



From Emotional Appeals to Brand Attitudes: Investigating the Role of Persuasion Knowledge

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ABSTRACT

Nowadays, with advertising online and offline, consumers become more and more aware and resistant to persuasion tactics, while brands work continuously to improve their marketing strategies. Inevitably, customers form attitudes towards the brands and make purchasing decisions accordingly. Brands on the other hand, want to ensure that their target audiences hold positive attitudes towards them and will engage with them in the future. One way to accomplish this is if companies release appealing advertisements. Previous research has already shown that emotionally appealing advertisements lead to favourable brand attitudes. However, this outcome is frequently influenced by other variables. One of them is persuasion knowledge. Therefore, the goal of this research is to investigate how are brand attitudes formed when ad appeal and persuasion knowledge are assessed.

By using quantitative methods, a mixed-method approach was adopted. Namely, a survey together with an experiment were designed to gather the data which after the analysis will enable the researcher to answer the thesis question. The study was conducted via an online tool employing an experiment and a survey, which assessed respondents' reactions towards three advertising stimuli, 2 of which were emotionally appealing. The results showed that emotional ad appeals did not render a significant result on situational persuasion knowledge, nor on brand attitudes. However, this research is in accordance with previous studies which demonstrate that persuasion knowledge influences brand attitudes negatively. Namely, high scores of persuasion knowledge are translated in negative brand attitudes. With regards to implications, the study suggests marketing specialists to acknowledge the product type and the interest towards the respective product before designing ad appeals. Furthermore, as far as consumers are concerned, this paper advises them to be vigilant and assess critically the advertisements they encounter.

KEYWORDS: persuasion knowledge, brand attitude, emotional ad appeal, ad format, coping skills, consumers' goals.

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1. Introduction

It has never been easier to purchase goods or engage with brands than it is nowadays. Everything is at one click's distance whether we need a new pair of shoes, buy groceries or leave a review about our experience with a product. However, as it is simple, it can also become overwhelming at times. *Which brand is the most sustainable? Which brand uses ethically sourced ingredients? Which brands are suspected of greenwashing? Which brand entails the best choice for me, my budget, my values, or my needs?* These are all questions which at some point a consumer will ask himself throughout the purchasing decision journey. On the other side, the brands design communication and marketing strategies which will address these questions in the most effective manner for their goals. For example, brands will paint a picture of themselves the consumers want to see. They are knowledgeable about their target audiences and will do their best to build campaigns which appeal to them, leading these populations from target consumers to actual customers (Panda, Panda & Mishra, 2013). This journey is a complex one and brands are considering multiple performance indicators when designing their strategies. However, an indicator which is proven to influence purchasing decision and word of mouth is the attitude towards the brand (Burke & Edell, 1989). It can be influenced by numerous variables and two of them are advertisement appeal and persuasion knowledge.

Furthermore, companies assign a considerable amount from their budget to promote the image of their brand and their products. The purposes for this are various, but as mentioned previously, the most common ones are improving brand image through creating positive brand attitudes, enhance the brand engagement and determine positive word of mouth and ultimately increase their sales (Burke & Edell, 1989; Puccinelli et al., 2009). One of the main ways to promote brand images is through advertisements. These can take different formats such as visual, textual, or audio-visual and can transmit various emotions or feelings which could bear either positive or negative valences. Some of these advertisements have the purpose of informing the target audience with regard to a specific product or action the brand is taking, others carry the goal of persuading the consumers to take some type of action such as purchasing or recommending the product to others (Sweldens, Osslelaer & Janiszewski, 2010). In addition, other ads are designed with the intention of communicating brand values or even improve the brand's image after it was altered due to various factors.

Besides designing the advertisement and adding a certain appeal to it, marketing experts are knowledgeable of different persuasion strategies and use them accordingly. Still, since each individual has different psychological traits, it is challenging to always be able to influence consumers' attitudes. Specifically, even though if companies assessed a certain target population, individuals from that

population are not all the same, meaning that they do not have the same beliefs, value systems, habits or even financial resources and, therefore, the message transmitted will resound differently for each one of them. Thereby, in order for marketers to attain the necessary tools to build relevant and consistent communication strategies, there is a need for studies which would research concepts such as advertising appeals, brand attitudes and persuasion knowledge.

Even though marketers learn the characteristics of their target populations and build the communication plans or campaigns, their strategies might not always render the desired outcomes. However, to prevent an extreme underperformance of their plans, most specialists employ one or more of the most popular and most effective strategies which usually entail appealing to different beliefs or values consumers have such as self-care, kindness, etc.; employing celebrities to be brand ambassadors because people can empathise better with them (Boerman, 2020); using different ad formats together with emotional appeals or conducting giveaways (Sweldens et al., 2010).

In addition, with technology changing and improving continuously, marketers need to adapt their messages and the form in which they transmit their messages (Puccinelli et al., 2009). This is because consumers become acquainted with marketing tactics and as a result, they will resist the persuasion episode which usually is depicted by the advertisement. This form of awareness is studied under the persuasion knowledge construct. Consequently, consumers' persuasion knowledge changes as well and they are becoming more and more aware of new persuasion attempts easier. In this sense, Boush, Friestad, and Rose (1994) discovered that consumers' frequency of exposure to advertising predicts the kind of persuasion attempts they recognise - more subtle or more complex ones.

With companies focusing on creating positive attitudes towards their brands and services, research in this direction is continuously needed (Pucinelli et al., 2009). The purchase decision or recommendations towards a product are determined by multiple variables which are studied in the marketing and consumer behavior field. For example, researchers argue that positive brand attitudes will lead to purchase intentions (Cotte, Coulter & Moore, 2005). Adding to this, consumers' needs are constantly changing, the market is continuously evolving, and marketing specialists have to predict and follow all these changes in order to create engaging and persuasive advertising. Moreover, along with all these circumstances, targets' persuasion knowledge is adjusting, so this is another reason for constant extensive research.

For a clearer depiction of persuasion knowledge, it is added that it encompasses a multidimensional concept which entails dispositional and situational persuasion knowledge, which in their turn consist of various indicators (Friestad & Wright, 1994). Studies related to the persuasion

knowledge model are needed continuously because brands' marketing strategies are continually adapting to consumers' perceptions, values, traits and behaviours.

1.2. Study justification

This study focused on finding out if emotional appeals in advertisements are mediated by persuasion knowledge in their relationship with brand attitudes. The contribution this study provided will be useful not only to marketers but also to consumers. Marketers will be able to improve the design of their marketing strategies, and consumers will improve their coping skills with persuasion knowledge. All the more, not only marketers and consumers can benefit from this study, but also researchers. Specifically, this paper will deepen the knowledge into the advertising domain, bringing information regarding the effectiveness of different emotional appeals used in advertisements when it comes to determining positive brand attitudes.

1.2.1. Practical and social implications

The practical implications of this study are manifold. Overall, the literature review and consequently the results will provide valuable insights into how marketers might possibly deliver relevant campaigns which result in effective communication between the brand and consumer and ultimately lead to positive brand attitudes, engagement and purchase intention. Specifically, the results are expected to deepen the expertise with regards to how emotional appeals should be employed in an advertising campaign. Furthermore, the study intends to show which pictures are more effective: the ones with only a text and the product or the visuals with a person interacting with the product. This observation is relevant because there are some formats and appeals which influence a low level of persuasion knowledge and more positive brand attitudes for a particular type of product than others.

The contribution this study might bring to consumers consists mainly of information regarding how they could identify persuasion tactics and how should they react to advertisements from brands. In addition, customers can learn to recognise easier ad formats and appeals which are meant to deceive and to shift their attention from the reality of the brand if the brand is lying to its buyers.

1.2.2. Academic relevance

Overall, this study contributes to the expansion of knowledge in the advertising domain. Specifically, this paper provides insights into how can ad appeals influence brand attitudes and whether this is a direct relation or not.

There is extensive research in the persuasion knowledge sphere. However, to the best of our knowledge, the model proposed by this study was not yet researched. Even though ad formats and advertisement appeals were studied in relation to persuasion knowledge and brand attitudes, the stimuli employed in these papers and their contexts were different than the ones used by this study. For example, other studies researched brand names (Matthes, Schemer & Wirth, 2007), Facebook pages (Leung, Tanford & Jiang, 2017), product placement in TV shows (Gibson, Redker & Zimmerman, 2014), on a website (Leung et al., 2017) or on social media (Boerman, 2020, Tutaj & van Reijmersdal, 2012) with stimuli such as banners, videos, pictures. Furthermore, the present study is one of the few studies which researched persuasion knowledge under the role of a mediator variable.

Another contribution this research brings is the comparison between two emotional appeals. Namely, an emotional appeal in a picture showing a product and a text and another picture showing a person using the product. This way it will be known whether there exist differences between the pictures and whether one is more emotionally appealing than the other.

Seeing that nonetheless one of the most important goals marketers have is selling brand's products, they shape their message in such a way that it would determine a positive reaction in their target population's behaviour and attitudes. Such positive responses entail forming positive brand attitudes, becoming willing to buy the product or being loyal to the brand, etc. Considering these aspects, the purpose of this study is to focus on advertisement appeals and as consumers reactions, we will focus on brand attitudes. As a result, the following research question emerged: *How do positive appeals brand use in advertisements influence customers' brand attitudes?*

2.1. Persuasion Knowledge

This section will discuss the persuasion knowledge concept. Papers which researched this concept will be presented along with their findings, models and recommendations. Overall, persuasion knowledge is a complex concept, characteristic which enables scholars to be creative and explore it in a variety of research designs. Generally, persuasion knowledge refers to consumers' awareness of the persuasive intent of marketers. However, researchers identified multiple indicators which determine awareness and this allows a certain degree of flexibility when it comes to assessing persuasion knowledge in a specific context (Campbell, 1995; Friestad & Wright, 1994; 1995).

In order to expand the intelligence in the advertising domain, namely how different persuasion tactics take place, how consumers form their brand attitudes or make purchasing decisions, researchers established the Persuasion Knowledge Model (PKM). It was first developed by Friestad and Wright (1994), then other scholars contributed to a further expansion of this theory (see Campbell, 1995; Ham, Nelson & Das, 2015). In its essence, persuasion knowledge is a multidimensional concept and due to this characteristic, it allows researchers to study its dimensions together with its multiple indicators in relation to numerous dependent or independent variables. For example, Friestad and Wright (1994) identified persuasion knowledge to have 2 dimensions, which entail other indicators and sub-indicators. Namely, the first dimension is dispositional persuasion knowledge and the second dimension is situational persuasion knowledge. These two dimensions can be studied in relation with agent and target knowledge, the persuasion episode, persuasion coping skills, etc. (Friestad & Wright, 1994). This is because all these variables have the characteristic of influencing persuasion knowledge to a certain extent. In addition, Friestad & Wright (1994) claimed that all these concepts together complete the Persuasion Knowledge Model, this meaning that persuasion knowledge is better assessed and explained when explored together with the variables from the model and their indicators.

To illustrate the variety of research designs persuasion knowledge was employed in, this paragraph displays some of the variables persuasion knowledge was frequently researched in relation with: credibility towards advertising (Dahlen, 2005), attitudes toward the advertisement and towards the brand (Buvár & Orosz, 2020; Campbell, 1995, Cotte et al., 2005; Wei, Fischer & Main, 2008), advertisement format and advertisement appeals (Akbari, 2015; Albers-Miller & Stafford, 1999; Dens & de Pelsmacker, 2010; Holbrook & Batra, 1987; Leung et al., 2017; Rhee & Jung, 2019), sponsorship disclosure (Boerman, 2020; Boerman, van Reijmersdal & Neijens, 2012; Boerman, Willemsen & Van Der Aa, 2017). Consequently, these studies usually depicted contrary results with regards to how persuasion knowledge is influenced by the other variables but also how persuasion knowledge in its turn affects

other concepts. This is because persuasion knowledge is highly dependent on the other variables it is studied together with but also on the demographic characteristics of the sample (Friestad & Wright, 1994; 1995). Therefore, in order to grasp valid inferences on a population when studying persuasion knowledge, researchers need to assess the targeted population's characteristics, choose the sample accordingly and carefully control the variables and the stimuli used.

To give a clearer overview of persuasion knowledge, in broad terms, it is defined as being the consumers' ability to identify and cope with advertisers' persuasion tactics (Friestad & Wright, 1994). In a more specific explanation, from the consumers' point of view, persuasion knowledge entails the ability to acknowledge, decode and evaluate the persuasion episode by employing coping tactics. Coping tactics comprise people's abilities to resist the persuasion episode. For example, consumers can apply their knowledge to make the best choices to meet their purchasing goals when considering the price, the quality of the product and other characteristics, and not let themselves be deluded by advertisements which could be untrue (Campbell & Kirmani, 2000). More researchers actually argued that persuasion knowledge, and therefore the target's response to the persuasion episode is also influenced by the target's goals towards the respective product (Friestad & Wright, 1994; Puccinelli et al., 2009).

What is more, goals have the quality of regulating people's purchasing behaviour (i.e., impulsive purchasing), therefore keeping the interest towards distractions such as discounts or promotions under control (Puccinelli et al., 2009). However, according to the same authors, if consumers' goals are in line with marketers' intentions, persuasion knowledge might not influence consumers' responses towards the brand or towards the advertiser. This is because if the consumer is interested in the advertised product, he will recognise the persuasion episode but this will not imply a critical assessment with regards to the ad (Campbell, 1995; Campbell & Kirmani, 2000; Friestad & Wright, 1995).

Adding to this, researchers claimed that coping tactics, which are an important element in the persuasion knowledge field, are conditioned by the presence and strength of the previously mentioned consumers' goals regarding their purchasing intentions and behaviour (Friestad & Wright, 1994). Therein, it could mean that for strong and clear goals, the consumer might ignore other advertisements and focus only on those which appeal to his needs. In other words, coping tactics entail a significant feature of a consumer's ability to process persuasion episodes, but they are also context dependent, meaning that they rely on consumer goals and their intensity. Furthermore, most of the consumers have the capacity to distinguish a persuasive episode and enable their coping skills towards advertising (Friestad & Wright, 1994). This has resulted from their lifelog experience with advertising exposure, and

it represents a useful feature when consumers intend to focus on their specific purchasing goals because it enables them to be less interested in other advertisements. However, even if past experiences with advertising are translated into increased persuasion knowledge, researchers are still debating how this process takes place exactly (Buvár & Orosz, 2020). This is due to the complexity of concepts influencing this process, namely processing mechanisms, mood (van Reijmersdal, Lammers, Rozendaal & Buijzen, 2015), past experiences and knowledge (Friestad & Wright, 1994; 1995).

On the other hand, it was found that the coping skills resulted from past exposures to promotional content, might not be efficient in dealing with new ad formats (Buvár & Orosz, 2020; Hibbert, Smith, Davies & Ireland, 2007) or even new types of message content (Matthes et al., 2007). Accordingly, Matthes et al. (2007) concluded that persuasion knowledge is low for new advertising strategies and new types of content, but repeated exposure to similar formats will increase its levels. Nevertheless, with the marketing field evolving rapidly, consumers' coping tactics with persuasion need to adapt as well. Thereby, these conclusions are in line with other studies which argue that persuasion knowledge scores will manifest an upsurge along with advancing years (Friestad & Wright, 1994; 1995) due to more efficient employment of coping tactics. However, few studies have researched the differences between age groups in persuasion knowledge levels in relation to new ad formats, an aspect which is valuable to explore since they claim that persuasion knowledge changes over time. Nonetheless, this would entail an interesting research perspective as it would render information on how resistant are to persuasion episodes younger individuals compared to older ones. Such a study would provide valuable insights as to what are the most effective advertising tactics depending on consumer age groups and whether the differences between these groups are significant when they are exposed to the same stimuli.

As mentioned previously, one of the challenging aspects in regard with persuasion knowledge is that it is not a stable feature; namely, its levels do not remain consistent throughout different types of advertisements or over time (Campbell, 1995; Friestad & Wright, 1995). This is because the occurrence of persuasion knowledge is conditioned by topic knowledge and agent knowledge which are unique for each message and advertisement (Friestad & Wright, 1995). Namely, consumers cannot retain information concerning all the agents and all the tactics employed and adapted continuously by them. What is more, marketing strategies are different among brands, from the product types to the message appeal and advertisement format. In addition, ad formats and appeals are evolving along with new technologies and findings from the marketing field. Therefore, individuals might display different levels of persuasion knowledge depending on the existence of previous advertising experiences with a brand.

This is also explained by Dens & de Pelsmacker (2010) who claimed that an interaction with advertisements from known brands will result in different intensities of persuasion knowledge and even more positive brand attitudes compared to new or unpopular brands. To conclude, persuasion knowledge varies across practices and time, therefore there is a need for continuous research which is able to update these changes.

