The Role of Negative Emotions in Climate Change Awareness Advertising

Sylvia Eirini Chalkiadaki, Sebastian Vaida

ISSN online: 2247-8671

Educatia 21 Journal, (26) 2023, Art. 13 doi: 10.24193/ed21.2023.26.13

Theoretical article

The Role of Negative Emotions in Climate Change Awareness Advertising

Sylvia Eirini Chalkiadaki a*, Sebastian Vaida a

^a Faculty of Psychology and Educational Sciences, Babeş-Bolyai University, Cluj Napoca, Romania

*Corresponding author: eirini.sylvia@gmail.com; sebastianvaida@psychology.ro

Abstract

Keywords: emotional appeals; negative emotions; advertising; climate change awareness; behavioural intention.

The field of advertising has been increasingly using psychological concepts to push consumers towards buying and changing their attitudes about the product and even about the whole brand. Accordingly, using emotions as a tool for persuasion and raising behavioural intention should be discussed from a psychological point of view. Therefore, this paper aims to provide an extensive explanation and an experimental proposal for the relationship between three distinct negative emotions and behavioural intention in the context of video advertising. The main advertising concept that we have discussed is the awareness of advertising campaigns, specifically ones on the topic of climate change. In addition, to increase the specificity of the information presented, we analysed several emotions individually: fear, guilt and anger, and their potential of inducing behavioural intention. The three negative distinct emotions were chosen specifically because of the motivational factor that they include, if used in certain conditions, they induce a drive for action, a want for behavioural change - which is preferable in awareness campaigns. We have also discussed some technical details that can be considered important when creating emotional appeals - especially anger, fear or guilt inducing. This paper also offers future directions and represents a guideline for creating emotion inducing advertisements. On top of that, it represents proof that the field of advertising can benefit from research in the psychological field, and that publicity can be used not only as a means for persuading consumers, but also shifting behaviours towards sustainability.

Zusammenfasung

Schlüsselworte: emotionale Appelle; negative Emotionen; Werbung; Bewusstsein für den Klimawandel; Verhaltensabsichten. In der Werbung werden zunehmend psychologische Konzepte eingesetzt, um die Verbraucher zum Kauf zu bewegen und ihre Einstellung zum Produkt oder sogar zur gesamten Marke zu ändern. Dementsprechend sollte der Einsatz von Emotionen als Instrument zur Überzeugung und zur Steigerung der Verhaltensabsicht aus psychologischer Sicht diskutiert werden. Daher zielt dieser Beitrag darauf ab, eine umfassende Erklärung und einen experimentellen Vorschlag für die Beziehung zwischen drei verschiedenen negativen Emotionen und der Verhaltensabsicht im Kontext der Videowerbung zu liefern. Das wichtigste Werbekonzept, das wir erörtert haben, ist die Wahrnehmung von Werbekampagnen, insbesondere von solchen zum Thema Klimawandel. Um die Spezifität der dargestellten Informationen zu erhöhen, haben wir außerdem mehrere Emotionen einzeln analysiert: Angst, Schuldgefühle und Wut und ihr Potenzial, Verhaltensabsichten auszulösen. Die drei negativen Emotionen wurden speziell wegen des Motivationsfaktors ausgewählt, den sie beinhalten. Wenn sie unter bestimmten Bedingungen eingesetzt werden, lösen sie einen Antrieb zum Handeln aus, einen Wunsch nach Verhaltensänderung - was bei Sensibilisierungskampagnen wünschenswert ist. Wir haben auch einige technische Details erörtert, die bei der Erstellung von emotionalen Appellen wichtig sind - insbesondere wenn sie Wut, Angst oder Schuldgefühle auslösen. Dieses Papier gibt auch Hinweise für die Zukunft und stellt einen Leitfaden für die Erstellung von emotionsauslösenden Werbungen dar. Darüber hinaus ist er ein Beweis dafür, dass der Bereich der Werbung von der Forschung im psychologischen Bereich profitieren kann und dass Werbung nicht nur als Mittel zur Überzeugung der Verbraucher, sondern auch zur Veränderung des Verhaltens in Richtung Nachhaltigkeit eingesetzt werden kann.

1. Introduction

In recent decades, the concerns for our environment, and whether our planet will be able to keep supporting human life, considering the devastating changes and catastrophes that humans have brought upon it, have been rising. This might be one of the reasons why scientists study the possibility of life on other planets. As there are still major discoveries to be done, and much debate to whether or not this is a good alternative, we can try to opt for the solutions that have been lying in front of us for many years now: to try to undo the harm, to try not to do

more harm, and, if all else fails, to try and reduce the harm that we keep doing.

From a psychological point of view, this study aims to shed some light on the topic of using emotions, in general, and negative emotions specifically to create powerful awareness campaigns on the topic of environmental issues and sustainability. The premise is the fact that highly impactful emotional messages have the power to change someone's views, attitudes, and ultimately provide or foster behavioural change



through intention. There has been quite some research on the topic of persuasion by inflicting positive emotions through advertising, that has shown us that positive emotions act indeed as a mediator for changing the subjects' attitude toward the ad (Holbrook & O'Shaughnessy, 1984; Holbrook & Batra, 1987). Lately, the attention has been falling onto negative emotions like guilt, fear, and anger, when it comes to advertising health campaigns, public service announcements or even raising awareness on socio-political causes (Moore & Hoeing, 1989).

