ERASMUS UNIVERSITY ROTTERDAM

Erasmus School of Economics

Master Thesis Economics and Business in Marketing

COLOUR CONGRUENCE IN POLITICAL ADVERTISING: INEVITABLE OR CONVENIENT?

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Erasmus University Rotterdam

Rotterdam, 8 July 2021

ABSTRACT

Objective

Marketing tools have been fully adopted in contemporary politics. Especially during election periods those tools are used to reach and convince the voter of the party's beliefs. On request, advertising agencies make clear and readable ads for such campaigns. Often only with a slogan, party logo, and leader of the party. However, it is not clear what the influence of primary party colour is on the attitude of the consumer who sees the ad. The objective of this study was to investigate the effect of colour congruence on the attitude towards the ad. Therefore, three Dutch political parties and their primary party colour has been used for this study.

Method

Previous research shows that colour congruence positively improves the attitude towards the ad and attitude towards the brand. However, this is from the perspective of a commercial company, with relatively low brand awareness. Political parties generally have a greater brand awareness. Hence, a quantitative survey was designed, 209 respondents took part in the online experiment. Assigned to the control group (N=108) and treatment group (N=101).

Findings

This study shows two significant differences in the mean between the attitude towards the shown ad of the control and treatment group. Colour congruence has a positive influence on the attitude towards the VVD, while the attitude towards the ad of the PVDA is higher if there is a colour mismatch. In addition, there is no significant effect on the attitude towards the ad D66. Furthermore, ad perceptions and ad credibility are powerful predictors for the attitude towards the shown ad. Lastly, in two cases the interaction variable ideology influences the relationship between the attitude towards the colour and attitude towards the ad.

Conclusion

It is indisputable that colour influences the attitude towards the political ad. The results of this study can be used by managers or campaign teams to optimise their ads. In addition, it implies guidelines for potential consequents when changing colour in marketing communication. Blue and green are highly preferred over red regardless of this corresponds to the brand identity. Thus, brands should be careful when using red in advertisements. The other colours could be interesting for further research as well as the proportions to the colours used in this study.

<u>ACKNOWLEDGEMENTS</u>

The thesis presented here, "Colour congruence in political advertising: inevitable or convenient?", has been written to complete the master Economics and Business, Marketing at the Erasmus University Rotterdam.

I have received tremendous assistance and resources throughout the writing of my thesis. Firstly, I would like to thank my supervisor Dr. C. Bellet. The structure of working with two-week contact has helped me a lot. In addition, his critical feedback and advice were very beneficial to my research and the further development of myself in the academic field.

During the data analysis, I have again used the course material of Dr. M. Van Crombrugge, who gave the course 'Marketing Research and Analysis'. It was very helpful in solving research-related issues. Furthermore, I want to acknowledge all the participants who filled in the survey.

I hope you enjoy reading.

Stefan Gelok

Rotterdam, June 2021

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CHAPTER 1
INTRODUCTION

Visual information is a fundamental aspect of human perception. The role of visual information in our memory system goes beyond any other information system. It is therefore not surprising that it has been an item of great interest in the advertising and marketing world for decades. The possibilities with today's technology remain limitless, both for traditional and digital advertising. At the same time, marketers spend more on digital advertising, while reducing their budgets for traditional advertising (Statista, 2021). To deliver an optimum desirable and/or useful message, the attention and perception of consumers must be triggered (Wendel & Pieters, 2007). Therefore, it is important to build and maintain a corporate visual identity, essential for every company and brand, regardless of the industry it operates in.

One of these industries is politics. In the past decades, an increase in usage of "political marketing" has become a global phenomenon (Hughes, 2018). The use of the marketing concept is adopted in the political process, and contrariwise. The concept of exchange is a common interest in both domains (Andrei, 2018). With the aim to satisfy the needs and wants of selected people and groups in society (Newman, 2002). Politicians have become a consumer product, which includes marketing strategies and promotion campaigns through which market share can be obtained (Kotler, 1999; Niffenegger, 1989). Political marketing is the outcome of the marriage between politics and marketing (Lees-Marshment, 2001). The concept of political parties as brands is now commonplace (French and Smith, 2010).

Colour is one of the visual elements which can be used for this purpose, it is universal and applicable to all kinds of specific elements within the identity of a company or brand. In addition, colour has a special status in human memory and is a more familiarity-based process than any other type of visual information (Mammarella et al., 2016). The potency of colour in marketing ensures brand differentiation (Schmitt & Pan, 1994), create and foster brand identity (Garber & Hyatt, 2000; Madden et al., 2000), and consumer perceptions (Grossman & Wisenbilt, 1999).

Consciously or unconsciously, information processing takes place in human memory. There are three memory structures that capture this process (Atkinson & Shiffrin, 1968). For colour, sensory memory is of great importance in the first place. It processes all kinds of information

coming from senses, so also visual information in the form of colours. Thereafter, short-term memory will be activated. Now the consumer has come to a point with two outcomes; first, information will be forgotten, or second, information is forwarded to the long-term memory. Howbeit, based on this process an array of perceptions is built up. Associated with a stack of specific events.

In politics, colour is perhaps even more important than for commercial companies. Where practice purposes such as differentiation and communication are served. They retain political significance through persistent associations, which is part of influencing behaviour (Marini, 2017). In addition, the role of colour in politics is more dynamic and context-dependent than believed which means that the preference is moveable and momentary (Schloss & Palmer, 2014). Nonetheless, a chosen primary party colour is steadfast, where it must be taken into account to what extent colour associations are rightful according to the ideology of the party. During election periods, people are faced with numerous ads, these are difficult to distinguish from each other. Colour seems to be a pertinent filter for this. However, little is known about colour congruence and the relationship towards the attitude of a person, from a political perspective. In this context, colour congruence can be defined as the extent to which the primary brand colour and primary ad colour are congruent. In a fundamental way, this is parallel to the Stroop effect, the psychological test where stimuli between colour and text is measured. Furthermore, political parties usually have a primary and secondary colour that are part of their colour scheme. In advertisements, one colour is often used, to keep it as simple as possible in the communication towards the voter. However, colour associations go further than just the political party. Colour is often part of an ideology. For example, in Dutch politics, red for socialist parties and blue for liberalist parties.

Research to commercial brands, show no one-sided opinion about the influence of colour congruence on attitude. Moore, Stammerjohan, and Coulter (2005) shows that colour congruence led to a more positive attitude towards the ad and brand, while Lichtlé (2007) stated that a more favourable attitude can be provoked by colour mismatch. Howbeit, several researchers have pointed out a better understanding of the role of colour, even so, more research is necessary both in print and media (Gorn et al., 2004; Lichtlé, 2007; Labrecque & Milne, 2011). In addition, the online environment offers many challenges and research questions (Moore, Stammerjohan, & Coulter, 2005). Especially, at a time when it is not self-evident to campaign through traditional (offline) media.

1.1   Academic and Managerial Relevance

Academic relevance

The impact of colour on consumers behaviour in advertising has been investigated by numerous academic studies. Researchers have shown that behaviour can be measured by attitude towards the advertising, attitude towards the brand, ad credibility, ad perceptions, and mood (Mitchell & Olson, 1981; Moore, Stammerjohan, & Coulter, 2005; MacKenzie & Lutch, 1989). The latter identified that attitude towards the ad, often abbreviated as A_{ad}, as an important construct for advertising attitude.

Advertising strategies in politics are increasingly important, as the influence of this instrument on the perceptions of the voter becomes more important (Gordon & Hartmann, 2013), and the voting behaviour resulting from this (Lee Kaid, Fernandes, & Painter, 2011). In addition, strategies are becoming more sophisticated, instead of one ad for a specific group, micro-targeting can provide personalized ads based on the characteristics of an individual. During the Dutch general election in March 2021, 15 parties together spend more than 2.7 million euros on Facebook ads (ICDS, 2021). Moreover, they used more than 750 unique ads.

According to Bagchi and Cheema (2013), the colour red positively influences the willingness to pay. Blue, on the other hand, creates a relaxed atmosphere when shopping offline (Gorn et al., 2004). While green is associated with nature and environment (Elliot & Maier, 2014). So, each colour has its own associations. In addition, colour congruence generates more favourable evaluations towards the ad and brand (Moore, Stammerjohan, & Coulter, 2005). However, this research is focused on web site banners for commercial brands. It is important to obtain more knowledge about the impact of a political brands on the attitude towards the ad.

According to Ordabayeva and Fernandes (2018), ideology is an individual predictor of consumer behaviour. This stems from social background factors that influence beliefs and norms and values. Which in turn influence the intentions and actual behaviour of an individual (Ajzen, 1991).

This research measures the attitude towards the ad of three Dutch political parties. The colours red, blue, and green are used for three flyers. In addition, it is examined to what extent ideology

interacts between the attitude towards the colour and attitude towards the ad. This combination has not been studied before.

Managerial relevance

For managers this study is relevant because it investigates the importance of using a primary brand colour in advertising. In other words, whether colour mismatch affects consumers' attitude negatively. This study will give managers in politics, campaign teams, and external agencies that work on behalf of political parties new insights on how they should cope with colour use in advertisings. Managers can optimise their competitive advantages and profits by understanding how colour effects the judgements of a voter. Especially, the effect of congruence between the primary party colour and ad.

Notwithstanding, this case study focuses on political parties, however, the results are also interesting for brand managers in a commercial or non-commercial organization. The findings can be used to reconsider all kinds of branding attributes with colour, such as designing advertisements. Moreover, it can be applied for improving the identity and assessing the image of the company.

1.2   Research Questions

The aim of this study is to investigate the effectiveness of congruence between the primary party colour and the background colour of a political advertising. An experiment with three colours and Dutch parties will be conducted to measure the impact. This thesis is written with the aim to answer the following question:

"In what ways does congruence between the primary party colour and the background colour of a political ad influence the attitude towards the ad?".

The following sub-questions will be used to formulate an answer to the main question:

RQ1   What factors can influence the attitude towards the shown ad, and how are they related to each other?

RQ2   To what extent does colour mismatch affect the attitude towards the shown ad?

RQ3   To what extent does ideology moderate the relationship between attitude towards the colour on attitude towards the ad?

1.3   Reading guide

First, the literature review shows several concepts that can serve as the foundation of this paper. In doing so, the hypotheses are formulated. The chapter ends with the conceptual model. Subsequently, in chapter 3 the methodology is described, in which the data collection and analysis is further explained. Thereafter, the results are presented in chapter 4. Several tests are performed, the chapter ends with an overview of the hypotheses. In chapter 5 the results are discussed, and the limitations of this study are explained. Recommendations are made for further research.

CHAPTER 2
LITERATURE REVIEW

The research question of the present study is based on previous research conducted in three literature streams, namely visual information in human memory, advertising efficiency and the role of ideology. Those subjects provide a broader understanding of relevant concepts and based on this, a coherent structure that clarifies the phenomenon of colour in a flyer can be built.

2.1 Visual experience as a determinant of human behaviour

Colour is the most visual experience in the human memory performance, both cognitive and affective (Dzulkifli & Mustafar, 2013). It seems that colours have a special status in human memory, the so-called *colour superiority effect*. Remembering colour is a more familiarity-based process than any other type of information communication (Mammarella et al., 2016).

2.1.1 Information processing

Processing information commonly takes places in human memory. Atkinson and Shiffrin (1968) created a model that illustrates their theory of human memory, based on three determinants: sensory memory, short-term memory, and long-term memory. The first component, sensory memory processes information derived from senses, for instance, through visual information. Thereafter, the short-term memory will be activated, lasts for approximately 30 seconds. This means that information will only be retained for a short period of time. After that, information can be forgotten through decay. At the same time, information can be forwarded to the long-term memory. This component consists of a vast capacity, which can recall specific information from a particular event or experience.

Baddeley's model is another theory about working memory and can be seen as an improvement on the original. Both Atkinson and Baddeley's models have similarities. However, the way of looking at short-term memory seems to be dissimilar. Baddeley expanded the short-term memory, in the origin, with three components. The visuospatial sketchpad is one of these components, which receive visual information in the short term. In contrast with Atkinson's model, the visuospatial sketchpad processes visual and auditory stimuli simultaneously without affecting other processes (Denis & Logie, 2016).

