

Multi-ethnic vs. mono-ethnic cosmetics ads:

The influence of social identity on diversity & inclusion make-up advertisements and advertising effects.

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ABSTRACT

Diversity and inclusion in advertisements has become increasingly important in the last decades, especially in the cosmetics industry. Throughout the past years more brands started diversifying their foundation lines and communicating this through their advertisements by featuring multiple models of different ethnicities (i.e., multi-ethnic ads). It was common for marketers to utilize the notion of “race matching”, matching the model’s race with the brand’s target audience, and therefore creating ethnically congruent ads (i.e., mono-ethnic ads). However, as the younger generations (Millennials and Gen Z) become more racially diverse, the concept of social identity should be considered when determining advertising effects. Social identity can help explain consumers’ attitudes and intentions towards diversity and inclusion ads. To analyse this, the following research question was posed: to what extent is diversity and inclusion advertising type (mono-ethnic vs. multi-ethnic) associated with advertising effects (i.e., attitude towards the ad, attitude towards the brand, and purchase intention) and to what extent is the relationship between diversity and inclusion advertising type and advertising effects moderated by the three dimensions of the concept of social identity (i.e., belief congruence, diversity ad sentiment, and social connectedness). To answer this, a single factorial between-subjects experimental design with three conditions (multi-ethnic ad, mono-ethnic ad, and control ad) was conducted. The sample consists of 94 participants (n = 94), for which one-way ANOVA analysis and moderated multiple regression analyses were conducted. These analyses found that Millennials and Gen Z who saw the mono-ethnic had a significantly less favourable attitudes and weaker purchase intention compared to those who saw the multi-ethnic ad. Furthermore, the three subdimensions of social identity, belief congruence, diversity ad sentiment, and social connectedness, are significantly and positively associated with advertising effects. However, they do not moderate the relationship between diversity and inclusion advertising type and advertising effects. These findings suggest that besides race matching or creating ethnically congruent ads, marketers can utilize social identity to target its consumers. Having said that, social identity is a complex concept for which several factors such as the consumers’ self-concept, identity priming, social distinctiveness, and social identity complexity should be considered. Hence, future research should consider including these factors when further determining different elements of diversity and inclusion advertisements, such as physical characteristics, religion, and origin.

KEYWORDS: *Diversity & inclusion advertising, foundation advertisements, social identity, advertising effects, Millennials and Generation Z*

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1 Introduction

1.1 The Fenty Effect: Diversification of make-up brands

Throughout the past five decades diversity and inclusion advertising have become increasingly important in academic and business research due to different trends (Eisend et al., 2023, p. 52; Farivar & Wang, 2022, p. 3). For example, from the consumers' perspective, more consumers advocated for diverse and accurate representation within advertising campaigns (Burgess et al., 2022, p. 66; Campbell et al., 2023, p. 437). This can be explained by the growing size of the minority populations and the growth in their purchasing power (Thomas et al., 2023, p. 74). This development was increasingly supported by the market entry of the new make-up brand Fenty Beauty in 2017 (Burgess et al., 2022, p. 61; Childs, 2022, p. 9; Frisby, 2019, p. 36).

As communicated through their social media channels, Fenty Beauty considers itself an inclusive brand because they cater to various ethnicities (Gwynne, 2022, p. 6). They entered the beauty market by launching the very first foundation line to consist of 40 shades that included an even shade range of light, medium, tan, and dark categories (Burgess et al., 2022, p. 62; Childs, 2022, p. 10). At that time, an even shade range was exceptional as per industry standard the proportion of shades offered (lighter shades vs. darker shades) was considered unbalanced because often only approximately six to eight shades catered to darker skin tones (Frisby, 2019, p. 51). For example, in a content analysis by Frisby (2019, p. 47), that looked at the frequencies of shades offered in brick-and-mortar stores and online, it was found that lighter foundation shades were offered significantly more than darker foundation shades. Due to Fenty's extensive shade range and their diverse and inclusive marketing campaigns, the darkest shades were sold out within weeks (Mackenzie, 2017, para. 4). This launch indicated that there was a high demand in an untapped audience segment, making diversification very profitable for other brands (Croteau & Hoynes, 2018, p. 353). As a result, this profitable opportunity ignited diversification developments of make-up lines across various beauty brands, which is also referred to as "The Fenty Effect" (Childs, 2022, pp. 9-10; Frisby, 2019, p. 36). Thus, the beauty industry increasingly started developing more foundation shades, extending their make-up lines, and communicating diverse make-up products to various ethnic groups through their ads (Burgess et al., 2022, p. 72).

1.2 Advertising diversity and inclusion in make-up ads

Diversity refers to "the description of individual and social differences of people with distinct attributes" (Eisend et al., 2023, p. 52), while inclusion describes "the engagement with diversity and emphasizes the incorporation and valuation of the presence and perspective of different groups of people into an environment" (Eisend et al., 2023, p. 52). Thus, diversity emphasises the physical or socio-cultural differences, whereas inclusion highlights the incorporation of these diverse groups, with the aim to foster a sense of belonging (Henderson & Williams, 2013, p. 1).

In the past, diversity and inclusion advertising was less frequent as marketers were reluctant to use ethnic minorities in ads as to not offend white consumers and negatively affect sales (Appiah & Liu, 2009, p. 27). However, to reach ethnic consumers in ads, it is important that they are represented in those ads (Appiah & Liu, 2009, p. 27). Especially as research suggests that the race or ethnicity of models depicted in the ad significantly affects the consumers' attitude towards it (Morris & Kahlor, 2014, p. 415). This notion is also referred to as "race matching", which describes the effort to match the model's race to the race of the brand's target audience (i.e., a mono-ethnic ad) (Jones, 2020, p. 45). However, it has been argued that this is an oversimplification (Jones, 2020, pp. 45, 57-58), especially considering the increased racial and ethnic diversity of the global population (Grier & Deshpandé, 2001, p. 216). Therefore, recent research suggests rather than looking at concepts related to race matching (i.e., matching the model's race to the race of the brand's target audience), such as similarity and likeability, future research should consider the concept of social identity which focuses on one's perception of belongingness to social groups (Farivar & Wang, 2022, pp. 1-2; Jones, 2010, p. 47; Wilkie et al., 2023, p. 723).

As more brands are diversifying their product lines and advertising campaigns, their diversification efforts can be amplified and supported by featuring multiple models of different ethnicities (i.e., a multi-ethnic ad) in the same ad. However, limited research is available regarding the effects of ads featuring multiple models with different ethnicities (Campbell et al., 2023, p. 3; Jones, 2010, p. 57). Therefore, an experimental gap is identified between diversity and inclusion advertising type (i.e., mono-ethnic ad vs. multi-ethnic ad) and the consumers' attitudes and intention towards the ad (i.e., advertising effects) (Campbell et al., 2023, p. 15).

As mentioned above, recent research has suggested using the concept of social identity for researching these advertising effects on diversity and inclusion ads (Farivar & Wang, 2022, pp. 1-2; Jones, 2010, p. 47; Wilkie et al., 2023, p. 723), due to prior oversimplifications in the field regarding creating ethnically congruent ads (Jones, 2020, p. 45, pp. 57-58). This concept can be used to help explain the relationship between attitudes and intentions and diversity and inclusion advertising as it may vary due to the consumers' social identity (Farivar & Wang, 2022, p. 3; Wilkie et al., 2023, p. 722). For this, the concept of social identity has been operationalized into three sub-dimensions, consisting of belief congruence, diversity ad sentiment, and social connectedness. Therefore, this research uses the concept of social identity to explain advertising effects and fill the experimental gap by answering the following research question: *To what extent is diversity and inclusion advertising type (mono-ethnic vs. multi-ethnic) associated with advertising effects (i.e., attitude towards the ad, attitude towards the brand, and purchase intention) and to what extent is the relationship between diversity and inclusion advertising type and advertising effects moderated by the three dimensions of the concept social identity (i.e., belief congruence, diversity ad sentiment, and social connectedness)*. For this, quantitative experimental research has been conducted.

1.3 Academic relevance

This research is academically relevant for the following two reasons. Firstly, this research investigates the relationship between mono-ethnic and multi-ethnic group advertisements (i.e., ads that contain multiple models) and advertising effects, particularly in make-up advertisements. Prior research has identified the following three ethnic marketing efforts: 1) targeting the same ethnic group displayed the ad (i.e., race matching), 2) targeting different ethnic group compared to what is displayed in the ad, and 3) targeting across different ethnicities (i.e., cross cultural advertising) (Fazli-Salehi et al., 2024, p. 75). The first two ethnic marketing efforts have been widely researched throughout the years as researchers tried to better understand and determine how ethnic minorities respond to ads that represent their own ethnic group or ethnic majority groups (Appiah & Liu, 2009, pp. 33-34, 37; El Hazzouri et al., 2017, pp. 717-718; Grier & Deshpandé, 2001, p. 219; Knobloch-Westerwick & Coates, 2006, p. 602; Lau & Lee, 2018, p. 218; Morris & Kahlor, 2014, p. 420). The latter ethnic marketing effort has recently become more relevant (Henderson & Williams, 2023, pp. 22-23; Shao et al., 2023, p. 1417) due to the newly observed paradigm shift as more companies are investing substantial resources into cross-cultural marketing efforts (Fazli-Salehi et al., 2024, pp. 74-75). However, limited research has been conducted regarding the use of multi-ethnic advertisements as marketing effort and consumers' attitudes and intentions (Jones, 2010, p. 57).

Secondly, it investigates the moderating role of social identity. Prior research sought to better understand how social context(s) and an individual's social identity influence consumers' response to marketing efforts (Grier & Deshpandé, 2001, p. 216; Jones, 2010, p. 47). This is because social identity theory can be utilized to predict the effectiveness of the ad and the choice of model(s) depicted in the ad (Jones, 2010, p. 47). The salience of an individual's social identity is of great importance as a salient social identity can significantly influence attitudes and intentions (Forehand et al., 2002, p. 1086). Therefore, this study will be expanding upon diversity and inclusion advertising research by investigating the moderating role of social identity on consumers attitudes and intentions (i.e., advertising effects) (Fazli-Salehi et al., 2024, p. 77; Forehand et al., 2002, p. 1086). Thus, ensuring the academic relevance of this research.

1.4 Societal and managerial relevance

The societal and managerial relevance of this research are explained through the following three reasons. Firstly, advertisements have been widely researched due to its impact on societies as ads play a critical role in shaping consumers' sense of self (Bartholomew, 2010, p. 941) as well as societal norms (Henderson & Williams, 2013, p. 2). Therefore, ads have the power to indicate what is considered normal or the standard (Henderson & Williams, 2013, p. 2), can be used to confirm a particular world view, and promote the acceptance of social arrangements (Baxter et al., 2016, p. 970). Nowadays, the younger consumers' need for accurate representation of different ethnic groups

has increased due to the need to move beyond only representing marginalized (i.e., minority) groups and move towards reflecting society at large (Burgess et al., 2022, p. 78; Wilkie et al., 2023, p. 732).

Secondly, this development can also be identified in advertisements as more brands are increasingly featuring non-white models in various Western societies (Eisend et al., 2023, pp. 54-55; Henderson & Williams, 2023, p. 2). Therefore, besides the fact that an increased need for accurate representation of ethnic (minority) groups from younger generations can be identified (Robner & Eisend, 2023, p. 775), marketers are also becoming more concerned with tailoring their marketing efforts to diverse identities rather than the same broad message that caters to one or a majority group in society (Bartholomew, 2010 p. 943). These developments may be further explained by the increase of political and cultural awareness, ethnic pride, and continuously growing number of ethnic minority subcultures and their increasing purchasing power further support the significance of understanding this part of the market (Henderson & Williams, 2023, p. 20; Jamal, 2003, p. 1600). This significance was highlighted when Fenty Beauty entered the cosmetics industry and many brands started diversifying their make-up lines, extending their shade ranges, as they recognized the profitability of catering to darker skin tones (Childs, 2022, pp. 9-10; Croteau & Hoynes, 2018, p. 353; Frisby, 2019, p. 36). Thus, in order to meet the needs of younger consumers' and to support the diversification developments of marketers, this research provides new insights from a different perspective on how marketers can approach their diversification marketing efforts based on the more complex concept of social identity.

Lastly, according to the 2030 Sustainability Development Goals made by the United Nations, an international agreement has been made to empower the promotion of inclusion regardless of differences, such as age, sex, race, ethnicity, origin, religion, disability etc. (Henderson & Williams, 2013, p. 1). As marketers are using different strategies that support diversity and inclusion efforts, the Journal of the Academy of Marketing Science and Marketing Science Institute both push for further research to help brand managers determine how they can respectfully evolve in this diverse consumer landscape, and to determine to what extent these strategies help to achieve desired business results (De Ruyter et al., 2021, p. 15; Marketing Science Institute, 2022, p. 10). Thus, further increasing the need to understand how social identity influences advertising effects, to help improve decision making for the development of these ads. Therefore, ensuring societal, as well as managerial relevance.

2 Theoretical Framework

In this chapter, the theoretical concepts, diversity and inclusion advertising type, social identity, and advertising effects are presented. In order to discuss this, general information about the cosmetics industry, ethnic marketing: advertising ethnicity in face make-up ads, and the representation of ethnic groups in ads are first presented. Followed by the dissection of diversity and inclusion advertising, the concept of social identity, how younger generations are advocates for diversity and inclusion, and advertising effects. The final section covers the hypothesis development, which is based on the argumentation given throughout the theoretical framework and lastly, concludes with the conceptual and statical models.

2.1 The cosmetics industry

The cosmetic industry, also referred to as the beauty industry, is a global lucrative and fast-paced industry (Gerstell et al., 2020, p. 2; Kumar et al., 2006, p. 286). The cosmetics industry can be categorized into five sub-industries: skin care, hair care, make-up, fragrance, and personal hygiene industries (Kumar, 2005, p. 1264). This research focused on the make-up industry, which can be further categorized into eye make-up (e.g., eyeshadow, eyeliner, mascara, etc.), lip make-up (e.g., lipstick, lipliner, lip-gloss etc.), and face make-up (e.g., concealer, powder, foundation, etc.) (Kumar, 2005, p. 1264). Despite a substantial market value decrease of -7.2% in 2020 compared to 2019 (due to COVID-19), the global make-up industry recovered the following year with a market value increase of 3.7%. The estimated market value of the make-up industry in the upcoming years (2025 – 2027) (though slightly slowing down) have been forecasted to continuously increase (MarketLine, 2023). This research focused on the face make-up segment, particularly the face make-up product foundation as this product has the highest market value (55.1%) within the face make-up segment (Global Data, 2023).

Foundation is a face make-up product that is used with the intend to even out or match natural skin variations (Middleton, 2022, p. 69), and is marketed for beautifying purposes, such as making the skin appear blemish free, hide pores and other skin problems (Frisby, 2019, p. 40; Kumar et al., 2006, p. 285; Kajita & Nakamura, 2021, p. 402). In other words, foundation is used to create a base on the face and/or neck with the intention to make one's skin colour and texture appear more even (Moriuchi, et al., 2009, p. 138). To do this, the foundation shade needs to match the consumers' skin colour (Middleton, 2022, p. 69; Moriuchi, et al., 2009, p. 138).

2.2 Ethnic marketing: Advertising ethnicity in face make-up advertisements

In face make-up advertisements, ethnicity is often displayed by utilizing phenotypic features, such as skin colour, physical characteristics, religion, and origin (Thomas et al., 2023, p. 620). When brands (re)launch new foundation lines, they often use different formats in their ads. For example,

brands use product shots that shows the shade range of the product, swatches of the entire foundation line, individual picture of a model wearing the foundation, or a group picture of various models with different a skin colour wearing the foundation. These forms of advertisements are often used to illustrate the range of the foundation and to indicate to which skin colours the foundation caters to.

In the past, the concept of ‘race matching’ was a common marketing practise used to match the model in an ad with the target audience to increase similarity and likability, consequently creating positive attitudes and intentions (Jones, 2010, p. 57). However, recently race matching through phenotypic features, such as by skin colour has become more complicated, decreasing the effectiveness of the ad as there has been a constant increase of cultural diversity amongst consumers (Fazli-Salehi et al., 2024, p. 74), consequently, deeming this marketing practise an oversimplification (Jones, 2010, p. 57).

Marketeers are increasingly using different strategies to target various ethnicities in their ads. For example, one strategy is creating more cross-cultural advertising (Fazli-Salehi et al., 2024, p. 75) in order to communicate their diversification efforts by including more ethnic minorities in the ads (Burgess et al., 2022, p. 72). This marketing practise is also referred to as ethnic marketing and can be defined as “the differentiated marketing effort toward one or more ethnic groups” (Shao et al., 2023, p. 1377). Ethnic marketing can be categorised into multi-ethnic advertising (i.e., inclusive) (Fazli-Salehi et al., 2024, pp. 76-77) and mono-ethnic advertising (i.e., exclusive) (Shao et al., 2023, p. 1377). On the one hand, multi-ethnic advertising aims to promote feelings of inclusion (e.g., feeling welcomed and valued) by representing diverse ethnic groups (i.e., depicting models from diverse cultural backgrounds) (Shao et al., 2023, pp. 1378-1379). Strebinger et al. (2018) defined multi-ethnic advertising as “advertising with multiple models of at least three different racial ethnicities in spatial or temporal proximity so that consumers perceive them as an ensemble of models representing the brand” (p. 410). On the other hand, mono-ethnic advertising is an exclusive, single-ethnic marketing effort, which Shao et al. (2023) defined as “advertisements that feature mono-ethnic advertising models who belong to the same cultural background” (p. 1380). This marketing effort was often utilized due to the fact that consumers prefer same-race, and thus mono-ethnic, ads (Shao et al., 2023, p. 1378). This is because consumers’ have in-group favouritism when exposed to model of the same race as themselves (Terlutter et al., 2021, p. 60).

As this research tried to determine to what extent diversity and inclusion advertising type is associated with advertising effects, and to what extent social identity moderates the relationship between diversity and inclusion advertising type and advertising effects, the distinction of ethnic marketing (i.e., mono-ethnic ad vs. multi-ethnic ad) has been used to define the types of diversity and inclusion advertisements. However, in order to further define these two distinctions, it is important to first consider the representation of ethnic groups in advertisements.