The following paper is research done for gaining a better understanding of the use of emotions in the field of advertising, but also regarding the influence of sad emotions (and advertising as a whole) might have when it comes to behavioural changes. We could think of it like studying consumer behaviour, but instead of a product or a service, we're selling behaviour. We have discussed sustainability factors, mechanisms of emotions, as well as the power that those emotions hold on shifting behaviours in awareness advertising.

2. Importance

Our environment is deteriorating, and we're letting it happen, contributing directly to all the health risks this process is putting us through. From minor respiratory inflammation, chronic diseases, lung cancer, acute infections, bronchitis, aggravating preexisting diseases, asthmatic attacks (Kampa & Castanas, 2008), to stress related disorders, increase in suicide rates, depression, and adjustment disorder (Padhy et al., 2015) that have all been linked to some kind of environment deterioration.

Gifford (2008) puts emphasis on the fact that people individually have a huge responsibility when it comes to sustainability issues. This is because, even if the change needed is one at a higher level - governmental policies programs or regulations, it's still people that change those and that demand change by being informed, and by debating important subjects. Other authors (Veitch, 2008; O'Brien, 2008) take the importance of sustainability further than the health effects we know and link the matter to psychological issues.

For example, O'Brien (2008) argues that sustainable behaviour and decisions in daily life can have a positive outcome on our emotions, increase subjective well-being and implicitly have an impact on our quality of life, by increasing overall health. On the other hand, Veitch (2008) mentions detrimental effects of phonic pollution such as memory impairment and stress. The authors mentioned above both have

expressed a need for further research on an interdisciplinary basis for sustainability. It's been proven to us time and time again that there is an inherent need for change, so the question now becomes why we don't make a change. Perhaps the answer lies in not knowing how, or not knowing where to start, or maybe even in not caring enough.

2.1. A few aspects of environmental sustainability

Sustainability is described, among definitions, as the avoidance of depletion of natural resources to maintain an ecological balance. In other words, the matter can be described in tight connection to environmental issues, as a quality of producing little to no damage to the environment, the capacity for the biosphere and human civilization to co-exist and maybe also a way of thinking and behaving that is mindful to the effects of human action upon nature and our ecological system. It involves issues like climate change, pollution of natural sources, pollution of oceans, harming of biodiversity, overpopulation, etc. It is important to keep in mind that all the mentioned issues are interconnected, and all contribute to the deterioration of human life as we go on to discuss the implication and costs of some of the above phenomena.

2.2. Climate Change

Humans have had the main influence on climate change, mainly by emitting more and more CO2 into the atmosphere. This phenomenon is detrimental to our planet, and our health. Climate change comes with a lot of implications, such as extreme weather, natural disasters (fires, floods, tsunamis, hurricanes, etc.), sea levels due increasing to ice desertification, changing rain patterns and many more. All these implications have a very high impact on our lives: people become sicker, lose their homes, water supply is decreasing, etc. (WWF, Effects of Climate change).

There is no doubt that Climate change, otherwise known as global warming, is disastrous, but we do have solutions. The WWF gives some solutions to this matter like demanding political action, measuring, and trying to reduce our carbon emissions, changing our lifestyles in a way that is beneficial to our environment. According to the **IPCC** (Intergovernmental Panel for Climate Change), anthropogenic warming can lead to abrupt and irreversible changes: species at risk of extinction, melting of ice (rise of sea level, inundation of lowlying areas, major coastline changes, etc.), terrestrial vegetation changes, marine ecosystem changes, etc. One of the solutions they propose is adopting policies that will create incentives for reducing the severity of the changes (mitigation). As this is a topic that implicates social, political, moral issues, changes should be made at a macro level (international policies and agreements), as well as micro (sustainable cityplanning, fuel-efficient cars, sustainable transportation) (Is it too late to prevent climate change? – Climate Change: Vital Signs of the Planet).

2.3. Pollution

Pollution is the introduction of harmful materials in the environment, in the air, water, soil. Again, as in the case of climate change, pollution is mainly caused by human activity on earth. This means that CO2 emissions, plastic and oil waste in the oceans, toxic materials dumped on soil, acid rains, etc., they all pollute the Earth. The World Health Organization (WHO) estimates that 90% of people breathe polluted air and as expected, this has major implications on our health, meaning that we are at risk of respiratory infections, heart disease and lung cancer, regardless of the time that we've been exposed to air pollutants (short-term exposure and long-term exposure). Water pollution is also dangerous, causing approximately 14,000 deaths a day, mainly in developing countries, by consumption of contaminated water (Owa, 2013).

As solutions, The World Health Organization states that reducing pollution is everyone's responsibility, from an individual level – by standing up for our rights to sustainable environments, holding our governments accountable, to a community level – by considering public health in public policies, and to national levels – by reducing emissions and setting standards for air quality (*Health consequences of air pollution on populations*, 2019). Some other strategies for managing pollution that can be implemented on an individual level include reducing waste, recycling, reusing, composting (Owa, 2013).