Tulving (1973) argues that long-term memory indeed consists of vast capacity; however, the way of encoding is pivotal in the accessibility of information. Moreover, colour-word associations are interconnected and lead to situational relations (e.g., a banana <is yellow>). In retrospect, Tulving's iteration on this part of the model is one of the most influential distinctions because it adds three types of sub-sections: procedural memory, semantic memory and episodic memory. The semantic memory section can be worthwhile in this research. This section is responsible for preserving general knowledge also known as declarative memory. Moreover, the knowledge of visual information, such as colour and form, are also involved (Thompson-Schill, 2003).

2.1.2 Visual marketing

Consumer experience is affected by visual marketing and can be seen as a strategic contraption for marketers to deliver a desirable and/or useful message (Wendel & Pieters, 2007). Fundamental processes within this topic are related to attention and perception. To establish an effective visual identity, consumer perception needs to be triggered. Multiple studies show that the use of colour can be an element in coaxing in likability, familiarity or purchase likelihood (Bagchi & Cheema, 2013; Labrecque & Milne, 2011; Wendel & Pieters, 2007). On the other hand, a conscious choice of colour is not self-evident. Gorn et al. (1997) showed that creative directors still choose based on their heuristics and are not familiar enough with the importance of colour theories.

According to Sample and Brasel (2019), the surface colour is one of the five main components in the piecemeal perception of a consumer, which in turn is one of the three areas of visual perception (the other two are: visual processing and visual comprehension). The theorists define piecemeal perception as "consumers' sensation of a stimulus' individual physical attributes".

Illuminance, shape, materiality and location are the remaining components that influence piecemeal perception. Each perception has associated facets that contribute to the whole. For instance, surface colour consists of hue, saturation and lightness, also known as HSL which is an acronym made for alternative representations of the ordinary RGB colour model.

A key finding from Sample and Brasel (2019) related to the component surface colour is that hues have a metaphorical meaning whereby they manifest themselves in a manner consistent with the metaphorical meaning of the respective hue. Hence, consumers tend to have a higher

preference and a more favourable evaluation for a particular product when it is congruous with the brand image. Furthermore, consumers estimate that items deviating from visual texture expectations are contaminated, which in turn resulting in lower retention desire. To clarify, visual texture alludes to the apparent consistency of a perceived object. For example, crumpled money is spent easier than new-made money, because smooth ones correspond to standard preferred visual texture.

> H1   Congruence between the primary brand colour and its flyer improves the attitude towards the ad.
>
> H2   Colour mismatch causes a lower brand preference.

Marketing researchers have investigated specific effects of colour in marketing. The most commonly used colour in congruent research is red, thereupon, blue (used as the opposite of red) and green (Valdez & Mehrabian, 1994; Eliot & Maier, 2014). Red seems to have a special status because of the majority of research attention and the wide variety of associations. For decades, red has been identified as the most poignantly emotional tone (e.g.: "The psychology of red" by H. Elliot, 1900). Assuming that most individuals have a unique colour taste, fundamental colour preference across the majority of individuals can be found, linked to evolutionary and biological factors (Wexner, 1954). Colour in marketing can contribute to differentiating from competitors and influencing moods and feelings, for instance, Bagchi and Cheema (2013) show that a red background (versus blue background) stimulates an increase in willingness-to-pay and/or purchase likelihood. This mainly arises because red causes aggression relative to blue, which in turn creates arousal. Additionally, red has an effect on bodily functions such as eye blink frequency, blood pressure and respiratory rate.

On the opposite side, in the colour spectrum, blue is more relaxing than red (Bagchi & Cheema, 2013). Moreover, blue is experienced as relaxing, trustworthy and less crowded, as a result of which this has a positive stimulus on the shopping experience and the consequential purchases, which in the end is higher (Gorn et al., 2004; Bellizzi & Hitte, 1992). On the grounds of this, it is not unsurprisingly that blue is the most chosen colour in graphic marks such as in company logo's (Labrecque & Milne, 2011). Online shoppers are more price-sensitive than in-store shoppers (Hsieh, et al., 2018). Despite that, blue demotes the identification of price as an important attribute (Mandel & Johnson, 2002). Supplementary, Mehta & Zhu (2009) shows an

interconnecting between a high-price and high-quality on a blue background. At the same time, red increases unwillingness to pay a high price caused by an aggressive attitude.

The most important associations in marketing colour literature have been collected some of those are discussed above. However, table 1 provides an overview of the colour associations, including the colour green which has not yet been discussed. In contemporary marketing, green represents a trendy growth role in marketing. Relative to red and blue, green is characterised by a larger group of products and services and is therefore widely used in advertising. As a consequence, credibility towards green advertising is relatively low (do Paço & Reis, 2012).

Table 1 Colour associations sort by author for red, blue, and green.

Author(s) (Year)	Red	Blue	Green
Aslam (2006)	Lust, Love	Masculine, High Quality	Good-Tasting, Envy
Elliot & Maier (2014)			Nature, Environment
Jacobs et al. (1991)			Adventurous
Bellizzi & Hite (1992)	Negative, Arousal	Calm, Cool, Positive, Trustworthy	
Labrecque & Milne (2011)	Excitement	Competence	
Mehta & Zhu (2009)		Openness	
Wexner (1954)	Exciting, Stimulating, Protective, Defending	Secure, Comfortable, Tender, Soothing	Calm, Peaceful, Serene

Regardless of the specific meaning and influence of colour on consumers, colour perception is highly context related. Colour symbolised different meanings to various people, regions and cultures (Bellizzi & Hite, 1992). Take mourning, for example, geographically it is the western culture that associates the colour black to this, while the Middle East culture links the colour blue to this. Therefore, geography leads to different implications (Elliot & Maier, 2014). On the other hand, must be said that colour is one of the many tools that international orientated companies use to manage their brand image. The point here is that it is not always possible to achieve the highest preferred attribute if you are an international brand although there are many similar colour associations across markets, for example, red that is associated to love and blue to high quality. Madden et al. (2000) show that colours can be clustered across cultures, based on associations. Blue is linked to green, black, white and brown. This means that those colours have a similar meaning, however, the meanings can vary between cultures. In contrast, red is the only colour that cannot be clustered.

Much of the described research about colour is very complex and leaves many unanswered questions. Over the decades, the visual stimulus has changed, for example, the transition from sensory phenomena to a cognitive phenomenon (Garber & Hyatt, 2000). Additionally, specific colour systems (e.g., Munsell, HSV, OSL) have not been followed in many studies (Labrecque & Mile, 2013). A frequently used variable in colour research is hue, but there are more dimensions in colour such as saturation and value. Even though every variable is equally important, the hue is the most coveted one. Value is highly context-related and is therefore less convenient in marketing connotations (Sample & Brasel, 2019).

2.2 Advertising efficiency

The role of advertising is important in politics, especially during the election period. To indicate the measures that influence advertising efficiency, for instance, the role of (actual) behaviour or attitude towards advertising. Advertising researchers paid large-scale attention to attitude towards advertising as an affective mediating effect on brand attitudes, and purchase intentions (Holmer, 1990).

2.2.1 Behaviour and attitude in advertising

It is human nature to respond either favourably or unfavourably to a certain exposure. Social psychology has provided several models of attitude. Fishbein's attitude model is one of the most well-known models in marketing and behavioural research (Mitchell & Olson, 1981). It is a fundamental model, and a starting point for subsequent research (Littlejohn, Foss, & Oetzel, 2016). Ajzen and Fishbein found two problems in traditional research: first, attitude was defined too generally (Ajzen & Fishbein, 1975). Up to that point, no distinction has been made between attitude, belief, subjective norms and behavioural intentions. Second, the receiver was ignored in research. They were only looking at the message, while the receiver was given a passive position. And so, the theory of reasoned (TRA) action emerged, the basis for understanding attitudes and predicting behaviour. A key determinant in this model is attitude, which can be influenced by two factors: the strength of behavioural beliefs and the evaluation of potential outcomes. Behaviour can be neutral, positive or negative, with a direct correlation between behaviour and outcomes. Moreover, if the belief is that certain behaviour will lead to a favourable outcome, it is more likely to have a positive attitude towards the behaviour. On the other hand, if the belief is that certain behaviour will lead to an unfavourable outcome, it is more likely to have a negative attitude towards the behaviour (Ajzen & Fishbein, 1975).

According to Mitchell and Olson (1981) who conducted research to test the validity of the Fishbein model, attitude towards the advertising should be treated as a construct, which can be distinguished from product attribute beliefs and brand attitude. See figure 1.

A critical note from Terry, Gallois, & Mccamish (1994) is mainly aimed at individual connections, both interpersonal and social relations, and broader social structures. However, social structures are part of the TRA, mainly focused on individual perceptions and

Figure 1 *Observed mediators of advertising (cognitive) (Mitchell and Olson, 1981)*

social phenomenon, which can lead to ambiguity. Under those circumstances, behavioural intention does not lead to actual behaviour.

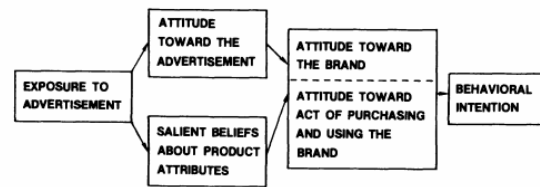The theory of planned behaviour (TPB) includes the control of perceived behaviour. Icek Ajzen proposed the concept, which can be seen as a refinement of the original TRA (Ajzen, 1991). By adding a new component: perceived behaviour control, Ajzen is fitting the gap between predicting behaviour and actual behaviour.

The model consists of three kinds of belief that can predict human behaviour. Behavioural beliefs cause a favourable or unfavourable attitude towards the behaviour, which can lead to a positive or negative outcome. Normative beliefs are related to social pressure or biased norm. The last one, control beliefs incite behaviour control, this can affect the performance of the behaviour (Ajzen, 1991). The three background factors that can influence the three beliefs are related to individual factors such as personality, intelligence, general attitudes, etc. Social factors like age, income, culture, etc. Information is about knowledge, media and intervention.

Attitude as an influencing factor towards advertising has been studied by many researchers. MacKenzie and Lutz (1989) describe the variable attitude as "an attitudinal reaction to the advertising generated at the time of exposure". The use of the variable in research consists of a bipartite. It has been in the focus as mediator to measure cognitive and affective antecedents, for instance research from Crites, Fabrigar and Petty (1994) who created a reliable scale for affective and cognitive bases of attitude, but also as outcome variable (MacKenzie & Lutz, 1989). The theorist concludes that attitude towards ad consist of five variables: ad credibility, ad perceptions, attitude towards the brand, attitude towards the advertising and mood. Ad credibility can be defined as the degree to which the consumer accepts claims in an ad as truthful and credible. Ad perceptions are defined as a multidimensional array of consumer perceptions.

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Attitude toward the brand is about the reaction, favourable or unfavourable, toward the sponsoring organization. While attitude towards the advertising is about the general opinion toward the advertising. The research that focused on the influence of attitude towards a brand revealed that there is only a link to non-comparative advertising (Dröge, 1989; Muehling, 1987). Under non-comparative advertising, a firm advertises its own quality. Finally, mood is defined as the consumer's intuitive state towards the ad stimulus at the time of exposure.

A highly significant relationship between brand cognition and attitude towards the brand has founded by Dröge (1989). Furthermore, Brown and Stayman (1992) found a significant indirect effect in their meta-analytic model, thus, an effect of attitude towards advertising on brand attitude via brand cognitions. In most studies, this relation is the weakest value in the model. This effect is important in understanding the indirect effect of attitude towards advertising. Earlier, MacKenzie, Lutz and Belch (1986) found a positive effect between both factors. Therefore, predictive validity can be a suitable measure of brand cognition. Recent research by Liu et al. (2020) shows equivalent results; the study focuses on restaurant customers. A positive effect was found on brand attitude, cognitive as well as affective. From a cognitive perspective, if customers believed that the quality of the meals was good, then brand cognition had a significant positive effect on brand attitude. Furthermore, a positive (affective) effect is found between brand attitude and brand awareness (Liu et al., 2020). The restaurant industry is highly competitive, which is often positioned close to each other. On the grounds of this, there are some similarities between the restaurant industry and the political landscape.