2.3 The representation of ethnic groups in advertisements

The notion of representation refers to actively selecting and presenting certain parts of the social world (Hall, 2005/1982, p. 62). Therefore, representation does not reflect society as a whole but rather selects a certain part to re-present (Croteau & Hoynes, 2018, p. 298, p. 351; Hall, 2005/1982, p. 62). The representation of ethnic groups has been widely researched in marketing, social sciences, and advertising research (Croteau & Hoynes, 2018, p. 351; Rößner & Eisend, 2023, p. 774). This type of research often focuses on ethnic minorities in comparison to the dominant majority in a given society. Often times the dominant majority are Eurocentric white consumers (Rößner & Eisend, 2023, p. 774). Thus, white models are overrepresented in ads because they are considered to be the beauty standard (Childs, 2022, p. 1; Eisend et al., 2022, p. 56; El Hazzouri et al., 2017, p. 718; Henderson & Williams, 2013, p. 3; Morris & Kahlor, 2014, p. 416; Rößner & Eisend, 2023 p. 774; Thomas et al., 2023, p. 623).

Having said that, it has been argued that the representation of the dominant majority is not always generalizable in a different cultural context (Prieler et al., 2020, p. 45). For example, in East-Asia it has been found that there is an overrepresentation of the white “Other” (Prieler et al., 2020, p. 56). Per Hall (1997, p. 225), the concept of the “other” or “otherness” refers to the representation of those who are significantly different (i.e., the representation of “difference”) (p. 231), from the dominant group in society. Thus, even though white consumers are considered to be a minority group in East-Asia, they are still overrepresented in ads due to the influence of Western media, the dominance of Western models and Westernization of beauty ideals, where whites are the beauty standard in many Asian countries (Prieler et al., 2020, p. 56).

This might be further explained by the fact that the majority of Western-centred brands, that have their headquarters in Europe or North America, often employ the same advertising in different regions of the world (Croteau & Hoynes, 2018, pp. 328-329; Rößner & Eisend, 2023, pp. 775-776). Therefore, if the dominant majority in that Western society is white, the brands will represent that part of society in its advertisements and distribute the same ad across their different operating regions (Rößner & Eisend, 2023, p. 776). Moreover, Henderson and Williams (2013, p. 3) argue that the social group that is at the centre of its society and have more privilege (i.e., the top group) is considered more representative, emphasizing that the representation in advertising is often based on the hierarchy within a society.

It should be noted that prior research often focuses on North America (e.g., primarily the United States of America) as subject group to research representation of different ethnic/racial groups (i.e., Black, White, Latino, and Asian) in advertising research (El Hazzouri et al., 2017, p. 718; Grier & Deshpandé, 2001, p. 223; Prieler et al., 2020, p. 47). In other parts of the world, such as Europe, this distinction of ethnicity/race is not as prominent as in North America (Jones, 2020, p. 58). Therefore, Jones (2020, p. 58) suggests the concept of social identity as this can more accurately

help to determine the positive/negative associations consumers have with the reference group (i.e., the model(s) depicted in the ad). Therefore, emphasising the importance of social identity and motivating its inclusion as a key concept in advertising research.

2.4 Social identity theory and advertising

Social identity theory was developed by Tajfel (1983) to help explain social comparison amongst different social groups. Social identity theory helps explain how individuals perceive their belongingness to certain social groups by evaluating the associated emotional and value significance of the group member (i.e., in-groups) (Farivar & Wang, 2022, p. 2), and how they compare this to the “Other” (social groups) (i.e., out-groups) (Hogg, 2020, p. 112). How people identify with a particular social group can be categorized into three distinct facets: 1) cognitive social identity, 2) evaluative social identity, and 3) affective social identity (Farivara & Wang, 2022, p. 2; Sierra et al., 2009, p. 55). Cognitive social identity refers to a categorization process where individuals become aware of similarities to others within the in-group and dissimilarities to out-groups (i.e., self-categorization/comparison). Evaluative social identity reflects an individual’s evaluation of importance and self-worth as part of their in-group and their negative/positive connotations to their in-group. Affective social identity refers to the sense of emotional involvement or belongingness with the group (i.e., affective commitment) (Bergami & Bagozzi, 2000, p. 556; Farivara & Wang, 2022, p. 2; Sierra et al., 2009, p. 55).

Because of this, social identity addresses social phenomena, such as ethnocentrism (i.e., comparison of ethnic/cultural groups), group-polarization, stereotyping, prejudice, discrimination, conformity etc. (Hogg, 2016, p. 111). According to Hogg (2016, p. 113), social identity affects beliefs, attitudes, and behavioural intentions due to an individual’s tendency to favour their in-group compared to out-groups (Farivar & Wang, 2022, p. 2).

Lastly, social identity has been widely used in social sciences, marketing literature and business research to explore for example customer-brand identification (Farivar & Wang, 2022, p. 3), and it has been reported to have a significant association between belonging to a social group and consumers’ attitudes and intentions (Farivar & Wang, 2022, p. 3). Therefore, social identity provides a holistic foundation for analysing how consumers identify themselves with a specific social group in society, and how this is associated with attitudes and intention (Sierra et al., 2009, p. 41).

2.5 Social identity, diversity and inclusion advertising

The three facets of social identity, cognitive (i.e., self-categorization/comparison), evaluative (i.e., being a part of the community), and affective identity (i.e., feelings of belongingness or a sense of community) (Bergami & Bagozzi, 2000, p. 556; Farivara & Wang, 2022, p. 2; Sierra et al., 2009, p. 55), have been further developed into a new framework to fill the gap between consumers' social identity and their attitudes and intention towards diversity and inclusion advertising (Wilkie et al., 2023, p. 732).

This framework contains five concepts, belief congruence, diversity ad sentiment, virtue signalling, social connectedness, and brand factors (brand authenticity, brand altruism, and brand engagement). However, as this research tries to determine to what extent diversity and inclusion advertising type (mono-ethnic vs. multi-ethnic) is associated with advertising effects (i.e., attitude towards the ad, attitude towards the brand, and purchase intention) and to what extent this relationship is moderated by the three dimensions of the concept social identity, not all of the above-mentioned concepts fit within the scope of this research.

Mainly, virtue signalling focuses on publicly supporting diversity and inclusion efforts to enhance one's social status within the social group (Wilkie et al., 2023, p. 724). As this concept focuses on supporting diversity and inclusion endeavours rather than advertising effects due to the exposure of the ad, it does not align with the scope of this research. Additionally, brand factors focus on the consumers' response to a brand's diversification effort by evaluating brand authenticity (i.e., how genuine a brand is in its diversity and inclusion advertising efforts), brand altruism (i.e., how genuine a brand cares for its stakeholders, such as their consumers), and brand engagement (i.e., interactive experience of consumers with the brand) (Wilkie et al., 2023, p. 724). These brand factors can be crucial when evaluating existing brands, however, this research avoided using an existing brand. This was decided in order to ensure that any previous knowledge, attitudes, experiences with the existing brand did not influence the consumers' responses, and consequently influencing the results (Vargas et al., 2017, p. 110). Hence why brand factors also did not align with the scope of this research. Based on this, it has been determined that virtue signalling and brand factors were outside of the scope of this research. Thus, this research focused on belief congruence, diversity ad sentiment, and social connectedness.

Belief congruence evaluates the alignment/match between the beliefs portrayed in the ad and the personal beliefs of the viewers (Wilkie et al., 2023, p. 723). It measures to what extent the message in the ad aligns with the consumers' own belief (e.g., their values and norms). For example, consumers who greatly identify with inclusivity ideals (e.g., people who think inclusion is important) will have a positive attitude towards an inclusive ad as their belief of inclusivity aligns with the ad (Wilkie et al., 2023, p. 723). Therefore, on the one hand, high belief congruence has a positive effect on the consumers' attitude towards the ad (Wilkie et al., 2023, pp. 723-724). On the other hand, low belief congruence has a negative effect on the consumers' attitude towards the ad (Wilkie et al., 2023, pp. 723-724).

Furthermore, diversity ad sentiment describes the consumers' overall perception of diversity and inclusion as a theme reflected in ads, disregarding whether their own belief is reflected in the ad, making it separate from belief congruence (Wilkie et al., 2023, pp. 723-724). For example, consumers belonging to a different ethnic group than what is portrayed in the ad, may still think that the depiction of the "Other" is fair and justified, as they find diversity and inclusion to be an important theme within advertising in general. Consequently, positively influencing the consumers' reaction towards ad (Wilkie et al., 2023, pp. 723-724).

Lastly, consumer-perceived social connectedness describes the extent to which an individual feels connected to another individual (Åkestam et al., 2017, p. 85). In term of diversity and inclusion advertising, it describes to what extent a consumer's identity and experiences, or those of the people close to them, is accurately reflected in the ad (Wilkie et al., 2023, p. 724). If the diversity and inclusion portrayed in the ad resonates with the consumers' identity, experiences, or to those of the people close to them, they will have a positive attitude towards the ad (Liljedal et al., 2020, pp. 183-184; Wilkie et al., 2023, p. 724). Whilst, if the ad misrepresents these identities and experiences, consumers will have a negative attitude towards the ad. For example, if an ad depicts models to which the consumer can relate to or feel connected to (regardless of ethnic resonance), the consumer's social connectedness will be high. This in turn will positively influence attitude towards the ad as well as attitude towards the brand (Wilkie et al., 2023, p. 724).

2.6 Millennials and Gen Z advocates for diversity

Per social identity theory, prior research indicates that consumers respond more positively towards ethnically congruence ads (Khan et al., 2015, p. 224). However, it has been argued that younger generations respond negatively towards mono-ethnic ads as these are unrepresentative to society at large (Licsandru & Cui, 2019, p. 262). This is because, diversity and inclusion has become increasingly important, especially amongst Millennials (born between 1980 and 1995) (Ng & Johnson, 2015, p. 122) and Gen Z (born between 1996 and 2012) (Pichler et al., 2021, p. 599). Both Millennials and Gen Z believe that diversity is good for societal change (Licsandru & Cui, 2019 p. 261; Pichler et al., 2021, p. 602). These two generations appear to be more open to diversity (Pichler et al., 2021, p. 602), and are also more articulated towards diversity efforts than previous generations (Licsandru & Cui, 2019, p. 261).

This might be explained by the fact that Millennials and Gen Z are more ethnically and racially diverse than previous generations (Pichler et al., 2021, p. 602), as they grew up in a more culturally diverse society. In fact, similarly to Millennials, it has been found that Gen Z appears to have a lower tolerance towards inequality as they experience more diverse of cultural perspectives (Pichler et al., 2021, p. 602). Therefore, these two generations are interesting populations to focus on in marketing research as they seem to appreciate multicultural marketing efforts, which impacts the advertising effects of multicultural ads due to their increasing appeal towards the ad (Licsandru & Cui, 2019, p. 261). For this reason, this research focused on Millennials and Gen Z as its target population.

2.7 Advertising effects

Marketeers utilize advertising for various objectives, such as creating awareness, informing consumers, creating a desired perception, and/or persuading consumers to purchase a (new) product and/or brand (Bendixen, 1993, p. 19). In advertising and marketing literature, a short-term evaluation of an ad is described as advertising effects, which are translated into awareness or attitudes, brand perceptions and sales (Wells, 2014, p. 9). In quantitative research these concepts are converted to three distinct factors: attitude towards the ad, attitude towards the brand, and purchase intention (Spears & Singh, 2004, p. 56). The evaluation of these three factors can indicate causality and long-term effectiveness over time (e.g., through return-on-investment) (Wells, 2014, p. 6).

Consumers' attitudes are considered a summary of evaluations, and purchase intention defines the consumers' motivation and conscious plan to carry out a behaviour (Spears & Singh, 2004, p. 56). Whilst attitude towards the ad can accurately reflect the consumers' overall evaluation of the ad (Mitchell & Olson, 1981, p. 327), attitude towards the brand determines the consumers' evaluation towards the brand (Mitchell & Olson, 1981, p. 318), which in turn influences purchase intention (Baxter et al., 2016, p. 973; Sicilia et al., 2006, p. 140). Thus, attitudes help predict consumer behaviour (Sicilia et al., 2006, p. 140; Spears & Singh, 2004, p. 53).

Moreover, the attitudes of consumers are regularly influenced by their world view (Baxter et al., 2016, p. 973) as ads help shape or confirm an individual's world view and promote (acceptance) of a particular societal arrangement (Baxter et al., 2016, pp. 970-971). It has been further argued that the nature of portrayal (what is being portrayed in the ad), for example the product and/or model(s), significantly influences the consumers' attitude towards the ad, brand and therefore their purchase intention (Baxter et al., 2016, p. 973). In other words, depending on what is being depicted in the ad, the attitude towards the ad and brand can be positive if the ad is conforming to the consumer's world view/beliefs (Baxter et al., 2016, p. 973; Brunel & Nelson, 2000, p. 17). Based on this, it has been decided to use attitudes (i.e., attitude towards the ad and attitude towards the brand) and intentions (i.e., purchase intention) to determine advertising effects of diversity and inclusion ads.

2.8 Hypothesis development

2.8.1 Direct effect of diversity and inclusion advertising type on advertising effects

Prior research has established the relationship between the content of the advertisements (i.e., nature of portrayal) and attitude towards the ad, attitude towards the brand, and purchase intention (Baxter et al., 2016, p. 973). Attitude towards the ad and attitude towards the brand can accurately determine the consumers' evaluation of the ad and the brand (Mitchell & Olson, 1981, p. 327). These evaluations in turn can predict purchase intention (Baxter et al., 2016, p. 973; Sicilia et al., 2006, p. 140).

In addition, the notion that consumers respond more positively towards ethnically congruent ads (i.e., relating to the concept of similarity or race matching) (Khan et al., 2015, p. 224), is considered to be an oversimplification (Jones, 2010, p. 57) due to the growing racially and ethnically diverse population (Pichler et al., 2021, p. 602). In fact, it has been found that the Millennials and Gen Z respond negatively towards mono-ethnic ads, regardless of ethnic resonance, as these are unrepresentative to society at large (Licsandru & Cui, 2019, p. 262; Pichler et al., 2021, p. 602; Shao et al., 2023, p. 1388). As a result, despite prior research stating that consumers respond more positively towards ethnically congruent ads, Millennials and Gen Z may respond negatively to mono-ethnic ads compared to multi-ethnic ads. Accordingly, the following hypothesis was formulated:

H1: There is a significant difference in the effect amongst the mono-ethnic ad, multi-ethnic ad, and control ad on a) attitude towards the ad, b) attitude towards the brand, c) purchase intention.

2.8.2 *Direct effect of social identity on advertising effects*

Social identity theory refers an individual's perception of belongingness to certain social group(s) by evaluating the associated emotional and value significance of the group member (i.e., in-groups) (Farivar & Wang, 2022, p. 2), and how they compare this to the "Other" (social groups) (i.e., out-groups) (Hogg, 2020, p. 112). This identification with social group(s) affects beliefs, attitudes, and behavioural intentions (Farivar & Wang, 2022, p. 2; Sierra et al., 2009, p. 41). Prior research states that consumers' attitudes and intentions towards a specific ethnic-related stimulus depends on their self-concept (i.e., self-categorization) and how they identify themselves with a specific social group in society (i.e., comparison) (Sierra et al., 2009, pp. 41-42). Therefore, a significant association can be found between belonging to a social group and consumers' attitudes and intentions (Farivar & Wang, 2022, p. 3). For example, in terms of advertising, if the ad communicates diversity and inclusion ideals, consumers' whose social identities align with this ideal will have positives attitudes and intentions towards the ad (Wilkie et al., 2023, p. 723). However, an individual's social identity can be quite complex (Masood et al., 2024, p. 200). Especially in terms of race or ethnicity, belonging to a certain social group becomes increasingly difficult due to the increase of an ethnically diverse population (Masood et al., 2024, p. 203). Because of this, rather than race matching (i.e., matching the target audience's race with the model's race) (Jones, 2010, p. 57), social identity towards an ethnic-related stimulus is a better predictor to determine the attitudes towards product(s)/brand(s) (Khan et al., 2015, p. 219) and intentions (Baxter et al., 2016, p. 973; Sicilia et al., 2006, p. 140; Spears & Singh, 2004, p. 53). Consumers who have a strong social identity towards the ethnic group being depicted in the advertisement, have a more positive perception of product(s)/brand (Khan et al., 2015, p. 219).

As mentioned above, social identity in terms of diversity and inclusion advertising can be measured through the following three factors: belief congruence, diversity ad sentiment, and social connectedness. In short, belief congruence reflects if the values presented in the ad matches with the consumers' own personal values. These values are a crucial aspect of an individual's everyday life as they are fundamental of the decision-making process and influence personal choices and preferences (McDonald et al., 2020, p. 586). When the consumers' values are represented in an ad, they will have a favourable attitude and a stronger purchase intention. Hence why belief congruence offers valuable insight on to what extent consumer's own personal belief matches with the beliefs portrayed in the ad.

Moreover, diversity ad sentiment reflects whether the consumers believe that the theme presented in the ad is important as an advertising theme in general (Wilkie et al., 2023, p. 723). Therefore, if the consumer has a high diversity ad sentiment, and therefore, aligns with diversity and inclusive ideals represented in the ad, their attitudes towards the ad and brand will be more favourable, and they will have a stronger purchase intention. Thus, in case of diversity ad sentiment, if the consumer finds that the theme presented in the ad is an important theme in general, their attitudes and intentions will be positive.

Lastly, social connectedness reflects whether the consumers own identities, experiences or those of people close to them is accurately reflected in the ad. In other words, if they can relate or feel connected to the content in the ad. Prior research states that the level of belief congruence, diversity ad sentiment, and social connectedness is positively associated with advertising effects (i.e., attitude towards the ad, attitude towards the brand, and purchase intention) (Liljedal et al., 2020, pp. 183-184; Wilkie et al., 2023, pp. 723-724). Accordingly, the following hypotheses were formulated:

H2: Belief congruence is positively associated with a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention.

H3: Diversity ad sentiment is positively associated with a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention.

H4: Social connectedness is positively associated with a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention.