It can also be argued that persuasion knowledge is related to a persons' judgement and cognitive development, folk knowledge and life experience (Campbell, 1995; Friestad & Wright, 1994). Adding to this claim, Buijzen, Reijmersdal and Owen (2010) argue that the essential consumer behaviour related skills are shaped until adolescence. This means that persuasion coping abilities are an outcome of people's experiences as consumers. In addition, experience with advertising can also be translated in media literacy which increases an advertisement's possibility to be processed more or less critically (Boerman et al., 2012; Rozendaal, Lapierre, van Reijmersdal & Buijzen, 2011). What is more, each particular exposure to advertising is translated into different learning outcomes related to persuasion knowledge (Sweldens, van Osselaer, Janiszewski, 2010). Considering these aspects, until the present moment researchers did not reach a common ground to a unanimous accepted definition of persuasion knowledge and a complete list of generally accepted indicators, nor a unique type of measurement or scale (Ham & Nelson, 2016; Tutaj & van Reijmersdal, 2012). This is why scholars advise other researchers if implied by the research design and context, to devise their own scales for measuring persuasion knowledge as these scales should be specific to the context of the study and should have the power to measure the right type of persuasion knowledge.

On a slightly different note, Ham and Nelson (2016), argue that how consumers self-assess their skills regarding the persuasion process outweighs in importance the brand knowledge they actually retain. Specifically, they claim that the self-perception of one's own abilities to cope with advertising and their trust that they can successfully recognise persuasion attempts is more important than the experience they have in this sense (Bearden et al., 2001). This indicates that persuasion knowledge wise, the coping strategies a person develops towards advertising over time is less important than the perception an individual has regarding these skills, therefore meaning that even if agent and topic knowledge is low, the consumer will be able to successfully resist a persuasion attempt if he thinks he has this ability.

Continuing to consumers' attitudes, it is argued that the attitudes towards the advertisement's credibility and the evaluation of the agent's manipulative intent will lead to attitudes towards the advertisement and marketer. Additionally, on one hand, Cotte et al. (2005) discovered that if an

advertisement is perceived as being credible the targeted audience will develop positive attitudes towards the ad and, on the other hand, if they perceive it as being manipulative, they will nurture negative attitudes towards the ad, agent and brand. Wentzel, Tomczak and Herrmann (2010), whose goal was to observe if salient manipulative intent influences brand evaluations, also found similar results. However, they pledged that manipulative intent would raise negative brand attitudes only when it is salient. Additionally, manipulative intent and cognitive efficiency are believed to impact ad and brand evaluation overall (Cotte et al., 2005). On the same note, Yoo and MacInnis (2005), had a similar conclusion, but they argued that the positive attitudes resulted from high ad credibility are, in fact, mediated by the positive emotions nurtured by ad credibility. Consumers can also be reticent with regards to marketing messages which can be perceived as being untrue, false, or deceiving (Amazeen & Muddiman, 2018; Friestad & Wright, 1994; Kirmani & Zhu, 2007) and these perceptions lead to unfavourable brand attitudes. In conclusion, credibility is extremely important when brands intend to address consumers' attitudes and the mentioned studies show that if companies fail with regards to their credibility, they risk to lose customers and be perceived negatively.

Taking into consideration the previously mentioned characteristics of persuasion knowledge, researchers categorised it into two dimensions. Overall, these dimensions enabled academics to better structure their research on persuasion knowledge and study it more accurately (Ham et al., 2015). The two dimensions are dispositional persuasion knowledge and situational persuasion knowledge (Ham et al., 2015) but other used constructs for these dimensions are conceptual persuasion knowledge and attitudinal persuasion knowledge, respectively (Rozendaal et al., 2011). As far as dispositional persuasion knowledge is concerned, it refers to the persuasion knowledge grasped along a lifetime and one of the methods used for measuring it, is asking participants questions on a general level regarding their beliefs about persuasion in advertising contexts. Dispositional persuasion knowledge can also be determined by sceptical attitudes towards advertising (Obermiller & Spangenberg, 1998) or beliefs about the agent in TV advertising (Boush et al., 1994). Consumer's self-confidence of persuasion knowledge is another indicator of the dispositional persuasion knowledge (Bearden, Hardesty & Rose, 2001) and it reflects target's trust in his own abilities to make suitable decisions for himself when it comes to his marketplace behaviour (Bearden et al., 2001). Additionally, dispositional persuasion knowledge also encompasses the recognition of the persuasion attempt and the recognition of the agent and his goals (Boerman et al., 2012; Friestad & Wright, 1994). This is why some researchers decide to measure dispositional persuasion knowledge by simply asking respondents if they recognised the advertisement in the experimental context (Buvár & Orosz, 2020).

Situational persuasion knowledge, on the other hand, refers to a specific event when persuasion knowledge is activated, and it usually is translated into the purchase intention and target's attitudes towards the brand and the persuasion episode (Campbell, 1995). The most often used scale for measuring it is the *Inference of Manipulative Intent* developed by Campbell (1995) and further used by Cotte et al. (2005), Matthes et al. (2007) etc. This scale measures the extent to which a specific advertisement or persuasion episode will be perceived by the targeted customer as being manipulative (Campbell, 1995). Specifically, it assesses the grasped credibility of the advertisement, which as shown previously, influences brand attitudes. Therein, the *Inference of Manipulative Intent* scale is considered a very suitable measure for assessing situational persuasion knowledge in experimental settings (Ham et al., 2015).

Seeing that persuasion knowledge is an umbrella concept, the conceptualization and operationalisation process might be tedious. However, this characteristic enables the researcher to use scales which are most appropriate for his study's goals (Ham et al., 2015). Firstly, for the persuasion knowledge measurement, the researchers need assurance that it is active, namely, that the ad is perceived as being an advertising episode to persuade or influence the target to take certain decisions in the agents' favour (Amazeen & Muddiman, 2018). Then, the next steps are the recognition of the topic and the agent. Additionally, recognition is also a valid measure to determine advertising memory and brand recall (Gibson et al., 2014; van Reijmersdal et al., 2015). These steps and methods are usually the standard ones which refer to dispositional persuasion knowledge. In addition, situational persuasion knowledge can be assessed through scales which are more context specific such as the above-mentioned *Inference of Manipulative Intent* scale (Campbell, 1995). Nonetheless, the choice of persuasion knowledge scales in a study should consider the other variables in the research and how persuasion knowledge usually interacts with them.

Boerman et al. (2012) argued that situational persuasion knowledge is more effective than dispositional persuasion knowledge when it comes to consumers' coping with advertising episodes. Moreover, Boerman et al. (2017) found that a sponsorship disclosure increases the dispositional persuasion knowledge, but it does not influence situational persuasion knowledge directly. Specifically, they discovered that there is an indirect positive correlation between dispositional persuasion knowledge and situational persuasion knowledge. Also, the respondents who were exposed longer to the sponsored content manifested higher levels of situational persuasion knowledge, that is, they revealed more suspicion and distrust towards the advertisement. Contrarily, according to the same authors, when the same content was posted by a celebrity, persuasion knowledge displayed low levels,

but the endorsement revealed negative attitudes toward the advertisement (Boerman et al., 2017). This paragraph showed that the two dimensions of persuasion knowledge are differently influenced by the same variable, a conclusion which further proves that researchers need to assess them separately.

Furthermore, discussing brand attitudes in relation with persuasion knowledge, researchers found that the advertisement's exposure duration influences the activation of persuasion knowledge, but it does not determine the immediate emergence of negative attitudes towards the content (Boerman et al., 2012). The exposure duration and its link to persuasion knowledge activation can be explained through the condition of the target's cognitive resources. For example, studies (van Reijmersdal et al., 2015) discovered that, due to better cognitive resources in the morning, people will recognise persuasion attempts easier in the morning than in the evening. Which indeed means that a rested mind will better cope with advertising due to the availability of cognitive resources.

Furthermore, according to Boerman et al. (2012), message processing literature can better explain and illustrate the relationship between the two dimensions of persuasion knowledge and how they influence one another. For example, they discovered that when the respondents showed high levels of dispositional persuasion knowledge, situational persuasion knowledge also manifested increased rates. However, according to the same authors, situational persuasion knowledge displayed high levels even when dispositional persuasion knowledge has recorded low values. This could mean that, contrarily to what other researchers concluded (Ham et al., 2015), the two types of persuasion knowledge are not necessarily interdependent. Furthermore, Buijzen et al. (2010) classified the message processing mechanisms based on their level of cognitive elaboration and added that attitude formation is dependent on these mechanisms. In other words, the variables which mediate the process of attitude formation differ based on what message processing mechanism is enabled for the specific persuasion episode. On a similar note, Bearden et al. (2001) concluded in their study that people who are more confident in their purchase related abilities are less prone to be persuaded by advertisements. However, the processing mechanisms are complex concepts which are beyond the scope of this study. As a result, a successful advertising strategy or template does not yet exist because they cannot guarantee infallible efficacy due to the diverse nature of interactions between the variables above-mentioned

This section defined persuasion knowledge and showcased the numerous variables that can influence it. Furthermore, it was shown that persuasion knowledge is not a stable feature, characteristic which implies that it should be studied continuously. The next section intends to discuss brand attitudes, ad appeals and persuasion knowledge together in order to explore the relationship between these concepts and assess what previous research has found.

2.2. Brand attitudes

This section discusses brand attitudes and how are these influenced by various concepts. Overall, brand attitudes formation depends on numerous variables and usually, those variables are employed together. In the following paragraphs research regarding these topics is assessed in order to provide a clearer image on brand attitudes and how are they determined.

Brand attitudes are important elements in the brand interaction process. This is because they can ultimately lead to decisions consumers take such as purchasing, word of mouth or engagement with the brand (Holbrook & Batra, 1987; Matthes et al., 2007). In addition, attitudes are believed to influence consumer behaviour, but some researchers argued that the respective attitudes must persist over time in order to determine a behavioural response (Puccinelli et al., 2009). Faircloth, Capella and Alford (2001), on the other hand, affirmed that consumer behaviour can be influenced by attitudes toward the brand but not through a direct relationship. Nonetheless, a clear aspect is that attitudes influence behaviour and this is why it is an extensively researched topic in the fields involving consumer behaviour, marketing and communication. Research identified multiple variables influencing and interacting with brand attitudes and this section will discuss some and only mention others. Studies usually employed brand attitudes as outcome variables. This was the case when researchers proposed variables as persuasion knowledge, advertisement format and advertisement appeals (Akbari, 2015; Albers-Miller & Stafford, 1999; Buvár & Orosz, 2020; Dens & de Pelsmacker, 2010; Rhee & Jung, 2019), brand recall (e.g., Matthes et al., 2007) or brand memory (Matthes et al., 2007) as predictors of ad and brand attitudes.

To begin with, it is important to acknowledge how brand attitudes are being formed and what are the best practices for positive attitude formation. Some studies argued that brand attitudes will emerge only after the consumer formed ad attitudes (Edell & Burke, 1987; Geuens et al., 2010; Hornik, Ofir & Rachamim, 2017; Liu & Stout, 1987). Specifically, these studies showed that positive attitudes towards the advertisement are correlated with positive brand attitudes (Geuens et al., 2010; Liu & Stout, 1987). In addition, other scholars claimed that brand attitudes can be determined directly by advertisement format, without the influence of ad attitudes (Tutaj & van Reijmersdal, 2012). One of the possible explanations as to why researchers did not reach a common conclusion in this sense is that attitude formation is highly dependent on other variables. For example, the familiarity with the brand (Rhee & Jung, 2019) or interest in the product (Hornik et al., 2017) can influence brand attitudes. Furthermore, the mood a person has when is being exposed to the advertisement or the level of fatigue, especially mental, impact the reaction to promotional formats (van Reijmersdal et al., 2015).

Nonetheless, these aspects will be mentioned further as they must not be overlooked when discussing consumer behaviour. Thus, even if research discussions as to how brand attitudes are formed are still ongoing, it is however clear that after being exposed to an advertisement, an individual will own a certain opinion towards the brand. Nonetheless, the attitude formation process is a complex one and it should be addressed more extensively.

Studies addressing recognition, which is oftentimes studied under the persuasion knowledge umbrella, expose mixed results as some researchers did not find any effect of ad recognition on positive ad attitudes (Bugar & Orosz, 2020; Evans & Hoy, 2016), while others found that ad recognition leads to negative attitudes towards the advertisement (Amazeen & Muddiman, 2018). These dissimilarities between studies can be explained by other variables like consumers' goals (Friestad & Wright, 1994) and consumers' interest in the product that is being advertised, but also by the availability of cognitive resources and even mood (van Reijmersdal, 2015). For example, consumers' goals have the strength of increasing individual awareness for the desired product (Akbari, 2015), therein increasing ad recognition. To illustrate, if a consumer is interested in buying a couch, his attention will be focused on couch advertisements, which leads to enhanced ad recognition but not necessarily to positive brand attitudes only. Other studies which link persuasion knowledge to brand attitudes claimed that different indicators of persuasion knowledge can indeed influence brand attitudes, but negatively (Gibson et al., 2014; van Reijmersdal et al., 2015) and only for respondents who revealed to be in a positive mood (van Reijmersdal et al., 2015). On the other hand, for those respondents who were in a negative mood, activation of persuasion knowledge did not lay a significant effect on brand attitudes (van Reijmersdal et al., 2015). These studies show that multiple variables need to be considered when assessing consumers' attitudes with regards to an advertised brand. As presented, the mood is also an important factor, but it entails something a marketer cannot manipulate like researchers in an experimental setting can. The same is available for goals and the availability of cognitive resources. Therefore, as it can be seen in the following section, more variables need to be assessed and addressed when researching brand attitudes.

2.3. Ad Appeals

Ad appeals are important factors when discussing brand attitudes, as research shows. Overall, ad appeals can influence brand attitudes either by themselves or together with other variables. This section provides more insight into these issues.

More researchers alleged that attitudes toward the advertisement depend on ad related aspects such as message content and advertisement format. For example, Holbrook and Batra (1987) claimed that message content produces certain emotions which in turn lead to attitude formation. In addition, Muehling and McCann (1993) had the same conclusion but added that cognitive capacity and mood were also factors to influence brand attitudes. On the contrary, Leung et al. (2017) observed that message content does not have a significant impact on attitudes. Nonetheless, on one hand, these opposite results can be explained by the type of content used in the studies. To illustrate, while Holbrook and Batra (1987) studied people's responses towards various audio-visual TV advertisements, Leung et al. (2017) studied the implications of different types of content posted on fictional hotel Facebook pages. The stimuli employed in these two studies were different, therefore, this raises the question of whether video advertisements are more efficient in determining attitude formation, as Holbrook and Batra (1987) concluded. On the same note, Reeves, Thorson, Rothschild and McDonald (1983) and Singer (1980) revealed that the audio-visuals were the most effective forms of advertising when brands intended to influence the formation of positive brand attitudes in their target population. In addition, Liu and Stout (1987) showed that the advertisement strategy which evoked more positive responses was the audio-visual format with an emotional appeal. One of the possible explanations could be that an audio-visual format depicts more information and experiences than a simple picture, in essence transmitting more complex feelings. Even though the debating with regards to most effective ad strategies to establish favourable brand attitudes is still ongoing, marketers can employ different ad strategies which are proven to render the expected results. In addition, specialists can tailor research findings according to their needs. Continuing, such researched strategies could be celebrities endorsing the product (Boerman et al., 2017), a strategy also shown to be effective by Gibson et al. (2014) in a study about product placement in a TV series. The researchers revealed that products introduced by appreciated celebrities (Boerman et al., 2017; Gibson et al., 2014) and the extent to which the respondent liked the show (Gibson et al., 2014) led to positive brand attitudes. However, when persuasion knowledge was activated, it led to less favourable brand attitudes. Another example of a proven effective message strategy is employing a picture together with textual content instead of using them separately (Leung et al., 2017). This is effective because the text will add meaning to the picture

and the consumer will be enabled to connect with the product or brand with less difficulty (Leung et al., 2017). As seen in the previously mentioned sentences, researchers have demonstrated that several advertising strategies lead to the appearance of positive brand attitudes. Thereby, it does not yet exist a most effective strategy, but marketers need to shape their approaches in accordance with various aspects such as product category (Akbari, 2015), online vs offline advertising (Leung et al., 2017; Puccinelli et al., 2009).

Researchers argued that when a consumer is exposed to an advertising episode, the advertising format and the ad appeal will determine different levels of cognitive effort and processing mechanisms (Rozendaal et al., 2011; van Reijmersdal et al., 2015). This means that the persuasion episode will result in various emotional and behavioural responses (van Reijmersdal, Neijens & Smit, 2010; van Reijmersdal et al., 2015). The studies which investigated these aspects reached different conclusions which are valuable for both the advertising research field and practitioners. However, this is particularly important for advertisers who are interested in nurturing positive reactions from consumers and who could employ in their strategies the ad formats which are considered to be most suitable for their goals.

Generally, researchers distinguish between two forms of advertising appeals, those being the emotional or affective appeal and the rational or informational appeal. These two types of appeals are believed to trigger different types of responses from customers (Akbari, 2015). Some scholars also argued that for low involvement products, the emotional appeal will render more favourable reactions while for high involvement products, rational will deliver better outcomes (Dens & de Pelsmacker, 2010). However, there are studies which did not discover a difference between consumers' attitudes as a result of both emotional and rational ad appeal exposure (Akbari, 2015). This could be explained by the type of product which was advertised if the consumer was previously exposed to the respective type of product or brand if the consumer is interested in that product.

Several studies have revealed that emotionally appealing advertisements positively influence attitudes towards the ad, effect which also leads to the appearance of favourable brand attitudes (Geuens, de Pelsmacker & Faseur 2011; Liu & Stout, 1987).

