

The effectiveness of threat appeals in commercial advertising. The moderating impact of product type.

ABSTRACT

In this experimental study the effectiveness of threat appeals in commercial advertisements on attitude toward the ad and purchase intention was tested. In addition hedonic and utilitarian products were compared to test the moderating impact of product type on threat appeal effectiveness. The results of the experiment showed that the ad with the threat appeal caused a significantly higher attitude toward the ad and purchase intention than an identical ad, but without the threat appeal. These effects were mediated by attention toward the ad and moderated by product type. A threat appeal is more effective than no threat appeal because it increases attention toward the ad. The positive effect of a threat appeal was stronger for the utilitarian product than for the hedonic product.

INTRODUCTION

In recent years, the advertising clutter forced advertisers to search for effective strategies to break through this clutter and attract consumers' attention. Research suggests that emotional appeals are often more effective in getting the attention of consumers than purely rational, factual ads (Geuens, De Pelsmacker & Fasseur, 2011). In particular, marketers frequently use positive emotions in their ads to attract the attention of consumers and to effectively persuade them to buy the advertised product or brand. However, even more than positive emotions, negative emotions could attract a person's attention and increase the message's elaboration (Forgas, 2007; Nabi, 1999). This tactic is often used in social marketing in which negative consequences of a certain behavior, such as smoking, are emphasized to encourage behavioral change (e.g. stop smoking) (Witte, 1992). This attempt to raise fear about a certain threat (e.g. black lungs) that is linked to a specific behavior (e.g. smoking) is called a threat appeal (Ruiter, Verplanken, Cremer, & Kok, 2004, p. 13). Many studies showed that threat appeals can be effective in a social marketing context (e.g. Brennan & Binney, 2010). The negative feelings increase the attention toward the message, which in turn causes a higher elaboration of the message and therefore the likelihood of behavioral change increase (De Pelsmacker & Janssens, 2010). Little is however known about the effectiveness of threat appeals in commercial marketing. Hence, in this study we focus on threat appeals in commercial advertisements. Because past research indicates that people are more likely to accept messages with product-congruent emotions than messages with product-incongruent emotions (Geuens, De Pelsmacker & Fasseur, 2011) we also investigate the moderating impact of product type on the threat appeal effectiveness. It could be that a message which presents a product that normally has just a pleasure purpose as a solution to take away the threat would be less likely accepted than a message that presents a product with an instrumental purpose as a solution to take away the threat.

THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

The effectiveness of a threat appeal and the mediating impact of attention toward the ad

In commercial marketing the effectiveness of an advertisement is influenced by how consumers elaborate upon the message, which can depend on many different features (De Pelsmacker, Geuens, & Van den Bergh, 2010). Following the Elaboration Likelihood Model of Cacioppo and Petty (2001), attitudes can be influenced by two routes of elaboration: the peripheral route and the central route. This model states that when motivation and ability to elaborate on an ad message is high, consumers will process the ad centrally and they will more likely to be influenced by rational thoughts about the information in the ad. However, when motivation and/or ability are low, consumers will be more likely to follow the peripheral route and they will be persuaded by peripheral cues, such as music, or colors. Emotional appeals not only function as peripheral cues, but also, following the cognitive functional model of Nabi (1999), affect the level of elaboration, as this may depend on the intensity of the emotion evoked by the message. Negative emotions may evoke more attention to the message than no emotions when the motivation to approach the message is high, for example when people want to restore the previous situation or to erase the negative emotion (see also Bagozzi, Gopinath, & Nyer, 1999). This attention to the message stimulates the elaboration of the message which could give a solution to take away the negative emotion.

Many models on the elaboration of a threat appeal in social marketing have been developed. The drive-reduction model of Hofland, Janis and Kelly (1953, in de Hoog et al., 2007) states that the aroused fear by a threat appeal would be a drive to take away the threat that caused the fear. If there is an efficient solution (e.g. change in behavior) given, consumers would thus be motivated to apply the solution. The threat appeal must thus cause enough fear to arise this drive to take away the threat. Too much fear, however, would lead to disbelief that the solution would take away the threat and therefore reduce the drive to change behavior. Witte and Allen (2000) in the contrary state in their meta-analysis that the higher the threatening degree the more effective the threat appeal will be.