To summarize and, at the same time, paint a complete picture of just how tragic the situation is, we mention that pollution (in all its forms and effects on other factors like climate change), is accountable for a very high percentage of deaths (premature) worldwide. According to The Lancet Commission (2017), in 2015 those numbers were critically high: 16% of deaths worldwide due to pollution. This means that 9 million deaths, a number higher than the one that accounts for deaths due to AIDS, malaria, tuberculosis, but also the number for deaths caused by wars and other types of violence. If this isn't enough, the tragedy continues to be proven, as there are

solutions, and if some of the solutions were to be implemented there are estimates of the numbers being reduced significantly (World Health Organization, 2018).

3. Emotions

Investigating the subject of emotions, we came to the realization that most authors tend to stay away from firmly defining the concept of emotions. This could be a result of the interdisciplinary aspect of emotions, or it could be simply because of the need to expand the concept to a definition that can exclude states that might otherwise be included. Thus, we can describe emotions as being a response of the body to a stimulus, no matter the point of view we look at it from (Frijda, 1986).

In the cognitive field of psychology, emotions are reactions of our thoughts, interpretations, and evaluations (cognitions) of and about a triggering event. Emotions have been generally defined in psychology always linked to other psychological concepts like thoughts, moods, temperament, personality, and stemming from neurophysiological changes. In other words, however we choose to define the concept of emotions, we could never bring them in discussion without understanding their tight links to our biology (nervous system), and the environment we're in.

It is beyond the point of this paper to present every theory about emotion, as there have been quite a few (Cannon, 1987; Schachter & Singer, 1962). However, we will briefly explain and exemplify the following theory, to get a better understanding on the process of emotions.

Lazarus theory (Lazarus, 1982). This theory states that after the stimulus comes cognitive appraisal (what meaning we give to the stimulus, how we perceive it), this appraisal is critical and dependent on personal and socio-cultural factors, and predicts the type of emotion we feel, as well as the type of physiological response our body has. In other words, this theory proposes that the occurrence of events happens in the following order: the stimulus, the cognitive appraisal, and after that the emotion and the physiological changes at the same time. An example could be seeing a stimulus, interpreting the stimulus as dangerous, feeling fear, while the heart rate increases, and experiencing sweat.

The field of neuroscience is also important in understanding the biological basis of emotion, and scientists like Damasio (1994) and LeDoux (1998) had

major contributions in explaining that emotions have a crucial role in rational reasoning and behaviours. Furthermore, the field of evolutionary psychology benefited from the better understanding of emotions, by proposing explanations as to why certain emotions appear in specific situations (Fessler et al., 2004). From an evolutionary point of view, this meant that certain emotions served the purpose of adaptation to evolutionary challenges. The most obvious example would be fear driven behaviours like running away from danger, or living in groups (Poels & Dewitte, 2019).

3.1. Emotions in the field of advertising

As seen so far, emotion is a very complex process, so it is expected that the roles it plays in advertising are diverse. Emotion can be used in a context of moderating attitude toward the ad, attitude toward the product that is being advertised, persuasion or even processing of informational content of the ad (Stewart, Morris & Grover, 2007). Emotions in advertising are usually referred to as "emotional appeal".

Achar et al. (2016) make a pertinent distinction between types of emotions important in the field of advertising: integral emotions and incidental emotions. Integral emotions are the emotional appeals of the ad, designed to provoke an emotion that is strategically chosen by the advertiser, while incidental emotions are those produced by circumstances independent from the decision, but that have potential of influencing decision. There has been an argument in advertising psychology that advertising stimulated emotions are different from real-life emotions. because the first ones are mediated, and therefore do not predict real harm, nor do they bring a benefit to the subject (Poels & Dewitte, 2019). There are, though, experts that proposed that the stimulus should be vivid enough to simulate a real-life situation, thus perceiving the situation as if it was real (Frijda, 1988; Fennis et al., 2011).

Mizerski & White (1986) identified three main uses for emotions in the field of advertising. The first and most obvious one is linking a type of emotion to the brand or product advertised, to influence the consumers' attitude toward the brand (usually creating a sense of security related to the brand). Further on, emotion can be used as a reward for consuming from a certain brand or a certain product. In other words, it could be described as conditioning the consumer to feel a certain way after buying the product or buying from a specific brand (usually, this works with positive emotions – feeling happy about buying chocolate, for

example). Last, but not least, emotions can become a form of strengthening the message/ advertisement, in a way that it is delivered successfully.

In contrast to using emotion for creating a positive attitude toward the brand, using it as a benefit of doing something has a very important component for sustainability: developing behaviours. When used as a benefit of a product, emotion becomes a benefit after the purchase (a specific behaviour), so it could be used, in this case, either as a benefit to purchasing sustainable items, or a benefit to adopting a certain sustainable behaviour (that could not have anything to do with purchase) (Plummer & Holman, 1981). In other words, the emotion-as-benefit approach can be described as teaching the consumer a specific behaviour, to assure the benefit (which in this case, is the emotion itself).