Also, Geuens et al. (2011) revealed that when the consumer needs to make a purchase decision regarding utilitarian products, the emotional ad format proves to be inefficient. However, when the product proves to hold deeply technical characteristics, the brand attitude formation process is more confusing (Panda, Panda & Mishra, 2013). Thus, the choice of advertisement appeal needs to be made accordingly with the type of product advertised. Further, Liu and Stout (1987) indicated that the emotional response resulted from advertisements influenced only attitudes toward the ad while the

cognitive response derived from the informational ad processing affected both attitudes toward the ad and attitudes toward the brand. But, nonetheless, they argued that the message appeals have the strength to determine different cognitive and behavioural reactions (Liu & Stout, 1987). This entails an important conclusion since it stands as proof that marketers have the advantage of influencing consumer behaviour through the types of advertisements they design.

The emotional appeal can be highly effective for products which are technically complex or when the brand needs to determine some changes in consumer behaviour (Panda et al., 2013). That is because emotional purchases are less stressful and less cognitively demanding. This argument is in line with what Shimp (1981) argued and that is, that ads which arouse emotions determine attitudes without requiring cognitive processing. In addition, Mattila (1999) argues that regardless of the product category, the emotional appeal will render the most favourable outcomes for the brand.

To continue the discussion about ad format research, Yoo & MacInnis (2005) studied the effects of emotional and informational ad formats on consumer attitudes toward the ad and towards the brand, respectively. They concluded that emotional advertisements indeed evoke more favourable reactions than the informational ones. Similarly, Albers-Miller & Stafford (1999), found that emotional appeals can lead to more favourable customer reactions and even a more accurate brand recall. However, an accurate brand recall might not necessarily embody an advantage for the marketer as it can lead to negative attitudes if persuasion knowledge records high levels (Gibson et al., 2014; van Reijmersdal et al., 2015). Contrarily, other studies concluded that rational appeals nurture more positive attitudes than emotional appeals (Coulson, 1989; Holbrook, 1978). Nonetheless, the discrepancy of these conclusions can be due to the variables and the stimuli studied as they were different among studies. Thus, this is a reason why there is an extensive need for studying concepts like advertising and attitudes towards the brand in various contexts, employing various types of products as stimuli.

Also, an important aspect to be considered when discussing ad appeals are the valences they bear (Akbari, 2015; Cotte et al., 2005). These could be positive or negative. For example, Cotte et al. (2005) conducted a study in which they employed a negative valenced emotional appeal to advertising charity work. Their results showed that the negative ad appeal rendered positive outcomes, namely, people were more willing to donate.

To conclude, research shows that brand attitudes can be influenced by advertisement appeals but not all the time. This is because the consumer purchasing goals, the product type and even the level of involvement can influence this outcome. Considering also that persuasion knowledge can play a role in the brand attitude formation, the following hypotheses were proposed for this study:

H1: Ad appeal influences situational persuasion knowledge.

Considering the ad appeal's strength to influence cognitive mechanisms and determine reactions, this study believes that the type and intensity of ad appeal will affect persuasion knowledge levels. That is, an ad which is perceived as being more emotional will reveal low persuasion knowledge.

H2: Situational persuasion knowledge mediates the effect of ad appeal on brand attitudes.

According to this hypothesis, a base level advertisement, which does not include any emotional appeals will result in a high situational persuasion knowledge which in turn will lead to more negative brand attitudes; an advertisement which contains emotionally appealing textual content results in a lower situational persuasion knowledge which will determine more positive brand attitudes; an ad with a person interacting with the product will result in the lowest situational persuasion knowledge and will lead to the most positive brand attitudes as it is perceived as being the most appealing.

3. Methodology

This chapter had the purpose of justifying and presenting the research design. In the first sections, the method justification is presented, then the design, followed by the operationalisation of the variables. Following, the sample and the procedure for gathering the data are depicted. Lastly, a presentation of the steps took for the analysis appears in this chapter.

3.1. Justification for method

Situational persuasion knowledge is better assessed via a survey and experimental mixed approach as it enables the researcher to investigate it in a specific context (Ham et al., 2015). This is also because persuasion knowledge is context dependent, therefore, researchers claim that a population will manifest distinct persuasion knowledge values based on advertising appeals (see Ham et al., 2016). A survey-based research owns an objective power (Boynton & Greenhalgh, 2004) and has the strength of reaching a variety of potential respondents (Kumar, 2011). Furthermore, a web-based survey enables the researchers to reach respondents regardless of the geographical area. However, these are limited to individuals who have access to a computer and internet connection. Nonetheless, considering that studies related to persuasion knowledge mostly employed respondents from the geographical zone of the researcher, the present study intended to reach a vaster audience through this web-based survey (see Boerman et al., 2017; Buvár & Orosz, 2020; Rozendaal et al., 2011; van Reijmersdal et al., 2015; Tutaj & van Reijmersdal, 2012).

Another argument in favour of conducting a survey-based research is that surveys are widely used to assess subjective aspects about individuals such as self-assessment, beliefs, attitudes (Matthews & Ross, Neuman, 2014). Thus, considering that the scope of this study is to collect responses about people's inferences about a stimulus and about their attitudes, a survey entails a suitable option. While only an experimental approach usually has the power of testing one hypothesis, a mixed research (experiment and survey) will benefit from survey characteristic of gathering data through which a researcher can test more hypotheses (Neuman, 2014).

Nonetheless, the researcher acknowledged that one of the disadvantages a web-based survey research holds is that older people might not have access to the study due to reasons such as technology literacy or access (Kumar, 2011). Thus, in order to reach this population, there is a need for more time and monetary resources than this study had available.

The experiment part of this research is justified by experiments' advantage of providing data as a result of respondents' exposure to stimuli. This way, the researcher is able to analyse if the

experimental conditions led to the expected outcomes. The computerized distribution of the instrument enabled the experiment to be randomly distributed and the stimuli to be controlled with regards to time and groups.

Neuman (2014) argues that experiments will render better results when used for small scale studies which do not intend to make general inferences about concepts. However, persuasion knowledge domain consists mostly of experimental or mixed approach studies (Ham et al., 2015). This is because persuasion knowledge involves studying people's reactions in relation to a specific stimulus. Therein, an experiment was suitable for this paper's objective.

3.2. Design

The objective of this study was to observe whether situational persuasion knowledge mediates the relationship between different emotional appeals in advertising formats and brand attitudes. Therefore, in order to answer the research question, a mixed quantitative study was considered the most suitable approach. Namely, an experiment was first constructed to expose respondents to stimuli followed up by a survey which assessed participants' reactions towards the experimental part. Most scholars researching persuasion knowledge in various contexts created a mixed research design (experiment and survey) or only an experimental design (Ham et al., 2015). This was because, an experimental research has the strength to show differences in responses when a specific stimulus, the emotional appeal in an advertisement in this case, varies in intensity, thereby showing if persuasion knowledge differs across distinct ad appeals used by the same brand and with the same product and whether it can lead to positive brand attitudes. Specifically, the experiment will help in observing whether emotional appeals in the pictures have a degree of impact on the relation between the independent and the dependent variables (Neuman, 2014). The reason for using a survey along with the experiment is encompassed in the need to assess respondents' perceptions on the stimulus in a quantifiable way which will build an exhaustive portrayal of the complex interaction between concepts (Matthews & Ross, 2010; Neuman, 2014). Moreover, the survey enables the researcher to collect a considerable amount of data which can later be statistically analysed in order to test the research hypotheses.

The experiment employed a between-subjects design across three groups. The independent variable has three levels. There was a single manipulation per group. One of the groups was the control group and the other two were the experimental groups. The manipulations consisted of three pictures advertising the same product but with different levels of emotion. Namely, the first picture illustrated the product on a white background (base level), then another picture showed the product on a white

background and a persuasive text which will appeal to consumers' beliefs (Campbell, 1995) and the last one showcased a person interacting with the product. In addition, the group which saw the base picture was the control group and they visualised a white mug on white background. The textual content group saw the same picture accompanied by the text 'Take a moment for yourself' and the third group observed a woman drinking from the cup. The stimulus materials were constructed in a way which would minimise the chances of bias. The cup was the same size and colour in all three advertisements, the font used for the textual content was a basic and commonly used one, namely, Arial, without any special effects or colours. With regards to the person appearing in the third advertisement, her cultural background cannot be assumed specifically, the eye colour cannot be seen, she is not smiling, nor portraying any facial expressions which could influence respondents' reactions, and her blouse's colour is black. Therefore, these previously mentioned aspects had the purpose of minimising the chances of any kind of interaction/bias with participants' responses. The reason for this is the decrease in any probability that other variables might interact with the outcomes of these stimuli (Neuman, 2014). The product choice was justified by its universal aspect as it is assumed that everybody is familiar with what a cup is and what it is used for. Besides, it is an object used regardless of geographical location, nationality, culture, age and gender. This means that the product was chosen in order to eliminate these types of bias from the research. Additionally, all the pictures contained a fictive brand logo in the bottom right corner in order to give the impression of an ad. The respondents were exposed for 5 seconds to one of the pictures. The time limit was decided to eliminate the possibilities of exposure time to the ad to influence different results among groups. The images and the survey can be seen in Appendix A.

3.3. Measures

3.3.1. Operationalisation

Usually, the operationalisation of a concept will be translated into one or more questions used in the survey. The importance of operationalisation is illustrated by numerous scholars (e.g. Babbie, 2011), and it entails the process by which a study's concepts are transformed into measurable variables. Throughout the operationalisation process, the researcher is constructing the measuring instruments such as a survey, an experiment or even a mixed approach. Variables are usually measured with the help of a scale which is pre-validated or constructed specifically for a study by researchers (Neuman, 2014). However, new scales need to be validated before employing them in a study (Boynton & Greenhalgh, 2004). This is why, for variable measurement, this paper employed previously used and validated scales.

The variables which needed operationalisation in this study were the covariate (i.e., Dispositional Persuasion Knowledge), the mediator (i.e., Situational Persuasion Knowledge) and the dependent variable (i.e., Brand Attitude).

3.3.1.1. Emotional Ad Appeal

The independent variables employed in this study are the emotional Ad Appeals and the Situational Persuasion Knowledge. Giving that the purpose of this study is to observe if different types/intensities of emotional appeal determine the activation of persuasion knowledge and brand attitude formation, there were three levels of emotional appeal. First is the base level, applied in the control group, an advertisement which only encloses the product without any affective stimulus; the second is the advertisement which incorporates both the product and a textual content which is emotionally appealing and the third is the commercial encompassing a person interacting with the product, namely, a person sipping from the mug. The pictures displaying the cup and the textual content are believed to be more emotionally appealing than the one which only shows the mug, while the visual which illustrates a person sipping from the cup is considered to be transmitting the highest level of emotion. This is because advertisements depicting images of people are considered more emotionally appealing than those which contain only the product (Leung et al., 2017).

3.3.1.2. Situational Persuasion Knowledge

The second independent variable was situational persuasion knowledge. Overall, considering the multidimensionality of persuasion knowledge as a researched topic, and the continuous debate around it, the scales assessing both dispositional and situational persuasion knowledge were carefully considered.

Situational Persuasion Knowledge was the mediator variable in this study. This is because researchers used it in experimental settings due to the advantage of it being enabled in specific situations. According to a number of researchers, *Inference of Manipulative Intent (IMI)* is one of the scales which best measure situational persuasion knowledge (Ham et al., 2015). This is because the items are built in a manner which assesses respondents' specific responses in relation to the experimental stimulus. IMI scale was designed by Campbell (1995) for a study which examined if consumers would activate their persuasion knowledge as a coping response to manipulative TV advertisements. After that, among others, it was used by Cotte et al. (2005) in a study regarding ad credibility. As for the reliability of this scale for both of Campbell (1995) and Cotte et al. (2005) studies, the Cronbach's alpha values were showing good internal consistency, recording values of .90 and .89,

respectively. Adding to this, both these studies found this scale to be a unidimensional construct. Considering all the aspects mentioned above, this scale was suitable to be employed in this study with the purpose of measuring situational persuasion knowledge in the experimental setting. The scale contains 6 items which were measured on a 7-point Likert scale with responses from “*completely agree*” to “*completely disagree*”, the same formulation being used by Campbell (1995).

3.3.1.3. Dispositional Persuasion Knowledge

In this study, dispositional persuasion knowledge was employed as a control variable, the only covariate used in the present study. This is because some papers concluded that a high level of situational persuasion knowledge is linked to a high level of dispositional persuasion knowledge (see Chapter 2). Thus, seeing that this study’s purpose is to observe the effects of situational persuasion knowledge on the relationship between ad appeal and brand attitude, the possible interactions of dispositional persuasion knowledge needed to be assessed. The scale applied is the *Self-confidence of persuasion knowledge*, constructed by Bearden et al. (2001). Its purpose was to determine respondents’ global persuasion knowledge. This can be achieved by assessing their self-confidence with regards to how efficient their advertising coping skills are. The scale was mostly used to measure dispositional persuasion knowledge due to its capacity of measuring the overall aspects through the generally formulated items. It consists of six items and the answers are recorded via a 5-point Likert scale with responses ranging from “*extremely uncharacteristic*” to “*extremely characteristic*”.

3.3.1.4. Brand Attitude

Brand Attitude was measured through a 5-point Likert scale which contained 3 items. The scale was adapted from several studies which used semantic differential scales with the purpose of measuring brand attitude (sources). The adapted constructs are “appealing”, “interesting”, “likeable”. Reasons for selecting these constructs are that all three of them were used by Kirmani and Zhu (2007) and also by other studies which employed at least two of them among other constructs for measuring attitudes towards the brand (Amazeen & Muddiman, 2018; Faircloth et al., 2001; Sweldens et al., 2015; van Reijmersdal et al., 2015; Yoo & MacInnis, 2005). Thus, the question asked the respondent to give his opinion on a 5 point-Likert scale with answers from “strongly agree” to “strongly disagree” on how “appealing”, “interesting” and “likable” the brand is.

3.3.1.5. Demographics

In order to assess respondents' characteristics and make valid inferences, the last block of questions of the survey comprised demographical questions. These were related to age, gender, education and nationality.

3.3.1.6. Manipulation check

A manipulation check type of question was employed for the purpose of verifying whether the manipulation was successful or not, namely, if respondents perceived higher emotional arousal across groups. This is important because it enables the researcher to determine whether the results were rendered by the emotional appeals and not by other variables. The manipulation consisted in a question where the respondents were asked if they perceived the ad as appealing to their emotions and had to record their answer on a 5-point Likert scale from "strongly agree" to "strongly disagree".

3.4. Procedure

The experiment and survey were completed using Qualtrics Survey Software. This is justified by Qualtrics features which will enable the randomization of the experiment stimuli and response filtering. Participants were recruited via social media platforms with the help of groups and also through the SurveySwap.io platform. The reason for choosing the SurveySwap.io platform is that the respondents answer the questionnaires willingly, they do not receive monetary compensations for completing the survey, therefore this makes their responses more reliable. The survey took approximately 3 minutes to complete.

The mixed method instrument unfolded as follows: respondents received the link to the survey and had to approve with the consent request. Then, the first scale would appear on the screen. This was the *Self-confidence of persuasion knowledge* (Bearden et al., 2001), which entails the control variable. The reason why this scale was employed first is because in this manner the responses are not influenced by the advertisement and thereby its role as a control variable can be better assessed. Next, the respondents saw for 5 seconds one of the randomly assigned advertisements which were used as stimuli. This was performed with the purpose of reducing the occurrence of possible responses affected by the ad exposure time, and thereby observe better the effect of the content itself on the dependent variable. After seeing the visual, the participants had to answer the next scale, namely the *Inference of Manipulative Intent (IMI)* (Campbell, 1995). Subsequently, the subjects were asked to respond to what extent they thought the mug selling brand is "appealing", "interesting" or "likable". Finally, the last set

of questions were the demographical ones and their purpose was to provide insight regarding the sample characteristics.

3.5. Sample

This study employed a non-probability sampling. Usually, academicians argue against this method due to its limited representativeness of the population (Mathews & Ross, 2010). However, this paper does not have strict conditions regarding the population studied as the topic of this research is one which applies to a variety of people, regardless of their age, gender, nationality, or educational background. Specifically, the flexibility towards the sampling used is justified by the characteristics of advertising and the variety of channels where it is distributed. In addition, a non-probability sampling is considered a suitable choice for web-based surveys (Best & Harrison, 2013). Considering this, every person who is present on social media, digital media, online shopping, etc. is a suitable respondent in this study. The exclusion criteria were respondents' age (18+) and their ability to answer the English based survey. Due to the previously mentioned population characteristics, this study adopted convenience and snowball sampling.