While the drive-reduction model is a rather emotional model, the parallel response model of Leventhal (1971) and the protection motivation Theory of Rogers (1975) apply a more cognitive approach. In those models the threat will be cognitively evaluated. Depending on certain characteristics such as severity of the threat, perceived susceptibility, perceived response-efficacy¹ and perceived self-efficacy², the threat appeal would lead to increased motivation to protect themselves against the threat. A more recent and the most complete model on the elaboration of a threat appeal in social marketing is the Extended Parallel Process Model (EPPM) of Witte (1992). This model states that there are two phases in the process of elaborating a threat appeal: the threat appraisal and the efficacy appraisal. The first phase takes place when the perceived severity and the perceived susceptibility are high enough. In this phase the threat is observed which will lead to fear. In the second phase the efficacy to take away the threat is evaluated according to the perceived self-efficacy and the perceived response-efficacy. Cauberghe, De Pelsmacker, Janssens and Dens (2009) concluded out of their study that the perceived self-efficacy and the perceived response efficacy strongly correlate and can thus be seen as one variable: efficacy. In the same way perceived severity and perceived susceptibility can be taken together into one variable: the threatening degree. So if the threatening degree is high enough the threat appeal will cause attention and the

¹ Perceived response-efficacy= the degree to which a person believes the recommended behavior can effectively take the threat away.

² Perceived self-efficacy =the degree to which a person believes he or she is able to exhibit the desired behavior.

message will be elaborated. In this way the solution presented in the message will be observed. The higher the perceived efficacy of the observed solution, the higher the intention to change their behavior will be.

For commercial advertisements, we expect as in social marketing that a threat appeal can cause fear and therefore a drive to take away the threat. As a consequence the elaboration of the message will increase. The message in commercial advertisements also brings a solution to take away the threat. Whereas in social marketing the solution is to avoid, change or stop a certain behavior (e.g. smoking), in commercial marketing it is buying and using a product or a service. Because of the higher elaboration of the message caused by the negative emotion (fear), the solution to take away the threat presented in the message will be observed. Applying the solution is in this case easier than in social marketing since there are less psychological investments to be made. The consumer can effectively take the threat away by simply buying the product or service. Since the individual wants the negative emotion to go away and the advertisement presents a product or service that can effectively take away the threat, this could cause a positive attitude towards the ad. Wheatley (1971) already investigated the difference in attitude towards the ad between a commercial ad with a threat appeal and a commercial ad without a threat appeal. The results of the study showed indeed a more positive attitude towards the advertisement with the threat appeal than without the threat appeal. Maddux and Rogers (1983) also argued that the higher protection-motivation would cause a more positive attitude towards the ad.

Because the fear arises a drive to reduce the threat, we also expect that the observing of the product or service as an effective solution to reduce the threat would lead to a higher purchase intention of that product or service. Following Maddux and Rogers (1983) the higher protection-motivation would not only cause a more positive attitude towards the ad but also a higher intention to apply the recommendations that should take away the threat. Vincent and Dubinsky (2005) already found in their study that a commercial advertisement with a threat appeal had a more positive impact on purchase intention compared to a commercial advertisement without a threat appeal. Following Mitchell and Olson (1981) the increase of the attitude towards the ad, as proposed by hypothesis 1, would also lead to an increase in attitude towards the brand. This would then imply a positive change in purchase intention (De Pelsmacker & Janssens, 2010). Attitudes that are formed by the central route are also more stable and more effective in changing behavior than attitudes that are evoked by the peripheral route (Nabi, 1999). We thus expect a more positive impact of a threat appeal on purchase intention than no threat appeal.

Hypothesis 1: *A commercial ad with a threat appeal will lead to a more positive attitude towards the ad and a higher purchase intention than a commercial ad without a threat appeal.*

Because the elaboration of the message is necessary in order to observe the product/service as a solution for the threat, we expect that the effect of a threat appeal on attitude towards the ad is mediated by the attention devoted to the ad. Without elaboration of the message the product/service would not be observed as an effective solution to take away the threat and therefore the attitude toward the ad and the intention to buy the product/service would be lower.