In a quite comprehensive study on emotions in the field of advertising, Mizersky & White (1986), explain some important elements that could answer questions of how to evoke emotions through advertising and, implicitly, influence consumers behaviour. First of all, the ad itself, through portraying events or cues, should evoke at least one type of emotional state in the audience. Second, appraisal plays a very important role in the type of emotion aroused, and last, there should be some pre-existing link in acting a certain way and either altering the emotion or extending it. For example, the ad could arouse guilt in the audience, but it is important for the audience to be involved, for them to appraise the cues a certain way and there should be a pre-existing condition of adopting a certain behaviour to reduce the feeling. If we are to combine the purpose of emotion (or lack of it) as a benefit with the elements we just presented, we should keep in mind reinforcing appropriate responses (as a learning technique), to teach the audience about the benefits of the behaviour, but also to create predispositions for adopting that behaviour (Mizersky & White, 1986). This research also explains the role that different types of learning influences consumer behaviour. For example, vicarious learning is helpful if the goal of the ad is to influence behaviour (observing the models' behaviour can influence our own). Classical conditioning is usually used if the goal is to form an attitude toward the brand and instrumental conditioning is a useful tool when the goal is adopting a behaviour to either alter or prolong a certain emotion.

Although this research aims to emphasize the effect of negative emotions, it is important to note that there are studies that show significant results (in some

types of behaviour) no matter the valence of the emotions (Berger & Milkman, 2012). It is important to mention that a lot of research on the topic of emotional ads has focused on discrete emotions (Poels & Dewitte, 2019). The concept of discrete emotions stems from the idea that there are some basic, well-defined emotions in human psychology that can be expressed similarly and are defined similarly, no matter the cultural or ethnic differences. The emotions proposed by Izard et al. (1993) to be defined as "discrete emotions" are the following: interest, joy, surprise, anger, disgust, contempt, self-hostility, fear, shame, shyness, and guilt.

Emotions, whether studied as arousal, or discrete emotions, have a big impact on our memory, meaning that events or stimuli that hold emotional meaning are remembered better than events that do not (Levine & Pizzaro, 2006). This also affects judgement and behaviour and is very much dependent on the valence of emotions. Studies have shown that negative emotions (e.g. sadness), in contrast to positive ones (e.g. happiness), impact our memory, making us recall facts in a way that is more accurate than in the case of a positive emotional state. In a positive emotional state, general knowledge is used more than actual, accurate statements or events (Bless et al., 1996). In other words, sadness seems to induce a more accurate recollection of facts, than happiness. This happens even though people believe they remember positive events or facts, rather than negative ones, and has to do with the differences in processing information under different emotional states (Levine & Pizzaro, 2006). All these findings are supportive evidence of how the valence of emotion can affect memory, but it is important to note how discrete emotions affect it as well. For example, fear and anxiety can make someone remember threat related information better than threat irrelevant information, sadness makes us recall negative events better (Levine & Pizzaro, 2006). The general idea is that discrete emotions evoke either different types of appraisals or "action tendencies" (Frijda, 1978, apud Levine & Pizzaro, 2006).

Furthermore, emotions can affect our judgment and valence has a role in how we process information, thus, how we make judgments based on emotions. For example, when we feel happy, we tend to judge social situations based on stereotypes and heuristics more than when we are sad or in a neutral state. Also, we become more creative in solving problems when we are happy, in contrast to the analytical and conservative perspective we embrace when we are sad. As we saw in the case of emotion valence, discrete

emotions also take part in judgment differences. Fear, for example, makes individuals highly aware of the possibility of risk, while anger makes them act without considering the risks much. On the other hand, sadness can make someone overestimate the importance of negative events (for example, losses) than other emotions (Levine & Pizzaro, 2006).

3.2. Defining and conceptualizing negative emotions

The main difference when it comes to determining the valence of an emotion has been described through: (a) the valence of the affect - positive emotions feel good, negative emotions feel bad (Damasio, 2003; Isen, 2000); (b) the valence of the behaviour - positive emotions involve approach behaviour, negative emotions involve withdrawal behaviour (Schneirla, 1959; Arnold, 1960); (c) the valence of the object positive stimuli versus negative stimuli (Cacioppo & Bernston, 1994; Lang et al, 2000). There is also another description that comes closer to the cognitive aspect of emotions: how we evaluate the triggering event determines the valence of the emotion (Colombetti, 2005). Next, we will continue with defining three distinct negative emotions that have been linked with motivational factors, behavioural intention and/ or behavioural change as we will see further on.

3.2.1. Fear

The Cambridge Dictionary gives the following definition of fear: "an unpleasant emotion or thought that you have when you are frightened or worried by something perceived as dangerous, painful, or bad that is happening or might happen". If we consider it from the cognitive psychology point of view, we can argue that fear, being an emotion, is a result of the evaluation of a stimulus/ triggering event. In other words, someone would feel fear when evaluating a stimulus/ event as being dangerous/harmful. The question is how we can use advertising messages in a way that the receiver evaluates the object of the ad dangerous and changes their behaviour in a direction that makes him not be fearful. To give an example, a person would see an ad that raises awareness on the effects of throwing tons of plastic litter into the ocean and decide to reduce the amount of plastic thrown away or bought.