H3   Congruence between the primary brand colour and its flyer positively improves the credibility.

H4   Congruence between the primary brand colour and its flyer positively improves the perception.

2.2.2   Ad-evoked emotional response in advertising

In marketing and advertising, there has been some discussion about what is more predictive: thoughts or feelings? According to Morris et al. (2002), emotional reactions are strongly predictive of behavioural intention. They argue that any Likert scale is missing emotional information, which is both descriptive and directive. Morris (2002) stated human experience surrounds a tripartite of attitude: cognitive, affective, and conative. Moreover, Morris stated based on a robust study that affect dominates over cognition for predicting conative attitude.

So, instead of using "linking of an advertisement", Morris pleads for the use of a more emotional approach. However, Pham et al. (2013) use both the variables cognitive and affected.

Political advertising is of course different from mainstream advertising. Therefore, emotional responses to political advertising are more likely (Chang, 2001). This also applies to negative advertising, which is in politics more natural than in mainstream advertising (Marland and Flanagan, 2013). On the other hand, political parties use positive advertising generally to promote candidates' merits and highlighting their strengths (Tinkham & Weaver-Lariscy, 1994). However, negative advertising focusing on attacking the opponent, and disclose their weaknesses. Thus, positive and negative advertising differ in terms of what parties want to evoke. Whence, a positive correlation between voters' positive response and candidate evaluation, and a negative correlation between negative response and candidate evaluation (Kaid & Tedesco, 1999; Chang, 2001).

Negative political messages, for instance in advertising, are easier to recall than positive messages (Newhagen & Reeves, 1991). The emotional response between positive emotions and negative emotions seems to be different. This depends on the working memory process (for reviews, see Baddeley's model of working memory, chapter 2.1.1) and the levels of emotional process, for example, short term and long term. Notwithstanding that this research focuses on the effect of colour in advertising, it may concern an underlying effect, for example, the way of communication that one of the parties in the research uses during an electoral campaign.

2.3   The role of ideology in political preference

Political ideology plays a major role in shaping the identity of consumers' and can be used as a lens to study the attitudes and behaviour of the consumers (Jung et al., 2017; Ordabayeva & Fernandes, 2018; Fraley et al., 2012; Jost et al., 2003). For marketeers, this is important because distinct preferences indicate marketplace behaviour although preferences and differentiation strategies may vary because of political ideology. That is why ideology can be seen as an independent predictor of consumers' behaviour, in contrast to socioeconomic status and income (Ordabayeva & Fernandes, 2018) which in turn can predict the consumption of brands.

Many empirical studies use a conservative-liberal or left-right scale in linking consumer behaviour. For example, Khan et al. (2013) found evidence with regard to individuals following a conservative ideology tend to score lower on openness, which is an association linked to the colour blue (see table 1). Moreover, conservatives highly prefer established national brands

because they represent values like tradition and convention and dislike complexity, for example, a new experience such as the consumption of a new brand (Khan et al., 2013). In addition, social structure is a valuable trigger for conservatives. In other words, the evaluation of high status is more favourably than those with low status, without conserving about their own status (Levin et al., 1998). On the other hand, liberalism is related to tolerance, compassion, flexibility, and openness to new experiences (Oyserman & Schwarz, 2017).

Regardless of whether one has a conservative or liberalism preference, this implies that corresponding norms and values improves the preference towards the brand, which in turn is associated with its brand attributes, such as colour. Thus, congruence between the primary party colour and the party should lead to a higher stimulus.

H5 Colour congruence on attitude towards the ad is moderated by political ideology.

2.4 Conceptual framework
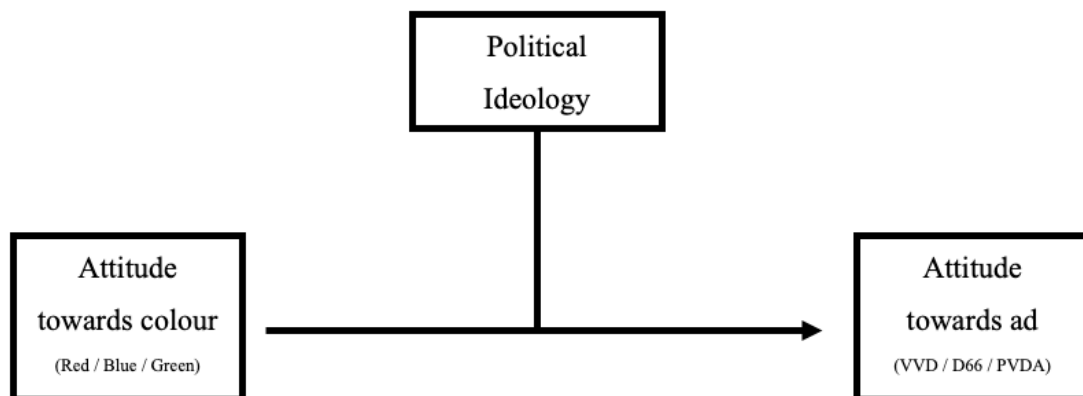
Figure 1 *Conceptual Framework including interaction variable*

CHAPTER 3

METHODOLOGY

This research aimed to determine if an adjustment in the independent variable 'background colour' (Blue, Green or Red) causes a different extent of change in the dependent variable 'attitude towards an ad'. Five hypotheses were formulated to carry out this research for which a survey was distributed to the respondents. This chapter will explain the research design, sample, measurements, analytical technique, and data collection.

3.1   Research Design

To answer the research question, a web-based experiment is used to gather the data, using a between-subjects design. The survey is created in Qualtrics and consists of 22 questions. The respondents were assigned to three posters. The between-subjects design assigned the respondents automatically to the control or treatment group. The experiment is based on a completely randomized design. As table 2 indicates, the independent variable was manipulated by the primary party colour of another party.

Table 2 Assignment control vs treatment group

Party/group	VVD	D66	PVDA
Control group (primary party colour)	Blue	Green	Red
Treatment group (colour mismatch)	Red	Blue	Green

The survey can easily be divided into three parts. After the introduction, a colour was shown to the respondent, for example, for VVD the colour red (colour mismatch) if the respondent was assigned to the treatment group. Then a question about the general impression and feeling about the colour was asked. Respondents were able to express their opinion using a 5-point semantic differential scale. Thereafter, the same flyer was shown, but now a text was added about one of the political parties, for example, "Vote VVD" on a blue background (primary party colour) if the respondent was assigned to the control group. Now they were asked about the general impression of the flyer, for comparison with the previous answer about the general impression of the colour. The second question was about the general impression of the party and advertising to discover the overall attitude towards the ad. In addition, three statements about the poster were made, for instance, this poster gives useful information versus meaningless information. Again, the same measurement level was used. The same system was used during the other two colours and parties. The flyers (solely colour and text on colour) can be viewed in Appendix I.

The second part of the survey consisted of questions about demographic information about the respondents. Mostly, as filter questions (age and nationality) to make sure that only the target group filled in the survey. In addition, a question regarding their gender was asked. In the last part of the survey, six statements have been questioned to determine the political ideology of the respondent. The statements are about the importance of national brands, Dutch traditions, the openness of new experiences, and the belief in power and dominion, all statements for which certain preferences were found in the literature review (liberal versus conservative). The Likert scale has been used for the four statements (from very unimportant to very important). The questions and answers of the survey can be found in Appendix II. Therefore, the survey can be so that the study can be rerun over time again (Golafshani, 2003).

3.2 Sample

This research is focused on Dutch voters, a population of an estimated 13.2 million people (CBS, 2021). The Central Agency of Statistics, also known as Statistics Netherlands, is a governmental institution that gathered information about the Netherlands, which is publicly accessible. 32,3% of the population is aged between 18 and 39. According to the NOS (2021) who did research during the election in March 2021, the voting behaviour of this group differs slightly from the national average. They are usually more progressive in their behaviour than the remaining age groups. Expressed in colours, green is most preferred followed by blue (NOS, 2021).

The biggest group of the population is aged between 40 and 61 and represents 36,9% of the population, the rest of the group, aged older than 61 represents 30,8% of the population. These ages are traditionally more conservative in their attitude, as a consequence blue and red are more dominant (NOS, 2021).

The survey is distributed through WhatsApp, LinkedIn, and a survey exchange platform. The latter provides a broader view of the results, since the respondents are not familiar with the researcher and wider spread through the country to avoid selection and convenience biases. Furthermore, multiple biases could occur during the distribution of the survey. Sampling bias is one of these, by setting careful criteria, the respondents were not chosen entirely randomly. On the other hand, the survey was accessible to everyone; a correction was made for this afterwards, for instance, for people below 18 years or from a foreign.

In total, 236 respondents started the survey, 21 did not finished the survey and 4 respondents had missing values, 2 possess another nationality, which gives a grand total of 209 respondents out of which 108 respondents were assigned to the control group and 101 to the treatment group, as shown in table 3. The research sample shows that 38,76% is male and 61,24% is female. Furthermore, there is a tendency towards young people, given that 88% of the respondents are aged 18-28 years old, while 7,2% is aged 29-39 years, 2,4% is aged 40-50 years and the remaining 2,4% is aged 51-61 years. Even though women are in the majority, this is not a significant difference. See appendix IV for additional descriptive statistics.

Furthermore, the differences between attitudes towards colours have been investigated to see if there is a significant difference between the control and treatment group. Because the attitude towards the colour is asked before the respondent sees the flyer, there should be no difference in answering. However, this assumption is not correct after analysing the independent samples t-test. There is a significant effect between the control and treatment group in their attitude towards the colour blue. The others are not significant, the output can be found in appendix III. This means that randomization between the control and treatment group is not perfect, and this variable will be used as control variable in further tests.

Table 3 Descriptive statistics; gender and assigned group

		Gender		Age	Attitude towards the colour		
		Male	Female	< 28	Blue	Green	Red
		%	%	%	Mean	Mean	Mean
Group	Control	17	34	45	3.55	3.73	2.93
	Treatment	22	27	43	3.80	3.85	2.96

3.3 Measurements

As the conceptual framework indicates, this research consists of three variable designs (X, Y, Z). Y explained the main outcome. While X represents the treatment randomized between control/treatment group, Z represents an interaction effect that is measured for all respondents.

3.3.1 Dependent variable: attitude towards the ad

In order to measure attitude towards the ad, research from MacKenzie and Lutz (1989) and Mitchel and Olsen (1981) is used. According to MacKenzie and Lutz (1989), five variables can predict attitude towards the ad: ad credibility, ad perceptions, attitude towards the brand, attitude towards the advertising and mood. Mitchel and Olson (1981) used a 5-point Likert

scale, whereas MacKenzie and Lutz (1989) used a 7-point semantic differential scale to measure attitude towards the ad.

The theoretical foundation for developing the scale is akin to Charles Osgood's, which came up with an underpinning in 1957. This method of rating measurement was adopted in marketing research shortly afterwards because it is quick, efficient and provides a comprehensive meaning of an attitude (Mindak, 1961). Research has shown that the reliability and validity of these scales are relatively high in front of other measurement scales (Osgood, Suci & Tannenbaum, 1957; Ahtola, 1975). Furthermore, averaging individual ratings give highly stable results if they correlate significantly (Heise, 1969; Komorita & Bass, 1967).

16 statements were used to measure the attitude towards the ad, so in total 48 statements for the three flyers. The statements were based on the five predictors for attitude towards the ad on a five-point semantic differential scale. In total, the attitude towards the ad is measured for three parties per respondent. Several assumptions were tested before the regression analysis. Firstly, the internal consistency between the items, table 4 shows that the three attitudes towards the ad have an excellent Cronbach Alpha (> .9). The second assumption was about the Pearson's correlation, in order to see if the individual statements show a correlation. All the three tables in appendix VI show a significant positive correlation between the items and differ from a little positive to highly positive. In addition, the path of normal distribution is investigated, see appendix VII. The Kurtosis-Skewness results are acceptable (Brown, 2015). The skewness is positive while the kurtosis is negative for the first variable. The second and third variables show an opposite impression, the skewness is slightly negative whereas the kurtosis is positive. Additionally, a Q-plot for each variable is made, in order to measure the residues, which can be found in appendix VII.