Hypothesis 2: *The effect of a threat appeal on attitude toward the ad and on purchase intention is mediated by attention.*

The moderating impact of product type

Rossiter, Percy and Donovan (1991) stated that emotions in advertisement are more effective for hedonic products than for utilitarian products. Hedonic products are used for pleasure, while utilitarian products have a functional or instrumental purpose (Spangenberg, Voss, & Crowley, 1997). Geuens, De Pelsmacker and Fasseur (2011) did however find a positive impact of emotions on attitude towards the ad and towards the brand, for both hedonic and utilitarian products. It seemed though that people are more likely to accept messages with product-congruent emotions than messages with product-incongruent emotions. Emotions are product-congruent when they are relevant to the product that is advertised (Lim & Ang, 2008). Because a threat appeal causes a negative emotion (fear) we could expect that this emotion is not congruent to hedonic products that are normally solely used for pleasure. Also, many researchers (e.g. Adaval, 2001) previously stated that to effectively influence consumers to buy a hedonic product, hedonic messages should be used. In order to influence people to buy a utilitarian product, utilitarian messages would be most effective. For utilitarian products, messages that emphasize the functional or instrumental purpose (e.g. solving a problem) should thus be used. For hedonic products, the messages should emphasize the fact that the product causes pleasure rather than a functional or instrumental purpose. A commercial message with a threat appeal presents the product as a solution to take away a problem or threat and therefore it can be seen as a utilitarian message. A message which presents a hedonic product, that normally has a solely pleasure purpose, as a solution to take away a threat would thus be less likely to be accepted than a message that presents a utilitarian product, with an instrumental or functional purpose, as a solution to take away a threat. Because of this we expect that the use of threat appeals is more effective for utilitarian products than for hedonic products.

***Hypothesis 3:** The effectiveness of a threat appeal on attitude towards the ad and on purchase intention will be higher for utilitarian products than for hedonic products.*

METHOD

Design and procedure

An experiment with a 2 (Threat appeal: no threat vs. threat) by 2 (Product Type: hedonistic vs. utilitarian) between-subjects design was set up. Participants were randomly assigned to one of the four conditions. Each respondent had to watch an advertisement, manipulated according to the assigned condition. After this they had to fill in a questionnaire in which we measured the dependent variables, attitude towards the ad and purchase intention, the mediator attention toward the ad, a manipulation check to measure the perceived threat and product type and some socio-demographic variables: age, gender and profession. 309 respondents were selected via e-mail and social network sites (43% men). Ages ranged from 18 to 75 years old ($M=36$, $SD=13$). Most of the participants were attendant (50%) or student (26%).

Stimuli

The stimuli were advertisements of a fictitious brand 'NOVA'. Four different versions of the ad were made according to the manipulation condition. To manipulate product type, one hedonic and one utilitarian product were chosen. The hedonic product was a vacation agency and the utilitarian product was a security system. The threat appeal was manipulated by adding a scary picture of a human to the ads of the threat conditions, while in the non-threat condition the ads consisted of the brand name and slogan on a colored background.

Measures

For the pretest and the manipulation check of the threat appeal the scale of Witte (n.d.) was used. This scale consisted of 5 items measured on a 7-point Likert-scale (e.g. “*This advertisement scares me*”; $\alpha=.98$). To measure the hedonic versus utilitarian characteristics of the product the scales of Spangenberg et al. (1997) were used. The hedonic aspect consisted of 5 bipolar items (e.g. *not amusing/amusing*; $\alpha=.96$). 5 other bipolar items measured the utilitarian aspect (e.g. *not useful/useful*; $\alpha=.90$). These 10 items were mixed and were each measured on 7-points.

The dependent variable attitude towards the ad was measured with the scale of Holbrook and Batra (1987). This scale consisted of 4 bipolar items measured on 7 points (e.g. *I don't like the advertisement/ I like the advertisement*; $\alpha=.93$). Purchase intention was measured with the 3-item scale from Putrevu and Lord (1994), extended to 4 items (e.g. “*I will definitely try a vacation/the security system from the ad*”; $\alpha=.94$). The mediating variable attention was measured with a 3 items based on the scale of Bruner and Kumar (2000) (e.g. “*I concentrated on the advertisement*”; $\alpha=.87$). The items of both scales, purchase intention and attention, were measured on a 7-point Likert-scale.

