

Beware of the Wrinkles:

The Impact of Fear-Based Skincare Advertising on Brand Perception Among Gen Z Consumers

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ABSTRACT

Negative emotional appeals are used by the cosmetics industry as a way to promote products while perpetuating unattainable beauty standards. Fear-based advertising is used by brands to highlight the consequences of inaction, potentially villainizing natural aging and painting it as undesirable. With such appeals brands aim to evoke anxiety and prompt consumers to adopt preventative skincare routines. While fear can incite attention and even increase purchase intent, this study aims to explore its potential to damage brand perceptions, especially in the eyes of younger consumers. Drawing on the Brands as Intentional Agents Framework (Kervyn et al., 2012), the study examines how emotional appeals influence perceived brand warmth and competence, as well as whether self-esteem, gender, and consumer involvement moderate these effects. The main research question is as follows: “To what extent do fear-based appeals in cosmetics advertising impact the brand perception of Gen Z consumers in the Netherlands?”

The research employs a quasi-experimental design with a between-subjects manipulation of fear appeal intensity in three levels – low, medium, and high. An online survey distributed among Gen Z participants in the Netherlands collected a final sample of 163 people, who were randomly assigned to view one of the three advertisements about a fictional skincare brand. Brand perception, self-esteem, and consumer involvement were measured using validated scales, and manipulation checks assessed perceived fear intensity. ANOVA results showed unsuccessful manipulation of fear conditions. Nonetheless, regression analyses showed partial support for H1, which stated that high fear appeals negatively affect brand perceptions. However, no significant moderating effects were found for gender, self-esteem, or consumer involvement. Interestingly, self-esteem was positively associated with perceived brand intention ability, suggesting that individuals with higher self-worth may evaluate brands more favorably regardless of emotional manipulation.

These findings highlight the delicate role of fear in skincare marketing. Overall, the research suggests that fear-based tactics seem to not be particularly effective in the context of young consumers who value honesty and authenticity. The study contributes to existing literature by expanding the understanding of emotional appeals within beauty and cosmetics marketing. It offers practical insights for brands seeking to engage Gen Z audiences ethically and effectively.

KEYWORDS: *Cosmetics, Brand perception, Fear appeals, Self-esteem, Skincare Advertising, Emotional appeals*

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1. Introduction

The cosmetics industry constantly pushes the narrative that youth is beauty. As women age, they start being perceived as projects in need of intervention. Botox, face lifts, fillers, retinol, laser treatments, and really anything and everything that can be done needs to be done. Skincare is then marketed as an easier preventative solution. Cosmetic advertising pushes the idea that all these products will save customers from the inevitable torture that is aging and will help them keep their youthful glow for as long as humanly possible. Consumers, particularly women, are conditioned to believe that aging should be prevented by all means necessary in order to maintain physical attractiveness (Clarke & Griffin, 2007, p.198).

Harnessing these societal beliefs, fear-based appeals in skincare advertising emphasize negative outcomes of inaction, aiming to evoke urgency and drive purchases. While such appeals have long been used, their effectiveness varies based on emotional triggers, cultural values, and audience traits. Skincare is a high-involvement purchase as it requires research and consideration (Chu, 2020, p.1). Despite the idea that high-involvement purchase advertising is more effective when employing rational appeals, emotional appeals are still highly present in the cosmetics industry, as emotions play a crucial role in shaping consumer responses to advertisements (Ganjoo, 2020, p.2; Majeed and Lu, 2016, p.1). Notably, cosmetic fear-based messaging often portrays negative stereotypes about aging, which not only influence consumer behavior but also contribute to lower self-esteem, reinforcing the emotional impact of fear-based advertising in the beauty industry (Evangelista et al., 2022, p.11).

Fear, as a negative emotional appeal, is only effective when paired with actionable solutions that promote a sense of efficacy. Without this balance, excessive fear or lack of clear solutions often leads to defensive reactions and message avoidance, therefore it is essential to support fear with actionable outcomes (Ganjoo, 2020, p.3). Furthermore, while fear-based messages may create urgency, appeals that evoke hope and positive emotions often build stronger consumer trust and foster more successful long-term relationships between brands and consumers (Harisma et al., 2022). Since trust, as related to the perceived intentions of a brand, is linked to consumer brand perception, increased usage of threatening messages and negative emotional appeals may damage said perceptions (Kervyn et al., 2012, p.173).

Research also suggests that self-esteem plays an pivotal role in how consumers view and respond to fear-based advertising. Individuals with lower self-esteem are more vulnerable and more likely to react negatively to threatening messaging focused on appearance or aging (Evangelista et al., 2022, p.10). They are therefore more susceptible to fear appeals that highlight the undesirable consequences of neglecting skincare. Conversely, individuals with higher self-esteem may evaluate such messages more critically and be less affected by them. This, the interaction between fear appeals and self-esteem can have a significant influence on the way consumers perceive the intentions and trustworthiness of a brand (Kervyn et al., 2012, p.167).

This study focuses on Gen Z consumers which reside in the Netherlands. It is worth noting that this research does not specifically address Dutch consumers, but simply ones that are within the Dutch market. Gen Z, residing between the ages of 18 and 28, is characterized by high media literacy and a preference for transparency and authenticity in advertising. They also grew up with social media, consistently exposed to beauty standards via filters and influencer culture. This consumer group is extremely sensitive about appearance, mental health, and advertising tactics. Examining their responses to fear-based skincare ads provides socially relevant contribution, especially in understanding how young consumers engage with marketing that addresses insecurity and aging anxiety.

Overall, this study examines how fear-based cosmetics ads influence Gen Z consumers in the Netherlands.

RQ: To what extent do fear-based appeals in cosmetics advertising impact the brand perception of Gen Z consumers in the Netherlands?

Societal Relevance

Through addressing how Gen Z consumers in the Netherlands perceive and respond to fear-based appeals in cosmetics advertising, the study aims to offer clarity and practical insights for marketers in the skincare and cosmetics industry. As beauty standards affect the psychological well-being of many, especially young women, understanding and navigating the consequences of emotionally charged advertising is highly socially relevant. If the use of fear appeals reinforces insecurities or affects consumer trust, by using them brands may risk alienating their audiences. Additionally, the current generation of young adults has shown a demand for authenticity and a preference for direct non-manipulative marketing tactics, which brings upon a need of re-evaluation of the use of fear-based appeals for skincare. By understanding the connection between these appeals and consumer self-esteem and brand perception, this paper could help marketers in designing effective campaigns and potentially reconsidering the use of emotionally manipulative advertising. This research can therefore highlight the importance of ethical, positively framed skincare marketing.

Academic Relevance

Furthermore, while negative emotional appeals in advertising are present in research, most research has focused on older generations, such as Millennials or Gen X (Tannenbaum et al., 2015; Ganjoo, 2020). There is therefore a gap in targeting Gen Z consumers, leaving them thus far underrepresented in studies focused on fear appeals in advertising. Similarly, while self-esteem is often discussed and examined, few studies have related it to consumer responses in emotional advertising, much less in relation to skincare and cosmetics marketing. This research would therefore contribute to the growing body of knowledge on emotional appeals in advertising by focusing on a specific demographic, as well as narrowing down the industry.

2. Theoretical Framework

2.1 Brand perception

Brand perception refers to the way consumers view, understand, and feel about a brand based on their experiences and interactions. According to Romaniuk and Sharp (2003), brand perception is affected by consumer experience, marketing communications, and word of mouth (p.219). Tangible information, such as product descriptions, benefits, and consumer evaluations, significantly affects brand perceptions. The quantity and quality of brand associations hold importance, suggesting the exposure to a higher number of positive image attributes that a consumer associates with a brand leads to an increased consumer loyalty, and is related to a positive brand perception (Romaniuk & Sharp, 2003, p.226). Alternatively, Kervyn et al. (2012), suggest that consumer views are not only based on the tangible attributes and benefits of products, but also on deeper relational and emotional aspects (p.166). In other words, while a brand's perceived ability and competence affects consumer perceptions, its perceived intentions or warmth also hold significant impact. Their proposed framework, the Brands as Intentional Agents Framework (BIAF), therefore places a greater emphasis on the emotional evaluations of a brand and the way they shape consumer judgements. That is why for the current study, which focuses on emotional appeals in advertising and their impact on brand perceptions, the BIAF is a more suitable lens for analysis, and its foundational aspects, competence and warmth, will be explored in greater detail.

Competence in this case refers to a brand's ability to implement its intentions (Kervyn et al., 2012, p.167). It can be established through utilization or word of mouth, but marketers can sway consumer opinions on brand competence prior to product usage through the help of opinion leaders (Afzal et al., 2010, p.46). Similarly, brand ability refers to the potential of a brand to satisfy the needs of a consumer. Both of these qualities can only be established with complete certainty by a consumer through usage or word of mouth (Afzal et al., 2010, p.46). Consumers may view a brand as competent if it consistently displays high performance, good quality, and reliable service (Kervyn et al., 2012, p.171).