3.6. Analysis

Data was analysed using IBM SPSS Statistics version 26, after transferring it from Qualtrics. Prior to transferring the data, the empty or incomplete (i.e., respondents only answered the first scale, then they abandoned the survey) responses were deleted. After the transfer, the database was prepared for analysis. Namely, the researcher removed variables created by Qualtrics such as time and date of completion, etc., the variable nationality was cleaned, and variables which implied recoding were recoded. Subsequently, was created a new variable for ad appeal groups, naming the base picture group, '1', textual content advertisement, '2' and person interacting with the product ad group, '3'. Next to these steps, the researcher conducted factor and reliability analyses in order to ensure the reliability of the scales for the study. Before running the factor analysis in SPSS, a priori conditions for factor analysis were checked. Namely, it was verified if the scale is normally distributed and if the sample size contains a minimum of 150 respondents. Tabachnick and Fidell (2007) argued that the minimum preferred number of respondents for factor analysis is 300, but if the scale proves to have good internal consistency, a minimum sample of 150 responses is also accepted. The factor analysis was run using the Principal components method and Varimax rotation and Eigenvalues greater than 1. Afterwards, the a posteriori criteria were verified by checking the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity scores and the Correlation Matrix (Pallant, 2007). If the analysis met the a

posteriori criteria, the next steps were visualising the Total Variance Explained table for the number of eigenvalues above 1 and executing the reliability analysis. Since the scales proved to bear good internal consistency and did not require any item to be removed in order to increase its reliability, a new variable was computed using the mean, for each scale present in the study, namely: Dispositional Persuasion Knowledge, Situational Persuasion Knowledge and brand attitudes. Lastly, the researcher ran descriptive analyses in order to explore the sample characteristics explicitly and to identify potential outliers.

Subsequent to preparing the data for analysis, the first analysis performed was the manipulation check using one-way between-subjects ANOVA. As a default, before conducting any analysis, the assumptions implied were always checked. Thereby, it was verified if the variables to be introduced in the analysis were normally distributed and if the variances were homogenous (Pallant, 2007). Also, the measurement level of the dependent variable was continuous, and the responses of the participants were assumed to be independent (Pallant, 2007).

After computing the analysis for the manipulation check, the researcher created dummy variables for ad appeal groups. To generate the dummy variables, new variables were computed using group 1 as a reference. Thus, dummy 1 was based on the difference between group 2 and group 1, whereas dummy 2 was based on the difference between group 3 and group 1.

The research hypotheses were tested via a mediation model in order to see if situational persuasion knowledge mediates the relationship between the three types of images used as stimuli and brand attitudes. The first hypothesis was analysed by computing a one-way between-subjects ANCOVA with Ad Appeal as the independent variable, Situational Persuasion Knowledge as a dependent variable and Dispositional Persuasion Knowledge as a covariate. Then, the mediation effect of Situational Persuasion Knowledge between Ad Appeal and Brand Attitude was explored by designing and executing a 3-model nested hierarchical regression, employing Brand Attitude as a dependent variable. Model 1 used dispositional persuasion knowledge as an independent variable, model 2 applied dispositional persuasion knowledge as a predictor in the first block and the two dummy variables in the second block of predictors. Lastly, model 3 employed the same first two blocks of predictors plus situational persuasion knowledge in the third block of predictors. Prior to computing the one-way between-subjects ANCOVA and the 3-model nested hierarchical regression, the assumptions implied for these analyses were verified as seen in Pallant (2007). In addition, for the latter analysis, the influential cases were checked through Mahalanobis values and Cook's distance as described by Field (2018).

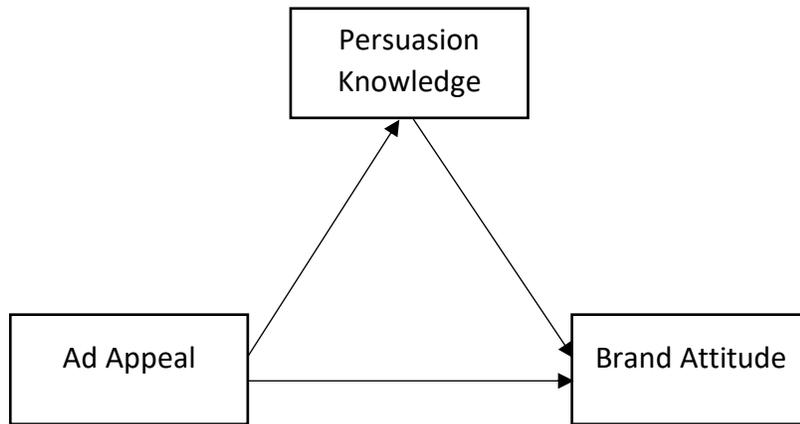


Figure 1. Mediation model

4. Results

4.1. Reliability and validity analyses

4.1.2 Factor analysis - Dispositional Persuasion Knowledge

The 6 items which were intended to measure dispositional persuasion knowledge were introduced into factor analysis. The extraction used the Principal components method based on Eigenvalues greater than 1. Additionally, the factor analysis employed Varimax rotation. The results of this analysis revealed a $KMO = .83$, $\chi^2 (N = 159, 15) = 282.72$, $p < .001$, which means that the correlations among the items are significant. Additionally, the Correlation Matrix displayed the vast majority of coefficients to be of values above .3. Also, the scale loaded on one factor, explaining 51.6% of the variance, meaning that the items measure the same concept. Seeing that the factor analysis met *a posteriori* criteria, the scale was introduced in the reliability analysis which uncovered a Cronbach's alpha of .80. After reviewing the Item-Total Statistics table resulted from the reliability analysis, was concluded that none of the items had to be deleted in order to increase the reliability of the scale.

4.1.3. Factor analysis - Situational Persuasion Knowledge

The 6 item 7 point-Likert scale was entered into factor analysis. The extraction criteria were set on Principal components with Varimax rotation based on Eigenvalues greater than 1. The results showed $KMO = .81$, $\chi^2 (N = 159, 15) = 437.2$, $p < .001$. The Correlation Matrix revealed most coefficients to be of values above .3. These results show that the correlations between items are significant, and thereby, measure the same aspects. This scale loaded on two factors which explained 75% of the variance. Considering that this analysis for dimension reduction met *a posteriori* criteria, the scale was introduced into reliability analysis which displayed a Cronbach's alpha of .84. Furthermore, the Item-Total Statistics table did not reveal greater values for internal consistency if one of the items were deleted. The Inter-Item Correlation Matrix did not display any negative values, which means that the items were recoded correctly.

4.1.4. Factor analysis - Brand Attitude

The 3-item scale intended to measure attitude toward the brand was introduced into factor analysis in order to verify its adequacy for the concept. The extraction used the Principal components method based on Eigenvalues greater than 1. The analysis exposed $KMO = .73$, $\chi^2 (N = 159, 3) = 209.1$, $p < .001$. The scale loaded on one factor explaining 77.5% of the total variance. The Cronbach's alpha for this scale showed good internal consistency, $\alpha = .85$.

Consequent to these analyses, new variables were computed: Dispositional Persuasion Knowledge, Situational Persuasion Knowledge, and Brand Attitudes.

4.2. Descriptives

The sample consisted of multiple nationalities, with the majority of people being Dutch ($N = 52$), 32.7%; followed by German ($N = 18$), 11.3%; British ($N = 17$), 10.7%; American ($N = 8$), 5%. Other nationalities were Romanian, Chinese, Italian, French, Jamaican, Spanish. The average age was 25 years old ($M = 25.44$, $SD = 5.77$) and 89.3% of the respondents were with ages between 18 and 30 years old. In addition, 35.8% of participants were male, 62.9% were female, and 1.3% identified as other. Regarding this sample's educational level, 55.3% completed a Bachelor's degree, 28.5% attained a Master's degree, 15.7% achieved a high school diploma or equivalent and 3.1% obtained a doctoral degree.

The total number of respondents in the base group was 51 and they have the following nationalities: Dutch ($N = 17$), 33.3%; British ($N = 5$), 9.8%; Chinese ($N = 3$), 5.9%; Italian ($N = 3$), 5.9%; other ($N = 23$), 35.7%. Their average age is 26.16 years old ($SD = 7.38$), and 32 of them were females while 19 were males. In addition, the majority of them completed their Bachelor's degree ($N = 31$), 60.8%; followed by Master's degree ($N = 11$), 21.6%; high school diploma or equivalent ($N = 6$), 11.8%; and Doctoral degree ($N = 3$), 5.9%.

The textual content group had 55 respondents which were Dutch ($N = 15$), 27.3%; British ($N = 9$), 16.4%; American ($N = 5$), 9.1%; German ($N = 3$), 5.5%, other ($N = 23$), 41.4%. The participants had a mean age of 25.60 years old ($SD = 4.50$), with 20 males, 34 females and 1 other gender. The educational degrees of the respondents from this group completed were as follows: Bachelor's degree ($N = 23$), 41.8%; Master's degree ($N = 21$), 38.2%; high school diploma or equivalent ($N = 10$), 18.2%; Doctoral degree ($N = 1$), 1.8%.

The overall number of participants in the person interacting with the product group was 53. Their nationalities are diverse, just like in the other groups: Dutch ($N = 20$), 37.7%; German ($N = 10$), 18.9%; British ($N = 3$), 5.7%; Romanian ($N = 3$), 5.7%; other ($N = 17$), 32.3%. The average age was 24 years old ($M = 24.58$; $SD = 5.17$) and this group consisted of 18 males, 34 females and 1 other gender. In addition, most of the respondents from this group attained a Bachelor's degree ($N = 34$), 64.2%; followed by a Master's degree ($N = 9$), 17% and high school diploma or equivalent ($N = 9$), 17%; and Doctoral degree ($N = 1$), 1.9%.

This paragraph will present the descriptive statistics for Brand Attitudes, Situational Persuasion Knowledge and Dispositional Persuasion Knowledge corresponding each of the three groups. For the first group ($N = 51$), base level, the Brand Attitude values were $M = 8.31$, $SD = 2.82$, the Situational

Persuasion Knowledge scores were $M = 16.80$, $SD = 5.20$ and the values for Dispositional Persuasion Knowledge were $M = 24.30$, $SD = 3.91$. Following, for the textual content group ($N = 55$), Brand Attitude values were $M = 9.05$, $SD = 3.00$, the scores for Situational Persuasion Knowledge $M = 15.00$, $SD = 6.32$ and the values for Dispositional Persuasion Knowledge were $M = 23.90$, $SD = 3.47$. Lastly, the mentioned continuous variables registered the following values in the person interacting with the product group ($N = 55$): Brand Attitude $M = 9.01$, $SD = 2.55$; Situational Persuasion Knowledge $M = 14.85$, $SD = 6.81$; Dispositional Persuasion Knowledge $M = 24.00$, $SD = 3.35$.

4.3. Manipulation check

ANOVA's assumptions were checked prior to performing the one-way between-subjects ANOVA analysis. Normality was assessed through visualising histograms for each group for the scores of Emotional Ad Appeal (see Appendix B). In addition, the three groups revealed homogeneous variance, as the Levene's test for equality of variances was non-significant, $F(2, 156) = 0.80$, $p = .450$.

The one-way between-subjects ANOVA for Ad Appeal groups and perceived emotional appeal revealed a significant result between the three ad appeal groups in their brand attitude, $F(2, 159) = 5.3$, $p = .006$, partial $\eta^2 = .064$. Tukey post-hoc comparisons revealed that participants which were exposed to the textual content picture perceived a higher emotional appeal ($M = 2.89$, $SD = 1.21$) than participants who only saw the base picture ($M = 2.20$, $SD = 1.04$), $p = .005$, $d = 0.61$. However, the significance between the groups which were exposed to the base level picture ($M = 2.20$, $SD = 1.04$) and the person picture ($M = 2.70$, $SD = 1.12$) is marginal, $p = .063$, $d = 0.46$. Furthermore, there is no significant difference in perceived emotional appeal between the groups which were exposed to the textual content picture ($M = 2.89$, $SD = 1.21$) and the person picture ($M = 2.70$, $SD = 1.12$), $p = .649$, $d = 0.17$. Thus, these results show that the manipulation was partially successful.

4.4. Hypotheses testing

4.4.1. Relationship between ad appeal and situational persuasion knowledge
In order to test the first hypothesis, a one-way between-subjects ANCOVA employing Ad Appeal as an independent variable and Situational Persuasion Knowledge as a dependent variable, using Dispositional Persuasion Knowledge as a covariate was conducted. Firstly, the researcher verified the assumptions for ANCOVA, as explained in Pallant (2007), which were all met. Specifically, the normality assumption was checked for the covariate and the dependent variable across the three groups by visualising the six histogram graphs of the covariate and the dependent variable for each group (see Appendix C). Furthermore, the covariate was measured with a reliable instrument (see section 4.1.). In addition, the relationship between the dependent variable (i.e., Situational Persuasion Knowledge) and the covariate

is linear as observed through a visual inspection of the scatterplot depicting the relationship between the two variables (see Appendix C). Moreover, the assumption of homogeneity of regression slopes was checked by inspecting the scatterplots which depicted a similar relationship between the covariate and the dependent variable in each group (see Appendix C). In addition, the interaction between the Ad Appeal groups and the Dispositional Persuasion Knowledge was non-significant, $F(2, 153) = 0.35, p = .709$, which further proves that the regression slopes were homogeneous. Furthermore, one-way between-subjects ANOVA for Ad Appeal and Dispositional Persuasion Knowledge did not reveal a significant difference between the groups in terms of Dispositional Persuasion Knowledge levels $F(2, 156) = 0.20, p = .822$, partial $\eta^2 = .003$. Moreover, the variances between the groups did not differ significantly $F(2, 156) = 0.36, p = .697$, as assessed through Levene's test.

The one-way between-subjects ANCOVA analysis did not disclose a significant relationship between the covariate and the dependent variable $F(1, 155) = 2.60, p = .109$, partial $\eta^2 = .02$. Also, the groups did not significantly differ in Situational Persuasion Knowledge levels $F(2, 155) = 1.44, p = .240$, partial $\eta^2 = .02$. Furthermore, the LSD post-hoc test revealed that there were not any significant differences between the control group ($M = 16.80, SD = 5.18$) and the textual content group ($M = 16.09, SD = 6.32$), $p = .500$ or the person interacting with the product group, respectively ($M = 14.85, SD = 6.81$), $p = .094$. In addition, there were not registered any significant differences between the textual content group ($M = 16.09, SD = 6.32$) and the person interacting with the product group ($M = 14.85, SD = 6.81$), $p = .303$. Therefore, the null hypothesis is not rejected.

4.4.2. Mediation Model

To test the mediation effect of Situational Persuasion Knowledge between Ad Appeals and Brand Attitude, a 3-model nested hierarchical regression was conducted, where Brand Attitude was the dependent variable, Dispositional Persuasion Knowledge was used as a covariate and Situational Persuasion Knowledge was used as a mediator. In the first model, the only independent variable introduced in the block of predictors was Dispositional Persuasion Knowledge. Subsequently, in the second model, the researcher kept Dispositional Persuasion Knowledge in the first block of predictors and interpreted it as a covariate of the mediation model. In addition, the two dummy variables created for the ad appeal groups were introduced in the second block of predictors. Lastly, the third model had the Dispositional Persuasion Knowledge in the first block of predictors and it was interpreted as a covariate. In addition, the third model employed the two dummy variables created for the ad appeal groups as the second block of predictors and the Situational Persuasion Knowledge as the independent variable of the third block.

The assumptions for multiple regression were verified for each model prior to the analyses and it resulted that none of the assumptions was violated. For all the models the sample size assumption was met, as there were more than 15 subjects per predictor (Pallant, 2007).

For Model 1, the linearity of the relationship between the Dispositional Persuasion Knowledge and the dependent variable was determined through the visualisation of the scatterplot depicting the relationship between the two (see Appendix D). Furthermore, the homoscedasticity and the normal distribution of residuals was confirmed by observing the scatterplot of standardised residuals (see Appendix D). In addition, the model did not contain any outliers as the all the scores had standardised residuals with values between -2.21 and 2.42, nor influential cases (maximum value Mahalanobis = 20.31; maximum Cook's distance = 0.24).

The second model also revealed linearity between the dependent variable and the predictors. The predictors' errors were normally distributed, and the homoscedasticity conditions were met as observed through the standardized residuals scatterplot (see Appendix D). Additionally, the model did not display the presence of outliers as all the values showed standardised residuals between -2.28 and 2.33, neither cases that significantly influenced the model (maximum value Mahalanobis = 21.80; maximum Cook's distance = 0.12).

With regards to the third model, the linearity, normality, and homoscedasticity assumption were met, as assessed with the scatterplot of standardised residuals (see Appendix D). Furthermore, the model did not reveal any outliers, as the scores displayed standardized residuals with values between - 2.56 and 2.12, neither influential cases (maximum value Mahalanobis = 22.92; maximum Cook's distance = 0.14). In addition, there were found low levels of multicollinearity between the two continuous predictors, namely Dispositional Persuasion Knowledge and Situational Persuasion Knowledge, since they presented non-significant correlation, $r = -.12, p = .121$.

Consequently, the nested hierarchical regression was run. The first model revealed a non-significant result, $R^2 = .02, F(1, 157) = 2.72, p = .101$, this meaning that dispositional knowledge did not predict Brand Attitude ($\beta = -.13, p = .101$). Adding the two dummies to compute the second model, the results did not significantly improve the prediction, $\Delta R^2 = .01, F(2, 155) = 1.06, p = .348$, displaying that neither the control variable ($\beta = -.13, p = .117$), nor the dummies influenced brand attitude ($\beta = .12, p = .197; \beta = .11, p = .217$). The last model revealed a significant change in R square, $\Delta R^2 = .04, F(1, 154) = 6.18, p = .014$, thereby explaining better the dependent variable. Specifically, the only independent variable that predicted brand attitude was Situational Persuasion Knowledge ($\beta = -.20, p = .014$),

displaying a negative relation between the two, whereas Dispositional Persuasion Knowledge ($\beta = -.15, p = .058$) and the dummies ($\beta = .11, p = .239$; $\beta = .08, p = .361$) did not predict changes in Brand Attitude.