RESULTS

Manipulation check

A manipulation check showed that the ads with a threat appeal were indeed more threatening ($M=4.82$, $SD=2.09$) than the ads without a threat appeal ($M=2.21$, $SD=1.64$; $t(299.8)=12.26$, $p<.001$). The vacation agency was indeed evaluated more hedonic ($M=6.24$, $SD=.82$) than the security system ($M=3.19$, $SD=1.23$; $t(258.26)=-25.41$, $p<.001$), while the security system was evaluated more utilitarian ($M=5.22$, $SD=1.03$) than the vacation agency ($M=4.41$, $SD=1.45$; $t(285.51)=5.68$, $p<.001$). Our manipulations were thus confirmed.

Threat appeal effectiveness

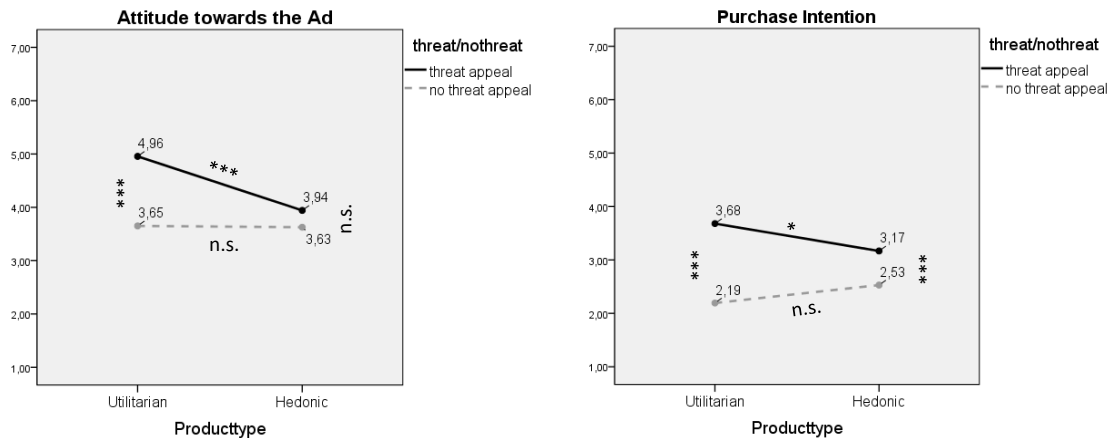
To test the first hypothesis we used a two-way Anova in which the attitude towards the ad was compared between the ads with a threat appeal and the ads without a threat appeal, taking into account the manipulation of product type (cfr. infra). The results of this test showed that the ads with a threat appeal caused, as expected, a significantly higher attitude towards the ad ($M=4.44$, $SD=1.30$) than the ads without a threat appeal ($M=3.64$, $SD=1.07$; $F(1, 305)=38.78$, $p<.001$). We used the same method to measure the effectiveness of a threat appeal on purchase intention. The results showed that the ad with the threat appeal caused indeed a significantly higher purchase intention ($M=3.42$, $SD=1.46$) than without the threat appeal ($M=2.37$, $SD=1.31$; $F(1, 305)=45.95$, $p<.001$). Our first hypothesis is thus confirmed.

The mediating impact of attention

In hypotheses 2 we expected that the effects explained by hypotheses 1, would be mediated by attention. A mediation analysis, using the model 4 of Hayes (2013, 5000 bootstrap resamples), showed that the effect of a threat appeal on attitude towards the ad was indeed mediated by attention ($c' = -.48$, $SE = .08$, 95% CI= $[-.6710, -.3325]$). The same was found for purchase intention ($c' = -.55$, $SE = .10$, 95% CI= $[-.7752, -.3650]$). An independent samples t-test showed that the ads with a threat appeal got more attention ($M=5.63$, $SD=1.06$) than the ads without the threat appeal ($M=4.36$, $SD=1.26$; $t(288.6)=9.47$, $p<.001$). We can conclude that our hypothesis 2 is also confirmed.

The moderating impact of product type

Using a two-way Anova, we tested the moderating impact of product type. The results showed a significant interaction effect with threat appeal on attitude towards the ad ($F(1,305)=14.45$, $p<.001$) and on purchase intention ($F(1,305)=7.32$, $p=.007$). More specifically, for both attitude towards the ad and purchase intention, the threat appeal was more effective for the utilitarian products ($M_{Ad}=4.96$, $SD_{Ad}=.99$; $M_{PI}=3.68$, $SD_{PI}=1.31$) than for the hedonic products ($M_{Ad}=3.94$, $SD_{Ad}=1.37$; $M_{PI}=3.17$, $SD_{PI}=1.55$) ($t_{Ad}(147.9)=5.38$, $p<.001$; $t_{PI}(156.47)=2.27$, $p=.025$), while there was no significant difference for the non-threat appeal. This confirmed hypothesis 3.