Warmth refers to the perceived intentions of the brand. Positive and cooperative intentions are perceived as warm, and relate to helpfulness, friendliness and trustworthiness. Conversely, negative and exploitative intentions are seen as cold (Kervyn et al., 2012, p.167). A warm brand is one that acts in the best interests of its consumers, fostering emotional closeness. Interestingly, warmth is typically evaluated before competence, as people are psychologically predisposed to first assess intent before ability. Furthermore, warmth holds more weight than competence when forming a consumer impression (Kervyn et al., 2021, p.53). In the context of marketing and advertising this implies that a brand perceived as well-intentioned despite lacking competence may still be more positively evaluated than a competent brand perceived as exploitative or cold.

The various combinations of perceived warmth and competence are seen to elicit certain emotions among consumers (Kervyn et al., 2012, p.171). Brands shown to have high warmth and

competence elicit admiration. Those that are warm, but incompetent elicit pity. Cold, yet competent brands are connected to feelings of envy, and cold and incompetent to contempt. Overall, each combination has certain emotional consequences, as displayed in the Brands as Intentional Agents Framework. Understanding how warmth and competence shape brand perception is particularly important in contexts where emotional appeals are used to influence consumer perceptions.

2.2 Fear-based advertising as a negative emotional appeal

Advertising appeals, defined as the theme of an advertisement, typically affect consumer decision-making and purchase intentions as advertisements that incite positive emotions are easier to remember (Ganjoo, 2020, p.3). These appeals are split into two categories: rational and emotional. Rational appeals focus on providing detailed product information, focusing on advantages and benefits, presented with logical argumentation (Zhang et al., 2014, p.2106). For example, advertisements that highlight efficacy scientifically, using statements such as “clinically proven to reduce wrinkles in 5 weeks”, are typical of this approach. Such appeals are generally considered more effective for high-involvement purchases, where consumers are more motivated to consider detailed information (Ganjoo, 2020, p.3).

In contrast, emotional appeals aim to evoke positive feelings, such as love, joy, and pride, or negative feelings, such as fear and guilt, within consumers (Zhang et al., 2014, p.2107). This approach is typically more suitable for low-involvement categories, where rational evaluation is less needed (Ganjoo, 2020, p.3). For instance, beauty and skincare brands often use positive emotional appeals by showcasing confidence, glow, or admiration associated with using their products. Emotional responses can create affective associations with a brand, influencing brand liking, trust, and perceived personality traits. While advertisements triggering positive emotions are more memorable and more likely to positively influence purchasing behavior, research suggests that conveying negative emotions such as fear, guilt, sadness, and anger, can also bring positive results (Zheng, 2020, p.1). The effectiveness of the type of emotions is heavily dependent on the context, and in terms of brand perception, positive emotions are more likely to enhance perceived warmth and trust, while negative emotional appeals, if not carefully executed, can risk showcasing the brand as cold, therefore harming consumer perceptions (Shin et al., 2017, p.13).

Fear appeals, a type of emotional appeal that focus on inciting fear in an audience by highlighting potential negative impacts of ignoring a message or not buying a product (Tannenbaum et al., 2015, p.2). In skincare advertising, this often involves focusing on aging, sun damage, or skin imperfections as undesirable outcomes which can be mitigated through use of the advertised product. Despite being seen as a polarizing topic, they have been shown to yield an overall positive effect on consumer attitudes, intentions, and behaviors. In fact, fear can be particularly effective when aiming to attract new customer segments, as it has a higher effect on consumers who do not find the product category particularly relevant (Ray & Wilkie, 1970, p.61). Furthermore, it can generate interest in

consumers who are already familiar with all positive aspects of the products.

Within the Message-Behavior-Audience Framework by Tannenbaum et al. (2015), fear appeal communication is organized around its three important aspects: the message content, the recommended behavior, and the audience. (p.20). Each of these components can independently affect the impact of communication. The message content refers to the way the threat is framed, through level of depicted fear, efficacy, and severity (Tannenbaum et al., 2015, p.3). A message depicting severe consequences, such as accelerated ageing or irreversible damage, may be more attention-grabbing, but also risks backlash if it's perceived as exaggerated. The recommended behavior details the action that needs to be taken as a solution, whether that is a one-time or recurring behavior, whether it has immediate effects, whether it acts as detection or prevention/promotion, and whether it affects self-esteem (Tannenbaum et al., 2015, p.6). Fear appeals are generally prevention-framed and are more effective when promoting one-time or low-effort behaviors, such as trying a new product, as opposed to long-term lifestyle changes (Tannenbaum et al., 2015, p.20). Lastly, the audience refers to the characteristics of the target consumers. The framework notes that women, on average, are more responsive to fear appeals than men. This is due to the fact that women are more prevention focused. This effect may be more pronounced in contexts like cosmetics, where women tend to have higher product involvement, stronger emotional investment, and greater internalization of beauty norms. This model overall highlights the way the effectiveness of fear-based advertising is heavily reliant on a balance between message intensity, recommended actions, and audience characteristics. An inappropriate level of fear appeal in messaging has the potential to affect perceived brand warmth, and therefore perceptions, as it may accidentally portray the brand in a negative, or even exploitative light (Kervyn et al., 2012, p.167).

While there is no clear consensus on the optimal fear level in cosmetics advertising, excessive fear can backfire, especially in a category associated with self-care and aesthetic enhancement. The use of fear appeals in advertising incites negative emotions in consumers. This can yield positive effects such as increased purchase intent due to positioning the product as problem-solving (Zheng, 2020, p.1). Additionally, there is a possible positive effect on attention and brand recognition, as negative emotional appeals attract attention to advertisements (Dens & De Pelsmacker, 2010, p.60). Conversely, the use of fear appeals also reduce the perceived warmth of the brand and generate a negative attitude towards the advertisement itself. This effect can then be transferred to the brand image and general perceptions of the brand (Shin et al., 2017, p.13). For new or lesser-known brands, fear-based messaging brings a possibility of negative attitudinal reactions, which overshadow any intended benefits as they may damage both product and brand perceptions (Zheng, 2020, p.1). Given the established effectiveness of high fear appeals in messaging, but the lack of agreement on their optimal level in cosmetics advertising, this study proposes the following hypothesis:

H1: High levels of fear appeal in skincare advertisements lead to more negative brand perception compared to low or medium levels of fear appeal.

Furthermore, as the efficacy of fear-based appeals is stated to be higher when targeting women (Tannenbaum et al., 2015, p.20), and as women report higher involvement in skincare and beauty products, a second hypothesis is proposed to suggest that the relationship between the fear-appeal use and brand perception is affected by the gender of the observers.

H2: The effect of fear-based skincare advertising on brand perception is moderated by gender, such that female consumers exhibit a stronger negative perception compared to male and other gender identities.

2.3 Self-esteem and cosmetics

Self-esteem refers to an individual's overall subjective evaluation of their own worth, involving feelings of self-assurance and self-respect (Orth & Robins, 2014, p.382). It is closely related to personal identity, social comparisons, and perceived appearance, and it is especially relevant in industries focused on identity-building, such as beauty and skincare (Hogg et al., 2000, p.643). Generally, higher self-esteem is associated with increased levels of success, psychological resilience, and overall positive traits, while lower self-esteem has been linked to higher emotional sensitivity, as well as vulnerability to anxiety-inducing content.

In the context of cosmetics and skincare, an exploration of the effects of self-esteem is especially relevant due to the industry's relationship with consumer appearance, self-image, and societal beauty norms. Unattainable beauty standards, perpetuated by celebrities, influencers, and the media in general, have intensified the pursuit of eternal youth and flawless skin (Evangelista et al., 2022, p.2). This contributes to the growing demand for anti-ageing products such as sunscreens, serums, and creams containing active ingredients like retinol or exfoliants. Such products promise to protect, repair, and improve skin texture and tone while addressing any visible signs of ageing. The most important reasons for cosmetic use among women are reportedly "management of the private and public self, attractiveness in the workplace, mate attraction, and use for fun and creativity", as well as their general desire to simply feel good about themselves (Evangelista et al., 2022, p.2).

Importantly, individuals who are satisfied with their appearance report higher self-esteem than those who are not, and the use of cosmetics is advertised to promote higher self-satisfaction (Evangelista et al., 2022, p.2). However, the incorporation of fear appeals in cosmetics advertising brings complexity to that relationship, as they aim to promote anxiety within the viewers (Feng, 2024, p.97). Since fear-based cosmetic advertisements often highlight the negative consequences of neglecting skincare routines, such as premature ageing, wrinkles, or skin damage, these advertisements implicitly reinforce anxieties about ageing. This increase in anxiety is particularly

effective for individuals with low self-esteem, but anxiety itself is also linked to a decreased self-esteem (Evangelista et al., 2022, p.10). Additionally, negative emotional representations of aging, such as stereotyping, as well as a lack of acceptance toward aging, highlight the aging process as something to be feared and, if possible, avoided. Aging becomes a cause for severe concern due to the negative messaging, leading older individuals or those who are unwilling to accept changes in their appearance to suffer from decreased self-esteem (Evangelista et al., 2022, p.11).