5. Conclusion

The purpose of this study was to determine the relation between ad appeal and brand attitudes when situational persuasion knowledge acts as a mediator. Namely, we wanted to see if advertisements displaying emotionally arousal pictures impact brand attitudes via situational persuasion knowledge. The emotional appeal was manipulated using the 'Take a moment for yourself' text on one of the pictures and in the other picture there was a person interacting with the product. Consequent to the manipulation check, the results revealed that the manipulation was partially successful and there were differences in perceived emotional arousal between the control group and the textual content group and between the control group and the person interacting with the product group. Considering this and also the fact that the effect sizes were medium and marginally medium, respectively, it was concluded that the stimuli had the expected results. However, there were not any significant differences between the textual content group and the person interacting with the product group. This is why the manipulation was partially successful.

The hypotheses of this study were not confirmed, therefore the null hypotheses were accepted. One-way between-subjects ANCOVA was conducted to test the first hypothesis, but the results were not statistically significant. This means that ad appeal did not influence situational persuasion knowledge levels in neither of the three groups. Furthermore, the covariate did not influence the relationship between ad appeal and situational persuasion knowledge in neither of the groups which means that dispositional persuasion knowledge has no effect on situational persuasion knowledge. The insignificance of the results could be explained by a low between groups variance, which can occur when the differences between stimuli are too subtle. Therein, by trying to limit potential background elements in the pictures which could bias the results, the manipulations were not as impactful in order to create the expected results.

The testing of the second hypothesis required a 3-model nested hierarchical regression. Overall, the first two models revealed insignificant results while the third one proved to be significant. The first model showed that dispositional persuasion knowledge, interpreted as a control variable, did not predict brand attitudes, regardless of ad appeal. The second model further divulged that ad appeal did not play a role in predicting brand attitudes and neither did dispositional persuasion knowledge. However, the third model rendered significant results, but when a closer look was taken, only situational persuasion knowledge predicted brand attitudes. Specifically, when persuasion knowledge levels increased, brand attitudes became more negative. Thus, in this study, the emotional ad appeal did not play a role neither in influencing persuasion knowledge nor in predicting brand attitudes.

5.1. Discussion

The occurrence of these results could be explained by several factors but among the most important ones are the characteristics of persuasion knowledge and brand attitudes. In accordance with previous research, this study shows that there are more underlying factors influencing persuasion knowledge than ad appeal. These could be cognitive resources (Rozendaal et al., 2011), mood (van Reijmersdal et al., 2015), consumers' goals (Friestad & Wright, 1994) and even the fact that the brand was not an established one (Dens & de Pelsmacker, 2010). Considering these, perhaps a more impactful advertisement appeal would render different results due to a strong effect of the stimuli on consumer's processing mechanisms. However, this would entail a research design which would include the study of processing mechanisms in relation to stimuli.

As far as the emotional appeal is concerned, there could be several explanations as to why it did not render the expected results. One of them, as mentioned above, is that the differences between stimuli could have been too subtle. However, the manipulation between the control group compared to the other two groups proved to be successful. Therefore, the participants perceived the advertisements as appealing to their emotions. Nonetheless, even if it is active, an emotional appeal which is too subtle might not be effective. Thus, this is a good insight provided by this study and is also worth being researched further.

Another explanation is the nature of the product. Namely, perhaps the product did not raise interest in the respondents from this sample. Studies which specifically researched the relation between ad format and product category found different results. Some argue that the best approach when advertising a utilitarian product is using an emotional appeal (Akbari, 2015; Rhee & Jung, 2019) while others claim that the emotional appeal renders better results for service advertising (Albers-Miller & Stafford, 1999; Dens & de Pelsmacker, 2010). In addition, according to Hornik et al. (2017), emotional appeals in ad formats should nonetheless result in more positive brand attitudes regardless of the product category. By considering all these it could be claimed that the subtle emotional appeal together with a product people might not have been interested in, results in inefficient outcomes.

Continuing, other studies mention that the medium also plays a role (Dahlen, 2005; Hornik et al., 2017; Puccinelli et al., 2009). More specific, the place (online or offline) where the advertisement is first observed impacts responses and affects persuasion knowledge (Dahlen, 2005). The responses can be influenced by the ambient (Puccinelli et al., 2009) which can mean from colours, interface (if online) to sounds and smells (offline – shops, supermarkets, offices). Therein, considering that digital media

cannot appeal to senses as smell, taste, touch, advertisers are challenged to substitute these with relevant advertising appeals such as stronger emotions.

What this study shows is that younger consumers might prefer more colourful advertisements, observing people's faces and their expressions in an advertisement, viewing the promoted product in an engaging background such as a café or a table with an appealing setting. Therefore, younger consumers need stronger or better said more engaging stimuli when it comes to advertising format. Nonetheless, this research shows that minimalistic advertisement formats with emotional appeals do not work best for young populations.

The fact that dispositional persuasion knowledge did not have any predictive power on brand attitudes is in line with other studies which rendered the same result (Buvar & Orosz, 2020; Evans & Hoy, 2016). This is because, when the customers encounter a persuasive situation in advertising, dispositional persuasion knowledge enables them to recognize the situation, whereas situational persuasion knowledge, which is more context dependent, will lead to attitude formation and other responses such as purchase intention (Puccinelli et al., 2009).

The significant negative relationship between situational persuasion knowledge and brand attitudes can be explained by several studies which found similar results (Boerman et al., 2017; Gibson et al., 2014). This is because the more aware a person is of the persuasion episode and intent, the more negative his or her brand attitudes will become. Furthermore, this result is also in line with Cotte et al. (2005) study, which found that great manipulative intent led to more negative brand attitudes. Nonetheless, unlike dispositional persuasion knowledge, situational persuasion knowledge has the power to assess reactions from a specific persuasion episode and is not making inferences about individuals' general ability to cope with advertising (Ham et al., 2015). This characteristic constitutes an advantage of persuasion knowledge and is also a great tool for marketers to employ when they want to introduce new ad formats or new concepts in their advertising strategy.

A strength of this study was the diversity of its participants, considering that the sample was multicultural, and it, therefore, assessed consumer's responses at a more diverse level. It also adds value to the academic field as it is one of the few studies regarding advertising appeal and persuasion knowledge employing a multicultural sample.

The stimuli employed in this study were carefully chosen and controlled, as presented in the Methodology Chapter. However, what the stimuli used in this research suggest is that there is a chance that younger consumers need more powerful arousals for attitude formation. The justification for this is

that this population is more media literate and they are able to recognize advertisements, product placements or sponsored content with less difficulty (Rozendaal et al., 2011).

5.2. Practical implications

The present study showed that minimalistic advertisements (i.e., the lack of multiple colours and bold fonts) are not effective when it comes to influencing positive brand attitudes in younger consumers.

Moreover, one of the outcomes of this research was that there is no significant difference between the perceived emotional ad appeals from an ad depicting the product and a persuasive text compared to an advertisement showcasing a person interacting with the product. The reasons for this could be manifold but a few which are relevant for marketing specialists are the following. Firstly, this study suggests that perhaps a low interest for the product could inference with ad appeals, and this is translated in the lack of any influence of ad appeals on brand attitude. Therefore, marketers should consider the type of product and the manifested interest in the respective product when they design new advertisements.

Nonetheless, situational persuasion knowledge influenced brand attitudes, which means that the way consumers perceive the advertisement impacts their attitudinal responses. This information is important for marketers, as this shows that credibility matters and it influences consumer behaviour. Therefore, specialists should design credible ads. However, it should be noted that consumers realise if they are being deceived so the best approach is the most honest one.

As far as consumers are concerned, this study shows that their situational persuasion knowledge can impact how they react to advertisements. Therefore they could easily resist persuasion attempts or even manipulative intents, by being aware of the sellers' purposes and by assessing critically promotional content.

5.3. Limitations and future research

One limitation of this study could be the stimuli used. Even though the manipulation was partially successful, the stimuli might have been too subtle. There is a chance that younger consumers are not used with the use of minimalistic advertisement pictures, therefore the arousal level of the stimuli did not appeal to their emotions in a way which would determine the emergence of brand attitudes. Therefore, perhaps future research should employ stimuli which are more impactful, but on the other hand should control for other constructs from the appeal which could possibly influence responses, as this study proceeded.

Furthermore, there is a need for more persuasion knowledge scales. This is because the situations from each study are unique and should fit best the context of the research.

Continuing on the same note, another limitation is the lack of difference between the two appeal stimuli. Even though between group 1 and group 2, and group 1 and group 3 were differences regards to the perceived emotional appeal, group 2 and 3 did not lay any differences in this sense. Therefore, in this study, there was no difference between an advertisement which depicted the product and an emotionally appealing text and a picture which showed a person using the product and this aspect could be due to the soft stimuli. There is a need for more research in this sense as some studies argue that persuasion knowledge is not found in high levels for advertisements which include a person promoting the product (Hornik et al., 2017).

Edell & Burke (1986) argued that scales measuring attitudes toward the ad or towards the brand, with items like 'interesting', 'good', 'humorous', etc. were limited in fully assessing respondents' feelings towards the advertisement or brand. This could be due to the complexity of attitude formation and processing mechanisms (Rozendaal et al., 2011). Another aspect which plays a role in this is mood (Muehling & McCann, 1993). This is why experiments assessing these variables offer more insights if they employ a mood regulating factor.

5.4. Future research

The results rendered by this study constitute good justification for the need of continuous studies on persuasion knowledge. Considering that it is a context specific concept, each advertiser has to shape the strategy they employ based on the type of product or service they intend to sell (Puccinelli et al., 2009). However, more research is needed in order to establish, at a general level, which strategies provide the best results for brands. Furthermore, there is a need to better understand persuasion knowledge and how it is affected by constructs as appeals, mood, cognitive resources, disclosures, exposure. Also, additional studies employing multiple ad formats and ad appeals for the same product are needed. This is because this way they could discover a pattern which would be valuable for marketing professionals.

Considering that this sample mainly consisted of people under 30 years old, there is a need for studies which recruit older respondents as well. Moreover, multiple persuasion knowledge studies depict young samples, while the older population of consumers remain underrepresented. An explanation for this could be the language of the instrument. Considering the language barrier, persons who did not have a good command of the English language were not able to answer this survey. Consequently, this entails a need for a more inclusive future advertising research, but on the other

hand, this type of study comprises the availability of time and monetary resources in order to be conducted across countries and to be administered in more languages.

In addition, numerous studies are conducted in developed countries, recruiting country's residents, leaving developing countries underrepresented for the consumers population. Such developed countries are the Netherlands, present in numerous studies (Boerman, 2020; Boerman et al., 2012; Boerman et al., 2017; van Reijmersdal et al., 2010; van Reijmersdal et al., 2015), Belgium, the United States. Thus, this justified the need for advertising research employing ad appeals even in less developed countries.

Reference list

- Akbari, M. (2015). Different Impacts of Advertising Appeals on Advertising Attitude for High and Low Involvement Products. *Global Business Review*, 16(3), 478–493.
<https://doi.org/10.1177/0972150915569936>
- Albers-Miller, N. D., & Stafford, M. R. (1999). An international analysis of emotional and rational appeals in services vs goods advertising. *Journal of Consumer Marketing*, 16(1), 42–57.
<https://doi.org/10.1108/07363769910250769>
- Amazeen, M. A., & Muddiman, A. R. (2018). Saving Media or Trading on Trust?: The effects of native advertising on audience perceptions of legacy and online news publishers. *Digital Journalism*, 6(2), 176–195. <https://doi.org/10.1080/21670811.2017.1293488>
- Bearden, W. O., Hardesty, D. M., & Rose, R. L. (2001). Consumer Self-Confidence: Refinements in Conceptualization and Measurement. *Journal of Consumer Research*, 28(1), 121–134.
<https://doi.org/10.1086/321951>
- Boerman, S. C. (2020). The effects of the standardized instagram disclosure for micro- and meso-influencers. *Computers in Human Behavior*, 103(May 2019), 199–207.
<https://doi.org/10.1016/j.chb.2019.09.015>
- Boerman, S. C., van Reijmersdal, E. A., & Neijens, P. C. (2012). Sponsorship Disclosure: Effects of Duration on Persuasion Knowledge and Brand Responses. *Journal of Communication*, 62(6), 1047–1064. <https://doi.org/10.1111/j.1460-2466.2012.01677.x>
- Boerman, S. C., Willemsen, L. M., & Van Der Aa, E. P. (2017). “This Post Is Sponsored”: Effects of Sponsorship Disclosure on Persuasion Knowledge and Electronic Word of Mouth in the Context of Facebook. *Journal of Interactive Marketing*, 38, 82–92.
<https://doi.org/10.1016/j.intmar.2016.12.002>
- Boush, D. M., Friestad, M., & Rose, G. M. (2018). *Linked references are available on JSTOR for this article : Adolescent Skepticism toward TV Advertising and Knowledge of Advertiser Tactics*. 21(1), 165–175.
- Boynton & Greenhalgh, 2004 Boynton, P. M., & Greenhalgh, T. (2004). Selecting, designing, and developing your questionnaire. *British Medical Journal*, 328(7451), 1312-1315.
- Buijzen, M., Van Reijmersdal, E. A., & Owen, L. H. (2010). Introducing the PCMC model: An investigative framework for young people’s processing of commercialized media content. *Communication Theory*, 20(4), 427–450. <https://doi.org/10.1111/j.1468-2885.2010.01370.x>

- Burke, M. C., & Edell, J. A. (1989). The Impact of Feelings on Ad-Based Affect and Cognition. *Journal of Marketing Research*, 26(1), 69. <https://doi.org/10.2307/3172670>
- Buvár, Á., & Orosz, G. (2020). “Branded, biased and it wants to sell a product”: typical ad representations influence the effect of ad recognition: a mixed-method research. *International Journal of Advertising*, 39(1), 32–50. <https://doi.org/10.1080/02650487.2019.1613848>
- Campbell, M. C. (1995). When Attention-Getting Advertising Tactics Elicit Consumer Inferences of Manipulative Intent: The Importance of Balancing Benefits and Investments. *Journal of Consumer Psychology*, 4(3), 225–254. https://doi.org/10.1207/s15327663jcp0403_02
- Campbell, M. C., & Kirmani, A. (2000). Consumers’ Use of Persuasion Knowledge: The Effects of Accessibility and Cognitive Capacity on Perceptions of an Influence Agent. *Journal of Consumer Research*, 27(1), 69–83. <https://doi.org/10.1086/314309>
- Cotte, J., Coulter, R. A., & Moore, M. (2005). Enhancing or disrupting guilt: The role of ad credibility and perceived manipulative intent. *Journal of Business Research*, 58(3 SPEC. ISS.), 361–368. [https://doi.org/10.1016/S0148-2963\(03\)00102-4](https://doi.org/10.1016/S0148-2963(03)00102-4)
- Coulson, J. S. (1989). An investigation of mood commercials. *Cognitive and affective responses to advertising*, 21-30.
- Dahlen, M. (2005). Effects of creative media choice. *Journal of Advertising*, 34(3), 89–98.
- 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>
- Edell, J. A., & Burke, M. C. (1987). The Power of Feelings in Understanding Advertising Effects. *Journal of Consumer Research*, 14(3), 421. <https://doi.org/10.1086/209124>
- Evans, N. J., & Hoy, M. G. (2016). Parents’ Presumed Persuasion Knowledge of Children’s Advergaming: The Influence of Advertising Disclosure Modality and Cognitive Load. *Journal of Current Issues and Research in Advertising*, 37(2), 146–164. <https://doi.org/10.1080/10641734.2016.1171181>
- Faircloth, J. B., Capella, L. M., & Alford, B. L. (2001). The Effect of Brand Attitude and Brand Image on Brand Equity. *Journal of Marketing Theory and Practice*, 9(3), 61–75. <https://doi.org/10.1080/10696679.2001.11501897>
- Field, A. P. (2018). *Discovering statistics using IBM SPSS statistics*. (5th Ed). Sage Publications, Inc.
- Friestad, M., & Wright, P. (1994). The Persuasion Knowledge Model: How People Cope with Persuasion Attempts. *Journal of Consumer Research*, 21(1), 1. <https://doi.org/10.1086/209380>