In addition we tested, using the model 8 of Hayes (2013, 5000 bootstrap resamples), if this moderating impact of product type on threat appeal effectiveness was mediated by attention. The results did not show a significant mediated moderation for both attitude towards the ad ($c' = .15$, $SE = .10$, 95% $CI = [-.0414, .3730]$) and purchase intention ($c' = .17$, $SE = .12$, 95% $CI = [-.0509, .4262]$).

CONCLUSION AND DISCUSSION

This paper investigated threat appeal effectiveness, the mediating impact of attention devoted to the ad and the moderated impact of product type. The results of an experimental study revealed that threat appeals have a positive impact on attitude towards the ad and on purchase intention. These effects were mediated by attention: the threat appeal attracted more attention which caused a more positive attitude towards the ad and a higher purchase intention. This indicates that an ad with a threat appeal is more effective than an ad without a threat appeal because the threat appeal increases likely a higher level of elaboration of the message. We also tested the moderating impact of product type. As expected threat appeals were more effective in changing a positive attitude towards the ad and purchase intention for utilitarian products than for hedonic products. This could be explained by the fact that threats are incongruent to the pleasure purpose of hedonic products. We can thus conclude that threat appeals can be effective for commercial messages but that it depends on the type of the product that is advertised.

The current paper has some limitations that provide guidance for future research. First, in this study an ad with a threat appeal was compared to an ad without a threat appeal. The

purely presentation of the threat appeal, which was a scary picture, could be more interesting than the colored background in the no-threat appeal condition, showing no picture. Leong, Ang and Tham (1996) also stated that an advertisement with the combination of text and an image is more effective than an advertisement with only text. Therefore future research should compare a threat appeal with an advertisement that includes a picture that causes a neutral and/or positive emotion. Secondly, for the manipulation of the product type the selected utilitarian product was a security system, while the hedonic product was a vacation agency. Since the security system clearly has a closer link with fear than a vacation agency the difference between the two products is very large. Future research should investigate the difference between a hedonic and a utilitarian product that are more alike. Thirdly, as explained in the models for elaboration of a threat appeal in social marketing the effectiveness of a threat appeal can depend on the perceived threatening degree and the perceived efficacy of the presented solution (cfr. supra). The interaction effect of threat appeal and product type could thus be further investigated according to different threatening degrees and different degrees of perceived efficacy of the product or service as a solution for the threat. Fourthly, in commercial marketing consumers often have a certain amount of persuasion knowledge³ which could also have an impact on the effectiveness of a threat appeal. This could thus also be interesting to investigate. A last recommendation is to investigate the effectiveness of other negative emotions such as guilt appeals and shame appeals.

REFERENCES

- Adaval, R. (2001). Sometimes it just feels right: the differential weighting of affect-consistent and affect-inconsistent product information. *Journal of consumer Research*, 25(1), 1-17.
- Bagozzi, R. P., Gopinath, M., & Nyer, P. U. (1999). The Role of Emotions in Marketing. *Journal of the Academy of Marketing Science*, 27(2), 184–206. doi:10.1177/0092070399272005
- Brennan, L., & Binney, W. (2010). Fear, guilt, and shame appeals in social marketing. *Journal of Business Research*, 63(2), 140–146. doi:10.1016/j.jbusres.2009.02.006
- Bruner, G. C., & Kumar, A. (2000). Web commercials and advertising hierarchy of effects. *Journal of Advertising Research*, 40(1), 35–44.
- Cacioppo, J. T., & Petty, R. E. (2001). The elaboration likelihood model of persuasion, 673–676.
- Cauberghe, V., De Pelsmacker, P., Janssens, W., & Dens, N. (2009). Fear, threat and efficacy in threat appeals: message involvement as a key mediator to message acceptance. *Accident; Analysis and Prevention*, 41(2), 276–85. doi:10.1016/j.aap.2008.11.006
- De Hoog, N., Stroebe, W., & de Wit, J. B. F. (2007). The impact of vulnerability to and severity of a health risk on processing and acceptance of fear-arousing communications: A meta-analysis. *Review of General Psychology*, 11(3), 258–285. doi:10.1037/1089-2680.11.3.258

³ Persuasion knowledge is the knowledge that people have about the fact that advertisers are attempting to persuade them.