According to Tannenbaum et al. (2015), if fear appeals focus on death or physical deterioration, as ones in aging advertising might, consumers are more likely to increase commitment to self-esteem enhancing behaviors (p.6). For example, if a skincare advertisement clearly links product usage with the prevention of visible signs of ageing, it may suggest the use of the product as a self-esteem-enhancing behavior. However, if the recommended behavior contradicts or undermines self-esteem-enhancing behaviors, for example by asking consumers to stop using tanning beds as they accelerate signs of aging, the fear appeal may be less effective when mentioning death or deterioration. This highlights the importance of aligning the behavioral recommendation in the advertisement with the self-esteem goals of the target audience.

In addition to its connection to emotional vulnerability, self-esteem also influences brand perception specifically through alignment between brand and self-image. Self-image refers to how individuals perceive themselves, similarly to self-esteem, while brand image refers to the set of associations, attributes, and values that a consumer links to a particular brand (Hogg et al., 2000, pp.663-664). Consumers tend to prefer brands that align with their self-image as these brands help strengthen their sense of identity, confidence, and social congruence. This search for alignment between self-image and brand image is particularly important in the beauty and cosmetics industry, as when it comes to appearance, product choices are used to signify social standing (Evangelista et al., 2022, p.2). In this case for example, consumers with higher self-esteem are more likely to assess brands positively, as they engage in self-verification by choosing brands that align with their desired social identity. Those with low self-esteem on the other hand may perceive a brand's fear-based messaging as judgmental, or even exploitative. Therefore, fear appeals can unintentionally cause a misalignment between consumer self-image and the brand's perceived identity, leading to a negative perception of the brand.

Indeed, building on the idea that self-esteem influences how consumers respond to fear-based advertising, self-esteem moderates the effect of such advertising on brand perception. Individuals with higher self-esteem may be less affected by fear appeals and more resilient to negative emotional messaging, while those with lower self-esteem may respond more negatively, influencing how they perceive brands. Based on this reasoning, the following hypothesis is proposed:

H3: The effect of fear-based skincare advertising on brand perception is moderated by self-esteem, such that the negative effect of fear-based advertising on brand perception is stronger for individuals with lower self-esteem.

2.4 Consumer involvement

Consumer involvement, also known as product involvement, refers to the perceived importance or personal relevance of a product in the eyes of the consumer (Guthrie & Kim, 2008, p.116). It is determined by internal factors, such as morals and values, as well as external factors, like environment and advertising. Consumer involvement is typically classified into two categories, low and high (Chalil & Dharmmesta, 2015, p.305). High involvement occurs when personal meaning and emotions are attached to products, leading consumers to actively seek information and critically evaluate alternatives. In contrast, low-involvement consumers tend to be more passive in making their purchase decisions, focusing on functional benefits rather than emotional or symbolic associations (Chalil & Dharmmesta, 2015, p.314).

Prior research suggests that the level of consumer involvement with an object or issue is related to effectiveness of fear appeals (Shin et al., 2017, p.6). Highly involved consumers are more likely to critically evaluate fear-based messaging, questioning its credibility. Their affinity toward logically and rationally assessing all aspects of their purchases make them less swayed by emotional appeals (Chalil & Dharmmesta, 2015, p.305). Conversely consumers with low involvement in a topic are less likely to engage in a thorough product analysis and may be influenced by fear-based messaging. In such cases fear appeals can ease decision making, therefore prompting more favorable attitudes toward a brand, assuming the message is not perceived as manipulative or excessively threatening.

Given that high-involvement consumers are more analytical of product messaging, fear-based content, which evokes negative emotions, may have a negative impact on brand perception. This suggests that consumer involvement could be a moderator of the relationship between fear-based advertising and brand perception.

H4: The effect of fear-based skincare advertising on brand perception is moderated by consumer involvement, such that consumers with higher involvement exhibit a stronger negative brand perception compared to those with lower.

3. Method

3.1 Method and research design

The study employs a between-factorial experimental design. Participants were assigned to one of three experimental conditions, representing different levels of fear appeal in skincare advertisements, low, medium or high. Each participant was exposed to only one advertisement condition, ensuring that the manipulation of the fear appeal was the only independent variable changed across groups. The between-subjects design is chosen based on the nature of the stimuli and the length of the research, ensuring a lack of respondent fatigue. By limiting exposure to a single condition, the design also reduced the likelihood of participants comparing stimuli, which could have influenced the reliability of their responses.

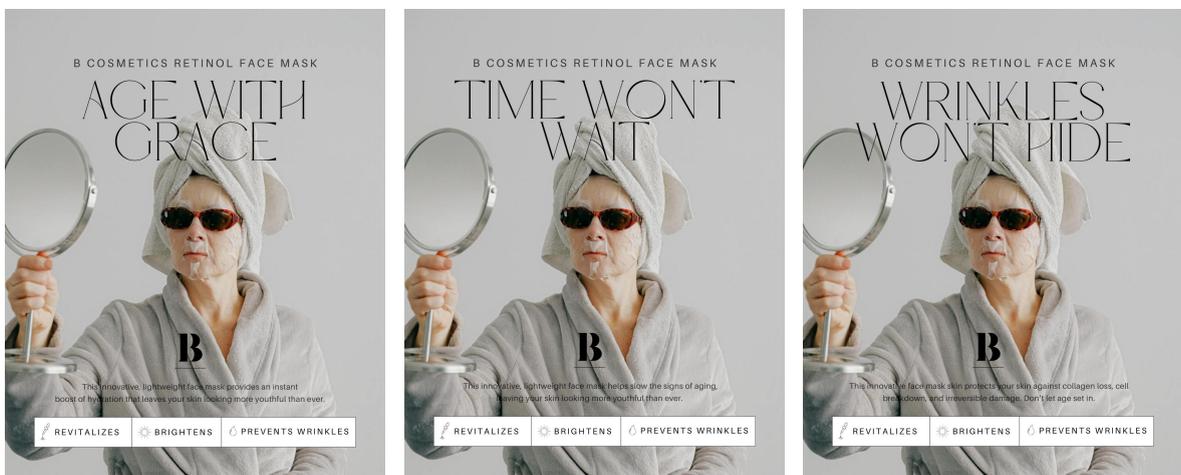
The survey overall consists of six sections. Firstly, participants were shown the randomly assigned manipulation. Next, they were asked to respond to questions focused on their brand perceptions. After that a section was designated to the Brief Rosenberg Self-Esteem, which was used as a tool for self-evaluation, followed by a section using the Consumer Involvement Scale. Then, manipulation check questions were asked to ensure that the fear levels of the assigned conditions were perceived correctly. Lastly, demographic information, namely age and gender, was collected.

3.2 Material

The stimuli materials were created with the use of a fictional brand, named B Cosmetics, as the use of a fictional brand ensured that pre-existing brand associations cannot create consumer bias and affect the responses. All of the information in the created advertisements is fictional as well. As seen below, Figure 1 represents the different represented fear-appeal levels in skincare advertising, as seen from left to right, respectively low, medium, and high.

Figure 1

Experimental Conditions



The distinction in fear levels is made by changing the phrasing of the main headline and the additional text using a progressively more threatening language. It is expected that the suggested threats will provoke fear at the prospect of facing negative outcomes of not using the product, therefore, at the lowest level, negative outcomes are not clearly mentioned. In the low fear-appeal image the text maintains a positive tone of voice. The headline “Age With Grace” suggests that aging is seen as beautiful, and not something to be feared. The supporting text highlights the hydrating qualities of the product and does not provoke any sense of urgency or consequence. The use of the product is gently encouraged, there is no perceived threat.

The medium fear-appeal image utilizes a more cautionary tone. The headline “Time Won’t Wait” introduces a sense of urgency, suggesting that inaction may lead to undesirable effects. The supporting text also aims to motivate consumers to purchase the product by mentioning wrinkles and highlighting the notion that this product would slow signs of aging. Aging in this advertisement is subtly presented in a more negative light.

At the highest level, the negative outcomes are most clearly stipulated. With a confronting text stating “Wrinkles Won’t Hide”, aging is shown as an unavoidable thing to be feared. The additional text mentions collagen loss, cell breakdown, and irreversible damage, using mild scientific language to heighten anxiety by suggesting that skin is slowly deteriorating. The closing line “Don’t let age set in.” reinforces that warning, aiming to prompt immediate action.

3.3 Data collection and sampling

The data collection for this study took place in the period from the 14th of April to the 29th of May 2025. The survey was distributed through WhatsApp groups and direct messages, Instagram stories, and a TikTok video. It was also posted on Reddit and put on SurveySwap. Although employing convenience sampling might limit the generalizability of the findings, it is chosen for this study due to restrictive timeframes and resources. This would help ensure that enough participants are reached. Moreover, random assignment to the three conditions strengthens internal validity.

A total of 220 responses were recorded. Data cleaning resulted in the exclusion of participants who did not complete the survey, or, in two cases, were outside of the required age range of 18 and 28. The final sample used in the analyses was therefore $N=163$. For the three advertisement conditions, the low condition had a sample of $N=51$ (31.5%), $N=52$ (32.1%) in medium, and $N=60$ (37.4%) in high. Table 3.1 describes the demographics of the sample.