2.8.3 *Moderation effect of social identity on diversity and inclusion advertising type and advertising effects*

In social identity theory a great emphasis is made on belonging to a social group because this process does not only define one's self-concept (i.e., personal identity) but also their social group (i.e., social identity) (Schury et al., 2020, p. 1). Social identity suggests that individuals tend to favour their in-group compared to out-groups (Farivar & Wang, 2022, p. 2). This process consists of self-categorization and comparison, where individuals become aware of their similarities with their social group (i.e., in-group) and dissimilarities with other social groups (i.e., out-group) (Terry & Hogg, 1996, p. 779). Different social groups have different norms, which are defined as "group prototypes" and refer to different characteristics that encompass the social group, such as the beliefs, attitudes, feelings, and behaviours (Terry & Hogg, 1996, p. 779). These norms or group prototypes from different social groups influence to what extent individuals perceive or react to certain messages (Terry & Hogg, 1996, p. 785).

In this light, social identity has a great impact on how individuals interpret and explain their social world (Cruwys et al., 2014, p. 66). When social identity is salient, individuals use their group prototypes to evaluate the social world around them (Terry & Hogg, 1996, pp. 779, 785). A strong sense of social identity indicates that the individual is more committed to their social group (Merrilees et al., 2010, p. 64). Based on this, prior research has indicated that an individual's social identity can moderate attitudes and behavioural intentions if the individual strongly identifies with the references group depicted (Terry & Hogg, 1996, p. 785). For example, generational (social) identity refers to the evaluation of belonging to a generational (social) group (Van Rossem, 2019, p. 436). The members of a particular generational group have a shared value system and as mentioned above, the salience of the shared value system, or norms, greatly shape attitudes and behaviour (Ross & Rouse, 2020, p. 1120; Van Rossem, 2019, p. 435). In terms of ethnic marketing, it has been argued that the younger generations are more likely to respond positively towards multi-ethnic ads than mono-ethnic ads. In other words, due to the salient social identity of the younger generations (e.g., inclusive, diverse, and less ethno-centric mindset), their attitudes and behaviours are likely to be more positive towards multi-ethnic ads and more negative towards mono-ethnic ads (Shao et al., 2023, p. 1388).

Prior research has indicated that favourable attitudes and intentions of specific ethnic-related stimuli are depended on one's social identity (Sierra et al., 2009, pp. 41-42). Moreover, the salience of their social identity can influence attitudes and behavioural intentions (Forehand et al., 2002, p. 1086). Based on this, an individual's social identity can act as a moderator between the message, in this research diversity and inclusion advertising type, and attitudes and intentions (i.e., advertising effects). Accordingly, the following hypotheses were formulated:

H5: The relationship between diversity and inclusion advertising types and a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention is moderated by the level of belief congruence.

H6: The relationship between diversity and inclusion advertising types and a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention is moderated by the level of diversity ad sentiment.

H7: The relationship between diversity and inclusion advertising types and a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention is moderated by the level of social connectedness.

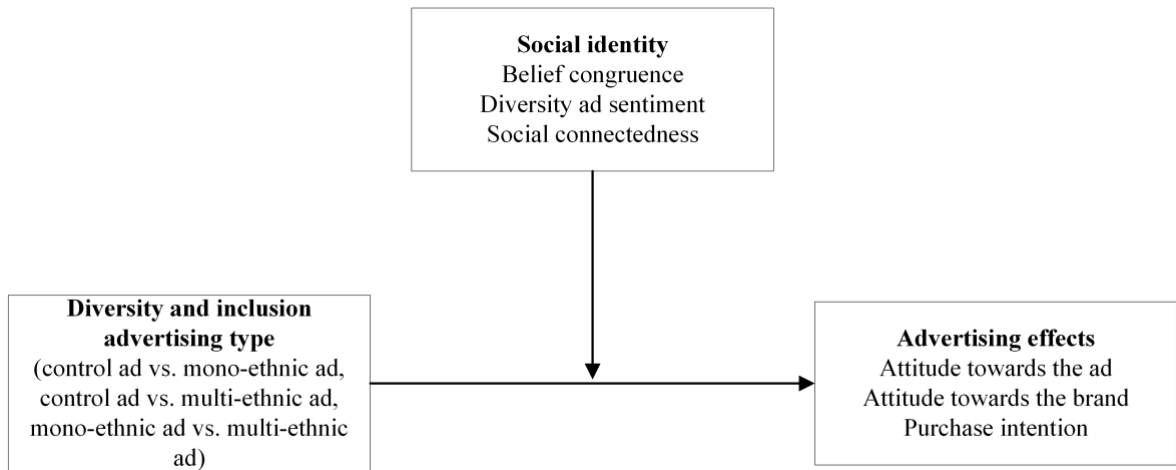


Figure 3.1. Conceptual model with diversity and inclusion advertising type as independent variable, advertising effects as dependent variable, and social identity as moderator.

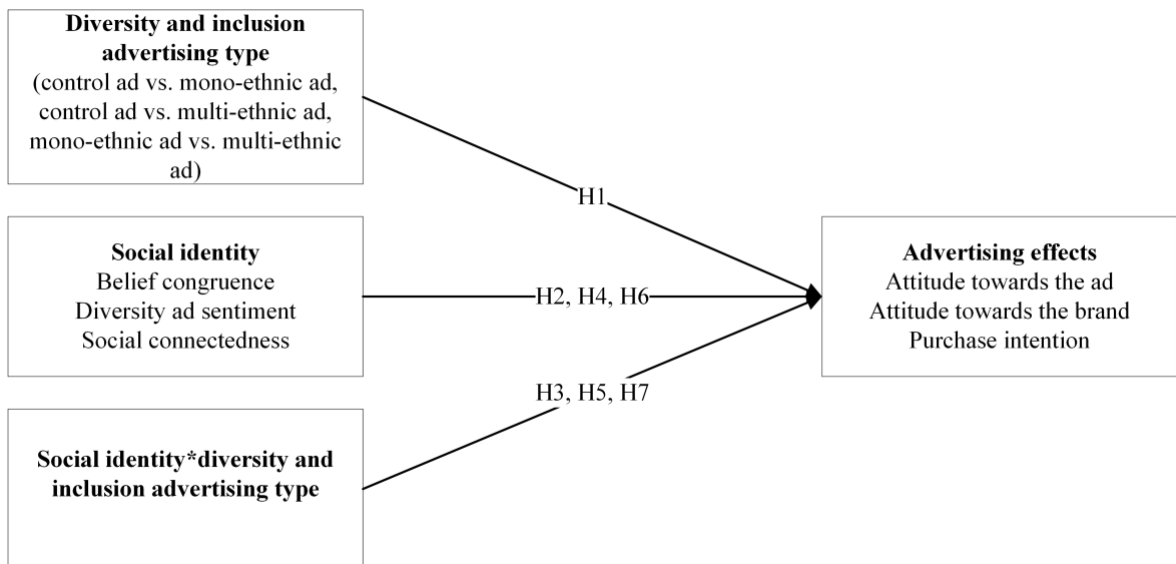


Figure 3.2. Statistical model illustrating the hypothesis development.

3 Methodology

In this chapter, the methodological design of the research will be discussed. To answer the research question “to what extent is diversity and inclusion advertising type (mono-ethnic vs. multi-ethnic) associated with advertising effects (i.e., attitude towards the ad, attitude towards the brand, and purchase intention) and to what extent is the relationship between diversity and inclusion advertising type and advertising effects moderated by the three dimensions of the concept social identity (i.e., belief congruence, diversity ad sentiment, and social connectedness), an online experimental design was set up through the online survey platform Qualtrics. A quantitative experimental design is appropriate to use when cause-and-effect relation wants to be determined (Privitera, 2012, p. 9) or for explanatory purposes (Babbie, 2017, p. 234). Because of this, a quantitative experimental approach is most suitable for this research design. To do this, the three subdimensions of social identity in relation to diversity and inclusion advertising types were researched, conceptualized, and operationalized into specific measures (Neuman, 2014, p. 287).

It should be noted that, though sometimes viewed as unethical by some researchers (Vargas et al., 2017, p. 111), (passive) deception often is a common element in experimental research as it is sometimes appropriate to conceal the purpose of the research (Babbie, 2017, p. 62). This is because, it helps to reduce a possible learning effect and reduce the chances of participants uncovering what the study was about during the survey (Vargas et al., 2017, p. 110). However, to ensure ethical practises, it is important that the participants are accurately debriefed and informed about the true nature of the research (Babbie, 2017, p. 71).

3.1 Choice of research method

To answer the research question, a single factorial between-subjects experimental design with three conditions (multi-ethnic ad, mono-ethnic ad, and control ad) has been employed. To conduct an experiment, the research design must first meet three requirements in order to ensure control and determine causation, mainly manipulation, randomization, and comparison/control (Privitera, 2012, p. 9). Firstly, the manipulation of the levels of the independent variable or factor is necessary as this ensures control and the isolation of cause-and-effect relationships between variables (Privitera, 2012, p. 10). In this research, a single factorial design was used, which was manipulated into three conditions (Gavin, 2008, p. 126). Therefore, the manipulation of the levels of the independent variables (i.e., diversity and inclusion advertising type) was measured separately, thus meeting the first experimental requirement.

Second, randomly assigning participants to one condition (i.e., randomization) is necessary to ensure that the characteristics of the participants vary by chance. Because of this, the assumption can be made that all condition groups relatively have the same characteristics (Privitera, 2012, p. 11). Therefore, ensuring that any observed difference in the analysis is caused by the manipulation rather

than the participants' characteristics (Privitera, 2012, p. 11). In this research, a between-subjects design describes that the respondents only saw one of the three conditions and were not aware of other experimental conditions during the survey (Vargas et al., 2017, pp. 110-111). This has been done to reduce the learning effect and reduce the chances for the participants to uncover what the study was about during the survey (Vargas et al., 2017, p. 110). The respondents were automatically randomly assigned by Qualtrics to one of the three conditions. This further ensured that the respondents were not assigned to a condition based on predetermined criteria (i.e., characteristics) (Privitera, 2012, p. 11) but rather at random (Neuman, 2014, p. 286). Thus, as all participants were randomly assigned to one of the three control groups, the second experimental requirement was met.

Finally, the comparison/control, that is the observation of at least two groups, is necessary to compare the scored values to each other in order to draw casual conclusions (Privitera, 2012, p. 11). Moreover, when possible, a control group should be used to ensure that the manipulation levels of the independent variable differ. A control group must follow the same procedure as the experimental groups; however, the manipulation is not shown in the control group. This ensures isolation of all factors in order to analyse the effect and difference of the manipulation across groups (Babbie, 2017, p. 236; Privitera, 2012, p. 11). In this research, there were a total of three experimental groups, which consisted of a control ad, a mono-ethnic ad, and a multi-ethnic ad, ensuring the comparison and control of at least two or more group, and therefore, meeting the comparison/control requirement. Thus, the three requirements (i.e., manipulation, randomization, and comparison/control) to conduct an experimental design were met.

3.2 Stimulus material

As this research focused on face make-up, particularly foundations, it is important to consider phenotypic features that marketers utilize to communicate race within their ads (Thomas et al., 2023, p. 620). As previously mentioned, phenotypic features include skin colour, physical characteristics, religion, and origin (Thomas et al., 2023, p. 620). To be able to use foundation, it needs to match the consumers' skin (Moriuchi, et al., 2009, p. 138), therefore the phenotypic feature skin colour was the most appropriate phenotypic feature to display in the stimuli ads. Thus, the creation of the three stimuli were based on the phenotypic feature skin colour (Thomas et al., 2023, p. 620). This is because diversity and inclusion in advertising in the cosmetics industry is often showcased through diverse representation based on the shade range that the foundation offers (Childs, 2022, p. 1). Foundation shade ranges can be categorized into light, medium, tan, and dark categories (Childs, 2022, p. 10).

As discussed prior, based on the ethnic marketing practise, a difference has been made between mono-ethnic and multi-ethnic ads (Fazli-Salehi et al., 2024, pp. 76-77; Shao et al., 2023, p. 1377). For this research, the mono-ethnic ads, an exclusive and single-ethnic marketing effort, were based on the following definition: “advertisements that feature mono-ethnic advertising models who belong to the same cultural background” (Shao et al., 2023, p. 1380). The single-ethnic group chosen to represent the mono-ethnic ad was based on white consumers as they are the beauty standard and are described as the dominant majority in society that are often (over)represented in media (Childs, 2022, p. 1; Eisend et al., 2022, p. 56; El Hazzouri et al., 2017, p. 718; Henderson & Williams, 2013, p. 3; Morris & Kahlor, 2014, p. 416; Rößner & Eisend, 2023 p. 774; Thomas et al., 2023, p. 623).

Moreover, as discussed by Strebinger et al. (2018), multi-ethnic advertising refers to ads that depict “multiple models of at least three different racial ethnicities in spatial or temporal proximity so that consumers perceive them as an ensemble of models representing the brand” (p. 410). Thus, the phenotypic feature, skin colour, was defined as foundation shades that fell within the light, medium/tan, and dark categories.

It should be noted that the diversity and inclusion of foundation shade ranges are often determined by the foundation shade depicted in the bottle (Childs, 2022, p. 1). Therefore, for this research it has been decided to only depict a clear and empty foundation bottle, ensuring that there is no association between the foundation bottle and the models depicted in the ads. Based on this, a total of three ads were created, from which the two experimental stimuli were created using the imaging AI software, PIXLR. It has been decided to utilize this AI software in order to enhance the quality and realism of the ad (Campbell et al., 2022, p. 26; Henderson & Williams, 2023, p. 23), therefore attempting to (somewhat) ensure ecological validity (i.e., ensuring that the ads are consistent with ads people encounter in their daily life) (Vargas et al., 2017, p. 108).

The experimental stimuli depicted a fictitious beauty brand, Brand X, showcasing three models with the product (i.e., a clear foundation bottle), and a promotional/descriptive text “The new foundation by Brand X for a satin finish.” As this research used the phenotypic feature skin colour to display diversity and inclusion, there the control group did not contain any models and only depicted the clear and empty foundation bottle with the promotional/descriptive text (see figure 4.1). The absence of the manipulation (i.e., phenotypic features skin colour) ensured the isolation of all factors in order to analyse the effect and difference of the manipulation across groups (Privitera, 2012, p. 11). The second condition, the mono-ethnic experimental group, depicted three white models, which was based on the Western Eurocentric beauty standard (see figure 4.2) (Childs, 2022, p. 1; Eisend et al., 2022, p. 56; El Hazzouri et al., 2017, p. 718; Henderson & Williams, 2013, p. 3; Morris & Kahlor, 2014, p. 416; Rößner & Eisend, 2023 p. 774; Thomas et al., 2023, p. 623). The third and final condition, the multi-ethnic experimental group, depicted three models that were racially and ethnically different, which were based on the definition by Strebing et al. (2018, p. 410) and the foundation categorization discussed by Childs (2022, p. 10). The racial ethnicities depicted were white (i.e., light), mixed-race/light-skin (i.e., medium/tan), and black (i.e., dark) (Childs, 2022, p. 10) (see figure 4.3).



Figure 4.1. Control stimulus – Control ad.



Figure 4.2. Experimental stimulus – Mono-ethnic ad



Figure 4.3. Experimental stimulus – Multi-ethnic ad

3.3 Sampling

3.3.1 Sampling strategy

To answer the research question and examine the hypotheses at least 90 participants were needed. The target population consisted of Millennials (born between 1980 and 1995) (Ng & Johnson, 2015, p. 122) and Gen Z (born between 1995 and 2006) (Pichler et al., 2021, p. 599) who (occasionally) wear foundation. This has been decided as these two generations appear to be more open to diversity (Pichler et al., 2021, p. 602), and are also more articulated towards diversity efforts (Licsandru & Cui, 2019, p. 262).

Moreover, it should be noted that, minors were excluded from this research as parental consent is necessary, however, this cannot be guaranteed. Hence the target population for this research were Millennials and Gen Z, aged 18 and 44 (born between 1980 and 2006), that (occasionally) wear foundation.

Lastly, to reach this target population, non-probability, convenience and snowball sampling were used as the online experimental survey was distributed amongst the researcher's professional and private network via social networking site LinkedIn, and social media platforms Instagram, in the Facebook group "Vragenlijst/Enquete respondentent gezocht ruilen HBO/WO Studenten 2023/2024" and in subReddits "r/SurveyExchange", and "r/Samplesize". It was also requested from the respondents to distribute the survey link with their own networks.

3.3.2 Sampling description

A total of 227 responses ($n = 227$) were recorded, however 4 respondents did not meet the sampling criteria of being 18 years or older and 1 respondent did not agree to the terms. Moreover, 46 respondents did not wear make-up and 32 respondents did not wear face make-up (e.g., foundation). Thus, these respondents did not meet the filter criterion and were therefore excluded in the final data. Lastly, 49 respondents did not complete the survey and 1 respondent did not meet the age sampling criteria (aged between 18 and 44) and were therefore also excluded in the final data. Therefore, after data cleaning, ($n =$) 94 responses were included for reliability testing, the one-way ANOVA analysis, and the moderated multiple regressions.

Furthermore, it has been decided to not require the respondents to force respond certain demographic questions, such as age, gender, and education level due to ethical reasons, and therefore, the total recorded responses vary between $n = 93$ and $n = 94$. Having said that, the other demographic questions, such as nationality, country of residence and ethnicity were required as this was relevant to the research. Because of this, in the final sample, the percentage of women was 95.7% ($n = 89$), the percentage of male was 2.2% ($n = 2$), the percentage of non-binary / third gender 1.1% ($n = 1$) and the remaining 1.1% ($n = 1$) indicated that they preferred not to say their gender. The participants' age ($n = 94$) ranged from 18 to 42, with an average age of 27.35 years old ($SD = 5.14$), from which 30.9% were Millennials ($n = 29$) and 69.1% were Gen Z ($n = 65$).