- Friestad, M., & Wright, P. (1995). Persuasion knowledge: Lay people's and researchers' beliefs. *Journal of Consumer Research*, 22(1), 62. <https://search.proquest.com/docview/215037928>
- Geuens, M., De Pelsmacker, P., & Fasseur, T. (2011). Emotional advertising: Revisiting the role of product category. *Journal of Business Research*, 64(4), 418–426. <https://doi.org/10.1016/j.jbusres.2010.03.001>
- Gibson, B., Redker, C., & Zimmerman, I. (2014). Conscious and nonconscious effects of product placement: Brand recall and active persuasion knowledge affect brand attitudes and brand self-identification differently. *Psychology of Popular Media Culture*, 3(1), 19–37. <https://doi.org/10.1037/a0032594>
- Ham, C. D., & Nelson, M. R. (2016). The role of persuasion knowledge, assessment of benefit and harm, and third-person perception in coping with online behavioral advertising. *Computers in Human Behavior*, 62, 689–702. <https://doi.org/10.1016/j.chb.2016.03.076>
- Ham, C. D., Nelson, M. R., & Das, S. (2015). How to measure persuasion knowledge. *International Journal of Advertising*, 34(1), 17–53. <https://doi.org/10.1080/02650487.2014.994730>
- Hibbert, S., Smith, A., Davies, A., & Ireland, F. (2007). Guilt appeals: Persuasion knowledge and charitable giving. *Psychology and Marketing*, 24(8), 723–742. <https://doi.org/10.1002/mar.20181>
- Holbrook, M. B. (1978). Beyond attitude structure: Toward the informational determinants of attitude. *Journal of Marketing Research*, 15(4), 545–556.
- Holbrook, M. B., & Batra, R. (1987). Assessing the Role of Emotions as Mediators of Consumer Responses to Advertising. *Journal of Consumer Research*, 14(3), 404. <https://doi.org/10.1086/209123>
- Hollebeek, L. D., & Macky, K. (2019). Digital Content Marketing's Role in Fostering Consumer Engagement, Trust, and Value: Framework, Fundamental Propositions, and Implications. *Journal of Interactive Marketing*, 45, 27–41. <https://doi.org/10.1016/j.intmar.2018.07.003>
- Kirmani, A., & Zhu, R. (2007). Vigilant against manipulation: The effect of regulatory focus on the use of persuasion knowledge. *Journal of Marketing Research*, 44(4), 688–701. <https://doi.org/10.1509/jmkr.44.4.688>
- Leung, X., Tanford, S., & Jiang, L. (2017). Is a picture really worth a thousand words?: An experiment on hotel Facebook message effectiveness. *Journal of Hospitality and Tourism Technology*, 8(1), 19–38. <https://doi.org/10.1108/JHTT-08-2016-0039>
- Liu, S. S., & Stout, P. A. (1987). Effects of Message Modality and Appeal on Advertising Acceptance. *Psychology & Marketing*, 4(3), 167–187. <https://doi.org/10.1002/mar.4220040303>

- Matthes, J., Schemer, C., & Wirth, W. (2007). More than meets the eye: Investigating the hidden impact of brand placements in television magazines. *International Journal of Advertising*, 26(4), 477–503. <https://doi.org/10.1080/02650487.2007.11073029>
- Matthews, B., & Ross, L. (2010). *Research methods a practical guide for the social sciences*. Harlow: Pearson.
- Mattila, A. S. (1999). Do emotional appeals work for services? *International Journal of Service Industry Management*, 10(3), 292–306. <https://doi.org/10.1108/09564239910276890>
- Neuman, W. L. (2014). *Social Research Methods: Qualitative and Quantitative Approaches*. Essex: Pearson.
- Obermiller, C., & Spangenberg, E. R. (1998). Development of a scale to measure consumer skepticism toward advertising. *Journal of Consumer Psychology*, 7(2), 159-186.
- Panda, T. K., & Mishra, K. (2013). Does Emotional Appeal Work in Advertising? The Rationality Behind Using Emotional Appeal to Create Favorable Brand Attitude. *The IUP Journal of Brand Management*, 10(2), 7–24.
- Puccinelli, N. M., Goodstein, R. C., Grewal, D., Price, R., Raghurir, P., & Stewart, D. (2009). Customer Experience Management in Retailing: Understanding the Buying Process. *Journal of Retailing*, 85(1), 15–30. <https://doi.org/10.1016/j.jretai.2008.11.003>
- Reeves, B., Thorson, E., Rothschild, M. L., McDonald, D., Hirsch, J., & Goldstein, R. (1985). Attention to television: Intrastimulus effects of movement and scene changes on alpha variation over time. *International Journal of Neuroscience*, 27(3-4), 241-255.
- Rhee, E. S., & Jung, W. S. (2019). Brand familiarity as a moderating factor in the ad and brand attitude relationship and advertising appeals. *Journal of Marketing Communications*, 25(6), 571–585. <https://doi.org/10.1080/13527266.2018.1461124>
- Rozendaal, E., Lapierre, M. A., van Reijmersdal, E. A., & Buijzen, M. (2011). Reconsidering Advertising Literacy as a Defense Against Advertising Effects. *Media Psychology*, 14(4), 333–354. <https://doi.org/10.1080/15213269.2011.620540>
- Shimp, T. A. (1981). Attitude toward the ad as a mediator of consumer brand choice. *Journal of Advertising*, 10, 9-15.
- Singer, J. L. (1980). The power and limitations of television: A cognitive-affective analysis. *The Entertainment Functions of Television*, 31-65.
- Smith, R. E., & Swinyard, W. R. (1983). Attitude-Behavior Consistency: The Impact of Product Trial versus Advertising. *Journal of Marketing Research*, 20(3), 257. <https://doi.org/10.2307/3151829>

- Sweldens, S., Van Osselaer, S. M. J., & Janiszewski, C. (2010). Evaluative Conditioning Procedures and the Resilience of Conditioned Brand Attitudes. *Journal of Consumer Research*, 37(3), 473–489.
<https://doi.org/10.1086/653656>
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5, pp. 481-498). Boston, MA: Pearson.
- Tutaj, K., & van Reijmersdal, E. A. (2012). Effects of online advertising format and persuasion knowledge on audience reactions. *Journal of Marketing Communications*, 18(1), 5–18.
<https://doi.org/10.1080/13527266.2011.620765>
- Van Reijmersdal, E. A., Lammers, N., Rozendaal, E., & Buijzen B, M. (2015). Disclosing the persuasive nature of advergames: Moderation effects of mood on brand responses via persuasion knowledge. *International Journal of Advertising*, 34(1), 70–84. <https://doi.org/10.1080/02650487.2014.993795>
- Van Reijmersdal, E. A., Neijens, P. C., & Smit, E. G. (2010). Customer magazines: Effects of commerciality on readers' reactions. *Journal of Current Issues & Research in Advertising*, 32(1), 59-67.
- Wentzel, D., Tomczak, T., & Herrmann, A. (2010). The moderating effect of manipulative intent and cognitive resources on the evaluation of narrative ads. *Psychology & Marketing*, 27(5), 510-530.
- Wei, M. L., Fischer, E., & Main, K. J. (2008). An examination of the effects of activating persuasion knowledge on consumer response to brands engaging in covert marketing. *Journal of Public Policy and Marketing*, 27(1), 34–44. <https://doi.org/10.1509/jppm.27.1.34>
- Williams, B. J., Eastman, C., Gorenstein, S., Lancaster, J., & Bohannon, P. J. (1979). Executive Board Members. In *Anthropology News* (Vol. 20, Issue 8). <https://doi.org/10.1111/an.1979.20.8.4>
- Yoo, C., & MacInnis, D. (2005). The brand attitude formation process of emotional and informational ads. *Journal of Business Research*, 58(10), 1397–1406.
<https://doi.org/10.1016/j.jbusres.2005.03.011>

Appendix A – Experiment and Survey

Survey Flow

Block: Default Question Block (1 Question)
Standard: Control variable - dispositional (1 Question)
Standard: Block 2 (1 Question)

BlockRandomizer: 1 - Evenly Present Elements

Block: Base (2 Questions)
Block: textual (2 Questions)
Block: person (2 Questions)

Standard: independent - dependent - manipulation (3 Questions)
Standard: demographics (4 Questions)

Page Break

Start of Block: Default Question Block

CONSENT REQUEST FOR PARTICIPATING IN RESEARCH DESCRIPTION

You are invited to participate in a research regarding consumer preferences.

Your acceptance to participate in this study means that you accept to participate in an experiment related to consumer preferences.

You are always free not to answer any particular question, and/or stop participating at any point.

TIME INVOLVEMENT

Your participation in this study will take approximately 3 to 5 minutes.

You may interrupt your participation at any time.

PARTICIPANTS' RIGHTS

If you have decided to accept to participate in this project, please understand your participation is voluntary and you have the right to withdraw your consent or discontinue participation at any time without penalty.

Your personal information is confidential, and your responses are used for the purposes of this research only.

Your individual privacy will be maintained in all published and written data resulting from the study.

CONTACTS AND QUESTIONS

If you have questions about your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may send an email to this address: masterthesis.it@gmail.com
To participate in this research you must be at least 18 years old.

By clicking "Next", you agree to everything mentioned above.

End of Block: Default Question Block

Start of Block: Control variable - dispositional

Q1 Please state to what extent each of the statements characterise you.

	Extremely uncharacteristic	Somewhat uncharacteristic	Uncertain	Somewhat characteristic	Extremely characteristic
I know when an offer is "too good to be true" (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can tell when an offer has strings attached (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have no trouble understanding the bargaining tactics used by sales persons (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know when a marketer is pressuring me to buy (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can see through sales gimmicks used to get consumers to buy (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can separate fact from fantasy in advertising (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Control variable - dispositional

Start of Block: Experiment

Q2 A picture will appear on your screen after you click "Next"

End of Block: Block 2

Start of Block: Base

Start of Block: person



End of Block: Base

Start of Block: textual

Start of Block: person



Take a moment for yourself



End of Block: textual

Start of Block: person



End of Block: person

Start of Block: independent – manipulation - dependent

Q13 Please state to what extent you agree with the following statements.

	Completely agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Completely disagree
The way this ad tries to persuade people seems acceptable to me (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The advertiser tried to manipulate the audience in ways that I don't like (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I was annoyed by this ad because the advertiser seemed to be trying to inappropriately manage or control the consumer audience (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I didn't mind this ad; the advertiser tried to be persuasive without being excessively manipulative (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ad was fair in what was said and shown (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that this advertisement is unfair (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 Please state to what extent you agree with the following statement.

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
This advertisement appealed to my emotions (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14 Overall, I believe this mug-selling brand is:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Appealing (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interesting (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Likable (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: independent - dependent - manipulation

Start of Block: demographics

Q17 Select your age from the list below:

▼ 18 (1) ... 65+ (48)

Q18 Select your gender from the list below:

- Male (1)
 - Female (2)
 - Other (3)
 - Prefer not to say (4)
-

Q19 Select your highest achieved educational degree from the list below:

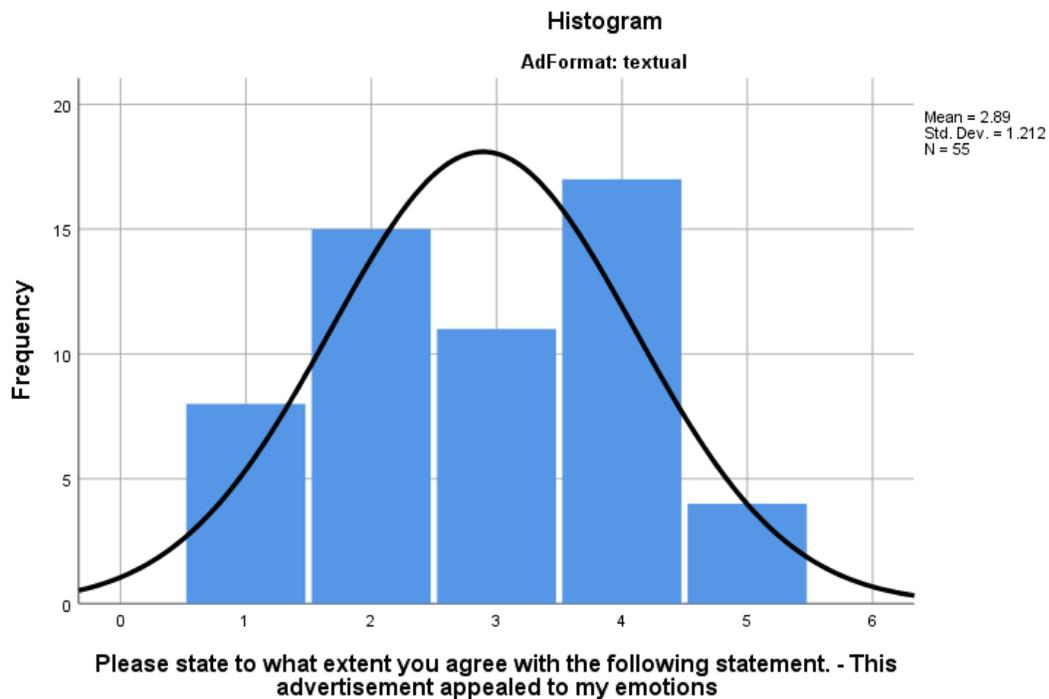
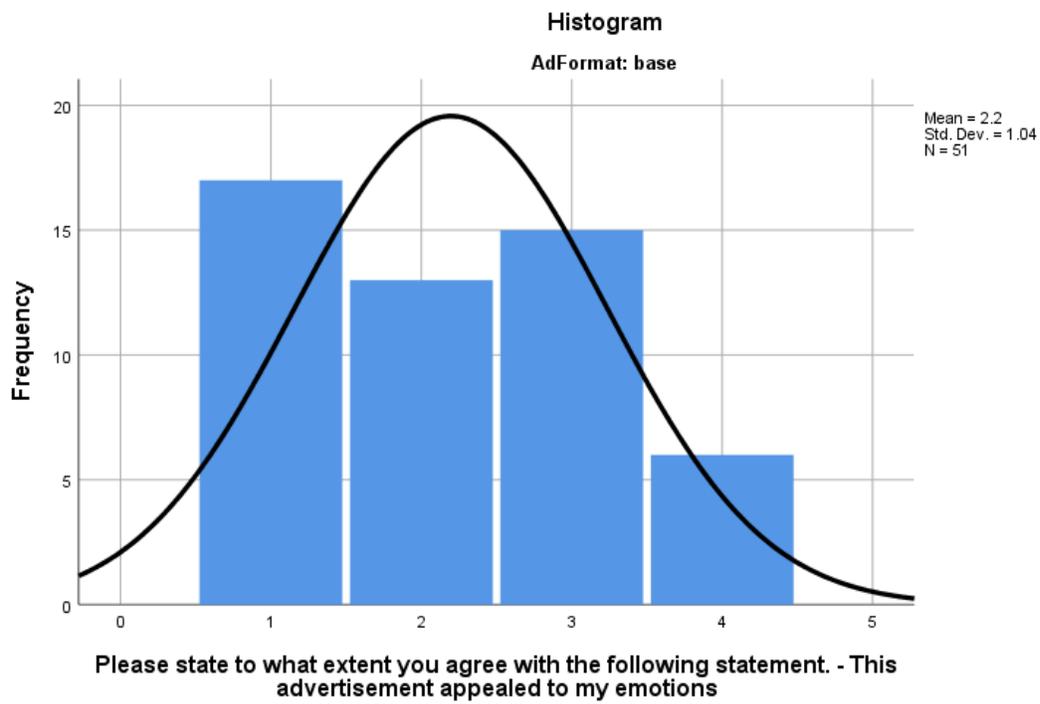
- Less than a high school diploma (1)
 - High school diploma or equivalent (2)
 - Bachelor's degree (3)
 - Master's degree (4)
 - Doctoral degree (5)
 - Other (6)
-

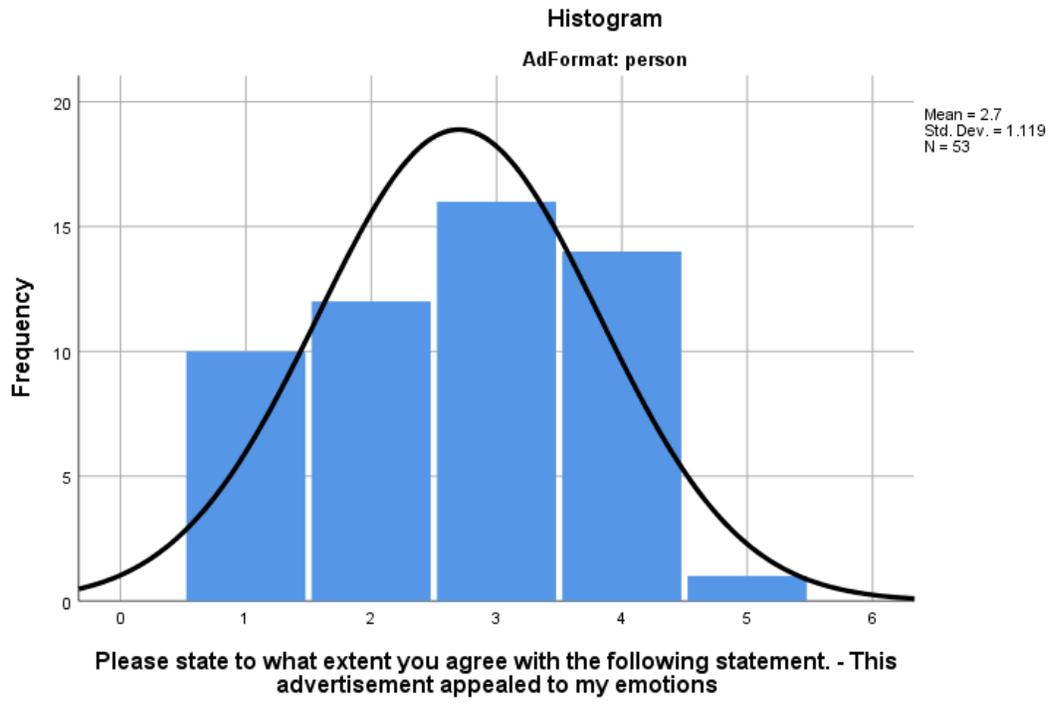
Q20 Please state your nationality:

End of Block: demographics

End of survey message: Your response has been recorded! Thank you for your time!