Table 3.1. Description of the sample

<i>Demographics</i>		Total	
		Frequency / N	Valid percent / %
Gender	Male	42	25.8%
	Female	119	73.0%

	Non-binary / Third Gender	2	1.2%
Age	18	3	1.8%
	19	3	1.8%
	20	9	5.5%
	21	17	10.4%
	22	21	12.9%
	23	22	13.5%
	24	21	12.9%
	25	21	12.9%
	26	14	8.6%
	27	18	11.0%
	28	14	8.6%

3.4 Operationalization

To ensure a higher validity and reliability of the study, the key variables are operationalized using pre-established scales. The fear-based appeal variable will be experimentally manipulated via three advertisements. The effectiveness of this manipulation will then be assessed using two manipulation check questions posed at the end of the survey.

Brand Perception

Brand perception was measured using the Brands as Intentional Agents Framework (BIAF), which originally separates brand perception into three dimensions (Kervyn et al., 2012, p.173). The scale divides into Intention and Ability items, Emotion items, and Behavior intention items. Intention and ability relate to consumer trust and opinion on whether the brand acts in the best interest of its customers, as well as its general competence (e.g. “Has good intentions toward ordinary people”). This aligns with the aforementioned attributes of warmth (perceived intentions), and competence (ability) of the brand itself. Emotions items address the extent to which the brand evokes admiration, pity, envy, and contempt, as aligned with the model’s interaction between warmth and competence. Additionally, the model measures perceived behaviour intention, which focuses on the extent to which consumers would be willing to act upon positive feelings towards the brand (e.g. “How likely you would be to make a purchase of, or donation to, BRAND if you had the money necessary to do so”) (Kervyn et al., 2012, p.175).

A Principal Component Analysis (PCA) with direct oblimin rotation based on eigenvalues (> 1.00) was used to explore the underlying dimensions of the 10 brand perception items. The Kaiser-Meyer-Olkin value of .74 verified the sampling adequacy for the analysis (Kaiser, 1970), and Bartlett’s Test of Sphericity was significant, $\chi^2(45) = 598.35, p < .001$, thereby indicating that the correlations between items were sufficiently large for a PCA (Bartlett, 1954). The resultant model

consisted of three factors, which together explained 65.26% of the variance in brand perception. The first factor included four items about Intention and Admiration, which explained 36.00% of the variance. Three items about Emotions loaded onto the second factor, which explained 17.25% of the variance. The remaining three factors loaded onto an Intention Ability factor, accounting for 12.02% of variance. The factor loadings and the Cronbach's alphas of each factor are presented in Table 3.2.

Table 3.2. Factor loadings, explained variance and reliability of the factor 'Brand Perception'.

Item	Intention and Admiration	Emotions	Intention Ability
Please indicate how well the following statements describe your attitude towards B Cosmetics - You feel a strong preference for this brand	.87		
Please indicate how well the following statements describe your attitude towards B Cosmetics - You would be likely to make a purchase from this brand if you had the money necessary to do so	.81		
Please indicate the degree to which you feel the following emotions toward B Cosmetics - Admiration	.79		
Please indicate how well the following statements describe B Cosmetics - The brand acts with the public's best interests in mind	.47		
Please indicate the degree to which you feel the following emotions toward B Cosmetics – Contempt (recoded)		.78	
Please indicate the degree to which you feel the following emotions toward B Cosmetics – Pity (recoded)		.69	
Please indicate the degree to which you feel the following emotions toward B Cosmetics – Envy (recoded)		.66	
Please indicate how well the following statements describe B Cosmetics - The			-.80

brand has the ability to implement its intentions			
Please indicate how well the following statements describe B Cosmetics - The brand is effective at achieving its goals			-0.76
Please indicate how well the following statements describe B Cosmetics - The brand has good intentions toward consumers			-0.55
<i>R</i> ²	.36	.17	.12
<i>Cronbach's α</i>	.82	.56	.69

The exploratory factor analysis did not replicate the original scale's structure, as items from all three initial categories are loaded into one factor, suggesting that the construct representation may differ within this sample. Therefore, revised factors were retained for subsequent analysis, computed as follows: firstly, Intention and Admiration (BP1), contains items from Intention and Ability and Behavior Intention aspects of the original scale, as well as Admiration from the Emotions. Emotions (BP2) contains the other three emotion items. Intention Ability (BP3) includes items from the Behavior Intention category, as well as one from Intention and Ability. The newly established factors demonstrated stronger internal consistency and clearer conceptual alignment.

One of the extracted factors, Emotions, demonstrated poor internal consistency (Cronbach's $\alpha = .563$). Attempts to improve reliability by removing individual items did not yield acceptable results; therefore, this factor was excluded from further analyses.

Self-esteem

Self-esteem as a mediating variable will be measured using the Brief Rosenberg Self-Esteem Scale (Monteiro et al., 2021, p.944). The scale collects responses on a 4-point Likert scale, a 5-point Likert scale was adapted for this study to ensure consistency within the measurement instrument. The modification will be done by including a neutral answer option.

A PCA was conducted using five items adapted from the Brief Rosenberg Self-Esteem Scale. Sampling adequacy was confirmed by a Kaiser-Meyer-Olkin value of .77, Bartlett's Test of Sphericity was significant, $\chi^2(10) = 338.245, p < .001$, therefore the data was suitable for factor analysis. The analysis revealed a one-factor solution, with a single component explaining 59.79% of the total variance. For factor loadings and the Cronbach's alphas of each factor, see table 3.3.

Table 3.2. Factor loadings, explained variance and reliability of the factor 'Self-esteem'.

Item	Self-esteem
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - I take a positive attitude toward myself	.86
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - On the whole, I am satisfied with myself	.83
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - All in all, I am inclined to think that I am a failure (recoded)	.82
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - At times I think I am no good at all (recoded)	.75
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - I feel I do have much to be proud of	.56
<i>R</i> ²	.60
<i>Cronbach's α</i>	.82

The findings support the structure of the original scale, demonstrating a good validity, with most items contributing meaningfully to a single factor.

Consumer Involvement

The consumer involvement scale was measured using Kapferer and Laurent's Consumer Involvement profile (1993), consists of sixteen items, divided into five factors: interest, pleasure, sign, risk importance, and probability of error. Participants were asked to rate their involvement with skincare based on a five-point Likert scale ranging from 1=strongly disagree to 5=strongly agree.

Another PCA with direct oblimin rotation based on eigenvalues (> 1.00) was conducted on 16 items measuring consumer involvement in skincare. The Kaiser-Meyer-Olkin value of .84 verified the sampling adequacy, and Bartlett's test of sphericity was significant, $\chi^2(120) = 1569.27, p < .001$, indicating that the data were suitable for factor analysis. Four emerged components together explained 73.39% of the variance in consumer involvement. The first included six items about Interest and Pleasure, explaining 32.96% of the variance. The second, with five items addressing Probability of Error, explained 21.59%. Three items about Sign explained 11.38%, and two about Risk Importance 7.47%. The factor loadings and the Cronbach's alphas of each factor are presented in Table 3.4.

Table 3.4. Factor loadings, explained variance and reliability of the factor 'Consumer Involvement.

Item	Interest and Pleasure	Probability of Error	Sign	Risk Importance
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - I really enjoy buying skincare	.92			
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - To me, skincare is pleasurable	.86			
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - Whenever I buy skincare, it is like giving myself a present	.83			
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - I am very interested in skincare	.77			
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - What skincare I purchase is extremely important to me	.71			
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - I could not care less about skincare (recoded)	.59			
Using the scale below, please		.92		

indicate whether you agree or disagree with each of the following statements. - When I buy skincare, I can never be exactly sure if the choice was right

Using the scale below, please .91

indicate whether you agree or disagree with each of the following statements. - When I buy skincare I can never be quite certain about my choice

Using the scale below, please .87

indicate whether you agree or disagree with each of the following statements. -

Choosing skincare is quite hard

Using the scale below, please .84

indicate whether you agree or disagree with each of the following statements. - When I am in front of the skincare section, I always feel unsure about which to choose

Using the scale below, please .42*

indicate whether you agree or disagree with each of the following statements. - I am annoyed with myself if it turns out that I made the wrong choice when buying skincare

Using the scale below, please .94

indicate whether you agree or disagree with each of the following statements. - The skincare a person buys reflects who they are

Using the scale below, please indicate whether you agree or disagree with each of the following statements. - The skincare I buy describes the person I am				.86
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - I can tell a lot about a person from the skincare they buy				.81
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - It does not matter too much if I make a mistake when buying skincare. (recoded)				.90
Using the scale below, please indicate whether you agree or disagree with each of the following statements. - It is very irritating to buy skincare that is not right				.64
<i>R</i> ²	.33	.22	.11	.07
<i>Cronbach's α</i>	.90	.91	.81	.65

While the exploratory factor analysis showed similar components to the original scale's structure, the interest and pleasure components of the original scale are here combined into one.

Manipulation checks

Two manipulation check questions were included to assess whether participants correctly perceived the level of fear appeal in the skincare advertisements. The items used 5-point Likert scales, asking participants to rate the extent to which they believed the advertisement they were shown aimed to induce fear, and then whether it was successful in doing so. The manipulation check was done toward the end of the questionnaire, rather than immediately after exposure to the advertisement, as to not alert the participants of the purpose of the study. The success of the manipulation was evaluated in the analysis stage using a one-way ANOVA.