Altogether, the items can be merged both from a theoretical and practical background. As a result, the three dependent variables can be used in further research. Each dependent variable is connected to two independent variables, see table 2.

Table 4 *Reliability statistics for dependent variable*

Variable	Cronbach's Alpha	N of items
Attitude towards Ad: VVD	.906	10
Attitude towards Ad: D66	.922	10
Attitude towards Ad: PVDA	.915	10

3.3.2 Independent variable: background colour

Sample and Brasel (2019) states surface colour are one of the five components of visual perception. Moreover, consumers tend to have a higher preference when the colour is congruous with the brand image. Red and blue are widely used in colour research as opposites whereas green is a familiar colour in politics. These three colours represent the majority of the political parties in the Dutch landscape.

The answer options are based on 5-point differential scale with six statements: interesting/ not interesting, pleasant/ unpleasant, good/ bad, love/ hate, tranquillity/ tension, and acceptance/ disgust. The first three statements are the same as with the question about the general impression about the poster (chapter 3.3.1) to create average indicators for measurement. But first, again, several assumptions have been made. In the first place the Cronbach Alpha, as table 5 indicate, the internal consistency of the items is good (> .8). Next, the correlation between the individual items was examined, this can be found in appendix V. Except for one item, the items correlate significantly in each group, all positive. Most of the items correlate with strength between .3 and .5, with some outliers. Therefore, we can assume that multicollinearity is no issue.

Table 5 Reliability Statistics for independent variable

Variable	Cronbach's Alpha	N of items
Attitude Blue	.844	6
Attitude Green	.871	6
Attitude Red	.848	6

3.3.3 Interaction variable: political ideology

Political ideology can shape consumers' identities and can be used as a lens to study the attitudes and behaviour of consumers. Therefore, it is important for validity, to measure the political persuasion of the respondent. Six statements have been used to measure this, by using a 5-point Likert scale, whereas 1 represents 'very unlikely and 5 'very likely'. The statements were based on the key takeaways from the political ideology in the literature review (chapter 2.3): the importance of national brands, traditions, new experiences, the role of power in current politics, and the centralization of liberty and equality. Openness for a new experience has the highest mean of 4.16 whereas the current political power has the lowest of 3.39. Although all means are relatively high. See Appendix VIII for the descriptive statistics. Based on Pearson's Correlation two political ideology groups are identified: conservatism and liberalism. As shown in table 6, both groups have an acceptable Cronbach Alpha (> .7).

Table 6 *Reliability Statistics for interaction variable*

Variable	Cronbach's Alpha	N of items
Political Ideology: Conservatism	.716	3
Political Ideology: Liberalism	.712	3

Furthermore, a construct of one measurement is built, to be more specific a 10-point scale where a number closer to zero means that there is a preference for liberalism and close to ten a preference for conservatism.

3.4 Analytical technique

Three flyers are used to measure the effect of colour in political advertising. In addition, the interaction effect of treated on ideology will be investigated. Therefore, two regression formulas are created.

Linear regression study:

The first formula will be used to explain the relationship of the primary party colour on the attitude towards the ad. Whereas, attitude towards shown ad indicates an average based on the five variables described in chapter 3.3.1.

1. $Attitude\ toward\ the\ ad\ VVD = \beta 0 + \beta 1 \cdot Treated_{dummy} + \beta 2 \cdot Gender + \beta 3 \cdot Age + \beta 4 \cdot Attitude\ towards\ Blue + \beta 5 \cdot Ideology + \varepsilon$

2. $Attitude\ toward\ the\ ad\ D66 = \beta 0 + \beta 1 \cdot Treated_{dummy} + \beta 2 \cdot Gender + \beta 3 \cdot Age + \beta 4 \cdot Attitude\ towards\ Green + \beta 5 \cdot Ideology + \varepsilon$

3. $Attitude\ toward\ the\ ad\ PVDA = \beta 0 + \beta 1 \cdot Treated_{dummy} + \beta 2 \cdot Gender + \beta 3 \cdot Age + \beta 4 \cdot Attitude\ towards\ Red + \beta 5 \cdot Ideology + \varepsilon$

Interaction study:

Furthermore, the following formula is made for the interaction variable 'ideology'. Where β2 is the interaction variable of treated and ideology. A linear regression will be used to test the models below:

1. $Attitude\ toward\ the\ ad\ VVD = \beta 0 + \beta 1 \cdot Treated_{dummy} + \beta 2 \cdot (Treated_{dummy} \cdot Ideology) + \beta 3 \cdot Attitude\ towards\ colour\ blue + \beta 4 \cdot Ideology + \beta 5 \cdot Gender + \beta 6 \cdot Age + \varepsilon$

2. *Attitude toward the ad D66 =* $\beta 0 + \beta 1 \cdot Treated_{dummy} + \beta 2 \cdot \left(Treated_{dummy} \cdot Ideology\right) + \beta 3 \cdot Attitude\ towards\ colour\ green + \beta 4 \cdot Ideology + \beta 5 \cdot Gender + \beta 6 \cdot Age + \varepsilon$

3. *Attitude toward the ad PVDA =* $\beta 0 + \beta 1 \cdot Treated_{dummy} + \beta 2 \cdot \left(Treated_{dummy} \cdot Ideology\right) + \beta 3 \cdot Attitude\ towards\ colour\ red + \beta 4 \cdot Ideology + \beta 5 \cdot Gender + \beta 6 \cdot Age + \varepsilon$

3.5   Data collection

The survey was designed in Qualtrics, conducted over 14 days between May 5th, 2021 and May 19th, 2021. Distribution took place on WhatsApp, Facebook, LinkedIn and a Survey Exchange platform. To make it easier to interpret, the survey is written in Dutch and lasted for not more than five minutes to keep the attention of the respondents. The colours used for the flyer correspond with the official RGB colour coding of the party, and for all the flyers the same font is used to avoid response bias. Furthermore, SPSS is used to analyse the results. The questionnaire and answers possibilities can be found in Appendix II.

CHAPTER 4

ANALYSIS AND RESULTS

In this chapter, the hypotheses will be tested. The focus lies on five main tables, other tables are included in the appendix. For the interaction analyses, a new linear regression model will be used to determine the relationship. Furthermore, the implications based on the SPSS output shall be discussed. Last of all, this chapter ends with an overview of which hypotheses are supported or rejected.

4.1   Independent samples t-test

To see if there is a significant difference in attitude towards the ad between the control and treatment group, an independent sample t-test has been used. As Levene's test in table 7 indicates, the attitude towards the ad VVD and PVDA are not significant, therefore the assumption of equal variances holds, and the first line of t-test results will be sought out. The p-value of both attitudes are below .05, there is thus a significant difference between the attitude towards the ad of the control and the treatment group. Treated respondents report an 9,3% decrease in attitude towards the ad VVD (mean difference: .224). On the contrary, treated respondents report an 17,4% increase in attitude towards the ad PVDA, so it is more positive.

Table 7 *Independent Samples Test for Positive Attitude towards Ad*

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
Attitude towards Ad VVD	Equal variances assumed	2.533	.113	1.890	207	.048	.22395
	Equal variances not assumed			1.901	204.657	.047	.22395
Attitude towards Ad D66	Equal variances assumed	7.132	.008	-.346	207	.729	-.04268
	Equal variances not assumed			-.350	198.758	.727	-.04268
Attitude towards Ad PVDA	Equal variances assumed	.115	.734	-4.200	207	<.001	-.45117
	Equal variances not assumed			-4.190	203.139	<.001	-.45117

The attitude towards the ad D66 is significant in the Levene's test which means that the hypotheses of equal variances will have to be rejected. The second line of the t-test shows no significant effect between the control and treatment group (p-value = .727). The treated respondents report an 1,3% increase in attitude towards the ad D66, thus more positive; however, the difference is way too small to be significant (mean difference: -.043).

4.2   Linear Regression

Three linear regressions models are constructed, as shown in table 8. Each model shows the linear effect of the dependent variable; attitude towards the shown ad, on the colour preference (attitude towards colour), treated dummy which captures the impact of mismatch (0 for control group and 1 for treatment group), ideology (on a liberal-conservatism scale, so, if low it means liberal and if high its means conservatism), gender (0 for male and 1 for female), and last age (0 for age between 18-28, 1 for age between 29-39, 2 for age between 40-50 and 3 for age between 51-61).

Table 8 *Linear Regression results for the relationship between attitude towards the colour and attitude towards the ad*

	Model 1		Model 2		Model 3	
	Attitude towards ad VVD		Attitude towards ad D66		Attitude towards ad PVDA	
	Coefficients	Statistics	Coefficients	Statistics	Coefficients	Statistics
Independent variables	**B**	**T**	**B**	**t**	**B**	**t**
Constant	1.600*	4.423	1.987*	5.055	2.407*	8.954
Colour preference	.260*	2.881	.359*	4.142	.117**	1.727
Treated	-.346*	-2.969	.021	.176	.466*	4.337
Ideology	.077*	2.020	-.025	-.652	-.045	-1.282
Gender	-.361*	-3.032	.185	1.495	.116	1.033
Age	.032	.328	-.206*	-2.088	-.156**	-1.723
F		5.549		5.974		5.331
R		.347		.358		.341
R Square		.120		.128		.116
Adjusted R Square		.099		.107		.094
Sig.		< .001		< .001		< .001

Notes. B represents the unstandardized coefficient, * p-value < .05, ** p-value <.10.

The first model shows a powerful positive effect of colour preference (β .260). Moreover, treated has also a powerful negative impact (β -.346). Subsequently, colour congruence (primary party colour is blue) for VVD leads to a higher positive attitude towards the ad. Furthermore, it seems that gender has the most impact on the dependent variable (β -.361). Because of this, it seems that the attitude towards the ad is lower for female than male. While

ideology shows a positive significant impact (β .077). This gives the following interpretation of the regression formula:

$$Attitude\ toward\ the\ ad\ VVD = \ \beta 1.600 - \beta 0.346 \cdot Treated_{dummy} - \beta 0.361 \cdot Gender + \beta 0.032 \cdot Age + \beta 0.260 \cdot Attitude\ towards\ Blue + \beta 0.077 \cdot Ideology$$

The second model in table 8 shows that colour preference has the most powerful influence on the attitude towards the ad D66 (β .359). The colour preference for green is therefore of great importance in the regression formula. The treated dummy shows a very small positive impact (β .021); however, this is not significant. That aside, colour congruence for D66 leads to a lower attitude towards the ad. In contrary with the first model age causes a significant negative impact on the dependent variable (β -.206). Also, ideology shows a negative impact (β -.025). This gives the following formula:

$$Attitude\ toward\ the\ ad\ D66 = \ \beta 1.987 + \beta 0.021 \cdot Treated_{dummy} + \beta 0.185 \cdot Gender - \beta 0.206 \cdot Age + \beta 0.359 \cdot Attitude\ towards\ Green - \beta 0.025 \cdot Ideology$$

Finally, the third model, representing the attitude towards the ad PVDA. Colour preference, in this case red, have a positive impact on the dependent variable (β .117, accepting a p-value below .10). Furthermore, the treated dummy seems to have a very powerful positive impact (β .466). Thus, colour congruence for PVDA leads to a lower positive attitude towards the ad. The impact of the ideology is negligible (p-value = .885). Age has a negative effect of β -.156, accepting a significant level of < .10. The following regression are made:

$$Attitude\ toward\ the\ ad\ PVDA = \ \beta 2.407 + \beta 0.466 \cdot Treated_{dummy} + \beta 0.116 \cdot Gender - \beta 0.156 \cdot Age + \beta 0.117 \cdot Attitude\ towards\ Red - \beta 0.045 \cdot Ideology$$

To conclude, a voter with a conservative preference ensures a more positive attitude towards the ad for VVD. While, on the other side, a liberalism preference will lead to a more positive attitude towards the ad for D66 and PVDA. More interesting is the colour preference which is positive in all the models. Despite that, colour congruence does not automatically lead to a more positive attitude towards the ad. This is only the case with attitude towards the ad VVD. Therefore, hypotheses 1a can be accepted, however the regression shows contrary results for hypotheses 1b and 1c, hence these are rejected.