Past literature in the fields of persuasive psychology and advertising psychology has shown quite a mix of results when it comes to fear inducing messages and persuading the receiver, or changes in the behaviours of the receiver. There are plenty of fearpersuasion models, that stand as evidence to the inconsistency of results: fear acts as a motivational factor to take action (Witte & Allen, 2000), low levels of fear arousal are more persuasive (Goldstein, 1959; Janis & Feshbach, 1953), or even an U shaped curve that indicates either that there are some contextual moderators when it comes to fear persuasion (Boster & Mongeau, 1984; Dillard, 1994) Also, that there is an optimal point of fear that determines persuasion, and any level of fear above that is too high and, therefore, detrimental to persuasion (Janis, 1967). However, some models that focus more on the cognitive aspects of fear have been more successful in finding consistent results (Witte & Allen, 2000; Rogers, 1975, 1983).

Criticism on fear-arousing models has focused on the presumption that flight is the most common response in fear (from the fight or flight response). Thus, an ad would not be able to motivate someone to act in a certain way. This is a pertinent assumption, but if the goal of the ad is for the audience to act in a certain way, the best course of action is to provide a clear plan for the audience (Witte & Allen, 2000). This finding is consistent with the research presented earlier in this paper, showing that altering an emotion can be a motivational component towards acting a certain way. Also, as presented earlier, fear makes people more attentive to threat related information, so when raising awareness, it could be a very effective tool. For example, if we induce fear related to climate change effects in an audience, they might not act immediately (if not presented with a very clear solution), but they might be prone to remember their negative contribution to climate change (as it is threat related information) and act in a different way, to alleviate their fear.

3.2.2. Guilt

This emotion holds a very special place in persuasion psychology because it has an action-motivational component. This means that guilt makes us want to act in ways that will make us stop experiencing it, more than other emotions. In other words, guilt springs from an inconsistency between the action and the principles or values of the person (what they think is right versus what they are doing), so they try to make up for the action that initiated the guilt feeling. For example, if someone believes that it is morally correct to tell the truth, but that person is put in a situation where he/she must behave otherwise, he/she will experience guilt. If the feeling is powerful enough or the event is meaningful enough, that person will try to make up for it.

This is consistent with the responses of people that were asked about their experience with guilt. The responses were: they wished they had acted differently, wanted to make amends, felt responsible (Tangney et al., 1996).

The characteristics of this emotion make it a very powerful one, when it comes to persuasion. Past studies have shown very consistent results, that guilt is indeed a very effective tool in advertising (Coulter & Pinto, 1995; Pinto & Priest, 1991). Guilt appeals must be used rather cautiously, because scientific literature shows us that: (a) moderately explicit guilt appeals have the best results, (b) very explicit guilt appeals have a very high risk of evoking anger, irritation, annoyance – or other negative emotions that interfere with the persuasion process (Coulter et al., 1997; Coulter & Pinto, 1995; Pinto & Priest, 1991).

The answer here is to offer a solution for reducing the guilt (for example, if we were to induce feelings of guilt in someone by bringing awareness to the harsh reality of homeless people's lives, the best result would be obtained if we offered the information that donations to local charities for the homeless have a major impact).

As mentioned before, guilt comes from an inconsistency of one's actions and beliefs and because of this, O'Keefe (2002) notes some similarities between guilt appeals and hypocrisy appeals, that have the same characteristic: they bring attention to oneself' inconsistencies. Although the author presents some studies that had positive results when appealing hypocrisy in participants, he then shows that the results could be explained by their guilt appealing characteristics (rather than dissonance arousal effects). In other words, whether we call it hypocrisy or guilt, the results of drawing attention to inconsistencies between our beliefs/ moral values and our way of acting show promising results.

3.2.3. Anger

This is one of the emotions that could be considered tricky when it comes to advertising, especially when the goal of the ad is to influence the audience in a way that they engage in and commit to certain behaviours. Anger comes from the evaluation that an event is blocking our way of attaining our goals, or from having our personal rights violated. A coping mechanism for anger is that it becomes a motivational factor for us to act in such a way that we regain control of the situation, so we can attain our goals and/or express our rights (Lazarus & Lazarus, 1994). This is where self-efficacy becomes important.

As individuals, we are more likely to do something if we believe we can do it. A person with higher levels of self-efficacy will be more likely to engage and commit to a behaviour (having faith that they can accomplish their goal), than a person with lower levels of self-efficacy (we are unlikely to do something if we don't believe we can – feeling like it would be a waste of time).

