☐

Yes  No

*If yes, please note down the specific reason if you are aware of it:*

_____________________________________________________________________

_____________________________________________________________________

What do you think that this study was about?

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

Any comments you may have:

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________
If you would like to get the report later on, please write your e-mail address below, and I will come back to you with more information regarding the study.

________________________________________________________________________

_e-mail address_


*Information about the study*
This experiment is trying to uncover what it is that makes people donate money to charity by exposing respondents to a fundraising advertisement(s). The other commercials were only there to leave you in a natural TV setting. The experiment is conducted in four groups, and you have been part of a group in which the main focus was to expose you to fundraising advertisement meant to only trigger positive social emotions (love, empathy, etc.). Our results will hopefully leave us with representative differences between the four groups, so it will be possible to determine what types of fundraising advertisements that work “the best”.

We kindly ask you not to reveal this information to your peers, as this might affect the results of the experiment.

Thank you for participating!
Appendix 6: Debriefing Group 3

Log Number ______________

Debriefing Group 3

Please check one of the boxes, and/or comment your opinion(s) below

Did you experience troubles with concentration?  
☐ Yes  ☐ No

If yes, please note down the specific reason if you are aware of it:
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

What do you think that this study was about?
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Any comments you may have:
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

If you would like to get the report later on, please write your e-mail address below, and I will come back to you with more information regarding the study.

______________________________________________________________________________________________

e-mail address

**Information about the study**
This experiment is trying to uncover what it is that makes people donate money to charity by exposing respondents to a fundraising advertisement(s). The other commercials were only there to leave you in a natural TV setting. The experiment is conducted in four groups. You have been part of a group in which the main focus was to first expose you to fundraising advertisement meant to trigger positive social emotions (love, empathy etc.), and then repeat the advertisement later on triggering both negative (guilt, shame, embarrassment, etc.) and positive social emotions (love, empathy etc.). Our results will hopefully leave us with representative differences between the four groups, so it will be possible to determine what types of fundraising advertisements that work “the best”.

We kindly ask you not to reveal this information to your peers, as this might affect the results of the experiment.

**Thank you for participating!**
Appendix 7: Debriefing Group 4

Log Number ________________

Debriefing Group 4

Please check one of the boxes, and/or comment you opinion(s) below

Did you experience troubles with concentration? ☐ ☐
Yes No

If yes, please note down the specific reason if you are aware of it:

______________________________________________________________

_____________________________________________________________________

What do you think that this study was about?

______________________________________________________________

_____________________________________________________________________

Any comments you may have:

______________________________________________________________

_____________________________________________________________________

_____________________________________________________________________
If you would like to get the report later on, please write your e-mail address below, and I will come back to you with more information regarding the study.

\[e-mail\text{ address}\]

*Information about the study*

This experiment is trying to uncover what it is that makes people donate money to charity by exposing respondents to a fundraising advertisement(s). The other commercials were only there to leave you in a natural TV setting. The experiment is conducted in four groups. You have been part of a group in which the main focus was to first expose you to fundraising advertisement meant to trigger negative social emotions (guilt, embarrassment, shame, etc.), and then repeat the advertisement later on triggering both negative and positive social emotions (love, empathy etc.). Our results will hopefully leave us with representative differences between the four groups, so it will be possible to determine what types of fundraising advertisements that work “the best”.

We kindly ask you not to reveal this information to your peers, as this might affect the results of the experiment.

\[\text{Thank you for participating!}\]
Appendix 8: One-way ANOVA *Shame* and *Empathy*

**Analysis of Variance**

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<th>Prob &gt; F</th>
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**Analysis of Variance**

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