To investigate the role of the colour congruence on brand preference, a new regression model is made.

Table 9 Linear Regression results for the relationship between brand preference and treated dummy

	Model 1		Model 2		Model 3	
	Brand preference VVD		Brand preference D66		Brand preference PVDA	
	Coefficients	Statistics	Coefficients	Statistics	Coefficients	Statistics
Independent variables	B	T	B	t	B	t
Constant	1.753*	4.321	2.175*	5.501	2.414*	10.082
Treated	-.339*	-2.374	-.028	-.199	.353*	2.922
Colour preference	.304*	2.738	.325*	3.169	.085	1.106
F		5.520		5.024		4.940
R		.226		.216		.214
R Square		.051		.047		.046
Adjusted R Square		.042		.037		.037
Sig.		< .005		< .007		< .008

Notes. B represents the unstandardized coefficient, * p-value < .05. Colour preference added as control variable.

The output in table 9 shows the effect of colour mismatch on the brand preference, controlled by colour preference. The first model shows a strong negative impact of β -.339, this can be interpreted as a decrease of 0.339 in the effect of mismatch in colour congruence due to an increase in brand preference.

The second model shows a small negative effect of β -.028 but not significant. The impact of mismatch on the brand preference is therefore of less powerful. The third model shows a very strong significant positive impact (β .353). Thus, mismatch between colour congruence, in this case the colour green, results in a higher brand preference than the official primary party colour red. Therefore, there is enough evidence to support hypotheses 2a and reject hypotheses 2b and 2c.

To determine the effect of the independent variables' ad credibility and ad perception on attitude towards the advertising, a new regression model is created, as shown in table 10. The output shows that ad perception has a significantly stronger effect on the attitude towards the ad than ad credibility. According to the VVD model in table 10, ad credibility and ad perception has a significant positive impact on attitude towards the ad with an effect size of β .284 and β .425. The model for D66 also shows a positive effect with a size of β .317 and β .442. In addition, age shows a significant negative effect, thus the older the group, the lower the attitude. Finally, the PVDA model shows a significant positive effect of ad credibility and ad perception, with an effect size of β .250 and β .465.

Table 10 *Linear Regression results for the relationship between ad credibility and ad perception and attitude towards the ad*

	Model 1		Model 2		Model 3	
	Attitude towards ad VVD		Attitude towards ad D66		Attitude towards ad PVDA	
	Coefficients	Statistics	Coefficients	Statistics	Coefficients	Statistics
Independent variables	B	T	B	t	B	t
Constant	.598*	2.376	.409**	1.623	.458*	2.412
Ad credibility	.284*	4.978	.317*	5.227	.250*	4.353
Ad perception	.425*	6.784	.442*	6.685	.465*	7.987
Treated	-.055	-.663	-.007	-.086	.085	1.111
Gender	-.215*	.009	.012	-.141	.007	.093
Age	.001	-2.552	-.126**	-1.832	-.072	-1.174
Colour preference	.099**	1.537	.148*	2.378	.099*	2.165
F		44.972		46.581		50.634
R		.756		.762		.775
R Square		.572		.580		.601
Adjusted R Square		.559		.568		.589
Sig.		< .001		< .001		< .001

Notes. B represents the unstandardized coefficient, * p-value < .05, ** p-value <.10. Colour preference added as control variable.

Noteworthy here is that ad credibility and/or ad perception limiting the impact of treated. That means that all the effect is going through its impact on ad credibility, ad perception or both. Taking that into consideration, an additional regression is worthwhile, to consider how the treatment impacted ad credibility and/or ad perception of each party. As shown in appendix IX, both variables impacted the treatment, depending on the party. For VVD, the impact of ad credibility (β -.389) and ad perception (β -.251) is significant negative. In other words, the effect is negative for the treatment. Furthermore, the effect of treated on ad credibility and ad perception for D66 is not significant and therefore neglectable. So, there is no effect between the control and treatment group on ad credibility and ad perception. Whereas the effect of treated on ad credibility (β .404) and ad perception (β .502) for PVDA is significant positive. That means that the effect of treated increases the credibility and perception towards the ad. For the treatment group the background colour was green instead of red.

To conclude, colour congruence in the flyer has a positive impact on the ad credibility and ad perception. Moreover, the variability explained by the statistical model is relatively high. Therefore, hypotheses 3 and 4 can be confirmed. In addition, the treatment effect is going through both ad credibility and ad perception, party conditional.

4.3   Interaction analysis

After testing several hypotheses with linear regression, now the interaction role of ideology on the relationship between attitude towards the colour and attitude towards the ad will be

determined through a new linear regression. The interaction variable 'Treated x Ideology' will measure if there is a significant interaction between colour congruence and political ideology.

Table 11 Interaction effect in full model

Independent variables	Model 1 Attitude towards ad VVD		Model 2 Attitude towards ad D66		Model 3 Attitude towards ad PVDA	
	Coefficients	Statistics	Coefficients	Statistics	Coefficients	Statistics
	B	T	B	t	B	t
Constant	1.068*	2.639	1.795*	4.237	2.034*	6.424
Treated	.617**	1.681	.309	.803	1.185*	3.414
Treated x Ideology	-.207*	-.2.761	-.062	-.787	-.155*	-2.176
Ideology	.192*	3.426	.009	.156	.041	.775
Colour preference	.260*	2.920	.354*	4.074	.107**	1.599
Gender	-.335*	-3.027	.187	1.516	.120	1.086
Age	.063	.656	-.197*	-.1982	-.132	-1.457
F		6.045		5.072		5.314
R		.390		.362		.369
R Square		.152		.131		.136
Adjusted R Square		.127		.105		.111
Sig.		< .001		< .001		< .001

Notes. B represents the unstandardized coefficient, * p-value < .05, ** p-value <.10. Colour preference added as control variable.

As shown in table 11, the control variables ideology, colour preference, gender and age are included in the model. The first model shows a significant positively impact from treated to attitude towards ad VVD (β .617). In addition, ideology shows a significant positive impact (β .192) while the interaction variable shows a negative impact (β -.207). This means that there is a significant interaction between colour congruence and political ideology in the first model. The following regression model is made:

$$Attitude\ toward\ the\ ad\ VVD = \beta 1.068 + \beta 0.617 \cdot Treated_{dummy} - \beta 0.207 \cdot \left(Treated_{dummy} \cdot Ideology\right) + \beta 0.260 \cdot Attitude\ towards\ colour\ blue + \beta 0.192 \cdot Ideology - \beta 0.335 \cdot Gender + \beta 0.063 \cdot Age$$

In model 2, there is no significant effect of the interaction variable (β -.062). The same applies for the control variable ideology (β .009). So, there is no significant interaction effect here. The impact of the independent variable is still very powerful, compared to the linear regression in table 8. Using the formula from chapter 3.4, it will give the following outcome:

$Attitude\ toward\ the\ ad\ D66 = \ \beta1.795 + \beta0.309 \cdot Treated_{dummy} - \beta0.062\ \cdot (Treated_{dummy} \cdot Ideology) + \beta0.354 \cdot Attitude\ towards\ colour\ green + \beta0.009 \cdot Ideology + \beta0.187 \cdot Gender - \beta0.197 \cdot Age$

Concerning the third model, it shows a significant negative effect of β -.155. So, there is an interaction effect between colour congruence and ideology. Because of the interaction variable, the treated variables positively increase, while it was β .466 in the first linear regression (table 8) it is now β 1.185. In addition, the colour preference is less powerful. The following formula is made:

$Attitude\ toward\ the\ ad\ PVDA = \ \beta2.034 + \beta1.185 \cdot Treated_{dummy} - \beta0.155\ \cdot (Treated_{dummy} \cdot Ideology) + \beta0.107 \cdot Attitude\ towards\ colour\ red + \beta0.041 \cdot Ideology + \beta0.120 \cdot Gender - \beta0.132 \cdot Age$

Effects of ideology and attitude towards the ad on group

The effects of ideology and attitude towards the ad for each party are shown in the figures below. To plot this and improve the readability, three categories are created for ideology. Where, low means liberalism, medium no preference, and high conservatism.
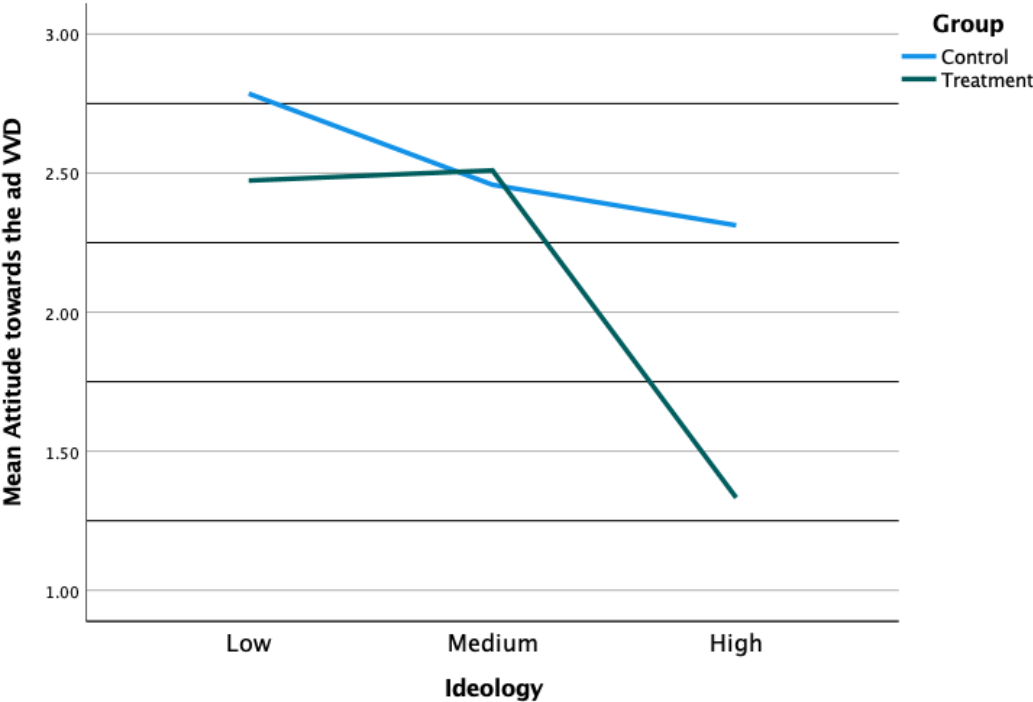
Figure 3 *Control versus treatment for ideology and attitude towards the ad VVD, higher means more positive*

As shown in figure 3, conservatism (high) is in all the lines the lowest and provides therefore the least positive attitude, especially for the treated. For low ideology, the highest attitude towards the ad is for the control group, while the attitude towards the ad is slightly higher if the ideology is medium. The VVD define itself as a party that thinks and works from liberalism (VVD, 2021). However, the party has a lot of conservative tendencies.
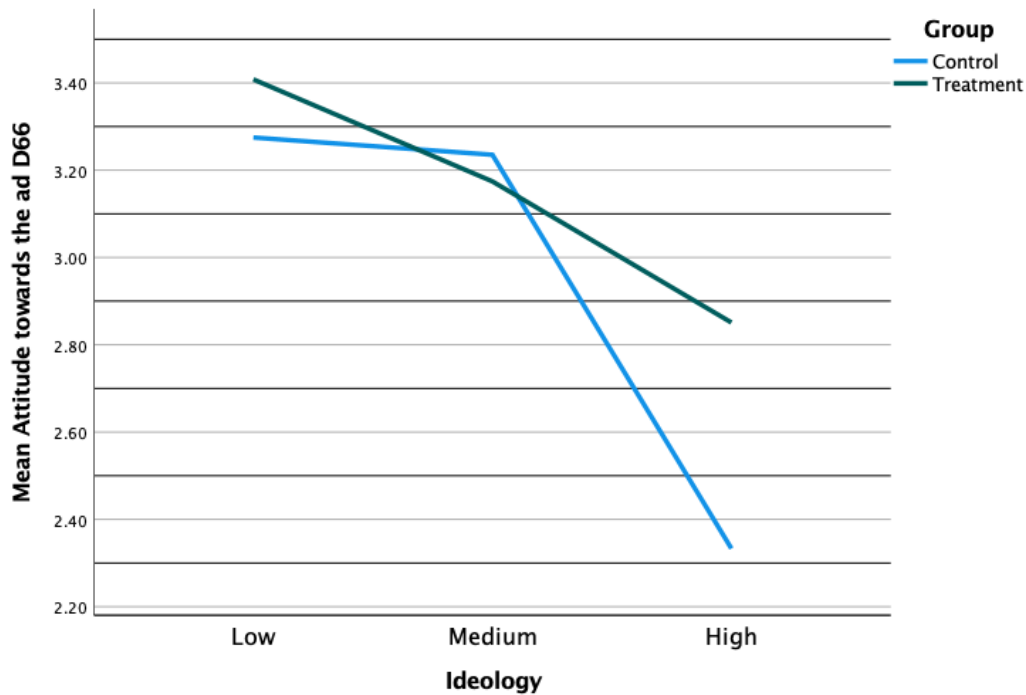
Figure 4 *Control versus treatment for ideology and attitude towards the ad D66, higher means more positive*

Figure 4 shows the attitude towards the ad D66 and the preferred ideology. Low liberalism gives the highest attitude towards the ad for both groups. The attitude for the treated is higher, blue was used as background colour for treated. If the ideology is high, so pro conservatism, the attitude towards the ad is significant low for the control group, while the treated slope declined steadier.