3.5 Ethical considerations

This study employed an experimental design, which used partial deception to maintain the validity of the responses. Therefore, the nature of the study was not disclosed at the beginning of the survey. While experiments raise ethical considerations, specifically regarding deception, this approach is necessary to minimize bias. To address the concerns of the deception, the study adheres to ethical guidelines and provides participants with an informed consent form at the start of the survey (see Appendix A). It details the purpose of the study and highlights the voluntary nature of their participation, as well as their right to withdraw consent at any time without consequences. It also guarantees anonymity and confidentiality of the responses. Although the specific focus on fear-based content is not specified at the start and the different levels of fear appeal are not mentioned, participants were informed that the study involved viewing skincare advertisements.

While the experimental nature of the study is not disclosed at the start, participants are not exposed to specifically misleading or harmful information. The full explanation of the experimental design of the study is provided at the end of the questionnaire through a detailed debriefing statement. In it, the use of fear-based appeals and the manipulation of the three advertising levels are detailed. This ensured that participants were fully informed and ethical disclosures are in line with academic standards for research.

Additionally, no personally identifying information was collected. All responses were stored securely and analyzed anonymously and remain confidential. Automatically collected revealing information such as IP addresses, timestamps, etc., were removed from the dataset. Participants were required to confirm that they were of legal age to participate, and no financial incentives or coercion were involved.

Due to the use of fear-based content, potential emotional distress of participants needs to be taken into consideration. However, it is worth noting that intense frightening content such as gore is not appropriate to use in cosmetics advertising (Feng, 2024, p.95). This was taken into consideration in the creation of the advertisements. They therefore do not include graphic or disturbing content. Instead, fear is conveyed through visual cues, tone, and language focused on age-related concerns, as suited for beauty marketing. This approach ensured that the material remains appropriate for general audiences, especially ones over the age of 18, and is unlikely to cause any significant psychological

distress. Nonetheless, as mentioned in the informed consent, in the case of any discomfort, participants held the explicitly stated right to discontinue the survey and withdraw consent at any point.

3.6 Data preparation and analysis

Collected data was analysed using IBM SPSS Statistics. Prior to analysis, several preprocessing steps were performed to ensure data quality. Cases with incomplete responses on key survey variables were excluded. Reverse-scored items were manually reviewed based on phrasing, confirmed through reliability analyses, and recoded. Two dummy variables were created for the medium and high fear-based advertising conditions and one for gender (female = 1, male = 0). It is worth noting that in the brand perception scale measuring emotional reactions, missing responses were interpreted as reflecting the lowest rating (1.00), granted the participants completed the rest of the survey, under the assumption that participants rated that emotion on the lowest level by not moving the slider. This possibility was addressed during pre-testing, as the slider was left as a non mandatory response in case participants did want to leave it at 1. As those responses were recorded as blank rather than 1, this should be avoided in future research and all responses for key variables should be marked as mandatory.

4. Results

4.1 Manipulation check

To assess the effectiveness of the fear-based advertisement manipulation, a one-way ANOVA was conducted on the two manipulation check items and a variable with their composite score across three fear appeal levels (low, medium, high).

For the first item, “The advertisement aimed to create a fear of ageing,” hereby referred to as Fear Intent, Levene’s test was not significant, $F(2, 160) = 1.23, p = .295$, indicating that the assumption of homogeneity of variance was met. The ANOVA did not reach significance, $F(2, 160) = 1.26, p = .288, \eta^2 = .015$. Although the means across the different conditions increased as expected ($M_{low} = 3.76, M_{medium} = 3.90, M_{high} = 4.07$), the difference was not statistically significant. This indicates no significant differences in perceived fear intent between conditions. This suggests that participants did not perceive a meaningful difference in the fear-inducing intent of the advertisements across the low, medium, and high fear conditions.

For the second item, “The advertisement was successful at creating a fear of ageing”, now referred to as Fear Success, Levene’s test was statistically significant, $F(2, 160) = 3.33, p = .038$, indicating a lack of homogeneity of the variance. The ANOVA test was still conducted, and it showed no significant difference in perceived fear success across conditions, $F(2, 160) = 0.51, p = .604, \eta^2 = .006$. Descriptive means again showed a minor, non-significant change ($M_{low} = 3.10,$

$M_{\text{medium}} = 3.25$, $M_{\text{high}} = 3.05$), indicating that the perceived success in creating fear did not differ significantly by condition.

Lastly, for the composite score of the two manipulation checks, Manipulation_Avg , Levene's test for the composite fear perception score was not significant, $F(2, 160) = 2.59$, $p = .078$, indicating that the assumption of equal variances was met. A one-way ANOVA again showed no significant differences between fear conditions, $F(2, 160) = 0.42$, $p = .657$, $\eta^2 = .005$. The average fear perception score did not vary significantly between the low ($M = 3.43$), medium ($M = 3.58$), and high ($M = 3.58$) fear appeal groups.

Overall, these results suggest that the fear appeal manipulation was not perceived as significantly different across conditions, thus the manipulation may not have functioned as intended.

4.2 Impact of fear-based advertising on brand perception, as moderated by gender

Two hierarchical multiple regression analysis were conducted to test whether gender moderates the relationship between fear-based skincare advertising and brand perception.

Firstly, a regression was performed with Intention and Admiration (BP1) as dependent variable, fear appeal levels in skincare advertising as independent variable and gender as moderating variable. The model was statistically significant, $F(3, 159) = 3.40$, $p = .019$, and it explained 6.0% of the variance in brand perception ($R^2 = .060$, Adjusted $R^2 = .043$). Significant negative effects were observed for the high fear condition ($B = -0.37$, $p = .026$), indicating that participants in the high fear condition reported significantly lower brand perception than those in the low fear condition, thereby providing partial support for H1. Gender was also a significant predictor ($B = 0.35$, $p = .022$), suggesting that female participants had more positive brand perceptions overall.

Then interaction terms between fear condition and gender (Medium \times Female and High \times Female) were added to test for moderation. The addition of interaction terms led to a small increase in explained variance ($\Delta R^2 = .010$), and the overall model remained statistically significant, $F(5, 157) = 2.37$, $p = .042$. However, neither the Medium \times Female ($B = 0.27$, $p = .477$) nor the High \times Female ($B = 0.49$, $p = .198$) interaction terms were statistically significant. Therefore, no support was provided for H2.

Secondly, testing the relationship between fear appeal as an independent variable, and Intention Ability (BP3) as dependent, the model did not reach statistical significance, $F(3, 159) = 0.905$, $p = .440$, and explained only 1.7% of the variance in intention ability ($R^2 = .017$, Adjusted $R^2 = -0.002$). None of the predictors in this model were statistically significant. Specifically, neither the medium fear condition ($B = 0.02$, $p = .886$) nor the high fear condition ($B = -0.019$, $p = .891$) had a significant effect on brand perception. Gender was also non-significant ($B = 0.207$, $p = .103$). No support was provided for H1.

When adding the interaction terms between fear condition and gender (Medium \times Female and High \times Female) to test for moderation, there was also no statistical significance, $F(5, 157) =$

1.118, $p = .353$, and a slightly greater, but still negligible, 3.4% of the variance in intention ability ($\Delta R^2 = .017$) was explained. Again, none of the individual predictors or interaction terms were statistically significant (all $ps > .130$). Therefore, no support was provided for H2.

These results show that while fear-based advertising negatively affects Intention and Admiration (BP1) and gender independently contributes to variance in perception, these effects are not present for intention ability (BP3). Any effect of fear appeal levels on overall brand perception is not significantly moderated by gender. Thus, H1 is partially supported, with the high fear condition being associated with lower brand intention and admiration than the low condition, whereas H2 was rejected.

4.3 Self-esteem as a moderator

A hierarchical multiple regression was conducted to examine whether self-esteem (SE) moderates the effect of the independent variable, fear level in advertising, on the dependent, Intention and Admiration (BP1). This model was not statistically significant, $F(3, 159) = 2.17$, $p = .094$, and explained 3.9% of the variance in brand perception ($R^2 = .039$, Adjusted $R^2 = .021$). Among the predictors, only the High fear condition was a significant negative predictor of brand perception ($B = -0.336$, $p = .046$). Interaction terms between SE and the fear conditions (Medium_SE, High_SE) were added to test for moderation. The change in R^2 was small and not statistically significant ($\Delta R^2 = .01$), $F(5, 157) = 1.611$, $p = .160$. None of the interaction terms were significant (Medium_SE: $p = .226$; High_SE: $p = .351$), indicating no moderating effect of self-efficacy. Thus, no support was provided for H3.

Due to fear-appeal not having effect on Intention Ability (BP3), there can be no moderation effect of self-esteem, and an analysis is not necessary. No support is provided for H3. H3 is rejected.