As mentioned above, it is already very clear that anger can result in negative outcomes when the goal is persuasion. Questioning this matter, Turner (2007) developed the Anger Activism Model, as a means for explaining when anger results in positive persuasive outcomes. The AAM proposes that anger can have persuasive abilities depending on the intensity of the emotion, but also considers self-efficacy matters. Turner (2007) proceeded to split the audience of the anger inducing advertisements into four groups, divided by the intensity of the anger and the level of perceived efficacy: a. the activists – the group with the strongest levels of anger and highest level of efficacy beliefs; b. the *empowered* – the group with low levels of anger stimulation, but high levels of self-efficacy; c. the angry - the group with high levels of anger aroused, but low levels of perceived efficacy and d. the disinterested – with low levels of fear aroused and low levels of self-efficacy. As expected, the author found out that the first group had the best results: they had the most amount of cognitive processing of the message and were most likely to engage in high commitment behaviour. The empowered group, although likely to engage in high commitment behaviours, was not angry about the topic, meaning that there was little cognitive processing of the matter (for example, "why should I do something about a matter that I don't really care about"). In contrast, the angry group, had very strong feelings about the topic, but they didn't believe they could do something about it, fact that resulted in not being likely to engage in high commitment behaviours (for example, "I care about the matter a lot, but I can't do anything about it"). Finally, the disinterested group had neither the feeling, nor the belief that they could do something about it, so they had the least amount of cognitive processing (for example, "I don't care").

3.3. How to induce emotions

There are different means to induce emotions, and the most known being imagination, facial expressions, social interactions, films, images, text, etc. These have been used in the past in laboratory conditions to study various aspects of emotions. We will mainly focus on presenting research on inducing emotions via films (or videoclips), as it has been argued to be one of the most effective ways, and is more relevant to this study, compared to other methods. We do acknowledge the fact that advertisements can also be written, appear in the form of images (e.g. poster advertisements), or can be in audio form, but for the purpose of this study we have decided to study mainly video advertisements in appealing emotions (Hewig et al., 2005).

Going back to where we presented the mechanism of emotions, we remember that for an emotion to spark, we need a stimulus or a triggering event. This event could range from being as little as a subliminal stimulus, or as wide as a whole combination of different stimuli. A subliminal stimulus could be, for example, a word presented very briefly, in a time that is too short for conscious perception, but can still be present in the subconscious, and that can activate cognitive schema. On the other hand, triggering events can be combinations of subliminal and conscious stimuli such as an image that is perceived, but is presented with a certain light filter on it. To further exemplify how subliminal stimuli work, we will briefly present the results of a study conducted on the issue of eating habits. Meyer & Waller (1999) presented different subliminal messages in the form of words presented to different groups in 4ms frames (under the perceptual threshold), and the results showed that some groups had significantly different outcome behaviours, although none of the groups was able to detect the word presented.

As a rule, when trying to artificially induce emotions, it is very important to stay true to and understand the mechanism of each distinct emotion. Asking "what makes this emotion different from another?", could be very useful in building stimuli. As we've seen above, presenting the three distinct emotions this study focuses on (fear, guilt, anger), there are some key differences in the way that emotions are sparked or in the way they make people act, motivating in a way or another.

Particularly, fear is a response to a perceived danger, so when trying to elicit this emotion, it is important to include images, written or spoken text that explicitly describes direct danger. Skurka et al. (2018), in a study concerning emotional appeals in relation to climate change, constructed fear appeals by using cues that portrayed the catastrophic effects of climate change (images and videoclips), with a voiceover that reinforced the threatening aspect of the clip, made in a serious voice, with a background of

sinister music. If we were to follow the same pattern, in the case of guilt, we would consider presenting the same facts as in the fear appeal, while trying to reinforce the feeling of inconsistency between the viewer's beliefs and actions. Perhaps a good idea would be to personalize the ad, in comparison to the fear appeal, making the statements personal, using pronouns or other means (placing fault on the viewer). Further on, anger appeals, following the same model, could be presented by fortifying the obstructive aspect to one's goals of the events presented in the ad. For example, the ad should be built in a way that emphasizes the effects of environmental catastrophes on a goal that is general to the population, such as quality of life, high life expectancy, health, etc.

An explanation as to why negative emotions were chosen for this study, rather than positive ones, is the fact that negative valence events have a bigger impact on our life than do positive valence ones. Portraying this phenomenon, Baumeister et al. (2001), wrote an article that explains the effects of "bad" being "stronger than good". This is applicable in various areas of life. For example, reactions to events seem to be stronger in the case of negative events. Also, if we think about learning and conditioning, punishments tend to be the most rapid way to learn and, in decision making, people tend to choose to avoid aversive stimuli. Another relevant example, cited in the study mentioned above (Baumeister et al., 2001) is Gottman's (1994) study, finding that in close relationships, negative events have effects 5 times stronger than positive ones.

Returning to emotions, Baumeister's study showed that, we have more words for describing negative emotions, in comparison to positive ones, as well as more mechanisms of emotion-regulation for negative emotions. In addition, negative emotions seem to be more prominent in our minds. Perhaps the most relevant idea of the study is the fact that negative emotions are processed in more depth rather than positive ones and have stronger effects on the behaviour (Baumeister et al., 2001).

4. Conclusions

We can conclude on some guidelines that might prove themselves to be quite effective in creating awareness campaigns. The first important aspect to consider is to personalise the ad relative to the emotion that you are trying to induce. For the three emotions presented in this paper, it is important to remember that: fear is a reaction to triggers perceived as dangerous, guilt is a reaction to perceived inconsistencies between one's beliefs and actions, and anger is a reaction to a trigger that is received as goal-blocking. Another very important aspect, especially when working with negative emotions, is to keep the emotional appeal intensity at a certain threshold - as a very intense or not intense enough emotion can be harmful to the purpose of persuasion. On the other hand, it is necessary that the advertisement provides a clear plan of action, for the audience to have a way of channelling the emotion into action, or otherwise it can become overwhelming.