As shown in figure 5, the results between the control and treatment group not proportional, as this does apply for figure 3 and 4. For the control group, the highest attitude towards the ad can be obtained if high ideology is preferred. This contrasts with the treatment group, where the highest attitude can be obtained if the ideology is low. In addition, medium ideology seems to have a negative influence on the attitude in both groups. Even though the PVDA originally has liberal roots, it is now mainly a socialist party (Partij van de Arbeid, 2021).
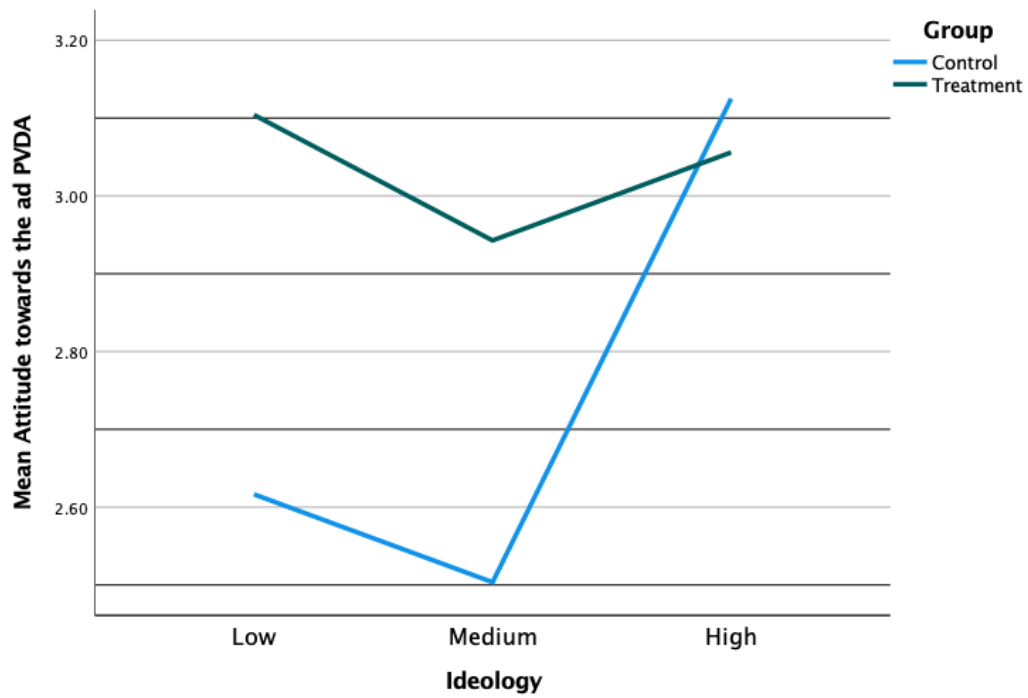
Figure 5 *Control versus treatment for ideology and attitude towards the ad PVDA, higher means more positive*

See table 12 on the next page for a summarization of the hypotheses.

4.4 Hypotheses

All the results of the previous paragraphs are summed up. Table 12 shows whether the hypotheses are supported or rejected.

Table 12 Summary of hypotheses

#	Hypotheses	
1	Congruence between the primary brand colour and its flyer improves attitude towards the ad.	**Partly supported**
a	VVD	Supported
b	D66	Rejected
c	PVDA	Rejected
2	Colour mismatch causes a lower brand preference.	**Partly supported**
a	VVD	Supported
b	D66	Rejected
c	PVDA	Rejected
3	Congruence between the primary brand colour and its flyer positively improves the credibility.	**Supported**
4	Congruence between the primary brand colour and its flyer positively improves the perception.	**Supported**
5	Colour congruence on attitude towards the ad is moderated by political ideology.	**Partly supported**
a	VVD	Supported
b	D66	Rejected
c	PVDA	Supported

CHAPTER 5
GENERAL DISCUSSION

The interest and application of marketing activities in contemporary politics by the administrators of political parties and/or stakeholders are of paramount importance. The aim of this study was to comprehend the specific role of colour in advertising and whether ideology can influence this. Hence, this paper presents notable outcomes about the influence of colour congruence on the attitude towards advertising. Three political parties and their primary party colours have been used to answer the main question of this research: *"In what ways does congruence between the primary party colour and the background colour of a political ad influence the attitude towards the ad?"*.

Based on literature, colour congruence was expected to have a more positive impact on the attitude towards flyers. Nevertheless, this assumption is not consistent with the results of this study. In the case of the VVD, the hypothesis can be accepted: colour mismatch has a very powerful negative impact on attitude. For the other parties D66 and PVDA, it seems that colour mismatch improves the positive attitude towards the ad. Especially for PVDA, the mismatch impact (green instead of the primary party colour red) is very powerful, while the impact of colour preference, in contrast with the other parties, is relatively low. A reason for this can be found in the two colours that are used (red versus green). Green can generate various associations that correspond to the beliefs of a PVDA voter, such as proponent of the environment. Hence green as background on a PVDA flyer can be seen more as a match than as a genuine mismatch.

Conspicuously, there is congruence in colour preference between the groups. So, randomizations seem to be excellent. This is not the case for the colour blue, there is a significant difference between the control and treatment group. Howbeit, PVDA has the highest positive attitude towards the ad. This is in line with previous research. Bagchi and Cheema (2013) states that red colour stimulates the likelihood of purchase, in this case, voting intention.

For the second hypothesis, more support has been found in this study. Previous research by Sample and Brasel (2019) had already shown that congruence led to a higher brand preference. Again, this can only be confirmed for the party VVD. For D66, there is also a positive impact, however, it is not significant; thus, there is simply not enough evidence to

support the negative impacts. In contrast, colour mismatch increases the brand preference for PVDA. Thus, colour congruence has a negative influence on the positive attitude towards the ad. In this case, the colour green was shown to the treatment group.

Even though ad credibility and ad perception are very similar in advance, the correlation matrix shows a moderate correlation. In addition, two separate hypotheses were created based on literature from MacKenzie & Lutz (1989). Based on this study, the impact of perception is significantly higher than credibility on attitude towards the ad. Especially for the VVD, perceptions have a powerful impact, while it reduces the impact of gender. Howbeit, both hypotheses 4 and 5 can be confirmed.

Previous research highlighted the pivotal role of political ideology in shaping the identity of consumers (Jung et al., 2017; Ordabayeva & Fernandes, 2018; Fraley et al., 2012; Jost et al., 2003). This is relevant for marketeers because it can be a predictor for consumption. Therefore, ideology is included as a moderator in this study. By doing so, this study shows that ideology, as an interaction variable, has a negative effect. To be more specific, colour preference, blue and red, has an indirect negative effect on attitude towards the ad of VVD and PVDA. While the effect for attitude towards the ad D66 is neglectable and not significant. Therefore, hypotheses 6a and 6c can be accepted, while 6b is rejected. Note here that adding the interaction effect of the treated variable on ideology in the model decreases the impact of the independent variable in all three cases.

Regarding the control variables used in the linear regression models, it seems to be model dependent whether it is important. For VVD, the control variable gender has a significant negative impact. Thus, the male will give a higher attitude than the female. Furthermore, the control variable age has a significant negative impact on the attitude towards the ad for D66 and PVDA. In other words, lower age groups provide a more positive outcome.

To answer the main question, no overarching general meaning can be attributed to the results. Based on this study, it is clear that colour influences the ad. However, this does not lead to a one-sided outcome. For instance, colour congruence positively influences the attitude towards the ad of the VVD, while, on the other hand, colour mismatch positively influences the attitude towards the ad of the PVDA. Moreover, the credibility and perception towards an ad seem to be essential predictors in forming the attitude.

5.1   Academic and managerial implications

Academic implications

Research into the influence of colour in all kinds of purposes has been done for a long time in academic literature, for instance, research into the psychology of red by Havelock Ellis (1900). Moreover, the influence of colour in advertising has been investigated by many researchers (Milne, & Labrecque, 2011; Moore, Stammerjohan, & Coulter, 2005; Bagchi & Cheema, 2013; Panigyrakis & Kyrousi, 2015). However, there is very little academic literature about the specific role of colour congruence in political advertising, especially in a mediating setting of ideology, which has been used before but not within a marketing setting of colour preference on attitude towards the ad. The latter is used by MacKenzie, Lutz, & Belch (1986) as a mediator for brand attitude, while in this study, attitude towards the advertising and attitude towards the brand together form the dependent variable because of the high correlation between both variables.

Previous research has largely neglected colour as a whole in an ad while the focus was on specific components within colour, such as hue, lightness, and so on (Lichtlé, 2007; Valdez, 1993; Gorn et al., 1997). Sample and Brasel (2019) already conclude that colour congruence with the brand image is beneficial for the preference of a consumer. However, in this study, the only evidence is found for congruence between blue and the VVD, which means that D66 blue and PVDA green will lead to a higher preference. A rationale for this phenomenon can be found in the paper of De Bock et al. (2013) where they state that colours with a positive valence provoke wanted behaviour, while colours with a negative valence do not reduce unwanted behaviour. Research shows that red has negative consequences on behaviour (De Bock et al., 2013; Bellizzi & Hite, 1992; Wexner, 1954). Conversely, blue is seen as calm, positive and trustworthy and is, therefore, more preferred than red (Mehta & Zhu, 2009). In addition, blue increases the purchase intention (Gorn et al., 2004). Thus, red and blue have contrasting connotations (Wexner, 1954). Subsequently, Bottomley and Doyle (2006) show that blue and green are highly positively correlated, while blue and red had the largest negative correlation. This study shows that colour preference is in line with previous research, red has been seen as the most negative colour. Furthermore, the influence of culture is notable, only Dutch people participated in this study. However, western cultures show similar patterns in colour interpretation, but there are still differences in meanings (Madden et al., 2000).

Other studies have shown the positive impact of colour congruence on brand preference (De Bock et al., 2013; Bottomley & Doyle, 2006; Sample & Brasel, 2019). This research shows partly equivalent results. Blue is preferred to red and green, while green is preferred to red. Howbeit, an explanation for this can be found in the paper of Meyers-Levy, Louie, and Curren (1994). They stated that consumers desire a certain amount of incongruence because they process ads more extensively when it is incongruent. Identifying a new relationship between the brand name and colour will lead to satisfaction which gives a feeling of fulfilment. Thus, being less consistent in an ad could create interest, depending on the chosen colour.