4.4 Consumer involvement as a moderator

A hierarchical multiple regression was conducted to examine whether consumer involvement moderates of the independent variable, fear level in advertising, on the dependent, brand intention and admiration (BP1). The model was statistically significant, $F(6, 156) = 6.583$, $p < .001$, and accounted for 20.2% of the variance in brand perception, $R^2 = .202$, Adjusted $R^2 = .171$. Significant predictors included Interest and Pleasure (CI1) ($\beta = .349$, $p < .001$) and CI4 ($\beta = -.171$, $p = .030$), indicating that higher consumer involvement based on interest and pleasure was associated with more positive brand perception, while Risk Intention (CI4) was associated with less favourable perception. Additionally, the medium fear condition predicted significantly lower brand perception ($\beta = -.175$, $p = .039$) compared to the low fear condition.

The interaction terms between fear condition and the four centered consumer involvement variables were added to test moderation. This model was also significant, $F(14, 148) = 3.417$, $p < .001$, explaining an additional 4.2% of variance in brand perception ($\Delta R^2 = .042$), with $R^2 = .244$,

Adjusted $R^2 = .173$. However, none of the interaction terms reached statistical significance (all with $p > .05$), suggesting that consumer involvement did not significantly moderate the relationship between fear appeal and brand intention and admiration.

Overall, while consumer involvement was a significant predictor of brand intention and admiration, there was no evidence of moderation.

Due to fear-appeal not having effect on Intention Ability (BP3), there can be no moderation effect of consumer involvement, and an analysis is not necessary. No support is provided for H4, and H4 is rejected.

4.5 Additional testing

To further assess the impact of the unsuccessful fear manipulation, a secondary analysis was conducted using a limited sample, excluding participants who did not perceive the manipulation as intended, i.e. scored an average of over 4 on the manipulation check scales while presented with the low fear appeal advertisement, or less than 2 when presented with high fear appeal. This reduced the sample to $N = 138$.

A one-way ANOVA confirmed that the fear appeal manipulation was effective. Descriptive statistics showed that mean perceived fear increased across the conditions: low ($M = 2.82$, $SD = 0.84$), medium ($M = 3.55$, $SD = 0.72$), and high ($M = 3.66$, $SD = 0.79$). Participants in the low fear condition reporting significantly lower perceived fear than those in the medium and high fear conditions, $F(2, 135) = 12.56$, $p < .001$, $\eta^2 = .157$. Post hoc tests showed no significant difference between the medium and high fear groups. Overall results supported a successful manipulation across low and medium and low and high conditions, but not between medium and high. The key analyses, namely three moderated linear regressions testing for all hypotheses were repeated, but results were consistent with those of the full sample, with no notable changes in statistical significance or direction of effects.

5. Discussion

5.1 Main findings

The overall aim of this study was to examine the extent to which fear-based appeals in cosmetics advertising affect brand perception among Gen Z consumers. The research explored both the direct impact of varying levels of fear appeal and the moderating effects of gender, self-esteem, and consumer involvement.

The most notable finding of this paper was partial support for the first hypothesis, which proposed that high levels of fear appeal would result in more negative brand perception compared to low or medium levels. Specifically, participants in the high fear condition rated the brand lower on the Intention and Admiration factor (BP1) than those in the low fear condition. This aligns with

existing literature suggesting that negative emotional appeals, such as fear, can reduce perceptions of brand warmth and trustworthiness (Shin et al., 2017, p.13). However, this was not observed with the Intention Ability factor (BP3), suggesting that while fear may influence the general likability and emotional aspects of brand perception, it might not significantly affect perceptions of brand competence or functionality.

The second hypothesis, which claimed that gender would moderate the relationship between fear appeal and brand perception, with female participants being more negatively affected, was not supported. Although gender had a small but significant independent effect on brand perception, as female participants tended to rate brands more positively, there was no evidence that it interacted with the level of fear appeal to shape perceptions. This finding contradicts prior research (Tannenbaum et al., 2015, p.20), which stated that fear-based appeals may be more effective when targeting women. Overall, based this research gender cannot be seen as a moderator of fear-based advertising effectiveness in this product context or demographic.

Hypothesis three, which proposed self-esteem as a moderator was also not supported. While self-esteem showed positive association with the Intention Ability (BP3) aspect of brand perception, there was no evidence of an interaction with the fear levels. This contradicts the idea that individuals with lower self-esteem are more susceptible to fear-based skincare advertising (Evangelista et al., 2022, p.11). Nonetheless, the connection between self-esteem and the Intention Ability aspects of brand perception may be seen as a reflection of the tendency of individuals with higher self-esteem to feel more confidence in their consumer behaviors. Since high self-esteem is linked to increased self-assurance, it can potentially enhance an individual's ability to form clear intentions when engaging with brand messages (Orth & Robins, 2014, p.382).

Lastly, the fourth hypothesis, which stated that consumer involvement moderates the relationship between fear appeal and brand perception, was also not supported. Although the Interest and Pleasure aspect of consumer involvement was found to be a significant predictor of brand perception, there was again no interaction with fear appeals. This suggests that while involvement is relevant for shaping attitudes toward skincare brands, it does not impact the effect of emotional messaging in any way. The lack of any relationship suggests that within this research there is no support of previous findings which stated that highly involved consumers are more critical of emotional appeals (Chalil & Dharmmesta, 2015, p.305), nor for the notion that involvement has any connection to the effectiveness of fear appeals (Shin et al., 2017, p.6).

In summary the findings show that while high levels of fear appeal can indeed have some negative impact on brand perceptions, the expected moderating factors do not influence that relationship. Furthermore, the manipulation checks revealed that some of the participants did not perceive the fear levels as significantly different, which creates limitations in terms of the validity of results.

5.2 Limitations and suggestions for future research

The lack of alignment between expected and observed results can be potentially attributed to a variety of factors.

Manipulation

Even though most participants did perceive a difference in the fear appeal levels, the overall sample did not perceive the fear appeal manipulation as intended. While there was an observed trend in the anticipated direction, it did not reach statistical significance. Additionally, among the sample of participants that did indeed perceive it correctly there was still not an ideal distinction between the medium and high level. Although testing confirmed that there was no difference in the acceptance of the hypotheses between the two samples, this research did aim to have a higher manipulation success rate, and it is therefore valuable to address how clarity of the fear appeal levels could have been improved.

Firstly, the design of the stimuli may not have been differentiated well enough. Despite the content being created to distinguish between low, medium, and high fear, the textual cues used to convey the emotions might not have been strong or explicit enough to be appropriately recognized by the participants. This might be attributed to the use of fear-based messaging solely in the text, without any changes in the image. Furthermore, as skincare advertising often employs a more empowering and positive tone of voice, the nature of the product category might not allow for a higher fear appeal to be used without sacrificing realism. Still, changes to all text in the images, instead of only the titles and sub-titles, might have allowed for a stronger distinction between the appeal levels. Alternatively, rather than changing the text, stimuli could have been created with the same text but different images, as participants might be more responsive to strong visual cues.

Secondly, the timing of the manipulation check questions in the survey might have affected the accuracy of the responses. It is possible that, as the fear-based content and the check questions were separated by a multitude of other questions, the emotional impact of the advertisements diminished by the time participants evaluated the perceived manipulations. The participant could have similarly not paid attention or forgotten the exact content in the process of filling out the rest of the survey, which would mean that the manipulation check questions can not be fully relied upon as indicators of successfully created fear-based content. This might be affirmed by the lack of difference in results between the full sample and the successfully manipulated one. However, this finding should be interpreted with caution, as it does not fully resolve concerns about the validity of the stimulus design. Overall, a more extensive pre-testing phase of the survey itself would have been beneficial in assessing whether timing of the questions is an issue.

Sample

The sampling was focused on Gen Z participants, which, while aligned with the research

question, limits the external validity of the findings. It is also worth noting that since the research focused on anti-aging skincare advertising, the input of older participants would have been highly relevant. Participants were diverse in their skincare involvement and consumption habits, and not all had consistent exposure to or interest in cosmetics advertising. It is possible that participants with minimal engagement in the skincare category responded differently to fear-based stimuli than more involved consumers, which may have lessened the strength of the experimental manipulation. Future studies on a similar topic could therefore benefit from addressing a wider age range while having self-reported consumer involvement as a prerequisite.

Additionally, cultural differences were not considered for this study. Participant nationalities were not recorded or addressed, but participants were collected through a variety of channels, and cultural diversity of the respondents is highly likely. Cultural background might have contributed to the way fear messaging was perceived, especially considering differences in beauty standards globally. Addressing the nationality of respondents could enrich the results and could bring further understanding to the lack of success of the manipulation.

Scales

This study employed pre-established scales to measure brand perception, self-esteem, and consumer involvement. However, the factor analyses conducted on the collected data revealed deviations from the original scale structures, particularly in the case of brand perception. The Brands as Intentional Agents Framework separated brand perception into Intention and Ability, Emotion, and Behavior intentions (Kervyn et al., 2012, p.175), but these dimensions were not replicated. Upon analysis the scale produced new factors, which required reinterpretations. It was divided into Intention and Admiration (BP1), Emotions (BP2), and Intention Ability (BP3). Emotions (BP2) were ultimately excluded, and the only emotional measurement from the original scale, Admiration, was retained as part of Intention and Admiration. Such deviations can be attributed to the fact that the current research sample is a representation of Gen Z consumers, whose interpretation of brand perception might differ from that of the participants used in the development of the original scale. It could be beneficial to consider the use of a different brand perception scale for this target audience.