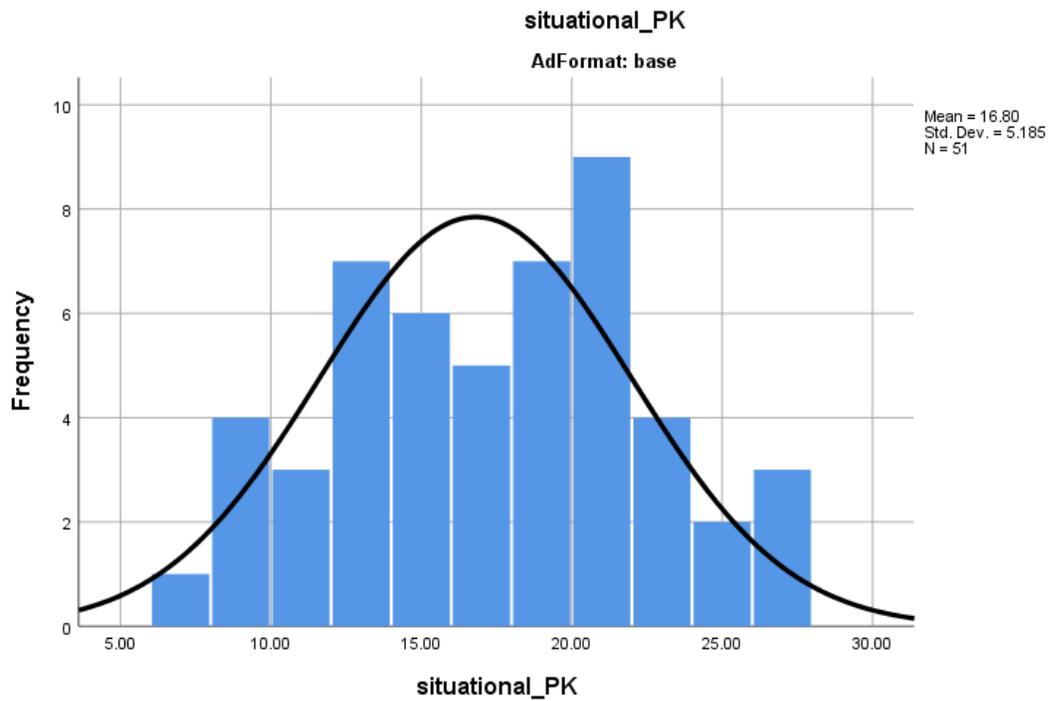
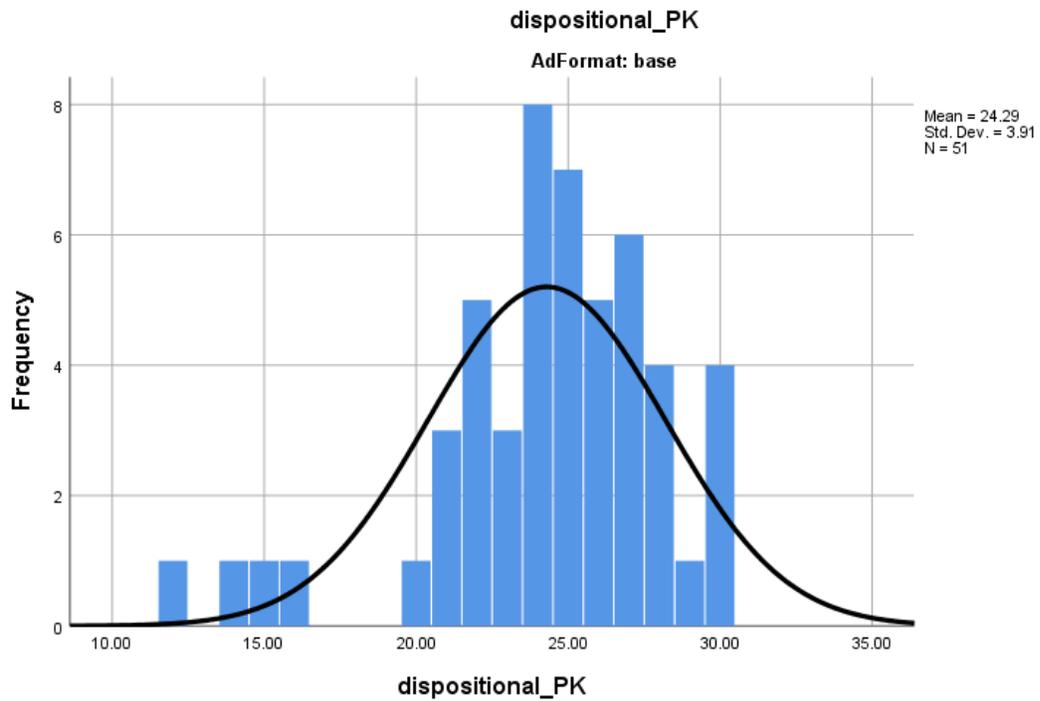
Appendix B

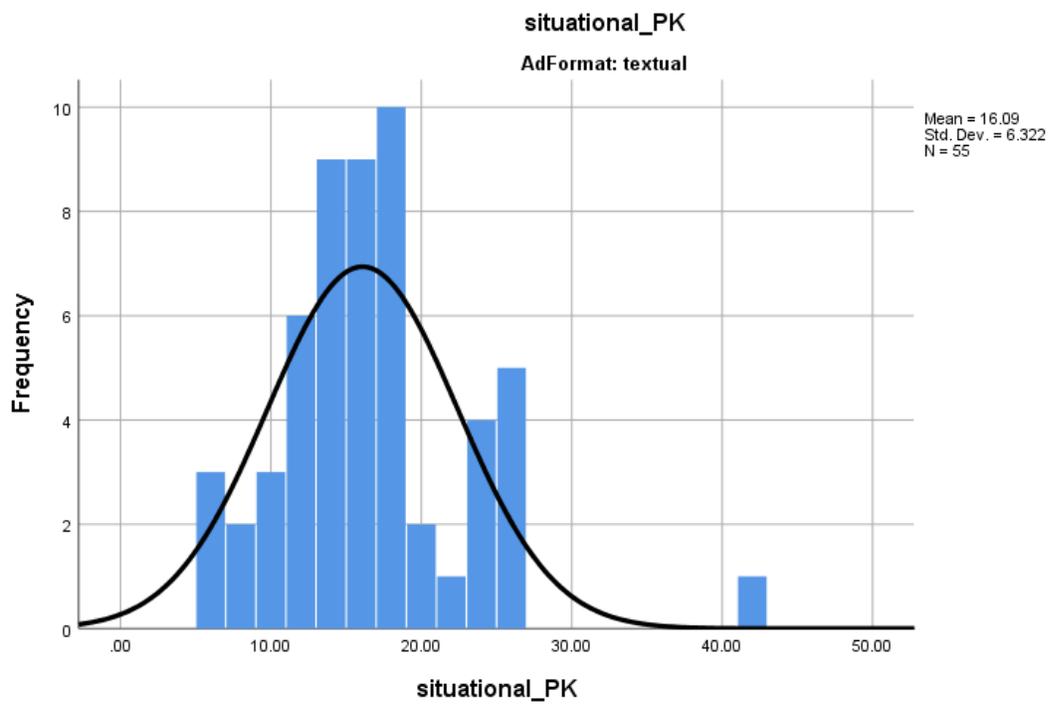
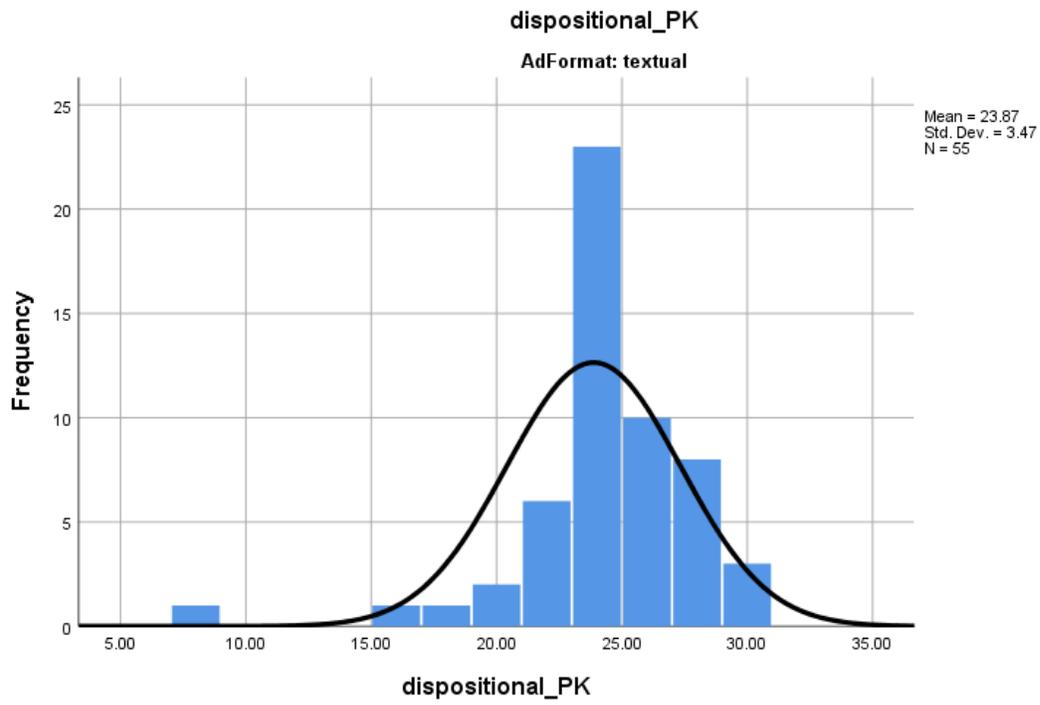


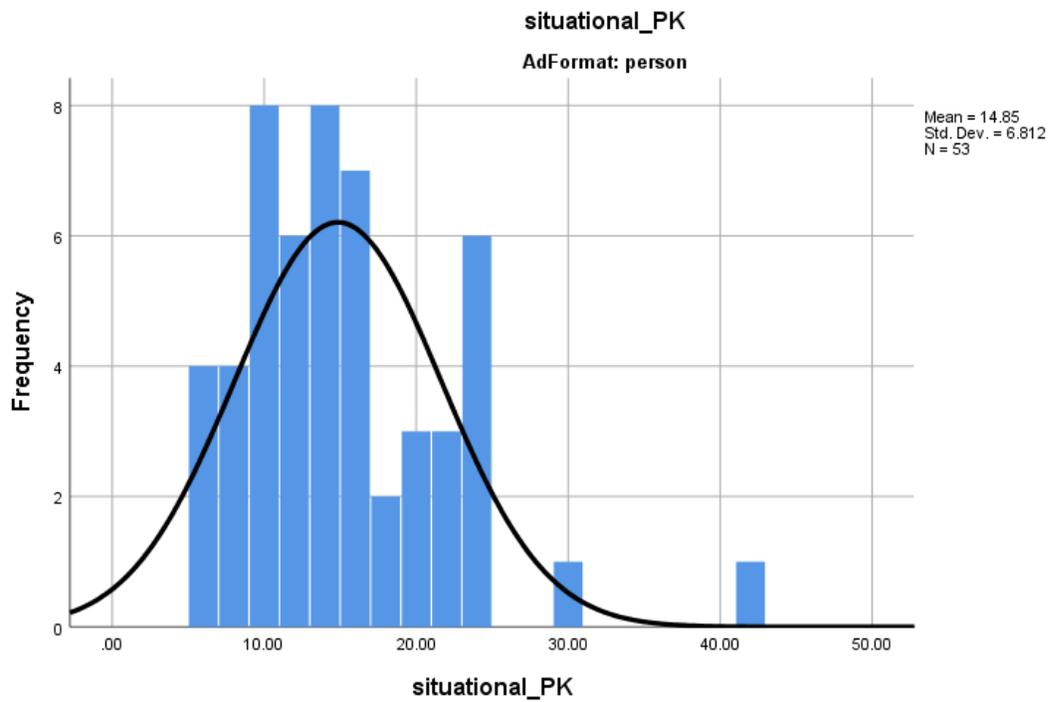
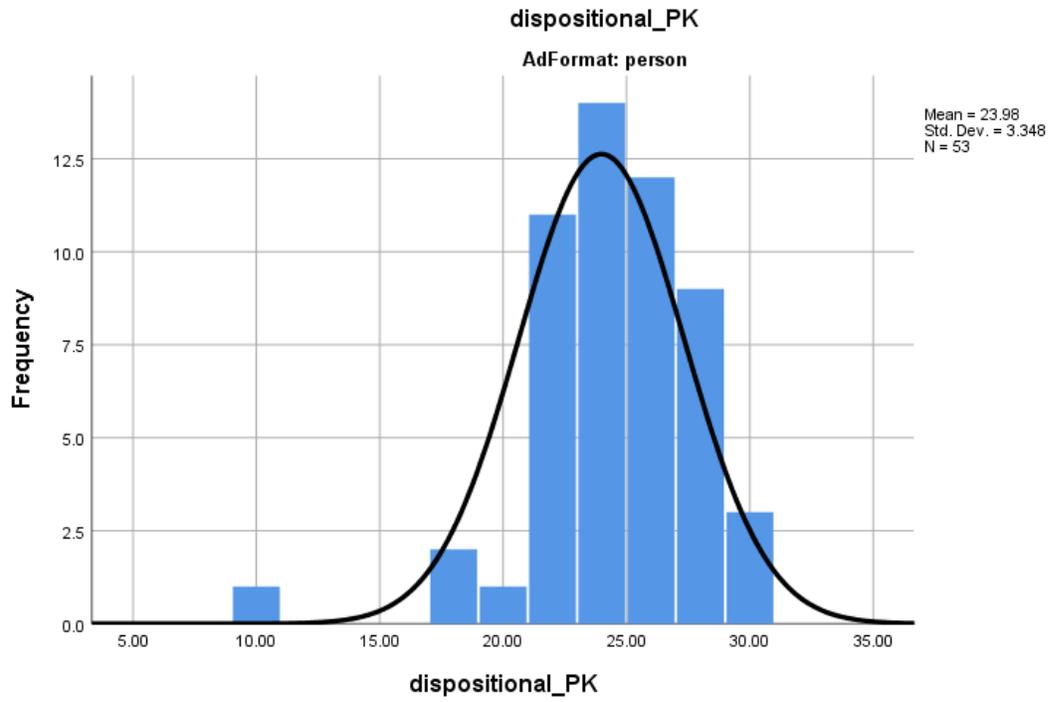


Appendix C

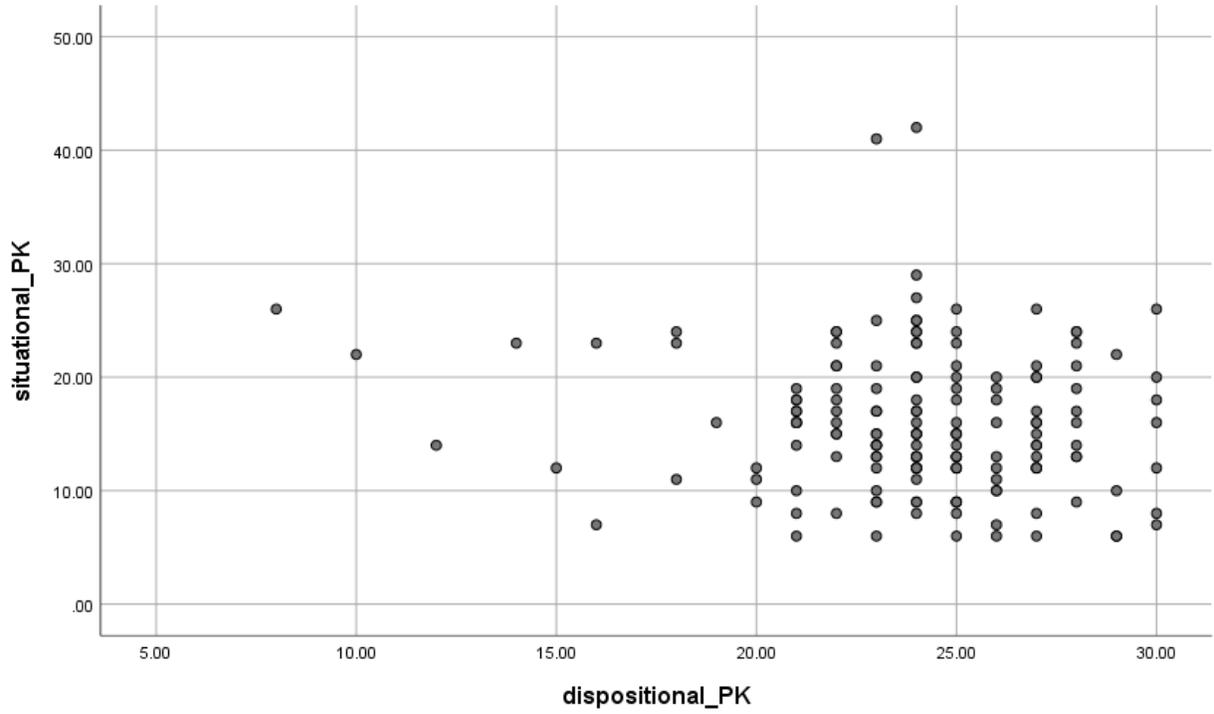
Normality histograms for the covariate and the dependent variable across groups