MacKenzie and Lutz (1986) note that ad perception and ad credibility are important determinates of attitude towards ad and have a direct influence on brand preference. In addition, they conclude that ad credibility is influenced significantly by ad perception. This study shows similar results, the role of ad perception is a very important predictor for the attitude towards an ad. Compared to other linear regression models, this model shows very consistent results for ad perception and ad credibility over the three parties. Moreover, variability is relatively high and is in line with work from MacKenzie and Lutz (1986). Dahlén et al. (2005) state that incongruence increased brand attitude; those findings are partly in contrast with this study. Only the party PVDA shows an equivalent outcome, while the other parties have an advantage from colour-party congruence.

Managerial implications

This research highlighted the importance of colour congruence not only within politics but also for businesses. It is crucial to know what consequences the use of colour in advertising can have for brands and companies, especially for political parties. Therefore, this study shows some key takeaways relevant for brand managers, marketing managers and (political) campaign teams. As mentioned before, the use of marketing tools within politics has been growing for years. Especially, the last election as the pandemic reduced the resources to campaign, which made advertising from a distance (both online and offline) even more important.

First and foremost, the use of colour is inevitable in communication. Also, brands with a great colour scheme, which matches with the external activities, will benefit from this. However, it is essential to weigh decisions based on the colour associations within the culture in which the company operates. Thus, it is important to work with colours but know in advance which reactions and perception are stimulated in your audience. Especially the colour blue seems to result in a positive attitude towards the ad, regardless of whether it matches with the brand image or not. However, colour congruence is more important if the aim of the activity is

to improve brand preference. In contrast, be very careful with the colour red, this usually provokes more extreme and negative emotions.

Secondly, it is important for companies and brands to build positive consumer perception with the ad. To do this, a consistent array of ads over a certain time frame is needed. However, from a managerial perspective, a detailed marketing plan can be used for this. This is essential because much of the point of view is based on perceptions gained in the past. This makes it the most effective component in influencing a consumer's attitude. In addition, credibility is also an influencer in the behaviour. However, you can already create this with a single advertisement. If you, as a marketing manager or as a member of a campaign team, want to improve the attitude of your advertisement, think carefully about whether this should be in the short run through a one-time activity, or in the long run by building positive perceptions. The latter will remain in force for a longer period and less likely to turn into a negative tendency.

At last, this study shows that the relationship between attitude towards the colour and attitude towards the ad can be modified by ideology, based on a liberal-conservative scale. Consumers build a colour scheme and political colour seems to be part of this. Therefore, we should know which parties are associated with a specific colour and whether the colour is applicable within the corporate identity.

5.2   Limitations and further research

Several limitations must be considered when evaluating this study. Firstly, there is a limitation in age. Age is categorized into groups of 10 years. Although the exact age is not known in the study, there is a clear age distribution towards people below 28 years. To be more specific, 87% of the sample is between 18 and 28 years old while the proportion of the groups 40 – 50 years and 51 – 61 years is relatively small. This explains, among other things, the negative impact of age on the D66 party. See chapter 3.2 for a detailed description of voting behaviour between groups. Thus, this study is not generalizable for the entire Dutch voting population, but it is for the youth group. So, further research can build on this study and expand the sample with more variation in age.

The survey was initially made in English because the statements and questions are often based on similar studies from the literature. Before distribution, it is translated into Dutch to avoid linguistic misinterpretations. Hence, it is plausible that this had led to confusion. In addition,

the repetition bias may have occurred. The survey is set up by showing first the colour, subsequently, a number of statements were presented, and after that, the respondent clicks through to the next page, the same colour occurred but now with the text of a political party, after that, again, a number of statements were presented. And so on, for all three cases. It is understandable that the participant could imagine, by the third flyer, what was going to show itself. Especially, what questions would arise, which perhaps resulted in a concentration that was not as good as it was, and consequently a quicker and inaccurate response.

Not to mention, the three colours that are used as primary party colour but also as mismatch colour. The latter can be doubtful because sometimes even though it is not the main colour of the party it does correspond to associations of voter. For example green, which is associated with nature and environment, many parties are in favour of this, just like many voters. Therefore, it is declarative that the attitude towards the PVDA with a green background (colour mismatch) is more positive towards a red background, which is their primary party colour. The assigned mismatch colours are chosen by the researcher, based on randomization. It was not decided to test all three colours on each party, due to the number of questions that would arise and as a result of that, the length of the survey.

Furthermore, randomization was not perfect because of two limitations. First, the control group is bigger than the treatment group (108 participants versus 101 participants). Second, there is a significant difference in colour preference between the groups. It is remarkable because this was asked before the experiment took place. Howbeit, the colours green and red show no significant difference.

Moreover, there are three parties used for this study, while there are 17 parties active in the House of Representatives. Using all the parties in this study is unfeasible, that is why it was decided to work with three colours and to choose the largest parties. Hence, although it is the same colour, results are not generalizable for parties other than the three that has been used, and there are quite a few. It would be interesting, in further research, to investigate the remaining colours in Dutch politics, namely orange, brown, purple and black.

Furthermore, to measure ideology as an interaction variable, a liberal-conservative scale is used. This is widely used in literature and therefore chosen as measurement. However, retroactively, a more suitable and distinguish scale for Dutch politics is the left-right scale combined with the

conservatism-progressive scale. This two-dimensional axis compass, which is introduced by political scientist André Krouwel, could work better in further research. Besides the Netherlands, Belgium also is using this compass.

Finally, this study is focused on the influence of colours in political advertising; however, findings could also be replicated in a business environment, for example in advertisements of well-known soft drink brands such as Coca-Cola, Pepsi, and Sprite, because they present the same primary colours. Hence, further research is needed to investigate the influence of colour in a more commercial way, for instance with brand with high awareness.

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APPENDIX

Appendix I: Overview flyers in survey

Firstly, only a colour was shown, and questions asked about the attitude and mood towards the specific colour. The sequence of the control group was blue, green and red. And for the treatment group this was red, blue, and green.

The control group saw the following flyers:

Whereas the treatment group saw the following flyers:

Appendix II: Survey questions

Variable	Question	Answer
First part		
Q1 – Feelings towards colour	What is your general impression of the above colour?	Intersting ○○○○○ Not interesting / Good ○○○○○ Bad / Pleasant ○○○○○ Unpleasant
Q2 – Mood towards colour	How do you feel about the colour?	Love ○○○○○ Hate / Tranquillity ○○○○○ Tension / Acceptance ○○○○○ Disgust
Q3 – Attitude towards the Advertising	What is your overall impression of the poster shown above?	Intersting ○○○○○ Not interesting / Good ○○○○○ Bad / Pleasant ○○○○○ Unpleasant
Q4 – Perception and credibility	This poster shows …	a positive feeling ○○○○○ a negative feeling / usefull information ○○○○○ useless information / credibility ○○○○○ incredibility
Q5 – Attitude towards the Brand	What is your general opinion about the lot shown in the poster?	Good ○○○○○ Bad / Hopeful ○○○○○ Desperate / Positive ○○○○○ Negative / Attractive ○○○○○ Unattractive

Second part (Q6 – Q10) and the third part (Q11 – Q15) are using the same questions, but another colour and party are shown

Variable	Question	Answer
Firth part		
Q16 – Gender	What is your gender?	Male / Female / Prefer not to say
Q17 – Age	What is your age?	17 or younger / 18 – 28 / 29 – 39 / 40 – 50 / 51 – 61
Q18 – Nationality	What is your nationality?	Dutch / Other
Fifth part		
Q19 – National brands	The right to exist for national brands (such as: Hema, Unox, Douwe Egberts) is in my opinion:	A 5-point Likert scale: Very unimportant / unimportant / neutral / important / very important
Q20 – Traditions	I think the right to exist of Dutch traditions is:	A 5-point Likert scale: Very unimportant / unimportant / neutral / important / very important
Q21 – New Experiences	I find being open to new experiences:	A 5-point Likert scale: Very unimportant / unimportant / neutral / important / very important
Q22 – Current Political Power	Following the power and rule in current politics I find:	A 5-point Likert scale: Very unimportant / unimportant / neutral / important / very important
Q23 – Centralization of individualism	Individualism is central to democracy; this is the highest power.	A 5-point Likert scale: Very unimportant / unimportant / neutral / important / very important
Q24 – Centralization of liberty	Liberty is central to democracy; this is the highest power.	A 5-point Likert scale: Very unimportant / unimportant / neutral / important / very important

Appendix III: Independent samples t-test attitude towards colour

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Attitude Blue	Equal variances assumed	5.739	.017	-2.818	207	.005	-.24754	.08785
	Equal variances not assumed			-2.841	200.140	.005	-.24754	.08712
Attitude Green	Equal variances assumed	.266	.606	-1.218	207	.224	-.11527	.09461
	Equal variances not assumed			-1.219	206.417	.224	-.11527	.09456
Attitude Red	Equal variances assumed	2.275	.133	-.257	207	.797	-.02819	.10968
	Equal variances not assumed			-.258	206.317	.797	-.02819	.10923

Appendix IV: Descriptive statistics independent and dependent variable

Blue and VVD

Report

Group		Attitude towards the colour Blue	Ad Perception	Ad Credibility	Attitude towards the ad VVD
Control	Mean	3.5478	2.5278	2.6667	2.637
	N	108	108	108	108
	Std. Deviation	.70676	.97116	.99532	.92454
Treatment	Mean	3.7954	2.2772	2.2772	2.4138
	N	101	101	101	101
	Std. Deviation	.54715	.82606	.93935	.77595
Total	Mean	3.6675	2.4067	2.4785	2.5295
	N	209	209	209	209
	Std. Deviation	.64519	.91049	.98584	.86126

Green and D66

Report

Group		Attitude towards the colour Green	Ad Perception	Ad Credibility	Attitude towards the ad D66
Control	Mean	3.7346	3.0370	3.0185	3.2407
	N	108	108	108	108
	Std. Deviation	.68814	.96117	.96656	.99783
Treatment	Mean	3.8498	3.0891	3.0396	3.2834
	N	101	101	101	101
	Std. Deviation	.67844	.77264	.89354	.75758
Total	Mean	3.7903	3.0622	3.0287	3.2614
	N	209	209	209	209
	Std. Deviation	.68427	.87346	.92982	.88802

Red and PVDA

		Attitude towards the colour Red	Ad Perception	Ad Credibility	Attitude towards the ad PVDA
Control	Mean	2.9306	2.5370	2.6852	2.5872
	N	108	108	108	108
	Std. Deviation	.83850	.84749	.83887	.74902
Treatment	Mean	2.9587	3.0990	3.0891	3.0384
	N	101	101	101	101
	Std. Deviation	.73990	.87755	.89553	.80400
Total	Mean	2.9442	2.8086	2.8804	2.8052
	N	209	209	209	209
	Std. Deviation	.79062	.90497	.88798	.80651

Report

Group

Appendix V: Correlation matrix attitude towards colour

Correlations: Attitude towards blue

	1	2	3	4	5	6
(1) Interesting – not interesting	1					
(2) Good – bad	.711**	1				
(3) Pleasant - irritating	.561**	.583**	1			
(4) Love - hate	.390**	.364**	.334**	1		
(5) Tranquillity – tension	.382**	.344**	.576**	.284**	1	
(6) Acceptance – disgust	.523**	.485**	.558**	.440**	.592**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations: Attitude towards Green

	1	2	3	4	5	6
(1) Interesting – not interesting	1					
(2) Good – bad	.726**	1				
(3) Pleasant - irritating	.613**	.765**	1			
(4) Love - hate	.465**	.448**	.477**	1		
(5) Tranquillity – tension	.302**	.422**	.556**	.393**	1	
(6) Acceptance – disgust	.448**	.544**	.639**	.483**	.652**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations: Attitude towards Red

	1	2	3	4	5	6
(1) Interesting – not interesting	1					
(2) Good – bad	.589**	1				
(3) Pleasant - irritating	.508**	.753**	1			
(4) Love - hate	.433**	.615**	.628**	1		
(5) Tranquillity – tension	.102	.315**	.430**	.276**	1	
(6) Acceptance – disgust	.424**	.539**	.583**	.502**	.514**	1