Similarly, the consumer involvement scale also did not fully align with the original scale. While the resulting factors were almost the same, in this research Interest and Pleasure were combined into one factor. It is possible that some constructs did not fully resonate with the participants, although the differences regarding this scale are minimal. The discrepancy between expected and observed factor structures suggests either an evolution in how consumers perceive these brand attributes, or a misalignment between the demographic of this research and that of the original papers. Therefore, interpretations of results and generalizations should be addressed with caution.

5.3 Practical and academic implications

This research offers several relevant insights for marketers and brand strategists within the sector of beauty and cosmetics. As social media has made consumers more critical of the consistent stream of advertising they have been exposed to, Gen Z has become an at times over-analytical generation. Understanding how to communicate with them, as well as how they interpret emotional messaging has become increasingly important.

Firstly, the partial support of the hypothesis that high fear appeals negatively affect brand perception signifies that the use of intense fear-based messaging in skincare or cosmetics advertising may damage the reputation of the brand. While such appeals do successfully attract attention, they may portray the brand as cold, therefore less trustworthy, damaging the emotional connection with younger consumers (Kervyn et al., 2012, p.173). For marketing professionals, this means that fear, albeit a powerful tool, should be used cautiously, particularly in industries related to appearance and self-image. Advertisements which incite fear but do not provide a sufficiently reassuring solution might cause consumers to become uncomfortable or defensive, therefore harming the relationship between the brand and the consumer.

Secondly, the finding that none of the addressed variables, i.e. gender, self-esteem, and consumer involvement, moderate the impact of fear appeals, shows that group generalizations may not be fully applicable in the context of low-involvement, appearance-focused products. Hence, marketers cannot rely on demographic or psychological segmentation, as those traits are not proven predictors of the impact of the advertisements. This study therefore suggests that brands may benefit from focusing their campaigns on universally effective approaches. Instead of focusing on group differences, marketers can focus on ensuring that the advertisements are clear, visually compelling and emotionally resonant for a wide audience.

Additionally, this study showcases the importance of aligning emotional tone with brand identity. Skincare and cosmetics brands typically focus on comfort, care, and empowerment. If not used carefully the integration of fear, even in moderate doses, can conflict with the core brand values. Therefore, instead of focusing on negative consequences, such as ageing, damage, and imperfections, which can negatively affect brand perception, marketers can focus on highlighting self-care through prevention. Positive messaging might be more effective in this industry. Mild forms of fear or concern can be used with care, as long as reassuring solutions are presented as well.

The failure of the fear appeal manipulation might, in itself, raise a point about content creation. Professionals could consider that subtle differences in tone and language, or maybe even visual cues, might not be as visible to consumers as intended. The importance of thorough testing of the content in advance is therefore highlighted, especially prior to large campaigns. Ensuring the clear content communication in advance can prevent miscommunication and failure of campaign communication materials.

Lastly, brands should consider consumer involvement not only as a grouping variable, but as

a predictor of content reception. Although it was not a relevant moderator in this study, consumer involvement was associated with more favorable brand perceptions overall. This suggests that brands that nurture genuine interest and positive emotions around their products may see better outcomes than those relying on more traditional, fear-based persuasive tactics. Interactive campaigns, personalized routines, and an increased focus on community engagement could help leverage consumer involvement and strengthen positive brand associations.

Overall, the findings of this research suggest that fear-based appeals in skincare advertising should only be applied with high caution. Relying on emotionally positive campaigns which align with the values of both brand and consumers might instead promote better brand perception and trust among a critical Gen Z audience.

5.4 Conclusion

This study aimed to examine the extent to which fear-based appeals in cosmetics advertising influence brand perception among Gen Z consumers. Through a manipulation of fear levels in a skincare advertisement, brand perceptions was measured, as well as interaction with self-esteem, consumer involvement, and gender. The findings offered partial support to the first hypothesis, confirming that high fear appeals negatively influence aspects of brand perception related to positive emotions and intentions. However, none of the moderating effects were found. Furthermore, the manipulation check results indicated that the experimental conditions might not have been perceived as intended by the entirety of the sample, therefore possibly limiting the strength of the conclusions.

Overall, despite its limitations, the study provides valuable insight into the effects of emotional advertising in the cosmetics industry. Fear appeals should be approached with caution in skincare marketing, as this product category is heavily linked to identity and self-image. Emotional messaging must be consistently aligned with brand identity and consumer expectations to avoid negative effects on trust and brand perceptions. Future research through stronger manipulations and use of alternative scales can provide more insight to these findings.

6. Reference list

- Afzal, H., Khan, M. A., ur Rehman, K., Ali, I., & Wajahat, S. (2010). Consumer's trust in the brand: Can it be built through brand reputation, brand competence and brand predictability. *International business research*, 3(1), 43.
- Barker, M., O'Hanlon, A., McGee, H. M., Hickey, A., & Conroy, R. M. (2007). Cross-sectional validation of the Aging Perceptions Questionnaire: a multidimensional instrument for assessing self-perceptions of aging. *BMC Geriatrics*, 7(1). <https://doi.org/10.1186/1471-2318-7-9>
- Barrera, D., & Simpson, B. (2012). Much ado about deception. *Sociological Methods & Research*, 41(3), 383–413. <https://doi.org/10.1177/0049124112452526>
- Bartlett, M. S. (1954). A Note on the Multiplying Factors for Various χ^2 Approximations. *Journal of the Royal Statistical Society. Series B*, 16(2), 296–298. <https://www.jstor.org/stable/2984057>
- Chalil, R. D., & Dharmmesta, B. S. (2015). The role of consumer involvement as a moderating variable: the relationship between consumer satisfaction and corporate image on service loyalty. *Journal of Asian Scientific Research*, 5(6), 303–319. <https://doi.org/10.18488/journal.2/2015.5.6/2.6.303.319>
- Chu, K. W. K. (2020). The green gap of high-involvement purchasing decisions: an exploratory study. *Asian Journal of Business Ethics*, 9(2), 371–394. <https://doi.org/10.1007/s13520-020-00115-6>
- Clarke, L. H., & Griffin, M. (2007). The body natural and the body unnatural: Beauty work and aging. *Journal of Aging Studies*, 21(3), 187–201. <https://doi.org/10.1016/j.jaging.2006.11.001>
- Clay, D., Vignoles, V. L., & Dittmar, H. (2005). Body image and self-esteem among adolescent girls: Testing the influence of sociocultural factors. *Journal of Research on Adolescence*, 15(4), 451–477. <https://doi.org/10.1111/j.1532-7795.2005.00107.x>
- Dens, N., & De Pelsmacker, P. (2010). Consumer response to different advertising appeals for new products: The moderating influence of branding strategy and product category involvement. *Journal of Brand Management*, 18(1), 50–65. <https://doi.org/10.1057/bm.2010.22>
- Durgee, J. F. (1986). Self-esteem advertising. *Journal of Advertising*, 15(4), 21–42. <https://doi.org/10.1080/00913367.1986.10673034>
- Evangelista, M., Mota, S., Almeida, I. F., & Pereira, M. G. (2022). Usage patterns and self-esteem of female consumers of antiaging cosmetic products. *Cosmetics*, 9(3), 49. <https://doi.org/10.3390/cosmetics9030049>
- Feng, J. (2024). The application and implications of fear appeals in short videos for beauty e-commerce. *Frontiers in Business Economics and Management*, 13(3), 93–98. <https://doi.org/10.54097/rxcmkq85>
- Ganjoo, M. (2020). Influence of advertising appeals on buying behaviour with reference to cosmetic