- De Pelsmacker, P., Geuens, M., & Van den Bergh, J. (2010). *Marketing communications: a european perspective (4th ed.)* (4th ed.). Amsterdam: Pearson Education.
- De Pelsmacker, P., & Janssens, W. (2010). Wie is bang van fear appeals?: angstprikkelers in sociale marketing. In *Stichting Wetenschappelijk Onderzoek Commerciële communicatie*. SWOCC.
- Forgas, J. P. (2007). When sad is better than happy: Negative affect can improve the quality and effectiveness of persuasive messages and social influence strategies. *Journal of Experimental Social Psychology*, 43(4), 513–528. Retrieved from <http://linkinghub.elsevier.com/retrieve/pii/S0022103106000850>
- Geuens, M., De Pelsmacker, P., & Fasseur, T. (2010). *Emotional advertising : Revisiting the Role of Product Category*.
- Holbrook, M. B., & Batra, R. (1987). Assessing Mediators to of the Role of Emotions Responses as Consumer Advertising. *Journal of Consumer Research*, 14(3), 404–420.
- Leong, S. M., Ang, S. H., & Tham, L. L. (1996). Increasing Brand Name Recall in Print Advertising among Asian Consumers. *Journal of Advertising*, 25(2), 65–81. doi:10.1080/00913367.1996.10673500
- Leventhal, H. (1971). Fear appeals and persuasion: the differentiation of a motivational construct. *American Journal of Public Health*, 61(6), 1208–1224.
- Lim, E. A. C., & Ang, S. H. (2008). Hedonic vs. utilitarian consumption: A cross-cultural perspective based on cultural conditioning. *Journal of Business Research*, 61(3), 225–232. doi:10.1016/j.jbusres.2007.06.004
- Maddux, J. E., & Rogers, R. W. (1983). Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change. *Journal of Experimental Social Psychology*, 19(5), 469–479. doi:10.1016/0022-1031(83)90023-9
- Mitchell, A. A., & Olson, J. c. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitude. *Journal of Marketing Research*, 18(August), 318–332.
- Nabi, R. L. (1999). A Cognitive-Functional Model for the effects of discrete negative emotions on information processing, attitude change, and recall. *Communication Theory*, 9(3), 292–320. Retrieved from <http://doi.wiley.com/10.1111/j.1468-2885.1999.tb00172.x>
- Putrevu, S., & Lord, K. R. (1994). Comparative and noncomparative advertising : Attitudinal effects under cognitive and affective involvement conditions. *Journal of Advertising*, 23(2), 77–91.
- Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change. *The Journal of Psychology*, 91, 93–114.

- Rossiter, J. R., Percy, L., & Donovan, R. J. (1991). A better advertising planning grid. *Journal of Advertising Research*, 31(5), 11–21.
- Ruiter, R. A. C., Verplanken, B., Cremer, D. De, & Kok, G. (2004). Danger and fear control in response to fear appeals : the role of need for cognition. *Basic and Applied Social Psychology*, 26(1), 13–24.
- Spangenberg, E. R., Voss, K. E., & Crowley, A. E. (1997). Measuring the Hedonic and Utilitarian Dimensions of Attitude : A Generally Applicable Scale, 24, 235–242.
- Vincent, A., & Dubinsky, A. j. (2005). Impact of fear appeal in a cross-cultural context., 15(1), 17–32.
- Wheatley, J. (1971). Marketing and the Use of Fear- or Anxiety-arousing Appeals. *Journal of Marketing*, 35(2), 62–64.
- Witte, K. (n.d.). Examples of items. Geraadpleegd op 12 januari 2014 op het World Wide Wibe: <https://www.msu.edu/~wittek/scale.htm>
- Witte, K. (1992). Puttin the fear back into fear appeals: the extended parallel process model. *Communication Monographs*, 59(4), 329–349.
- Witte, K., & Allen, M. (2000). A Meta-Analysis of Fear Appeals : Implications for Effective Public Health Campaigns, 27(October), 591–615.