Appendix VI: Correlations attitude towards the shown ad

Correlations: Attitude towards VVD

	1	2	3	4	5	6	7	8	9	10
(1) Acceptance – disgust	1									
(2) Pleasant - irritating	.504**	1								
(3) Good – bad	.664**	.713**	1							
(4) Positive – negative	.477**	.742**	.702**	1						
(5) Useful – useless	.439**	.467**	.514**	.485**	1					
(6) Credible – uncredible	.448**	.576**	.585**	.627**	.576**	1				
(7) Good - bad	.445**	.493**	.483**	.606**	.277**	.509**	1			
(8) Hopeful – hopeless	.412**	.552**	.506**	.554**	.351**	.530**	.748**	1		
(9) Positive – negative	.383**	.492**	.443**	.581**	.291**	.512**	.865**	.804**	1	
(10) Attractive - unattractive	.430**	.452**	.483**	.547**	.319**	.492**	.804**	.754**	.797**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations: Attitude towards D66

	1	2	3	4	5	6	7	8	9	10
(1) Acceptance – disgust	1									
(2) Pleasant - irritating	.659**	1								
(3) Good – bad	.717**	.776**	1							
(4) Positive – negative	.562**	.749**	.746**	1						
(5) Useful – useless	.419**	.430**	.511**	.453**	1					
(6) Credible – uncredible	.500**	.601**	.592**	.645**	.554**	1				
(7) Good - bad	.466**	.573**	.585**	.616**	.334**	.549**	1			
(8) Hopeful – hopeless	.415**	.553**	.519**	.570**	.335**	.558**	.830**	1		
(9) Positive – negative	.422**	.584**	.547**	.588**	.335**	.493**	.860**	.834**	1	
(10) Attractive - unattractive	.445**	.532**	.530**	.549**	.335**	.538**	.837**	.775**	.788**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations: Attitude towards PVDA

	1	2	3	4	5	6	7	8	9	10
(1) Acceptance – disgust	1									
(2) Pleasant - irritating	.696**	1								
(3) Good – bad	.782**	.787**	1							
(4) Positive – negative	.579**	.737**	.689**	1						
(5) Useful – useless	.604**	.567**	.582**	.493**	1					
(6) Credible – uncredible	.591**	.670**	.641**	.660**	.571**	1				
(7) Good - bad	.484**	.523**	.540**	.511**	.299**	.514**	1			
(8) Hopeful – hopeless	.446**	.487**	.497**	.543**	.301**	.375**	.722**	1		
(9) Positive – negative	.427**	.541**	.521**	.559**	.323**	.458**	.788**	.761**	1	
(10) Attractive - unattractive	.501**	.507**	.545**	.501**	.340**	.414**	.753**	.702**	.753**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix VII: Testing assumptions

Descriptives

			Statistic	Std. Error
Attitude towards the ad VVD	Mean		2.5172	.05680
	95% Confidence Interval for Mean	Lower Bound	2.4053	
		Upper Bound	2.6292	
	5% Trimmed Mean		2.5082	
	Median		2.5000	
	Variance		.674	
	Std. Deviation		.82111	
	Minimum		1.00	
	Maximum		5.00	
	Range		4.00	
	Interquartile Range		1.00	
	Skewness		.044	.168
	Kurtosis		-.160	.335
Attitude towards the ad D66	Mean		3.2115	.05722
	95% Confidence Interval for Mean	Lower Bound	3.0987	
		Upper Bound	3.3243	
	5% Trimmed Mean		3.2292	
	Median		3.3000	
	Variance		.684	
	Std. Deviation		.82728	
	Minimum		1.00	
	Maximum		5.00	
	Range		4.00	
	Interquartile Range		1.00	
	Skewness		-.396	.168
	Kurtosis		.528	.335
Attitude towards the ad PVDA	Mean		2.8163	.05332
	95% Confidence Interval for Mean	Lower Bound	2.7111	
		Upper Bound	2.9214	
	5% Trimmed Mean		2.8294	
	Median		2.9000	
	Variance		.594	
	Std. Deviation		.77088	
	Minimum		1.00	
	Maximum		5.00	
	Range		4.00	
	Interquartile Range		.90	
	Skewness		-.245	.168
	Kurtosis		.313	.335

Normal P–P Plot of Ad_VVD

Normal P–P Plot of Ad_D66

Normal P–P Plot of Ad_PVDA
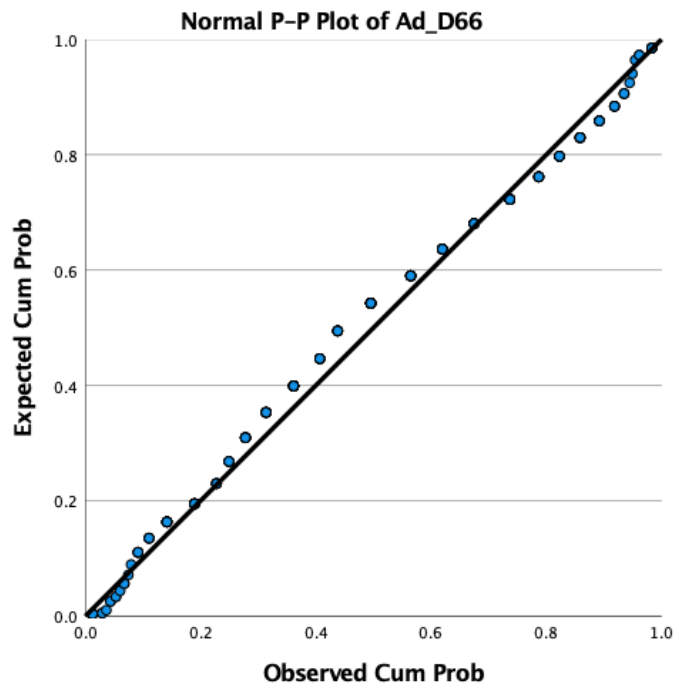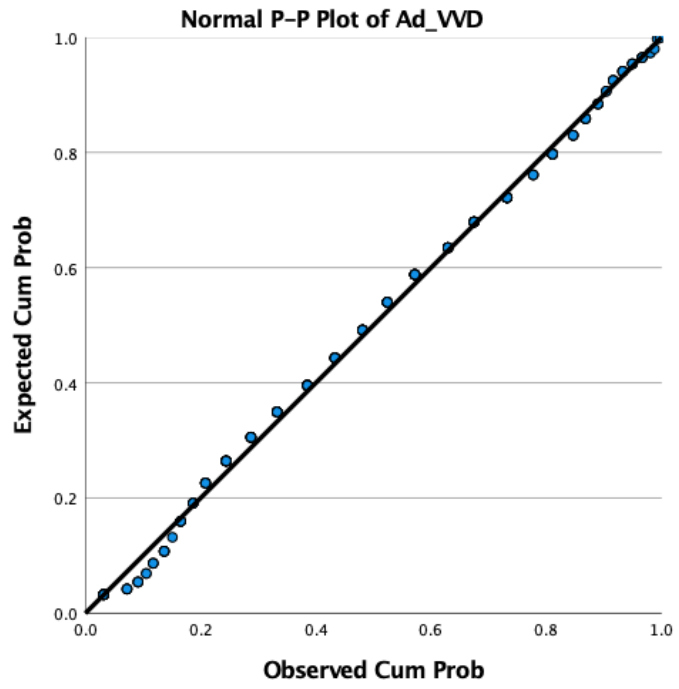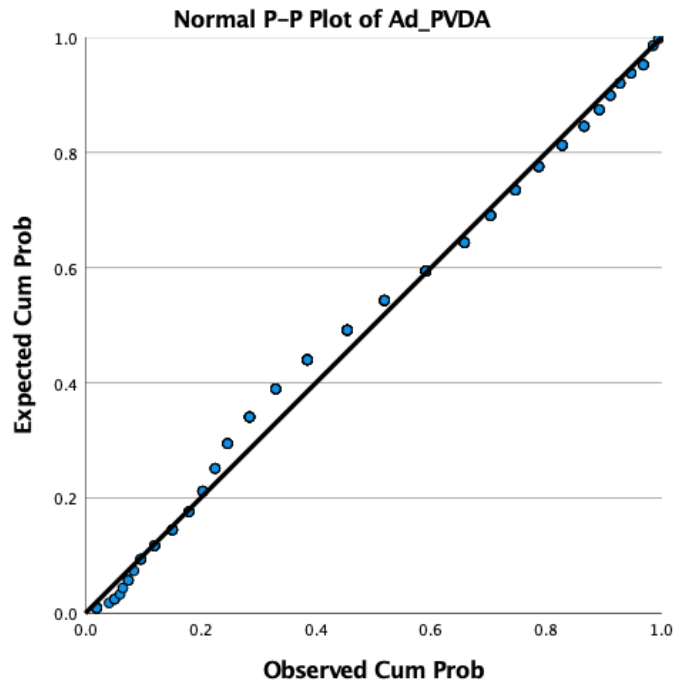
Appendix VIII: Descriptive statistics interaction variable

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
National Brands	209	1	5	3.67	.920
Traditions	209	1	5	3.62	.998
New Experiences	209	1	5	4.16	.765
Current Political Power	209	1	5	3.39	.826
Centralization Individualism	209	1	5	3.63	1.076
Centralization Liberty	209	1	5	3.46	1.014

Correlations

	1	2	3	4	5	6
(1) National Brands	1					
(2) Traditions	.518**	1				
(3) New experiences	-.008	-.022	1			
(4) Current Political Power	.026	-.041	.472**	1		
(5) Centralization Individualism	-.227**	-.280**	.411**	.517**	1	
(6) Centralization Liberty	.405**	.453**	-.125	.031	-.032	1

**. Correlation is significant at the 0.01 level (2-tailed).

Report

Group		Political Ideology Conservatism	Political Ideology Liberalism
Control	Mean	3.6019	3.7593
	N	108	108
	Std. Deviation	.76047	.73034
Treatment	Mean	3.5644	3.6898
	N	101	101
	Std. Deviation	.80656	.70278
Total	Mean	3.5837	3.7257
	N	209	209
	Std. Deviation	.78142	.71628

Converting two variables to a one measurement scale:

Ideology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	2.9	2.9	2.9
	2	9	4.3	4.3	7.2
	3	17	8.1	8.1	15.3
	4	61	29.2	29.2	44.5
	5	83	39.7	39.7	84.2
	6	13	6.2	6.2	90.4
	7	8	3.8	3.8	94.3
	8	6	2.9	2.9	97.1
	9	6	2.9	2.9	100.0
	Total	209	100.0	100.0	

Where low means liberal, and high means conservative.

Appendix IX: Linear regression for impact treatment on ad credibility and ad perception

Output linear regression for treated dummy on ad curability and ad perception for each party. Where the treated dummy is 0 if it consists of the control group, and 1 if it consists of the treatment group.

Ad Credibility

	Model 1		Model 2		Model 3	
	Ad Credibility VVD		Ad Credibility D66		Ad Credibility PVDA	
	Coefficients	Statistics	Coefficients	Statistics	Coefficients	Statistics
Independent variables	B	t	B	t	B	t
Constant	2.667*	28.609	3.019*	33.658	2.685*	32.197
Treated dummy	-.389*	-2.904	.021	.163	.404*	3.367
F		8.436		.027		11.336
R		.198		.011		.228
R Square		.039		.000		.052
Adjusted R Square		.035		-.005		.047
Sig.		.004*		.870		< .001*

Notes. B represents the unstandardized coefficient, * p-value < .05

Ad Perception

	Model 1		Model 2		Model 3	
	Ad Perception VVD		Ad Perception D66		Ad Perception PVDA	
	Coefficients	Statistics	Coefficients	Statistics	Coefficients	Statistics
Independent variables	B	t	B	t	B	t
Constant	2.528*	29.060	3.037*	36.063	2.537*	30.581
Treated dummy	-.251*	-2.002	.052	.430	.562*	4.709
F		4.009		.185		22.175
R		.138		.030		.311
R Square		.019		.001		.097
Adjusted R Square		.014		-.004		.092
Sig.		.047*		.668		< .001*

Notes. B represents the unstandardized coefficient, * p-value < .05