Moreover, the sample consisted of 20 nationalities ($n = 94$) with Dutch (50.0%), Indonesian (11.7%), Turkish (4.3%), Dutch-Caribbean (4.3%), and American (4.3%) being the most prominent. The majority resided ($n = 94$) in the Netherlands (79.8%), Indonesia (5.3%), United States of America (3.2%), Indonesia (2.1%), Italy (2.1%) and Andorra (2.1%). The sample included eight different ethnic groups ($n = 94$) most prominent being White- European, American, or Australian (37.2%), Caribbean (17.0%), South-East Asian (13.9%), North-African/Middle Eastern (12.8%), and

South-Asian (12.8%). Lastly, the most named education level ($n = 94$) was bachelor's degree (56.4%), followed by master's degree (31.9%), and secondary education (6.4%).

Table 4.1. Distribution of conditions

Condition	<i>n</i>
Condition 1: Control ad	33
Condition 2: Mono-ethnic ad	30
Condition 3: Multi-ethnic ad	31

Note. Total sample size = 94

3.4 Manipulation check

A manipulation check is necessary to support evidence of construct validity (Sigall & Mills, 1998, pp. 222-223). Construct validity refers to the relationship amongst variables based on its theoretical relationship (Babbie, 2017, p. 153), and ensures the absence of a confound variable, therefore providing support and eliminating the chance of another unforeseen factor influencing the relationship between the independent and dependent variable (Sigall & Mills, 1998, p. 223). Meaning, for this research, the manipulation checks helped ensure the absence of a confound variable (i.e., another possible unforeseen variable) that could possibly influence the perception of diversity and inclusion advertising type.

The manipulation checks were conducted to determine if the ads were perceived as intended. This was measured with three questions that determined whether the participants perceived the ad as more mono-ethnic, multi-ethnic or neither mono-ethnic nor multi-ethnic than the other ads. The participants were first given the definitions of mono-ethnic ads and multi-ethnic ads. Mono-ethnic advertising was defined as “mono-ethnic advertising is a single-ethnic marketing effort. Meaning, it is a marketing approach in advertising where a singular ethnicity (racial background) is depicted in an ad.”. Multi-ethnic advertising was defined as “multi-ethnic advertising is a multi-ethnic marketing effort. Meaning, it is a marketing approach in advertising where a diverse set of ethnicities (racial backgrounds) are depicted in an ad”. Followed by the three manipulation check questions, which were presented in a one matrix table and was measured with a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). The questions were measured with the following three items: “I think that this face make-up advertisement is a mono-ethnic ad”, “I think that this face make-up advertisement is a multi-ethnic ad”, and “I think that this face make-up advertisement is neither a mono-ethnic nor a multi-ethnic ad”.

3.5 Procedure

An online experimental survey has been conducted through the software Qualtrics. The data collection took place in April 2024 until May 2024, approximately one month. Before starting the survey, participants were informed about the nature of the survey. This information included that the research was about advertising effects of face make-up ads, how long the survey would take, and that their participation was completely voluntary, confidential, anonymous, for academic purposes only, and that the participants may stop taking the survey at any given moment. The participants were first asked if they were 18 years old or above and then asked if they agreed to the terms. If indicated not, they were forwarded to the end of the survey. If the participants were 18 years old or above and agreed to the terms, several screening questions (e.g., whether they wear make-up, specifically foundation, and frequency of purchasing foundation) were presented. If indicated “no” the participants were forwarded to the end of the survey as they did not meet the sampling criteria. If indicated “yes” the survey would start and the stimulus (i.e., one of the three conditions) was shown. The participants were instructed to carefully analyse the ad and made aware that they would not be able to return to the ad throughout the survey. This was followed by questions concerning attitude towards the ad, attitude towards the brand, purchase intention, and the three dimensions of social identity. The final part of the survey contained demographic questions regarding their age, gender identification, nationality, current country of residence, ethnicity, and education level. At the end of the survey, participants were debriefed and informed about the true nature of the research, were shown all three stimuli, and were informed that the ads were created by an AI imaging tool, emphasising that the models in the ad are not real humans. The entire survey approximately took 5 to 8 minutes.

3.6 Operationalization and measurements

For this research, the following variables have been used: the three dimensions of social identity (SI): belief congruence (BC), diversity ad sentiment (DAS), and social connectedness (SC), and attitude towards the ad (A_{ad}), attitude towards the brand (A_b) and purchase intention (PI). These measures used to quantify these variables were based on established scales to ensure reliability and validity (Vargas et al., 2017, p. 104).

Attitude towards the ad. The attitude towards the ad scale ($M = 4.14$, $SD = 1.37$) by Muehling and Pascal (2011, p. 114) has been adopted (Cronbach's $\alpha = .89$). This scale included one introductory question consisting of four items measured with bipolar adjectives: bad/good, unpleasant/pleasant, irritating/not irritating, and dislike very much/ like very, which were shown in random order to every respondent, and was rated on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). This was measured with the introductory question: “How do you feel about the advertisement?”.

Attitude towards the brand. The attitude towards the brand scale ($M = 4.01$, $SD = 1.21$) by Muehling and Pascal (2011, p. 114) and Biehal et al. (1992, p. 23) has been adopted (Cronbach's $\alpha = .91$). This scale included one introductory question consisting of four items measured with bipolar adjectives: bad/good, unpleasant/pleasant, worthless/valuable, and dislike very much/ like very much, which were shown in random order to every respondent, and was rated on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). This was measured with the introductory question: "How do you feel about Brand X?"

Purchase intention. The purchase intention scale ($M = 3.42$, $SD = 1.68$) by Yoon et al. (1998) stated in research by Bolls and Muehling (2007, p. 39) has been adopted (Cronbach's $\alpha = .95$). This scale included one introductory question consisting of three items measured with bipolar adjectives: unlikely/likely, improbable/probable, and impossible/possible and was assessed with a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). This was measured with the introductory question: "If you were in the market for foundation, how likely is it that you would choose Brand X?"

Social identity. Social identity can be sub-categorized into three dimensions: belief congruence, diversity ad sentiment, and social connectedness.

Belief congruence. The belief congruence scale by Malär et al. (2011, p. 47) has been adopted to measure to what extent the message portrayed in the ad aligned with the beliefs of the respondents (Cronbach's $\alpha = .93$). This scale included four items that were assessed with a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). For example, "This ad is consistent with how I see myself" ($M = 2.94$, $SD = 1.52$).

Diversity ad sentiment. The diversity ad sentiment scale by Wells (1964) stated in research by Sternadori and Abitbol (2019, p. 743) has been adopted to measure to what extent consumers support and perceive diversity and inclusion as a theme within ads as an important (Cronbach's $\alpha = .83$). It included six items that were assessed with a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). For example, "This ad is very appealing to me" ($M = 3.24$, $SD = 1.66$). Moreover, the following three items were reversed coded: "I dislike this ad" ($M = 4.38$, $SD = 1.69$), "I would probably skip this ad if I saw it again" ($M = 2.90$, $SD = 1.59$), and "This ad has little interest for me" ($M = 3.34$, $SD = 1.71$).

Social connectedness. The social connectedness scale by Hutcherson et al. (2008) stated in research by Åkestam et al. (2017, p. 87) has been adopted to measure to what extent a consumer's identity and experiences or those of the people close to them is accurately reflected in the ad (Cronbach's $\alpha = .88$). It included three items that were assessed with a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). For example, "I belong with the people in the ad" ($M = 3.06$, $SD = 1.54$).

3.7 Data analysis

To analyse the dataset and answer the hypotheses, the statistical software IBM SPSS 28 was used to conduct a one-way ANOVA analysis and the extension software PROCESS macro was used to conduct the moderated multiple regression analyses. The one-way ANOVA was used to determine the effect between the relationship of those who saw the control ad and attitude towards the ad, attitude towards the brand, and purchase intention compared to those who saw the mono-ethnic ad and multi-ethnic ad (Privitera, 2012, p. 357).

Finally, moderated multiple regressions were used to determine the moderation effect of the three subdimensions of social identity on the relationship between diversity and inclusion advertising type and advertising. Though a moderation effect can also be determined using, for example, multiple moderated regressions, it has been decided to utilize PROCESS macro as this software extension automates certain steps (e.g., centring the mean, creating the interaction variable and indicator/dummy coding) and enables to generate complex models, therefore reducing the chances of human errors (Hayes, 2022, pp. 594, 602). The moderated multiple regression analyses help determine whether there is a significant main effect between the independent variables and dependent variables, and whether this relationship is strengthened or reduced (i.e., moderated) by a third moderator variable (Hayes, 2022, p. 233). Before conducting these analyses, the dataset was evaluated and organized by removing incomplete responses and by removing responses that did not meet the sampling criteria.

4 Results

In this chapter, the results of the manipulation check, and hypotheses will be presented. Firstly, for the manipulation check, three one-way ANOVA were conducted to determine whether the stimuli were perceived as intended. Furthermore, to answer hypothesis one a one-way ANOVA was conducted. To further answer the other hypotheses moderated multiple regression analyses were conducted.

4.1 Manipulation check

Before employing the final survey, a pretest was conducted that measured a total of three manipulation checks for the mono-ethnic, multi-ethnic, and control ads. This was done to ensure whether the participants perceived the ad as more mono-ethnic, multi-ethnic or neither mono-ethnic nor multi-ethnic than the other ads. In other words, the first manipulation check helped to determine whether participants that saw the mono-ethnic ad perceived the stimulus as more mono-ethnic than those who saw the multi-ethnic ad, and the control ad. The second manipulation check helped to determine whether participants that saw the multi-ethnic ad perceived this stimulus as more multi-ethnic than those who saw the mono-ethnic, and the control ad. The third and final manipulation check helped to determine whether participants that saw the control ad perceived this stimulus more as neither mono-ethnic nor multi-ethnic than those who saw the mono-ethnic ad and the multi-ethnic ad. To analyse this, a total of three ANOVA analyses were conducted, one ANOVA per question.

For the first manipulation check, the following question was posed: “I think that this face make-up advertisement is a mono-ethnic ad” (MC_1). A one-way ANOVA was conducted with the advertising type, mono-ethnic ad, multi-ethnic ad, and control ad (ad_type) as independent variable and the mono-ethnic manipulation check question (MC_1) as dependent variable. ANOVA revealed a significant main effect for advertising type and mono-ethnic manipulation check question, $F(2, 46) = 18.57, p < .001$, partial $\eta^2 = .45$. Tukey post-hoc comparisons revealed that participants that had the mono-ethnic ad as stimulus ($M = 4.56, SD = 1.24$) significantly perceived the ad as more mono-ethnic compared to those who had multi-ethnic ad as stimulus ($M = 1.87, SD = 1.15$), $p < .001$, and to those who had the control ad as stimulus ($M = 2.50, SD = 1.23$), $p < .001$.

For the second manipulation check, the following question was posed: “I think that this face make-up advertisement is a multi-ethnic ad” (MC_2). A one-way ANOVA was conducted with the advertising type, mono-ethnic ad, multi-ethnic ad, and control ad (ad_type) as independent variable and the multi-ethnic manipulation check question (MC_2) as dependent variable. ANOVA revealed a significant main effect for advertising type and multi-ethnic manipulation check question, $F(2, 46) = 39.59, p < .001$, partial $\eta^2 = .63$. Tukey post-hoc comparisons revealed that participants that saw the multi-ethnic ad as stimulus ($M = 4.00, SD = 1.16$) significantly perceived the ad as more multi-ethnic

compared to those who had mono-ethnic ad as stimulus ($M = 1.37, SD = .60, p < .001$), and to those who had the control ad as stimulus ($M = 1.93, SD = .92, p < .001$).

For the third and final manipulation check, the following question was posed: “I think that this face make-up advertisement is neither a mono-ethnic nor a multi-ethnic ad” (MC_3). A one-way ANOVA was conducted with the advertising type, mono-ethnic ad, multi-ethnic ad, and control ad (ad_type) as independent variable and the control manipulation check question as dependent variable. ANOVA revealed a significant main effect for advertising type and the control manipulation check question, $F(2, 46) = 41.03, p < .001, \text{partial } \eta^2 = .64$. Tukey post-hoc comparisons revealed that participants that saw the control ad as stimulus ($M = 4.21, SD = .89$) significantly perceived the ad more as neither mono-ethnic nor multi-ethnic compared to those who had mono-ethnic ad as stimulus ($M = 1.63, SD = .76, p < .001$), and to those who had the multi-ethnic ad as stimulus ($M = 1.88, SD = .96, p < .001$).

4.2 The main effect of advertising type on advertising effects

To answer the hypothesis 1a that poses that there is a significant difference in the effect amongst the mono-ethnic ad, multi-ethnic ad, and control ad on attitude towards the ad, a one-way ANOVA was conducted with the advertising type as independent variable and the average attitude towards the ad as dependent variable. ANOVA revealed a significant main effect for the advertising type and average attitude towards the ad, $F(2, 91) = 7.78, p < .001, \text{partial } \eta^2 = .15$. Tukey post-hoc comparisons revealed that participants that saw the multi-ethnic ad as stimulus ($M = 4.88, SD = 1.32$) significantly had a more favourable average attitude towards the ad compared to those who saw the control ad ($M = 3.80, SD = 1.11, p = .003$) or the mono-ethnic ad as stimulus ($M = 3.73, SD = 1.42, p = .002$). Therefore, accepting H1a.

To answer the hypothesis 1b that poses that there is a significant difference in the effect amongst the mono-ethnic ad, multi-ethnic ad, and control ad on attitude towards the brand, a one-way ANOVA was conducted with the advertising type as independent variable and the average attitude towards the brand as dependent variable. ANOVA revealed a significant main effect for the advertising type and average attitude towards the brand, $F(2,91) = 6.38, p = .003, \text{partial } \eta^2 = .12$. Tukey post-hoc comparisons revealed that participants that saw the multi-ethnic ad as stimulus ($M = 4.60, SD = 1.11$) significantly had a more favourable average attitude towards the brand compared to those who saw the control ad ($M = 3.79, SD = 1.16, p = .015$) or the mono-ethnic ad as stimulus ($M = 3.63, SD = 1.18, p = .004$). Therefore, accepting H1b.

To answer the hypothesis 1c that poses that there is a significant difference in the effect amongst the mono-ethnic ad, multi-ethnic ad, and control ad on purchase intention, a one-way ANOVA was conducted with the advertising type as independent variable and the average purchase intention as dependent variable. ANOVA revealed a significant main effect for the advertising type

and average purchase intention, $F(2, 91) = 4.58, p = .013$, partial $\eta^2 = .09$. Tukey post-hoc comparisons revealed that participants that saw the multi-ethnic ad as stimulus ($M = 4.13, SD = 1.70$) significantly had a stronger average purchase intention compared to those who had the mono-ethnic ad as stimulus ($M = 2.94, SD = 1.54, p = .015$). No other comparison reached significance. Therefore, accepting H1c.

4.3 Assumption testing: Moderated multiple regression

Before conducting the moderated multiple regression analyses to answer the seven hypotheses, the dataset first must meet the following assumptions: sample size, multicollinearity, outliers, normality, linearity, homoscedasticity, and independence of residuals. In order to conduct the assumption testing of the dataset, the following variables were computed: the centred mean of belief congruence, diversity ad sentiment, and social connectedness, two dummy variables (i.e., mono-ethnic ad vs. control ad and multi-ethnic ad vs. control ad), and the interaction variables between the dummy variables and centred moderator means.

The sample size for this study ($n = 94$) meets the criteria for social sciences research that states that there needs to be at least 15 respondents per predictor (Pallant, 2020, p. 155). Furthermore, it should be noted that multicollinearity may arise in moderated multiple regression analysis due to the inclusion of the interaction variables (Aguinis, 1995, p. 1149; Shieh, 2010, p. 484), and due to the use of dummy coding (McClelland et al., 2016, p. 399). In this research, though some correlations were found above .70 (e.g., interaction variables and dummy variables), all variance inflation factor (VIF) values are below 10 and all tolerance values are greater than .10, and are therefore in the acceptable ranges (Pallant, 2020, pp. 155, 163-164). Accordingly, the multicollinearity assumption amongst predictors has not fully been violated (Pallant, 2020, p. 155).

Moreover, outliers, normality, linearity, homoscedasticity, and independence of residuals were tested by analysing the normal probability plots (p-p) of the regression standardized residuals and scatterplots (Pallant, 2020, p. 164). Firstly, based on the casewise diagnostic test, which determines cases that have standardized residual values above 3 or below -3, one outlier has been found (Pallant, 2020, p. 164). However, because the Cook's distance of this outlier was lower than 1.0, the outlier was not problematic to the analysis as it did not have an influence on the overall regression model, therefore, the outlier was not taken out of the dataset (Pallant, 2020, pp. 164-165). Secondly, the p-p plot and scatterplot indicated that the residuals were normally distributed, straight-line (linear) relationships were found between the residuals and predicted dependent variables, and the variance of the predicted dependent variables were relatively the same across all predicted scores (Pallant, 2020, p. 156). Therefore, as the majority of assumptions are partially met, the moderated multiple regression was conducted.

4.4 The main and moderating effect of belief congruence on advertising effects

4.4.1 The main and moderating effect of belief congruence on attitude towards the ad

To test hypothesis 2a and 3a, two moderated regression analyses were conducted using PROCESS macro (model 1) (Hayes, 2022, p. 367). For the first moderated regression analysis, indicator coding was used for the independent variable (as it was a multicategorical variable) to compare the control ad with the mono-ethnic and multi-ethnic ads. Advertising type was used as independent variable, average attitude towards the ad as dependent variable, and the centred mean of belief congruence as moderator. The overall model reached significance, $R^2 = .39$, $F(5, 88) = 10.54$, $p < .000$. The results of this analysis are illustrated in table 5.1 and figure 5.1.

As can be seen from the results, those who saw the mono-ethnic ad did not significantly have a more favourable average attitude towards the ad in comparison to those who saw the control ad ($p = .416$). In contrast, those who saw the multi-ethnic ad did significantly have a more favourable average attitude towards the ad in comparison to those who saw the control ad ($p = .004$). Moreover, belief congruence is positively associated with average attitude towards the ad ($p = .037$). Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of belief congruence, was not significant ($\Delta R^2 = .01$, $\Delta F(2, 88) = .53$, $p = .592$).