As a general conclusion, the ideas summarised in this paper show consistent evidence that negative emotions can be used as a powerful tool for persuading an audience, especially in awareness campaigns.

Authors note:

Sylvia Eirini Chalkiadaki is a psychologist who graduated from the Faculty of Psychology and Educational Sciences within the Babeş Bolyai University, Cluj-Napoca, has an MA in Human Resources Psychology and is currently involved in the field of HR. Her interests are in the area of Human Resources, Communication and Advertising. Her BA research was on the topic of how emotions influence decision making in advertising.

Sebastian Vaida is a PhD Lecturer in Psychology at the University of Babeş-Bolyai interested in the fields of social-emotional competences development, psychology of advertising, adaptive learning and IT&C applied to psychology.

References

Achar, C., So, J., Agrawal, N., & Duhachek, A. (2016). What we feel and why we buy: the influence of emotions on consumer decision-making. *Current Opinion in Psychology*, 10, 166-170.

Arnold, M.B. (1960), *Emotion and Personality. Vol.1: Psychological Aspects* (New York: Columbia University Press).

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of general psychology*, *5*(4), 323-370.

Berger, J., & Milkman, K. L. (2012). What makes online content viral?. *Journal of marketing research*, 49(2), 192-205.

Bless, H., Clore, G. L., Schwarz, N., Golisano, V., Rabe, C., & Wölk, M. (1996). Mood and the use of scripts: Does a happy mood really lead to mindlessness?. *Journal of personality and social psychology*, 71(4), 665.

- Boster, F. J. & Mongeau, P. (1984). Fear-arousing persuasive messages. In R. N. Bostrom (Ed.), Communication Yearbook 8, (pp. 330-375). Beverly Hills, CA: Sage.
- Cacioppo, J.T. & Berntson, G.G. (1994), 'Relationship between attitudes and evaluative space: A critical review, with emphasis on the separability of positive and negative substrates', *Psycho-logical Bulletin*, **115**, pp. 401–23.
- Cannon, W. B. (1987). The James-Lange theory of emotions: a critical examination and an alternative theory. *The American journal of psychology*, 100(3/4), 567-586.
- Colombetti, G. (2005). Appraising Valence. *Journal of Consciousness Studies*, 12(8-10), 103-26.
- Coulter, R. H., Cotte, J., & Moore, M. L. (1997). Guilt appeals in advertising: Are you feeling guilty. In *Winter Marketing Educators' Conference Proceedings* (pp. 109-115).
- Coulter, R. H., & Pinto, M. B. (1995). Guilt appeals in advertising: what are their effects?. *Journal of applied Psychology*, 80(6), 697.
- Damasio, A. R. (1994). Descartes' Error. Emotion, Reason and the Human Brain. New York (Grosset/Putnam) 1994.
- Damasio, A.C. (2003), *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain* (Orlando: Harcourt).
- Dillard, J. P. (1994). Rethinking the study of fear appeals: An emotional perspective. Communication Theory, 4, 295-323.
- Effects Of Climate Change. (n.d.). Retrieved December 05, 2020, from https://www.wwf.org.uk/learn/effects-of/climate-change
- Fennis, B. M., Adriaanse, M. A., Stroebe, W., & Pol, B. (2011). Bridging the intention—behavior gap: Inducing implementation intentions through persuasive appeals. *Journal of Consumer Psychology*, 21(3), 302-311.
- Fessler, D. M., Pillsworth, E. G., & Flamson, T. J. (2004). Angry men and disgusted women: An evolutionary approach to the influence of emotions on risk taking. *Organizational behavior and human decision processes*, 95(1), 107-123.
- Frijda, N. H. (1986). *The emotions*. Cambridge University Press.
- Frijda, N. H. (1988). The Laws of Emotion.
- Gifford, R. (2008). Psychology's essential role in alleviating the impacts of climate change. *Canadian Psychology/psychologie canadienne*, 49(4), 273.
- Goldstein, M. J. (1959). The relationship between coping and avoiding behavior and response to fear- arousing propaganda. *Journal of Abnormal and Social Psychology*, 58, 247-252.
- Health consequences of air pollution on populations. (2019, November 15). Retrieved December 03, 2020, from https://www.who.int/news/item/15-11-2019-what-are-health-consequences-of-air-pollution-on-populations
- Hewig, J., Hagemann, D., Seifert, J., Gollwitzer, M., Naumann, E., & Bartussek, D. (2005). A revised film set for the induction of basic emotions. *Cognition and emotion*, 19(7), 1095.