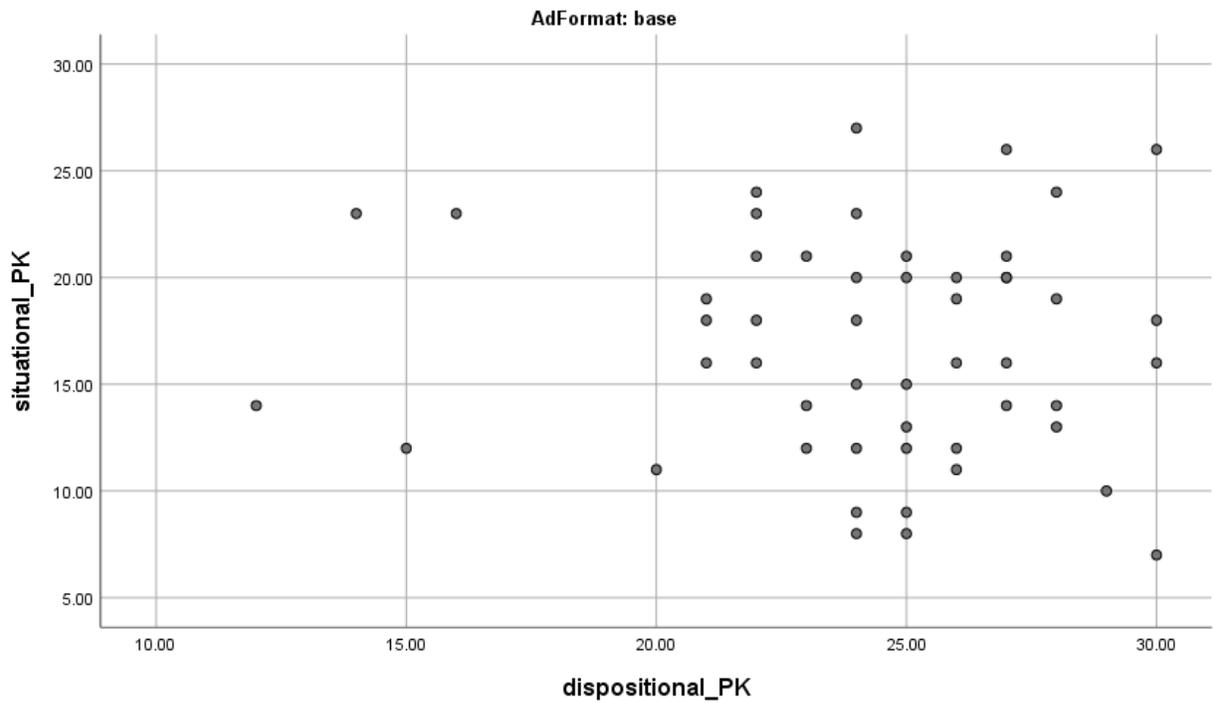


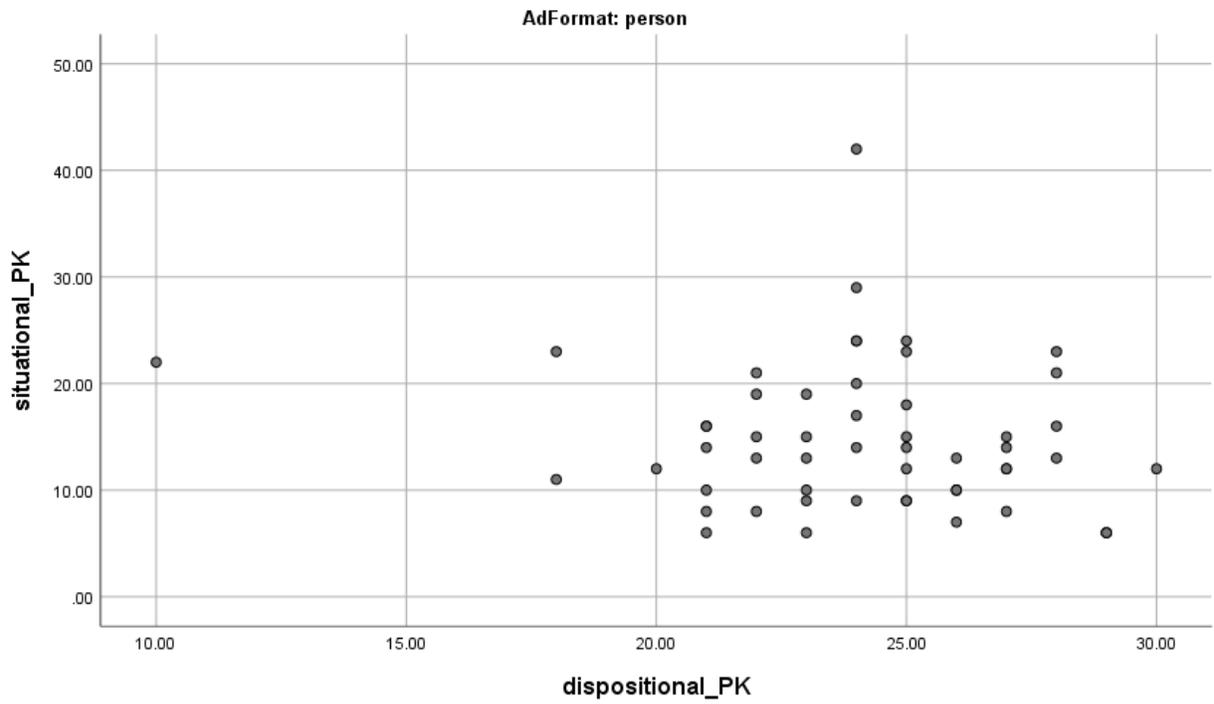
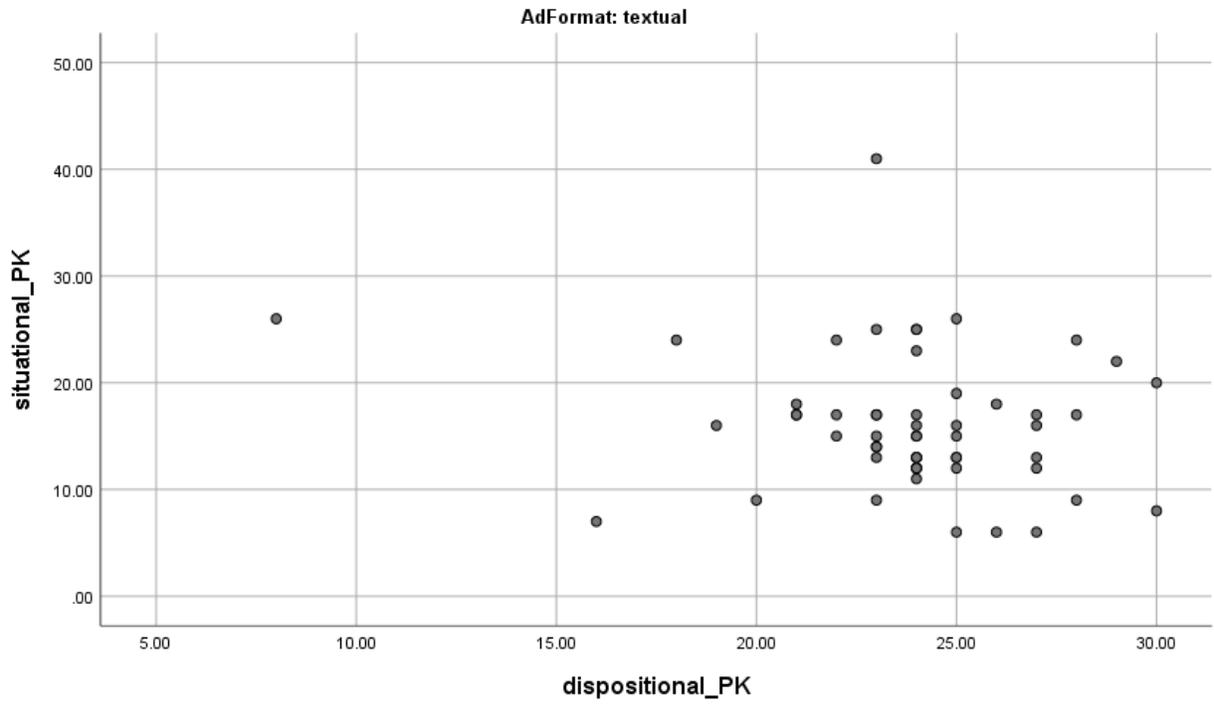


Relationship between the covariate and the dependent variable



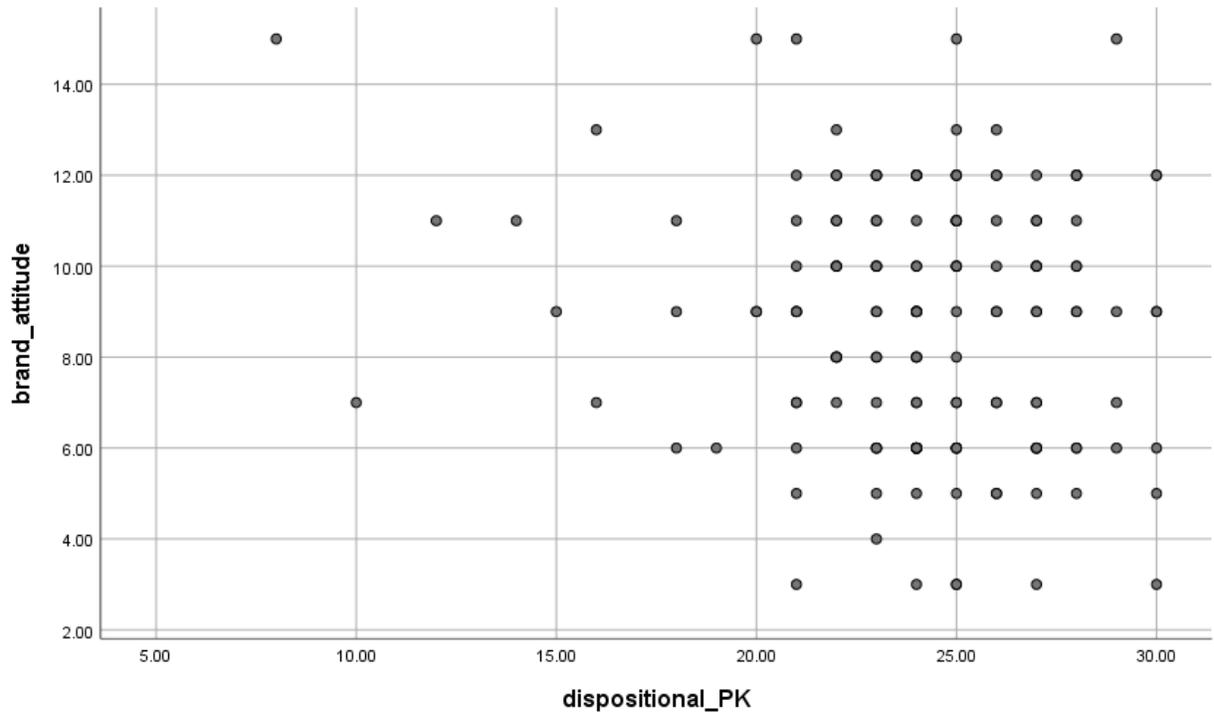
Relationship between the covariate and the dependent variable across each group



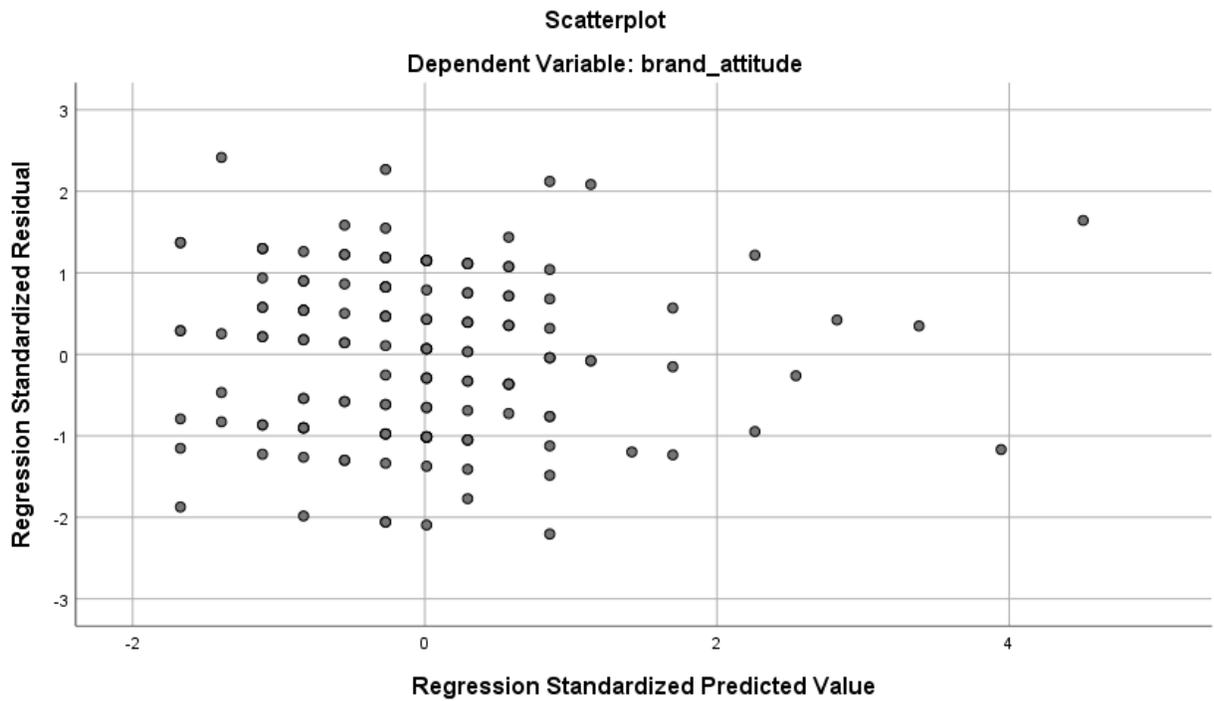


Appendix D

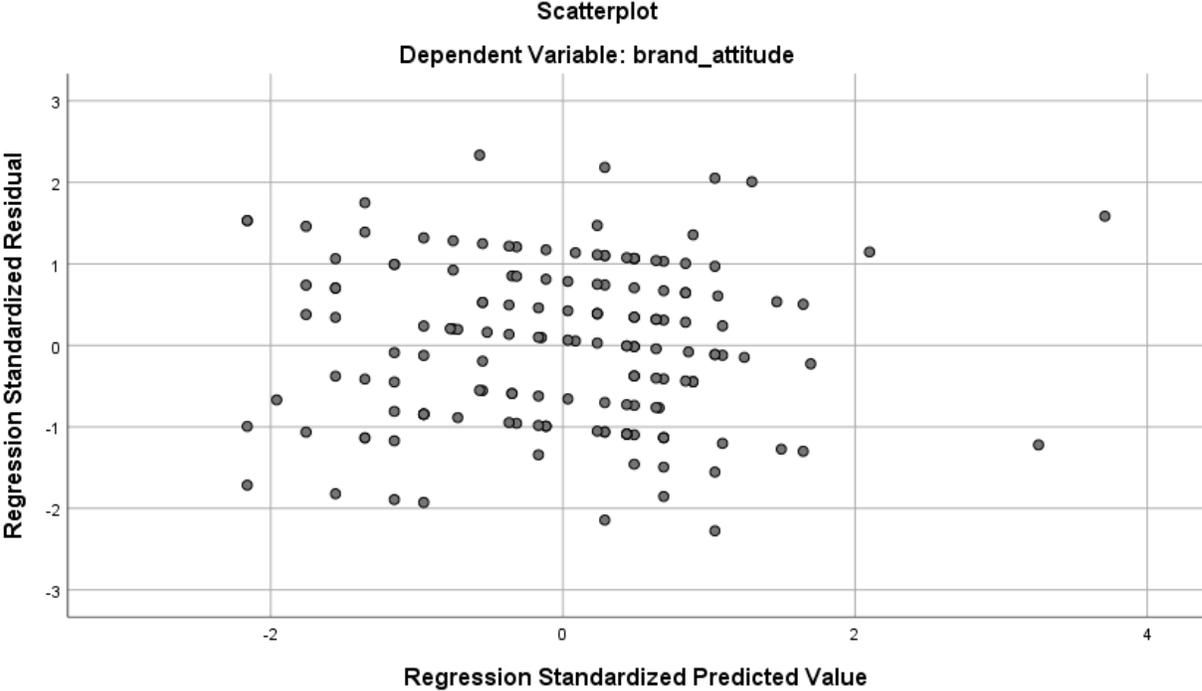
Scatterplot depicting the relationship between Dispositional Persuasion Knowledge and Brand Attitude



Standardized residual for Model 1



Standardized residual for Model 2



Standardized residual for Model 3