Table 5.1. Summary of moderated regression analysis predicting attitude towards the ad

	<i>b</i>	<i>t</i>	<i>p</i>	95% CI	
				<i>LL</i>	<i>UL</i>
Constant	3.79	19.72	.000	3.41	4.17
Mono-ethnic ad (X_1) ^a	.24	.82	.416	-.34	.81
Multi-ethnic ad (X_2) ^b	.84	2.98	.004	.28	1.40
Belief congruence (W) ^c	.35	2.12	.037	.02	.68
Interaction 1 (X_1*W)	.22	.96	.342	-.24	.67
Interaction 2 (X_2*W)	.18	.86	.392	-.24	.59

Note. Number of studies = 94. CI = confidence interval; LL = lower limit; UL = upper limit. ^a Mono-ethnic ad (control ad and multi-ethnic ad = 0; mono-ethnic ad = 1). ^b Multi-ethnic ad (control ad and mono-ethnic ad = 0; multi-ethnic ad = 1). ^c belief congruence grand centred.

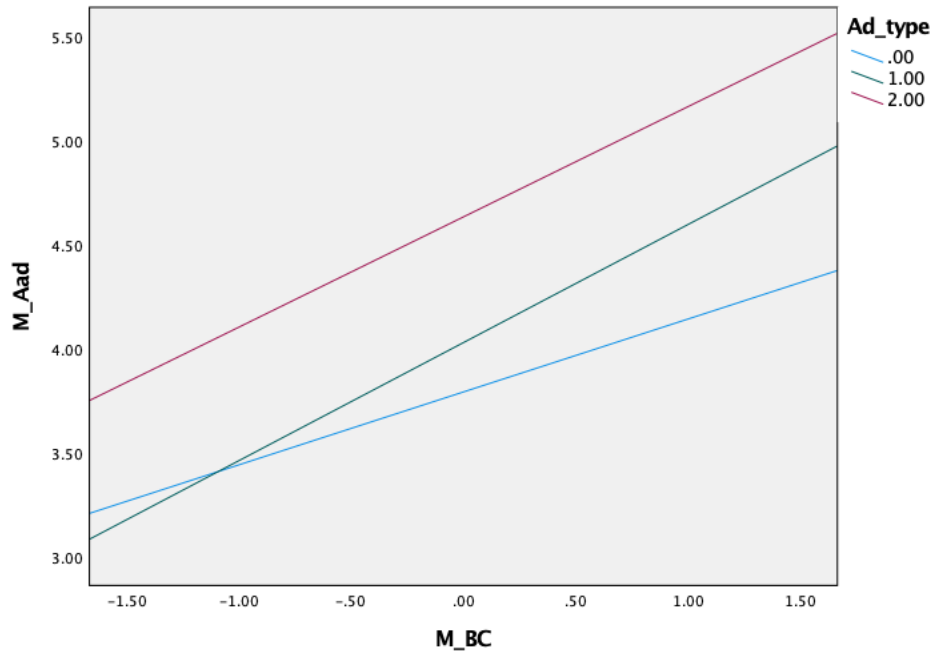


Figure 5.1. Moderation effect of the centred mean of belief congruence on advertising type and average attitude towards the ad (.00 = control ad, 1.00 = mono-ethnic ad, and 2.00 = multi-ethnic ad)

For the second moderated regressions analysis, dummy coding was used to compare the mono-ethnic ad with the multi-ethnic ad. Dummy coded variable advertising type was used as independent variable, average attitude towards the ad as dependent variable, and centred mean of belief congruence as moderator. The overall model reached significance, $R^2 = .44$, $F(3, 57) = 14.88$, $p < .000$. The results of this analysis are illustrated in table 5.2 and figure 5.2.

As can be seen from the results, those who saw the multi-ethnic ad did not significantly have a more favourable average attitude towards the ad in comparison to those who saw the mono-ethnic ad ($p = .054$). Moreover, in this model, belief congruence is also positively associated with average attitude towards the ad ($p < .001$), thereby accepting hypothesis 2a. Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of belief congruence, was not significant ($\Delta R^2 = .00$, $\Delta F(1, 57) = .03$, $p = .855$). Thus, based on both moderated regression analyses the relationship between advertising type and attitude towards the ad is not significantly moderated by the level of belief congruence, thereby rejecting hypothesis 3a.

Table 5.2. Summary of moderated regression analysis predicting attitude towards the ad

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	4.02	18.11	.000	3.57	4.46
Advertising type 01 (X) ^a	.60	1.97	.054	-.01	1.22
Belief congruence (W) ^b	.57	3.54	.001	.25	.89
Interaction 1 (X*W)	-.04	-.18	.855	-.45	.38

Note. Number of studies = 61. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Advertising type (0 = mono-ethnic ad, 1 = multi-ethnic ad). ^b belief congruence grand centred.

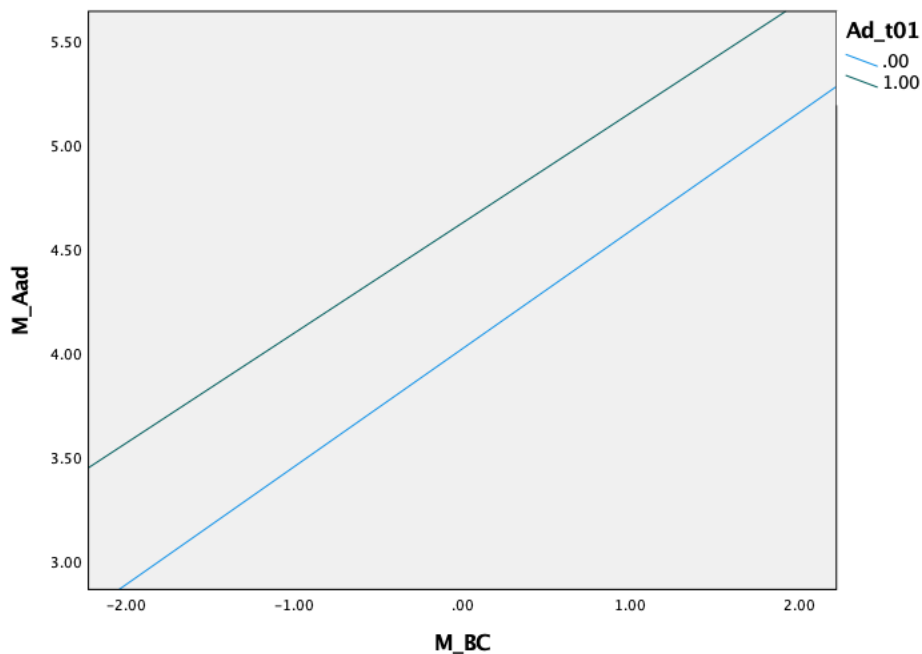


Figure 5.2. Moderation effect of the centred mean of belief congruence on advertising type and average attitude towards the ad (.00 = mono-ethnic ad, and 1.00 = multi-ethnic ad)

4.4.2 The main and moderating effect of belief congruence on attitude towards the brand

To test hypothesis 2b and 3b, two moderated regression analyses were conducted using PROCESS macro (model 1) (Hayes, 2022, p. 367). For the first moderated regression analysis, indicator coding was used for the independent variable (as it was a multicategorical variable) to compare the control ad with the mono-ethnic and multi-ethnic ads. Advertising type as independent variable, average attitude towards the brand as dependent variable, and the centred mean of belief congruence as moderator. The overall model reached significance, $R^2 = .36$, $F(5, 88) = 10.01$, $p < .000$. The results of this analysis are illustrated in table 5.3 and figure 5.3.

As can be seen from the results, those who saw the mono-ethnic ad did not significantly have a more favourable average attitude towards the brand in comparison to those who saw the control ad ($p = .642$). In contrast, those who saw the multi-ethnic ad did significantly have a more favourable average attitude towards the brand in comparison to those who saw the control ad ($p = .015$). Moreover, belief congruence is positively associated with average attitude towards the brand ($p = .014$). In addition, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and belief congruence, was not significant ($\Delta R^2 = .00$, $\Delta F(2, 88) = .21$, $p = .803$).

Table 5.3. Summary of moderated regression analysis predicting attitude towards the brand

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.76	21.75	.000	3.43	4.12
Mono-ethnic ad (X_1) ^a	.12	.47	.642	-.40	.64
Multi-ethnic ad (X_2) ^b	.63	2.47	.015	.12	1.14
Belief congruence (W) ^c	.37	2.51	.014	.08	.67
Interaction 1 (X_1*W)	.13	.65	.516	-.27	.54
Interaction 2 (X_2*W)	.05	.28	.778	-.32	.43

Note. Number of studies = 94. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Mono-ethnic ad (control ad and multi-ethnic ad = 0; mono-ethnic ad = 1). ^b Multi-ethnic ad (control ad and mono-ethnic ad = 0; multi-ethnic ad = 1). ^c belief congruence grand centred.

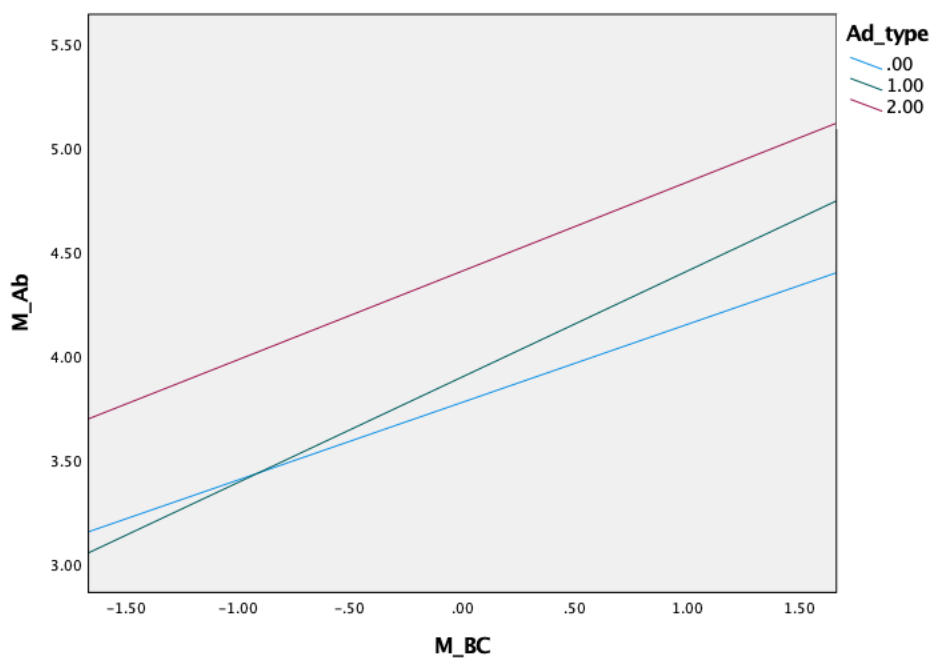


Figure 5.3. Moderation effect of the centred mean of belief congruence on advertising type and average attitude towards the brand (.00 = control ad, 1.00 = mono-ethnic ad, and 2.00 = multi-ethnic ad).

For the second moderated regressions analysis, dummy coding was used to compare the mono-ethnic ad with the multi-ethnic ad. Dummy coded variable advertising type was used as independent variable, average attitude towards the brand as dependent variable, and centred mean of belief congruence as moderator. The overall model reached significance, $R^2 = .45$, $F(3, 57) = 15.32$, $p < .000$. The results of this analysis are illustrated in table 5.4 and figure 5.4.

As can be seen from the results, those who saw the multi-ethnic ad did not significantly have a more favourable average attitude towards the brand in comparison to those who saw the mono-ethnic ad ($p = .052$). Moreover, in this model, belief congruence is also positively associated with average attitude towards the brand ($p < .000$), thereby accepting hypothesis 2b. Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of belief congruence, was not significant ($\Delta R^2 = .00$, $\Delta F(1, 57) = .22$, $p = .641$). Thus, based on both moderated regression analyses the relationship between advertising type and attitude towards the brand is not significantly moderated by the level of belief congruence, thereby rejecting hypothesis 3b.

Table 5.4. Summary of moderated regression analysis predicting attitude towards the brand

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.88	21.02	.000	3.52	4.26
Advertising type 01 (X) ^a	.51	1.99	.052	-.00	1.02
Belief congruence (W) ^b	.51	3.80	.000	.24	.78
Interaction 1 (X*W)	-.08	-.47	.641	-.43	.26

Note. Number of studies = 61. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Advertising type (0 = mono-ethnic ad, 1 = multi-ethnic ad). ^b belief congruence grand centred.

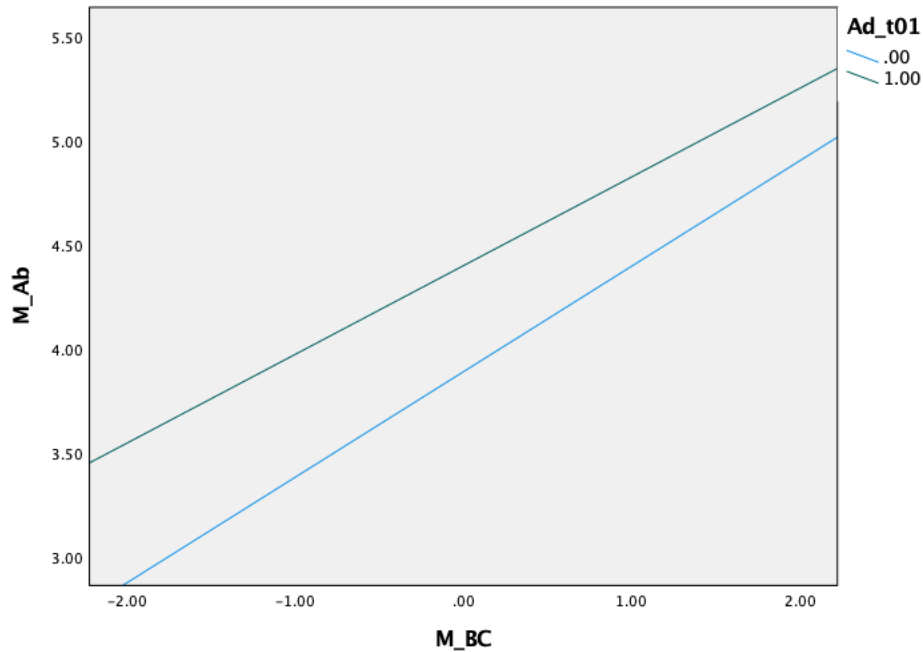


Figure 5.4. Moderation effect of the centred mean of belief congruence on advertising type and average attitude towards the brand (.00 = mono-ethnic ad, and 1.00 = multi-ethnic ad)

4.4.3 The main and moderating effect of belief congruence on purchase intention

To test hypothesis 2c and 3c, two moderated regression analyses were conducted using PROCESS macro (model 1) (Hayes, 2022, p. 367). For the first moderated regression analysis, indicator coding was used for the independent variable (as it was a multicategorical variable) to compare the control ad with the mono-ethnic and multi-ethnic ads. Advertising type as independent variable, average purchase intention as dependent variable, and the centred mean of belief congruence as moderator. The overall model reached significance, $R^2 = .48$, $F(5, 88) = 16.06$, $p < .000$. The results of this analysis are illustrated in table 5.5 and figure 5.5.

As can be seen from the results, those who saw the mono-ethnic ad did not significantly have a stronger average purchase intention in comparison to those who saw the control ad ($p = .506$). In addition, those who saw the multi-ethnic ad did not significantly have a stronger purchase intention in comparison to those who saw the control ad ($p = .057$). Moreover, belief congruence is positively associated with average purchase intention ($p < .000$). Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of belief congruence, was not significant ($\Delta R^2 = .00$, $\Delta F(2, 88) = .13$, $p = .869$).

Table 5.5. Summary of moderated regression analysis predicting purchase intention

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.17	14.54	.000	2.73	3.60
Mono-ethnic ad (X_1) ^a	.22	.67	.506	-.43	.87
Multi-ethnic ad (X_2) ^b	.62	1.93	.057	-.02	1.25
Belief congruence (W) ^c	.73	3.91	.000	.36	1.10
Interaction 1 (X_1*W)	.12	.46	.650	-.39	.63
Interaction 2 (X_2*W)	.01	.04	.969	-.46	.48

Note. Number of studies = 94. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Mono-ethnic ad (control ad and multi-ethnic ad = 0; mono-ethnic ad = 1). ^b Multi-ethnic ad (control ad and mono-ethnic ad = 0; multi-ethnic ad = 1). ^c belief congruence grand centred.

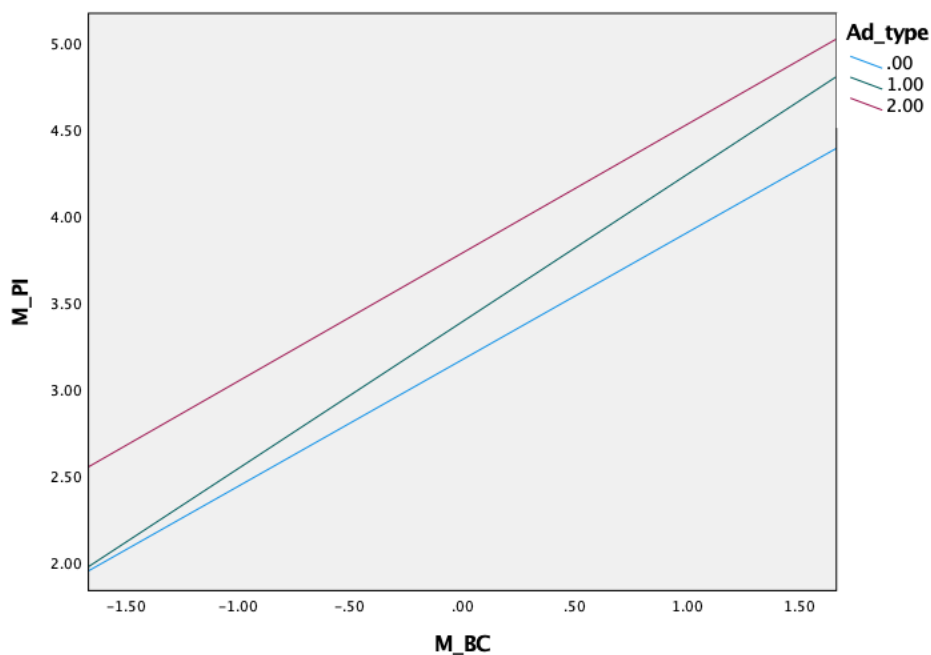


Figure 5.5. Moderation effect of the centred mean of belief congruence on advertising type and average purchase intention (.00 = control ad, 1.00 = mono-ethnic ad, and 2.00 = multi-ethnic ad)

For the second moderated regressions analysis, dummy coding was used to compare the mono-ethnic ad with the multi-ethnic ad. Dummy coded variable advertising type was used as independent variable, average purchase intention as dependent variable, and centred mean of belief congruence as moderator. The overall model reached significance, $R^2 = .56$, $F(3, 57) = 24.05$, $p < .000$. The results of this analysis are illustrated in table 5.6 and figure 5.6.