- Holbrook, M. B., & Batra, R. (1987). Assessing the role of emotions as mediators of consumer responses to advertising. *Journal of consumer research*, 14(3), 404-420.
- Holbrook, M. B., & O'Shaughnessy, J. (1984). The role of emotion in advertising. *Psychology & Marketing*, *1*(2), 45-64.
- Is it too late to prevent climate change? Climate Change: Vital Signs of the Planet. (n.d.). Retrieved December 05, 2020, from https://climate.nasa.gov/faq/16/is-it-too-late-to-prevent-climate-change/
- Izard, C. E., Libero, D. Z., Putnam, P., & Haynes, O. M. (1993). Stability of emotion experiences and their relations to traits of personality. *Journal of personality and social psychology*, 64(5), 847.
- Janis, I. L. (1967). Effects of fear arousal on attitude change: Recent developments in theory and experimental research. *Advances in Experimental Social Psychology*, 3, 167-225.
- Janis, I.L., & Feshbach, S. (1953). Effects of fear-arousing communications. *Journal of Abnormal and Social Psychology*, 48(1), 78-92.
- Kampa, M., & Castanas, E. (2008). Human health effects of air pollution. *Environmental pollution*, 151(2), 362-367
- Lang, P.J., Davis, M. and Öhman, A. (2000), 'Fear and anxiety: Animal models and human cognitive psychophysiology', *Journal of Affective Disorders*, **61**, pp. 137–59.
- Lazarus, R. S., & Lazarus, B. N. (1994). *Passion and reason: Making sense of our emotions*. Oxford University Press, USA.
- Lazarus, R. S. (1982). Thoughts on the relations between emotion and cognition. *American psychologist*, 37(9), 1019.
- LeDoux, J. (1998). *The emotional brain: The mysterious underpinnings of emotional life*. Simon and Schuster.
- Levine, L. J., & Pizarro, D. A. (2006). Emotional valence, discrete emotions, and memory. *Memory and emotion: Interdisciplinary perspectives*, 37-58.
- Meyer, C., & Waller, G. (1999). The impact of emotion upon eating behavior: The role of subliminal visual processing of threat cues. International Journal of Eating Disorders, 25(3), 319-326.
- Mizerski, R. W., & White, J. D. (1986). Understanding and using emotions in advertising. *Journal of Consumer Marketing*.
- Moore, D. J., & Hoenig, S. (1989). Negative emotions as mediators of attitudes in advertising appeals. *ACR North American Advances*.
- O'Brien, C. (2008). Sustainable happiness: How happiness studies can contribute to a more sustainable future. *Canadian Psychology/Psychologie canadienne*, 49(4), 289.
- O'Keefe, D. J. (2002). Guilt as a mechanism of persuasion. The persuasion handbook: Developments inc. theory and practice, 329-344.

- Owa, F. D. (2013). Water pollution: sources, effects, control and management. Mediterranean journal of social sciences, 4(8), 65.
- Padhy, S. K., Sarkar, S., Panigrahi, M., & Paul, S. (2015). Mental health effects of climate change. *Indian journal of occupational and environmental medicine*, 19(1), 3.
- Pinto, M. B., & Priest, S. (1991). Guilt appeals in advertising: An exploratory study. *Psychological Reports*, 69(2), 375-385.
- Plummer, J., & Holman, R. (1981). Communicating to the heart and/or mind. Los Angeles, CA: American Psychological Association.
- Poels, K., & Dewitte, S. (2019). The role of emotions in advertising: a call to action. *Journal of Advertising*, 48(1), 81-90
- Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change. *Journal of Psychology*, 91, 93-114.
- Schachter, S., & Singer, J. (1962). Cognitive, social, and physiological determinants of emotional state. *Psychological review*, 69(5), 379.
- Schneirla, T.C. (1959), 'An evolutionary and developmental theory of bi-phasic processes underlying approach and withdrawal', in *Nebraska Symposium on Motivation*, ed. M.R. Jones (Lin-coln: University of Nebraska Press).
- Skurka, C., Niederdeppe, J., Romero-Canyas, R., & Acup, D. (2018). Pathways of influence in emotional appeals:

- Benefits and tradeoffs of using fear or humor to promote climate change-related intentions and risk perceptions. *Journal of Communication*, 68(1), 169-193.
- Stewart, D. W., Morris, J., & Grover, A. (2007). Emotions in advertising. *The Sage handbook of advertising*, 120-134.
- Tangney, J.P., Miller, R.S, Flicker, L. & Barlow, D.H., (1996). Are shame, guilt and embarrassment distinct emotions? *Journal of Personality and Social Psychology*, 70, 1256-1269.
- Turner, M. M. (2007). Using emotion in risk communication: The anger activism model. *Public Relations Review*, 33(2), 114-119.
- Veitch, J. A. (2008). Investigating and influencing how buildings affect health: Interdisciplinary endeavours. *Canadian Psychology/Psychologie canadienne*, 49(4), 281.
- Witte, K., & Allen, M. (2000). A meta-analysis of fear appeals: Implications for effective public health campaigns. Health Education and Behaviour, 27(5), 608-632.
- World Health Organization (WHO), 2018. Inheriting a Sustainable World? Atlas on Children's Health and the Environment. WHO, Geneva Available at:. http://www.who.int/ceh/publications/inheriting-a-sustainable-world/en/, Accessed date: 28 January 2021
- Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American psychologist*, 35(2), 151.