- brands. *International Journal of Psychosocial Rehabilitation*, 24(8), 8222-8229.
- Guthrie, M. F., & Kim, H. (2008). The relationship between consumer involvement and brand perceptions of female cosmetic consumers. *Journal of Brand Management*, 17(2), 114–133. <https://doi.org/10.1057/bm.2008.28>
- Harisma, R., Erlindawaty, E., & Agustina, R. (2022). An analysis of persuasive strategies used in slogan woman cosmetic products “Safi” advertisement on Instagram. *Indonesian Journal of Education, Social Sciences and Research (IJESSR)*, 3(1), 34-41. <https://doi.org/10.30596/ijessr.v3i1.9892>
- Hogg, M. K., Cox, A. J., & Keeling, K. (2000). The impact of self-monitoring on image congruence and product/brand evaluation. *European Journal of Marketing*, 34(5/6), 641–667. <https://doi:10.1108/03090560010321974>
- Kaiser, H. F. (1970). A second generation little jiffy. *Psychometrika*, 35(4), 401–415. <https://doi.org/10.1007/bf02291817>
- Kapferer, J.-N., & Laurent, G. (1993). *Further evidence on the consumer involvement profile: Five antecedents of involvement*. *Psychology and Marketing*, 10(4), 347–355. doi:10.1002/mar.4220100408
- Kervyn, N., Fiske, S. T., & Malone, C. (2012). Brands as intentional agents framework: How perceived intentions and ability can map brand perception. *Journal of Consumer Psychology*, 22(2), 166–176. <https://doi.org/10.1016/j.jcps.2011.09.006>
- Kervyn, N., Fiske, S. T., & Malone, C. (2021). Social perception of brands: Warmth and competence define images of both brands and social groups. *Consumer Psychology Review*, 5(1), 51–68. <https://doi.org/10.1002/arcp.1074>
- Kowal, M., & Sorokowski, P. (2022). Sex differences in physical attractiveness investments: Overlooked side of masculinity. *International Journal of Environmental Research and Public Health*, 19(7), 3842. <https://doi.org/10.3390/ijerph19073842>
- Majeed, S., & Lu, C. (2016). Emotional contagion through the skincare advertisements: the influence of culture on the eastern women consumption behaviors. *Eur. J. Bus. Manag.*, 8(35), 9-19.
- McLean, M. C. (2015). *Gender and ageism: the role of aesthetic preferences in the aging double standard*. Rutgers The State University of New Jersey, School of Graduate Studies.
- Monteiro, R. P., De Holanda Coelho, G. L., Hanel, P. H. P., De Medeiros, E. D., & Da Silva, P. D. G. (2021). The Efficient Assessment of Self-Esteem: Proposing the Brief Rosenberg Self-Esteem Scale. *Applied Research in Quality of Life*, 17(2), 931–947. <https://doi.org/10.1007/s11482-021-09936-4>
- Orth, U., & Robins, R. W. (2014). The development of Self-Esteem. *Current Directions in Psychological Science*, 23(5), 381–387. <https://doi.org/10.1177/0963721414547414>
- Ray, M. L., & Wilkie, W. L. (1970). Fear: The potential of an appeal neglected by marketing. *Journal of Marketing*, 34(1), 54–62. <https://doi.org/10.2307/1250296>

- Romaniuk, J., & Sharp, B. (2003). Measuring brand perceptions: Testing quantity and quality. *Journal of Targeting Measurement and Analysis for Marketing*, 11(3), 218–229. <https://doi.org/10.1057/palgrave.jt.5740079>
- Rosenberg, M. (1965). Rosenberg self-esteem scale (RSE). *Acceptance and commitment therapy. Measures package*, 61(52), 18.
- Shin, S., Ki, E., & Griffin, W. G. (2017). The effectiveness of fear appeals in ‘green’ advertising: An analysis of creative, consumer, and source variables. *Journal of Marketing Communications*, 23(5), 473–492. <https://doi.org/10.1080/13527266.2017.1290671>
- Shin, S., Ki, E., & Griffin, W. G. (2017). The effectiveness of fear appeals in ‘green’ advertising: An analysis of creative, consumer, and source variables. *Journal of Marketing Communications*, 23(5), 473–492. <https://doi.org/10.1080/13527266.2017.1290671>
- Tannenbaum, M. B., Hepler, J., Zimmerman, R. S., Saul, L., Jacobs, S., Wilson, K., & Albarracín, D. (2015). Appealing to fear: A meta-analysis of fear appeal effectiveness and theories. *Psychological Bulletin*, 141(6), 1178–1204. <https://doi.org/10.1037/a0039729>
- Witt, G. L., & Baird, D. E. (2018). *The Gen Z frequency: How brands tune in and build credibility*. Kogan Page Publishers.
- Witte, K. (1992). Putting the fear back into fear appeals: The extended parallel process model. *Communication Monographs*, 59(4), 329–349. <https://doi.org/10.1080/03637759209376276>
- Zhang, H., Sun, J., Liu, F., & Knight, J. G. (2014). Be rational or be emotional: advertising appeals, service types and consumer responses. *European Journal of Marketing*, 48(11/12), 2105–2126. <https://doi.org/10.1108/ejm-10-2012-0613>
- Zheng, M. (2020). When and why negative emotional appeals work in advertising: A review of research. *Open Journal of Social Sciences*, 08(03), 7–16. <https://doi.org/10.4236/jss.2020.83002>

7. Appendix A: Survey

Thesis project

Start of Block: Informed consent

Consent

Hello!

Thank you for considering participating in this study conducted as part of a Master's thesis for Erasmus University Rotterdam.

The survey will take approximately 10 minutes to complete. It includes questions related to skincare and advertising, as well as some general information about you. You are not asked to disclose your name, or any defining information and your responses will remain anonymous.

Filling in in this survey is entirely voluntary. No significant risks or discomforts are expected to be associated with your participation, and if at any point you feel uncomfortable, you are free to withdraw.

Your responses will be treated with the utmost confidentiality. Data collected will be stored securely. Only authorized members of the research team will have access to the information, and it will be used solely for the purposes of this study.

By proceeding with the survey, you hereby confirm that:

- You have read and understood the information provided.
- You voluntarily agree to participate in this study.
- You are at least 18 years old.

If you have any questions about this study or your rights as a participant, please contact:

Eliana Hristova - 703047eh@eur.nl

Erasmus University Rotterdam.

If you agree to participate, please click the button below to begin the survey.

End of Block: Informed consent

Start of Block: Ad - High

HighFear Please look at and read through the following skincare advertisement carefully:

B COSMETICS RETINOL FACE MASK

WRINKLES WON'T HIDE

B

This innovative face mask skin protects your skin against collagen loss, cell breakdown, and irreversible damage. Don't let age set in.

 REVITALIZES	 BRIGHTENS	 PREVENTS WRINKLES
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End of Block: Ad - High

Start of Block: Ad - Medium

MidFear Please look at and read through the following skincare advertisement carefully:



B COSMETICS RETINOL FACE MASK

TIME WON'T WAIT

B

This innovative, lightweight face mask helps slow the signs of aging,
leaving your skin looking more youthful than ever.

 REVITALIZES	 BRIGHTENS	 PREVENTS WRINKLES
---	---	---

End of Block: Ad - Medium

Start of Block: Ad - Low

LowFear Please look at and read through the following skincare advertisement carefully:



B COSMETICS RETINOL FACE MASK

AGE WITH GRACE

B

This innovative, lightweight face mask provides an instant boost of hydration that leaves your skin looking more youthful than ever.

 REVITALIZES	 BRIGHTENS	 PREVENTS WRINKLES
---	---	---

End of Block: Ad - Low

Start of Block: Brand Perception

IntentionAbility Please indicate how well the following statements describe B Cosmetics

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
The brand has good intentions toward consumers. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The brand acts with the public's best interests in mind. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The brand has the ability to implement its intentions (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The brand is effective at achieving its goals. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Emotions Please indicate the degree to which you feel the following emotions toward B Cosmetics

	1	2	3	4	5
Admiration ()					
Pity ()					
Envy ()					
Contempt ()					

BehaviorIntention Please indicate how well the following statements describe your attitude towards

B Cosmetics

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
You would be likely to make a purchase from this brand if you had the money necessary to do so. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You feel a strong preference for this brand. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Brand Perception

Start of Block: Self-esteem

B-RSE Using the scale below, please indicate whether you agree or disagree with each of the

following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
At times I think I am no good at all. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
All in all, I am inclined to think that I am a failure. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel I do have much to be proud of. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
On the whole, I am satisfied with myself. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I take a positive attitude toward myself. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Self-esteem

Start of Block: Involvement

Inv-Interest Using the scale below, please indicate whether you agree or disagree with each of the

following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I really enjoy buying skincare. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Whenever I buy skincare, it is like giving myself a present. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To me, skincare is pleasurable. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Inv-Pleasure Using the scale below, please indicate whether you agree or disagree with each of the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
What skincare I purchase is extremely important to me. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very interested in skincare. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I could not care less about skincare. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Inv-Sign Using the scale below, please indicate whether you agree or disagree with each of the

following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I can tell a lot about a person from the skincare they buy. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The skincare a person buys reflects who they are. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The skincare I buy describes the person I am. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Inv-RiskImportance Using the scale below, please indicate whether you agree or disagree with each

of the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
It is very irritating to buy skincare that is not right (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It does not matter too much if I make a mistake when buying skincare. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am annoyed with myself if it turns out that I made the wrong choice when buying skincare (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Inv-PE Using the scale below, please indicate whether you agree or disagree with each of the

following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
When I am in front of the skincare section, I always feel unsure about which to choose (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I buy skincare, I can never be exactly sure if the choice was right (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Choosing skincare is quite hard (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I buy skincare I can never be quite certain about my choice (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Involvement

Start of Block: Manipulation Check

ManipulationCheck Using the scale below, please indicate whether you agree or disagree with each

of the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
The advertisement aimed to create a fear of ageing (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The advertisement was successful at creating a fear of ageing (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Manipulation Check

Start of Block: General questions

Age What is your age?

Gender What is your gender?

- Male (1)
- Female (2)
- Non-binary / third gender (3)
- Prefer not to say (4)

End of Block: General questions

Start of Block: End

End Thank you for your participation in this survey!

This study was designed to explore how fear-based advertising impacts consumer perception of skincare brands. Participants were shown three different versions of an advertisement, with either low, medium or high level of fear-based messaging. Self-esteem and involvement in skincare were

also examined as potential moderating factors.