As can be seen from the results, those who saw the multi-ethnic ad did not significantly have a stronger average purchase intention in comparison to those who saw the mono-ethnic ad ($p = .215$). Moreover, in this model, belief congruence is also positively associated with average purchase intention ($p < .000$), thereby accepting hypothesis 2c. Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of belief congruence, was not significant ($\Delta R^2 = .00$, $\Delta F(1, 57) = .26$, $p = .615$). Thus, based on both moderated regression analyses the relationship between advertising type and purchase intention is not significantly moderated by the level of belief congruence, thereby rejecting hypothesis 3c.

Table 5.6. Summary of moderated regression analysis predicting purchase intention

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.37	14.69	.000	2.91	3.83
Advertising type 01 (X) ^a	.40	1.25	.215	-.24	1.04
Belief congruence (W) ^b	.85	5.13	.000	.52	1.18
Interaction 1 (X*W)	-.11	-.51	.615	-.54	.32

Note. Number of studies = 61. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Advertising type (0 = mono-ethnic ad, 1 = multi-ethnic ad). ^b belief congruence grand centred.

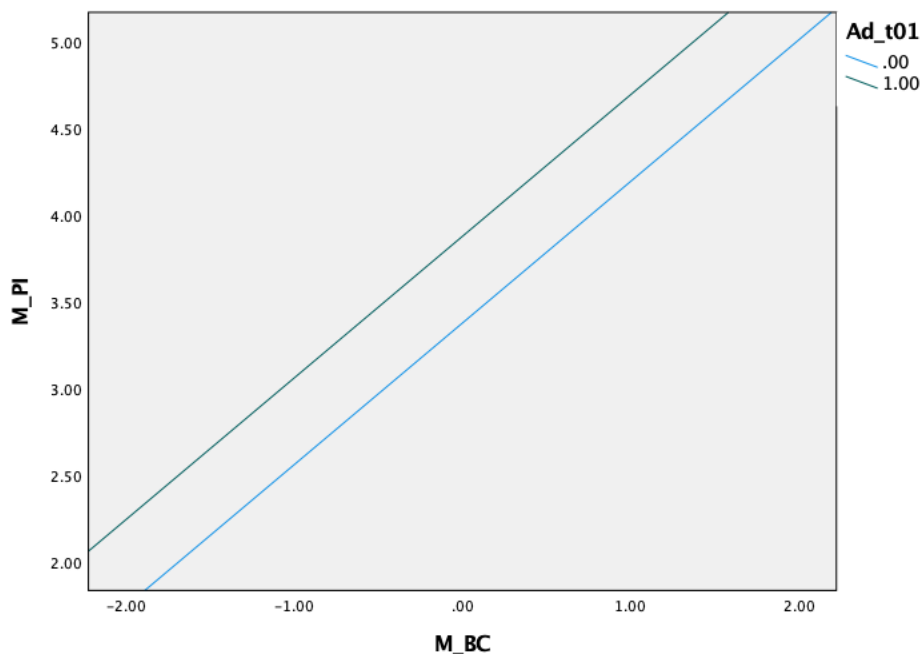


Figure 5.6. Moderation effect of the centred mean of belief congruence on advertising type and average purchase intention (.00 = mono-ethnic ad, and 1.00 = multi-ethnic ad)

4.5 The main and moderating effect of diversity ad sentiment on advertising effects

4.5.1 The main and moderating effect of diversity ad sentiment on attitude towards the ad

To test hypothesis 4a and 5a, two moderated regression analyses were conducted using PROCESS macro (model 1) (Hayes, 2022, p. 367). For the first moderated regression analysis, indicator coding was used for the independent variable (as it was a multicategorical variable) to compare the control ad with the mono-ethnic and multi-ethnic ads. Advertising type as independent variable, average attitude towards the ad as dependent variable, and the centred mean of diversity ad sentiment as moderator. The overall model reached significance, $R^2 = .56$, $F(5, 88) = 22.63$, $p < .000$. The results of this analysis are illustrated in table 5.7 and figure 5.7.

As can be seen from the results, those who saw the mono-ethnic ad did not significantly have a less favourable average attitude towards the ad in comparison to those who saw the control ad ($p = .718$). In contrast, those who saw the multi-ethnic ad did significantly have a more favourable average attitude towards the ad in comparison to those who saw the control ad ($p = .027$). Moreover, diversity ad sentiment is positively associated with average attitude towards the ad ($p < .000$). Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of diversity ad sentiment, was not significant ($\Delta R^2 = .02$, $\Delta F(2, 88) = 2.18$, $p = .119$).

Table 5.7. Summary of moderated regression analysis predicting attitude towards the ad

	<i>b</i>	<i>t</i>	<i>p</i>	95% CI	
				<i>LL</i>	<i>UL</i>
Constant	3.95	23.62	.000	3.62	4.28
Mono-ethnic ad (X_1) ^a	-.09	-.36	.718	-.56	.39
Multi-ethnic ad (X_2) ^b	.55	2.26	.027	.07	1.04
Diversity ad sentiment (W) ^c	.53	3.77	.000	.25	.81
Interaction 1 (X_1*W)	.39	1.77	.080	-.05	.82
Interaction 2 (X_2*W)	.36	1.79	.077	-.04	.76

Note. Number of studies = 94. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Mono-ethnic ad (control ad and multi-ethnic ad = 0; mono-ethnic ad = 1). ^b Multi-ethnic ad (control ad and mono-ethnic ad = 0; multi-ethnic ad = 1). ^c diversity ad sentiment grand centred.

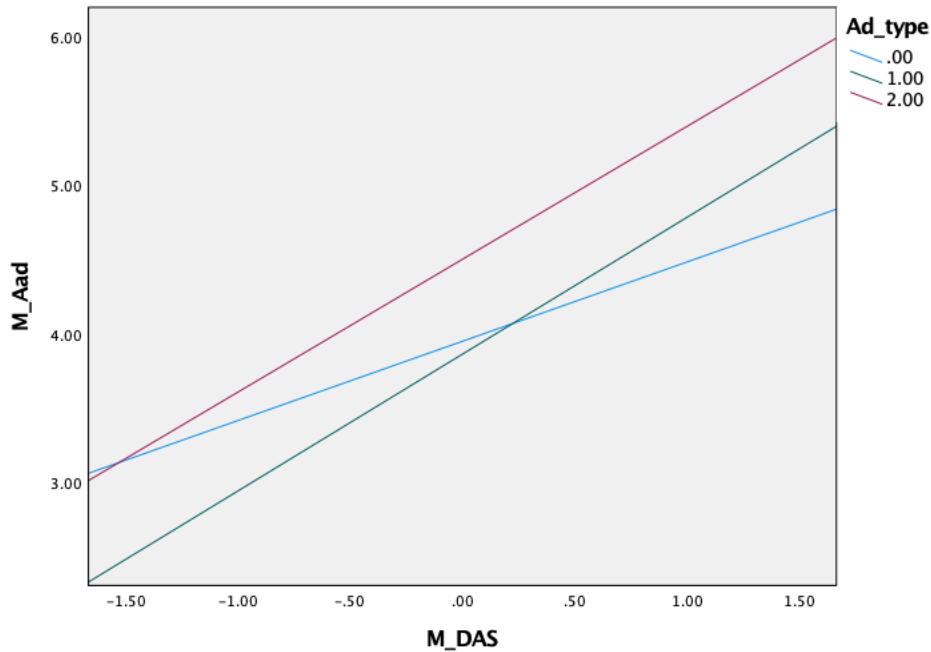


Figure 5.7. Moderation effect of the centred mean of diversity ad sentiment on advertising type and average attitude towards the ad (.00 = control ad, 1.00 = mono-ethnic ad, and 2.00 = multi-ethnic ad).

For the second moderated regressions analysis, dummy coding was used to compare the mono-ethnic ad with the multi-ethnic ad. Dummy coded variable advertising type was used as independent variable, average attitude towards the ad as dependent variable, and centred mean of diversity ad sentiment as moderator. The overall model reached significance, $R^2 = .62$, $F(3, 57) = 30.92$, $p < .000$. The results of this analysis are illustrated in table 5.8 and figure 5.8.

As can be seen from the results, those who saw the multi-ethnic ad did significantly have a more favourable average attitude towards the ad in comparison to those who saw the mono-ethnic ad ($p = .013$). Moreover, in this model, belief congruence is also positively associated with average attitude towards the ad ($p < .000$), thereby accepting hypothesis 4a. Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of diversity ad sentiment, was not significant ($\Delta R^2 = .00$, $\Delta F(1, 57) = .01$, $p = .905$). Thus, based on both moderated regression analyses the relationship between advertising type and attitude towards the ad is not significantly moderated by the level of diversity ad sentiment, thereby rejecting hypothesis 5a.

Table 5.8. Summary of moderated regression analysis predicting attitude towards the ad

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	4.00	22.60	.000	3.64	4.35
Advertising type 01 (X) ^a	.63	2.57	.013	.14	1.13
Diversity ad sentiment (W) ^b	.92	5.54	.000	.59	1.25
Interaction 1 (X*W)	-.03	-.12	.905	-.47	.41

Note. Number of studies = 61. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Advertising type (0 = mono-ethnic ad, 1 = multi-ethnic ad). ^b diversity ad sentiment grand centred.

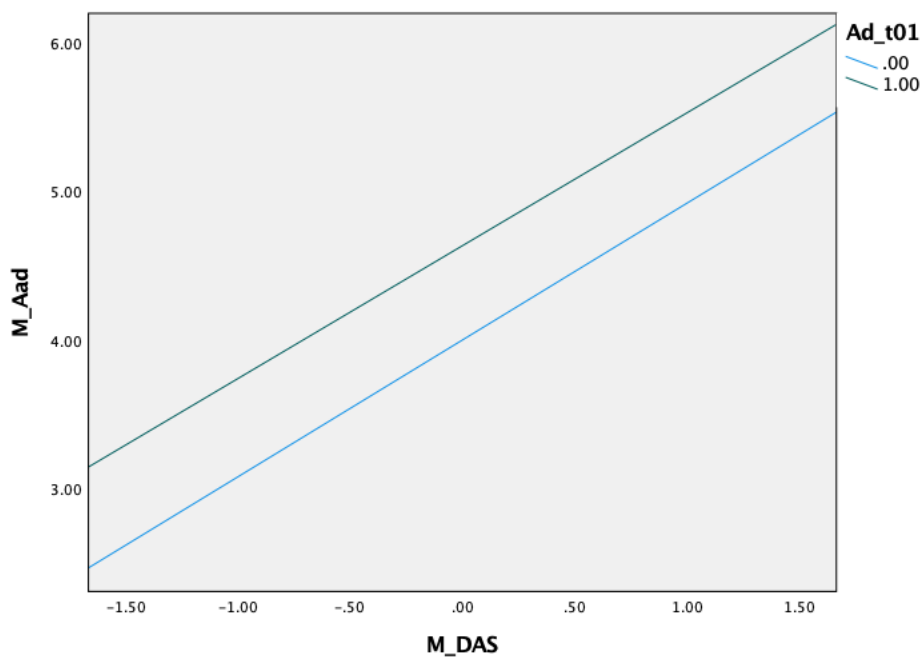


Figure 5.8. Moderation effect of the centred mean of diversity ad sentiment on advertising type and average attitude towards the ad (.00 = mono-ethnic ad, and 1.00 = multi-ethnic ad)

4.5.2 The main and moderating effect of diversity ad sentiment on attitude towards the brand

To test hypothesis 4b and 5b, two moderated regression analyses were conducted using PROCESS macro (model 1) (Hayes, 2022, p. 367). For the first moderated regression analysis, indicator coding was used for the independent variable (as it was a multicategorical variable) to compare the control ad with the mono-ethnic and multi-ethnic ads. Advertising type as independent variable, average attitude towards the brand as dependent variable, and the centred mean of diversity ad sentiment as moderator. The overall model reached significance, $R^2 = .52$, $F(5, 88) = 18.90$, $p < .000$. The results of this analysis are illustrated in table 5.9 and figure 5.9.

As can be seen from the results, those who saw the mono-ethnic ad did not significantly have a less favourable average attitude towards the brand in comparison to those who saw the control ad ($p = .407$). In addition, those who saw the multi-ethnic ad did not significantly have a more favourable average attitude towards the brand in comparison to those who saw the control ad ($p = .094$). Moreover, diversity ad sentiment is positively associated with average attitude towards the brand ($p < .000$). Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of diversity ad sentiment, was not significant ($\Delta R^2 = .01$, $\Delta F(2, 88) = 1.07$, $p = .349$).

Table 5.9. Summary of moderated regression analysis predicting attitude towards the brand

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.94	25.38	.000	3.63	4.24
Mono-ethnic ad (X_1) ^a	-.19	-.83	.407	-.63	.26
Multi-ethnic ad (X_2) ^b	.38	1.69	.094	-.07	.84
Diversity ad sentiment (W) ^c	.54	4.12	.000	.28	.80
Interaction 1 (X_1*W)	.30	1.46	.148	-.11	.70
Interaction 2 (X_2*W)	.13	.71	.478	-.24	.50

Note. Number of studies = 94. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Mono-ethnic ad (control ad and multi-ethnic ad = 0; mono-ethnic ad = 1). ^b Multi-ethnic ad (control ad and mono-ethnic ad = 0; multi-ethnic ad = 1). ^c diversity ad sentiment grand centred.

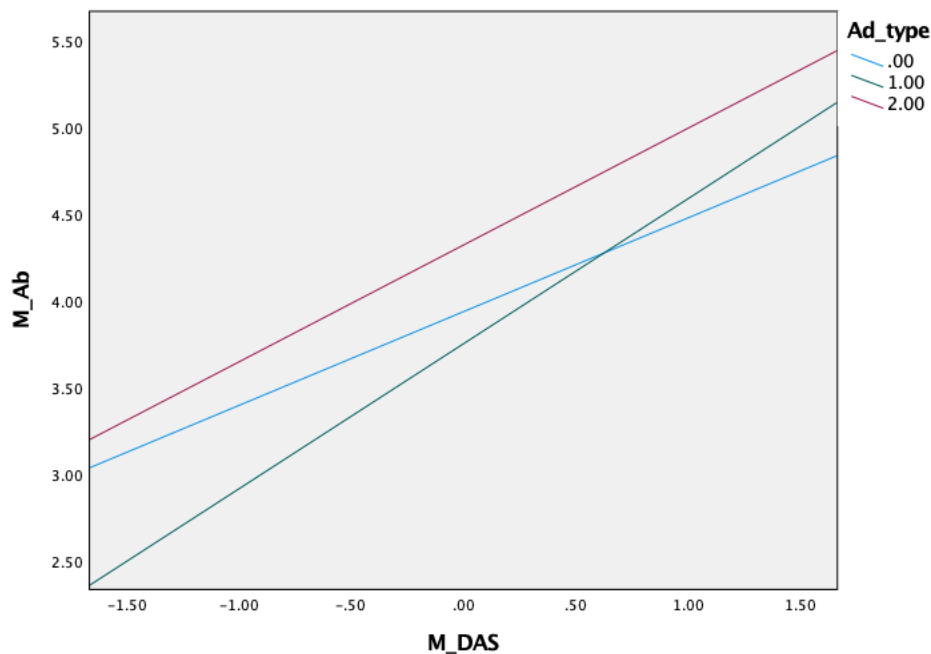


Figure 5.9. Moderation effect of the centred mean of diversity ad sentiment on advertising type and average attitude towards the brand (.00 = control ad, 1.00 = mono-ethnic ad, and 2.00 = multi-ethnic ad).

For the second moderated regressions analysis, dummy coding was used to compare the mono-ethnic ad with the multi-ethnic ad. Dummy coded variable advertising type was used as independent variable, average attitude towards the brand as dependent variable, and centred mean of diversity ad sentiment as moderator. The overall model reached significance, $R^2 = .61$, $F(3, 57) = 28.75$, $p < .000$. The results of this analysis are illustrated in table 5.10 and figure 5.10.

As can be seen from the results, those who saw the multi-ethnic ad did significantly have a more favourable average attitude towards the brand in comparison to those who saw the mono-ethnic ad ($p = .012$). Moreover, in this model, diversity ad sentiment is also positively associated with average attitude towards the brand ($p < .000$), thereby accepting hypothesis 4b. Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of diversity ad sentiment, was not significant ($\Delta R^2 = .01$, $\Delta F(1, 57) = .76$, $p = .387$). Thus, based on both moderated regression analyses the relationship between advertising type and attitude towards the brand is not significantly moderated by the level of diversity ad sentiment, thereby rejecting hypothesis 5b.

Table 5.10. Summary of moderated regression analysis predicting attitude towards the brand

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.87	25.69	.000	3.57	4.18
Advertising type 01 (X) ^a	.55	2.59	.012	.12	.98
Diversity ad sentiment (W) ^b	.84	5.90	.000	.55	1.12
Interaction 1 (X*W)	-.16	-.87	.387	-.54	.21

Note. Number of studies = 61. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Advertising type (0 = mono-ethnic ad, 1 = multi-ethnic ad). ^b diversity ad sentiment grand centred.

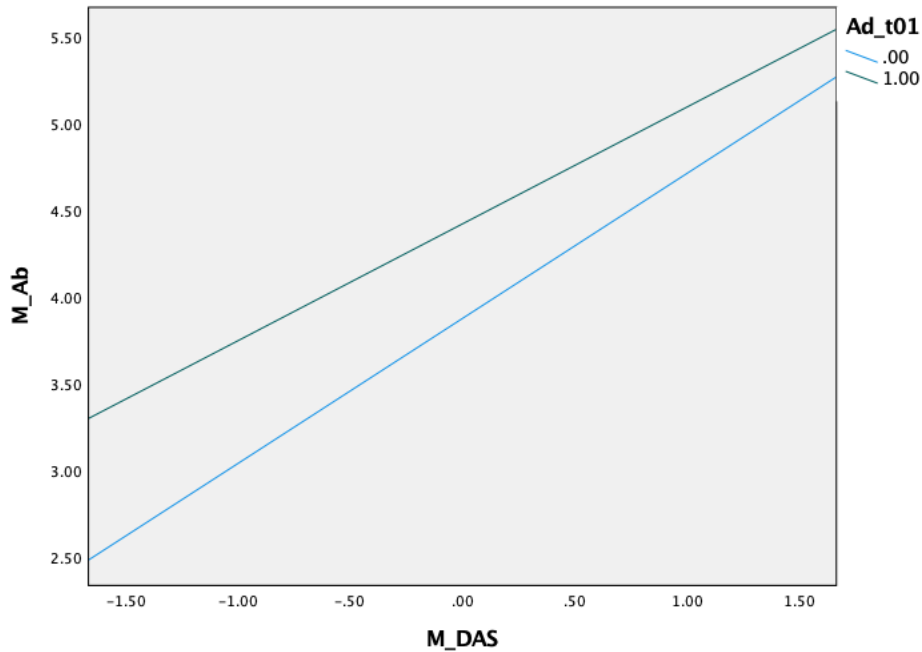


Figure 5.10. Moderation effect of the centred mean of diversity ad sentiment on advertising type and average attitude towards the brand (.00 = mono-ethnic ad, and 1.00 = multi-ethnic ad)

4.5.3 The main and moderating effect of diversity ad sentiment on purchase intention

To test hypothesis 4c and 5c, two moderated regression analyses were conducted using PROCESS macro (model 1) (Hayes, 2022, p. 367). For the first moderated regression analysis, indicator coding was used for the independent variable (as it was a multicategorical variable) to compare the control ad with the mono-ethnic and multi-ethnic ads. Advertising type as independent variable, average purchase intention as dependent variable, and the centred mean of diversity ad sentiment as moderator. The overall model reached significance, $R^2 = .60$, $F(5, 88) = 24.52$, $p < .000$. The results of this analysis are illustrated in table 5.11 and figure 5.11.

As can be seen from the results, those who saw the mono-ethnic ad did not significantly have a weaker average purchase intention in comparison to those who saw the control ad ($p = .244$). In addition, those who saw the multi-ethnic ad did not significantly have a stronger average purchase intention in comparison to those who saw the control ad ($p = .523$). Moreover, diversity ad sentiment is positively associated with average purchase intention ($p < .000$). Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of diversity ad sentiment, was not significant ($\Delta R^2 = .01$, $\Delta F(2, 88) = 1.19$, $p = .310$).

Table 5.11. Summary of moderated regression analysis predicting purchase intention

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.43	17.40	.000	3.04	3.82
Mono-ethnic ad (X_1) ^a	-.33	-1.17	.244	-.89	.23
Multi-ethnic ad (X_2) ^b	.19	.64	.523	-.39	.76
Diversity ad sentiment (W) ^c	.86	5.15	.000	.53	1.19
Interaction 1 (X_1*W)	.22	.86	.393	-.29	.73
Interaction 2 (X_2*W)	.36	1.53	.129	-.11	.83

Note. Number of studies = 94. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Mono-ethnic ad (control ad and multi-ethnic ad = 0; mono-ethnic ad = 1). ^b Multi-ethnic ad (control ad and mono-ethnic ad = 0; multi-ethnic ad = 1). ^c diversity ad sentiment grand centred.

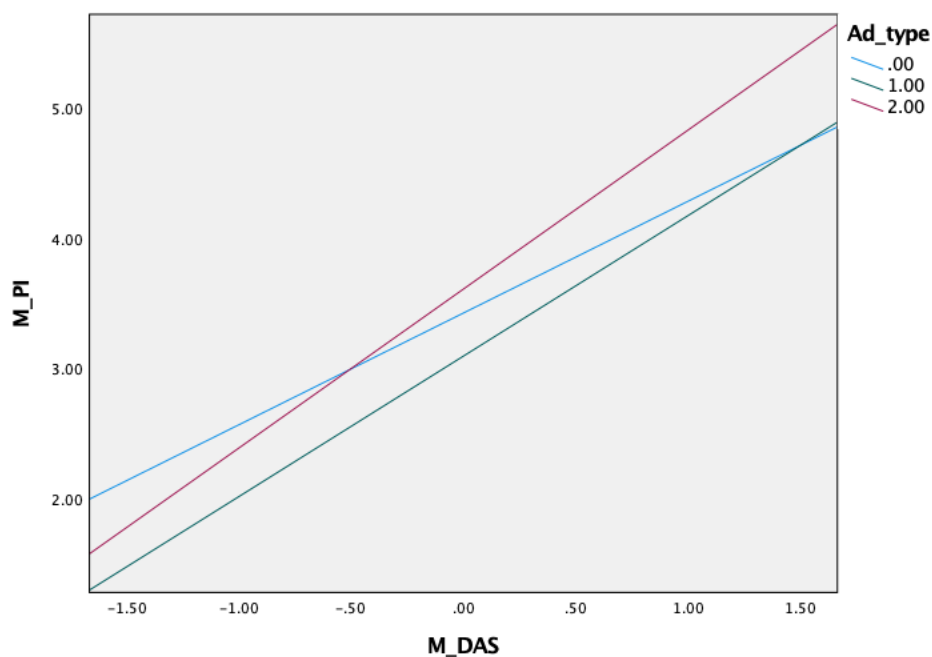


Figure 5.11. Moderation effect of the centred mean of diversity ad sentiment on advertising type and average purchase intention (.00 = control ad, 1.00 = mono-ethnic ad, and 2.00 = multi-ethnic ad).

For the second moderated regressions analysis, dummy coding was used to compare the mono-ethnic ad with the multi-ethnic ad. Dummy coded variable advertising type was used as independent variable, average purchase intention as dependent variable, and centred mean of diversity ad sentiment as moderator. The overall model reached significance, $R^2 = .69$, $F(3, 57) = 41.79$, $p < .000$. The results of this analysis are illustrated in table 5.12. and figure 5.12.

As can be seen from the results, those who saw the multi-ethnic ad did significantly have a stronger average purchase intention in comparison to those who saw the mono-ethnic ad ($p = .044$). Moreover, in this model, belief congruence is positively associated with average purchase intention ($p < .000$), thereby accepting hypothesis 4c. Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of diversity ad sentiment, was not significant ($\Delta R^2 = .00$, $\Delta F(1, 57) = .38$, $p = .541$). Thus, based on both moderated regression analyses the relationship between advertising type and purchase intention is not significantly moderated by the level of diversity ad sentiment, thereby rejecting hypothesis 5c.

Table 5.12. Summary of moderated regression analysis predicting purchase intention

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.25	17.42	.000	2.88	3.63
Advertising type 01 (X) ^a	.54	2.06	.044	-.02	1.06
Diversity ad sentiment (W) ^b	1.08	6.15	.000	.73	1.43
Interaction 1 (X*W)	.14	.61	.541	-.32	.61

Note. Number of studies = 61. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Advertising type (0 = mono-ethnic ad, 1 = multi-ethnic ad). ^b diversity ad sentiment grand centred.

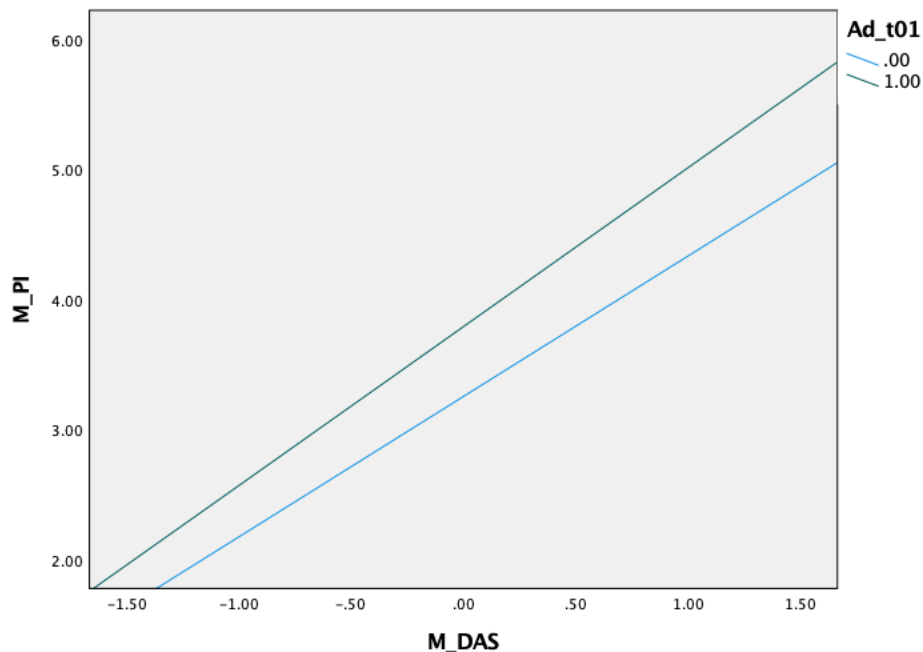


Figure 5.12. Moderation effect of the centred mean of diversity ad sentiment on advertising type and average purchase intention (.00 = mono-ethnic ad, and 1.00 = multi-ethnic ad)

4.6 The main and moderating effect of social connectedness on advertising effects

4.6.1 The main and moderating effect of social connectedness on attitude towards ad

To test hypothesis 6a and 7a, two moderated regression analyses were conducted using PROCESS macro (model 1) (Hayes, 2022, p. 367). For the first moderated regression analysis, indicator coding was used for the independent variable (as it was a multicategorical variable) to compare the control ad with the mono-ethnic and multi-ethnic ads. Advertising type as independent variable, average attitude towards the ad as dependent variable, and the centred mean of social connectedness as moderator. The overall model reached significance, $R^2 = .51$, $F(5, 88) = 18.00$, $p < .000$. The results of this analysis are illustrated in table 5.13 and figure 5.13,

As can be seen from the results, those who saw the mono-ethnic ad did not significantly have a more favourable average attitude towards the ad in comparison to those who saw the control ad ($p = .485$). In addition, those who saw the multi-ethnic ad did not significantly have a more favourable average attitude towards the ad in comparison to those who saw the control ad ($p = .096$). Moreover, social connectedness is positively associated with average attitude towards the ad ($p < .001$). Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of social connectedness, was not significant ($\Delta R^2 = .01$, $\Delta F(2, 88) = .57$, $p = .576$).

Table 5.13. Summary of moderated regression analysis predicting attitude towards the ad

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.92	22.24	.000	3.57	4.27
Mono-ethnic ad (X_1) ^a	.19	.70	.485	-.34	.71
Multi-ethnic ad (X_2) ^b	.45	1.68	.096	-.08	.98
Social connectedness (W) ^c	.51	3.40	.001	.21	.80
Interaction 1 (X_1*W)	.19	.92	.360	-.22	.61
Interaction 2 (X_2*W)	.18	.93	.354	-.21	.57

Note. Number of studies = 94. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Mono-ethnic ad (control ad and multi-ethnic ad = 0; mono-ethnic ad = 1). ^b Multi-ethnic ad (control ad and mono-ethnic ad = 0; multi-ethnic ad = 1). ^c social connectedness grand centred.

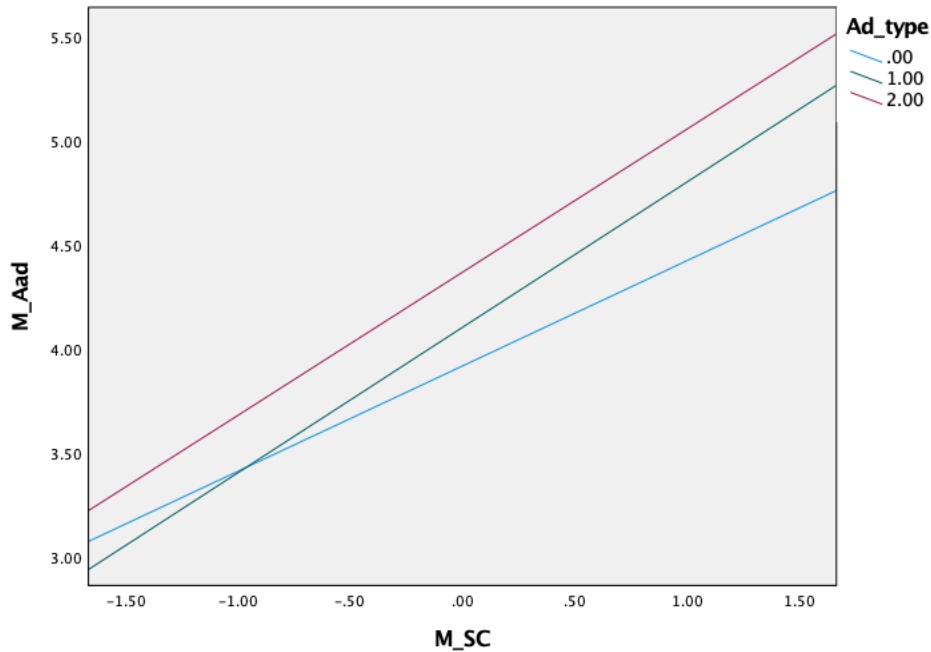


Figure 5.13. Moderation effect of the centred mean of social connectedness on advertising type and average attitude towards the ad (.00 = control ad, 1.00 = mono-ethnic ad, and 2.00 = multi-ethnic ad).

For the second moderated regressions analysis, dummy coding was used to compare the mono-ethnic ad with the multi-ethnic ad. Dummy coded variable advertising type was used as independent variable, average attitude towards the ad as dependent variable, and centred mean of social connectedness as moderator. The overall model reached significance, $R^2 = .55$, $F(3, 57) = 23.24$, $p < .000$. The results of this analysis are illustrated in table 5.14 and figure 5.14.

As can be seen from the results, those who saw the multi-ethnic ad did not significantly have a more favourable average attitude towards the ad in comparison to those who saw the mono-ethnic ad ($p = .364$). Moreover, in this model, social connectedness is also positively associated with average attitude towards the ad ($p < .000$), thereby accepting hypothesis 6a. Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of social connectedness, was not significant ($\Delta R^2 = .00$, $\Delta F(1, 57) = .00$, $p = .957$). Thus, based on both moderated regression analyses the relationship between advertising type and attitude towards the ad is not significantly moderated by the level of social connectedness, thereby rejecting hypothesis 7a.

Table 5.14. Summary of moderated regression analysis predicting attitude towards the ad

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	4.19	20.03	.000	3.77	4.60
Advertising type 01 (X) ^a	.26	.92	.364	-.31	.84
Social connectedness (W) ^b	.70	4.66	.000	.40	1.00
Interaction 1 (X*W)	-.01	-.05	.957	-.41	.39

Note. Number of studies = 61. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Advertising type (0 = mono-ethnic ad, 1 = multi-ethnic ad). ^b social connectedness grand centred.

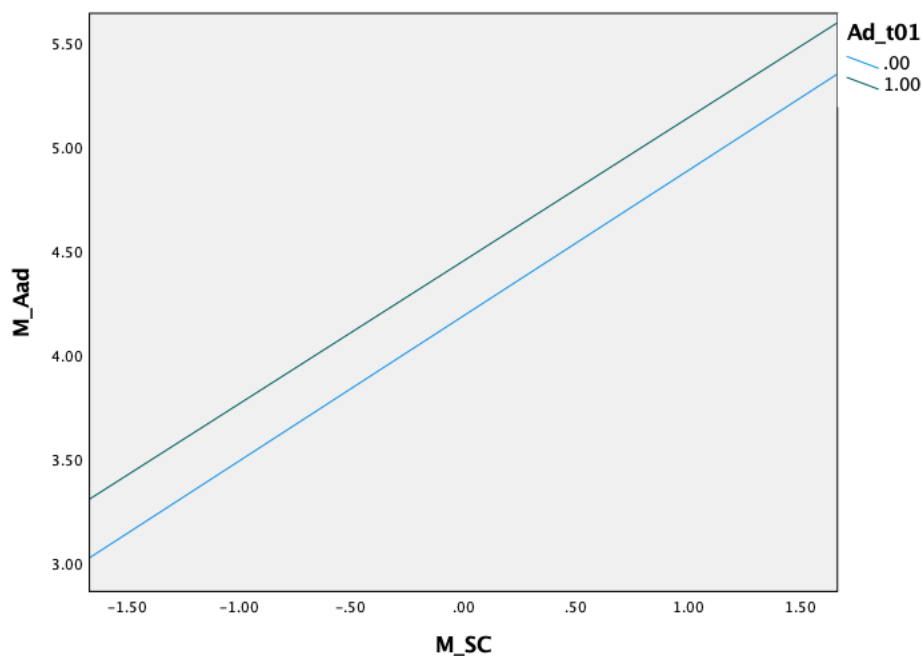


Figure 5.14. Moderation effect of the centred mean of social connectedness on advertising type and average attitude towards the ad (.00 = mono-ethnic ad, and 1.00 = multi-ethnic ad).

4.6.2 The main and moderating effect of social connectedness on attitude towards brand

To test hypothesis 6b and 7b two moderated regression analyses were conducted using PROCESS macro (model 1) (Hayes, 2022, p. 367). For the first moderated regression analysis, indicator coding was used for the independent variable (as it was a multicategorical variable) to compare the control ad with the mono-ethnic and multi-ethnic ads. Advertising type as independent variable, average attitude towards the brand as dependent variable, and the centred mean of social connectedness as moderator. The overall model reached significance, $R^2 = .41$, $F(5, 88) = 12.16$, $p < .000$. The results of this analysis are illustrated in table 5.15 and figure 5.15.

As can be seen from the results, those who saw the mono-ethnic ad did not significantly have a more favourable average attitude towards the brand in comparison to those who saw the control ad ($p = .892$). In addition, those who saw the multi-ethnic ad did not significantly have a more favourable average attitude towards the brand in comparison to those who saw the control ad ($p = .213$). Moreover, social connectedness is positively associated with average attitude towards the brand ($p = .004$). Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of social connectedness, was not significant ($\Delta R^2 = .00$, $\Delta F(2, 88) = .20$, $p = .812$).

Table 5.15. Summary of moderated regression analysis predicting attitude towards the brand

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.88	22.83	.000	3.55	4.22
Mono-ethnic ad (X_1) ^a	.04	.14	.892	-.47	.54
Multi-ethnic ad (X_2) ^b	.32	1.25	.213	-.19	.84
Social connectedness (W) ^c	.43	2.97	.004	.14	.71
Interaction 1 (X_1*W)	.11	.56	.575	-.29	.51
Interaction 2 (X_2*W)	.11	.57	.568	-.27	.48

Note. Number of studies = 94. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Mono-ethnic ad (control ad and multi-ethnic ad = 0; mono-ethnic ad = 1). ^b Multi-ethnic ad (control ad and mono-ethnic ad = 0; multi-ethnic ad = 1). ^c social connectedness grand centred.

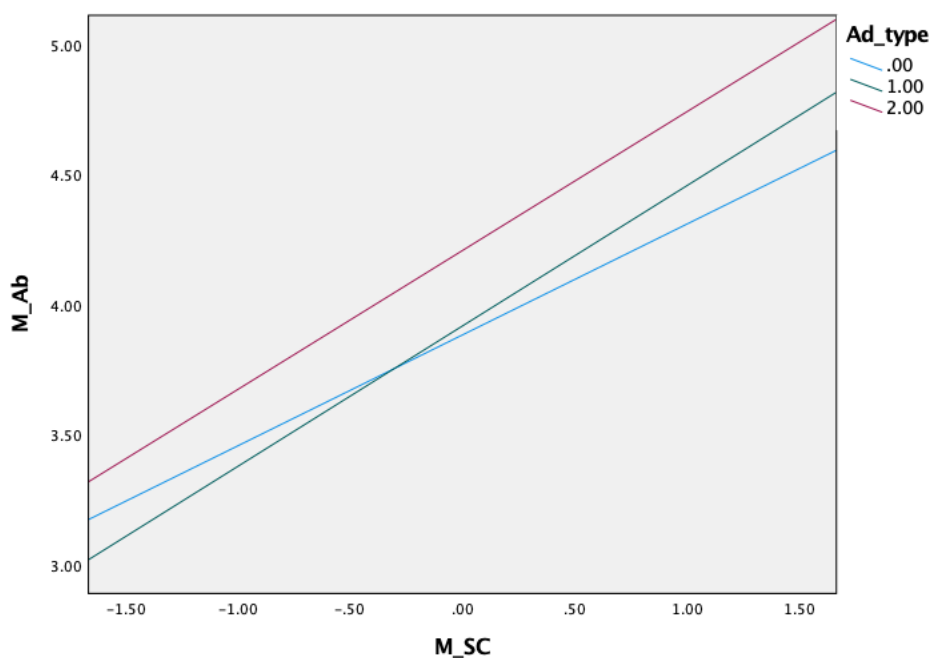


Figure 5.15. Moderation effect of the centred mean of social connectedness on advertising type and average attitude towards the brand (.00 = control ad, 1.00 = mono-ethnic ad, and 2.00 = multi-ethnic ad).

For the second moderated regressions analysis, dummy coding was used to compare the mono-ethnic ad with the multi-ethnic ad. Dummy coded variable advertising type was used as independent variable, average attitude towards the brand as dependent variable, and centred mean of social connectedness as moderator. The overall model reached significance, $R^2 = .50$, $F(3, 57) = 18.60$, $p < .000$. The results of this analysis are illustrated in table 5.16 and figure 5.16.

As can be seen from the results, those who saw the multi-ethnic ad did not significantly have a more favourable average attitude towards the brand in comparison to those who saw the mono-ethnic ad ($p = .265$). Moreover, in this model, social connectedness is also positively associated with average attitude towards the brand ($p < .000$), thereby accepting hypothesis 6b. Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of social connectedness, was not significant ($\Delta R^2 = .00$, $\Delta F(1, 57) = .00$, $p = .975$). Thus, based on both moderated regression analyses the relationship between advertising type and attitude towards the brand is not significantly moderated by the level of social connectedness, thereby rejecting hypothesis 7b.

Table 5.16. Summary of moderated regression analysis predicting attitude towards the brand

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.98	21.42	.000	3.61	4.35
Advertising type 01 (X) ^a	.29	1.13	.265	-.23	.80
Social connectedness (W) ^b	.54	4.05	.000	.27	.81
Interaction 1 (X*W)	-.01	-.03	.975	-.36	.35

Note. Number of studies = 61. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Advertising type (0 = mono-ethnic ad, 1 = multi-ethnic ad). ^b social connectedness grand centred.

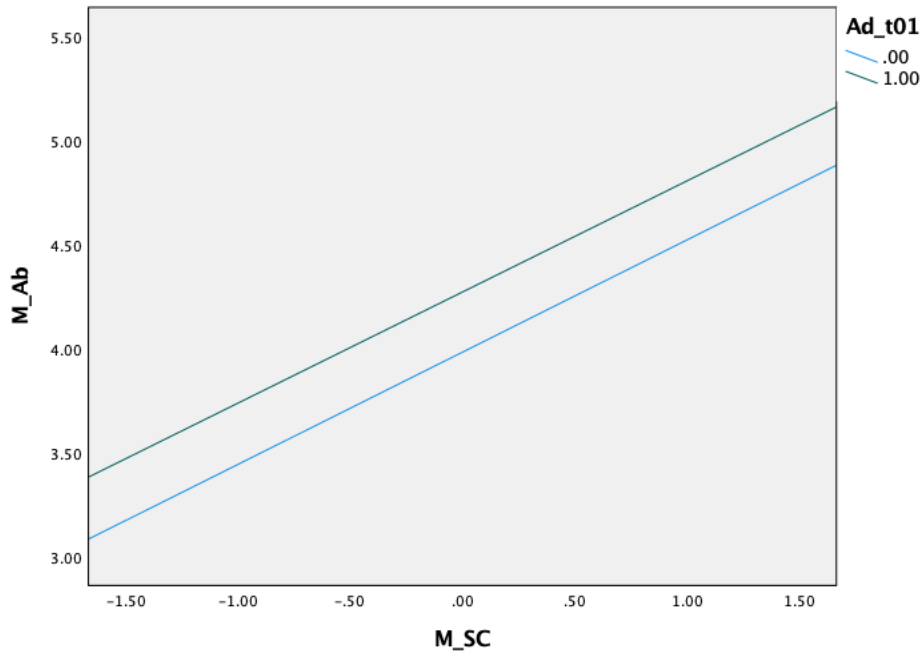


Figure 5.16. Moderation effect of the centred mean of social connectedness on advertising type and average attitude towards the brand (.00 = mono-ethnic ad, and 1.00 = multi-ethnic ad)

4.6.3 The main and moderating effect of social connectedness on purchase intention

To test hypothesis 6c and 7c two moderated regression analyses were conducted using PROCESS macro (model 1) (Hayes, 2022, p. 367). For the first moderated regression analysis, indicator coding was used for the independent variable (as it was a multicategorical variable) to compare the control ad with the mono-ethnic and multi-ethnic ads. Advertising type as independent variable, average purchase intention as dependent variable, and the centred mean of social connectedness as moderator. The overall model reached significance, $R^2 = .45$, $F(5, 88) = 14.37$, $p < .000$. The results of this analysis are illustrated in table 5.17 and figure 5.17.

As can be seen from the results, those who saw the mono-ethnic ad did not significantly have a stronger average purchase intention in comparison to those who saw the control ad ($p = .793$). In addition, those who saw the multi-ethnic ad did not significantly have a stronger average purchase intention in comparison to those who saw the control ad ($p = .599$). Moreover, social connectedness is positively associated with a purchase intention ($p = .004$). Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of social connectedness, was not significant ($\Delta R^2 = .01$, $\Delta F(2, 88) = .81$, $p = .450$).

Table 5.17. Summary of moderated regression analysis predicting purchase intention

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.32	14.60	.000	2.87	3.77
Mono-ethnic ad (X_1) ^a	.09	.26	.793	-.59	.77
Multi-ethnic ad (X_2) ^b	.18	.53	.599	-.50	.87
Social connectedness (W) ^c	.57	2.98	.004	.19	.95
Interaction 1 (X_1*W)	.31	1.15	.252	-.23	.85
Interaction 2 (X_2*W)	.27	1.07	.286	-.23	.77

Note. Number of studies = 94. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Mono-ethnic ad (control ad and multi-ethnic ad = 0; mono-ethnic ad = 1). ^b Multi-ethnic ad (control ad and mono-ethnic ad = 0; multi-ethnic ad = 1). ^c social connectedness grand centred.

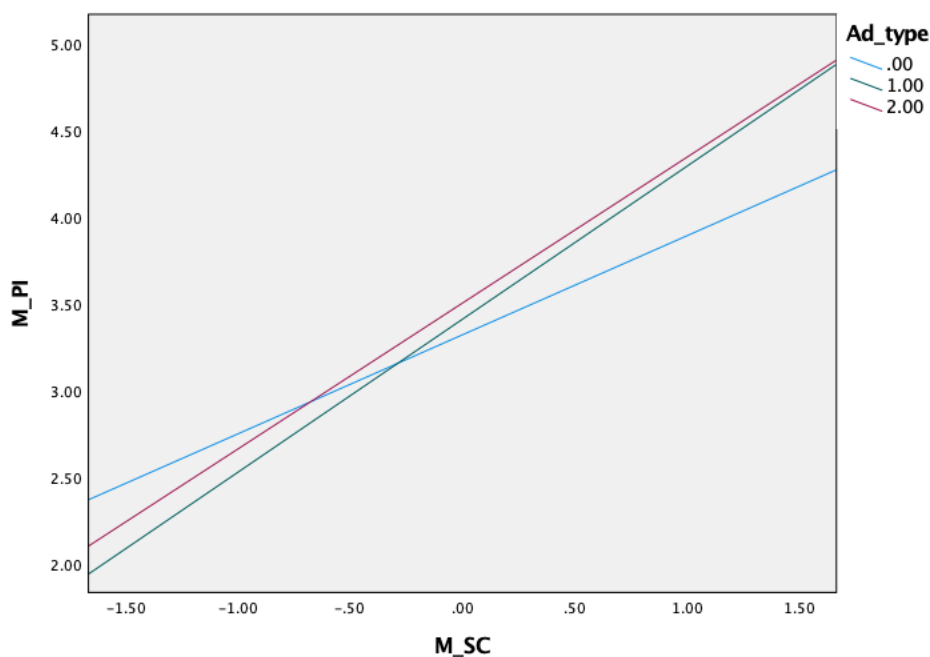


Figure 5.17. Moderation effect of the centred mean of social connectedness on advertising type and average purchase intention (.00 = control ad, 1.00 = mono-ethnic ad, and 2.00 = multi-ethnic ad).

For the second moderated regressions analysis, dummy coding was used to compare the mono-ethnic ad with the multi-ethnic ad. Dummy coded variable advertising type was used as independent variable, average purchase intention as dependent variable, and centred mean of social connectedness as moderator. The overall model reached significance, $R^2 = .57$, $F(3, 57) = 25.23$, $p < .000$. The results of this analysis are illustrated in table 5.18 and figure 5.18.

As can be seen from the results, those who saw the multi-ethnic ad did not significantly have a stronger average purchase intention in comparison to those who saw the mono-ethnic ad ($p = .790$). Moreover, in this model, social connectedness is also positively associated with average purchase intention ($p < .000$), thereby accepting H6c. Lastly, the test of unconditional interaction showed that the change in R^2 , due to the interaction of advertising type and the level of social connectedness, was not significant ($\Delta R^2 = .00$, $\Delta F(1, 57) = .03$, $p = .856$). Thus, based on both moderated regression analyses the relationship between advertising type and purchase intention is not significantly moderated by the level of social connectedness, thereby rejecting hypothesis 7c.

Table 5.18. Summary of moderated regression analysis predicting purchase intention

	<i>b</i>	<i>t</i>	<i>p</i>	95% <i>CI</i>	
				<i>LL</i>	<i>UL</i>
Constant	3.52	14.77	.000	3.04	3.99
Advertising type 01 (X) ^a	.09	.27	.790	-.57	.75
Social connectedness (W) ^b	.88	5.17	.000	.54	1.22
Interaction 1 (X*W)	-.04	-.18	.856	-.49	.41

Note. Number of studies = 61. CI = confidence interval; LL = lower limit; UL = upper limit.

^a Advertising type (0 = mono-ethnic ad, 1 = multi-ethnic ad). ^b social connectedness grand centred.

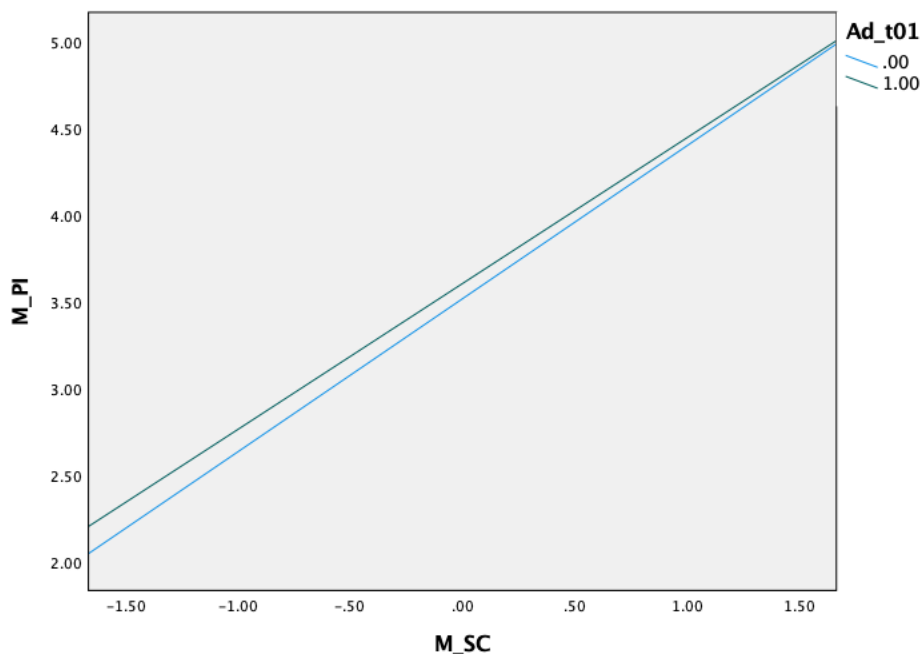


Figure 5.18. Moderation effect of the centred mean of social connectedness on advertising type and average purchase intention (.00 = mono-ethnic ad, and 1.00 = multi-ethnic ad)

Table 5.19. Overview hypotheses evaluations

Hypotheses	Accepted or rejected
H1 There is a significant difference in the effect amongst the mono-ethnic ad, multi-ethnic ad, and control ad on a) attitude towards the ad, b) attitude towards the brand, c) purchase intention.	Accepted
H2 Belief congruence has a positive effect on a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention.	Accepted
H3 The relationship between diversity and inclusion advertising types and a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention is moderated by the level of belief congruence.	Rejected
H4 Diversity ad sentiment has a positive effect on a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention.	Accepted
H5 The relationship between diversity and inclusion advertising types and a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention is moderated by the level of diversity ad sentiment.	Rejected
H6 Social connectedness has a positive effect on a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention compared to those who have low social connectedness.	Accepted
H7 The relationship between diversity and inclusion advertising types and a) attitude towards the ad, b) attitude towards the brand, and c) purchase intention is moderated by the level of social connectedness	Rejected

5 Discussion and conclusion

In this chapter a brief summary of the results and a conclusion to the research question will be given, followed by a discussion of the findings related to prior academic and managerial literature. Additionally, academic, and managerial implications will be presented. Lastly, limitations and future research will be presented.

5.1 Summary and conclusion of the main findings

This research investigated to what extent diversity and inclusion advertising type (mono-ethnic ad vs. multi-ethnic ad) is associated with advertising effects (attitude towards the ad, attitude towards the brand, and purchase intention), and to what extent this relationship is moderated by the three subdimensions of the concept social identity (belief congruence, diversity ad sentiment, and social connectedness). These concepts were used to conduct a one-way ANOVA and moderated multiple regressions using PROCESS macro (Hayes, 2022, p. 367).

In sum, the one-way ANOVA analysis found that advertising effects were significantly negatively associated with advertising type for Millennials and Gen Z who saw the mono-ethnic ad in comparison to the multi-ethnic ad. In other words, those who saw the mono-ethnic ad had a significantly less favourable attitude towards the ad, attitude towards the brand and weaker purchase intention compared to those who saw the multi-ethnic ad.

Furthermore, the moderated multiple regressions found that the three dimensions of social identity are significantly and positively associated with advertising effects. Meaning the level of belief congruence, diversity ad sentiment, and social connectedness significantly predict more favourable attitude towards the ad, attitude towards the brand and stronger purchase intention.

Having said that these three subdimensions do not significantly moderate the relationship between advertising type and advertising effects. Based on this, to answer the research question, in comparison to mono-ethnic ads, multi-ethnic ads are significantly and positively associated with advertising effects. Finally, though the three subdimensions of social identity are significantly positively associated with advertising effects, they do not moderate the relationship between advertising type and advertising effects.

5.2 Discussion of the main findings

In sum, the one-way ANOVA analysis found that the attitudes (i.e., attitude towards the ad and attitude towards the brand) amongst Millennials and Gen Z that saw the multi-ethnic ad were significantly more favourable than those who saw the control ad or mono-ethnic ad. Additionally, it was also found that purchase intention was significantly stronger only amongst Millennials and Gen Z that saw the multi-ethnic ad compared to the mono-ethnic ad. In other words, those that saw the multi-ethnic ad significantly had a more favourable attitude towards the ad, attitude towards the brand and purchase intention compared to those who saw the mono-ethnic ad.

These findings are in line with recent research that suggests that younger generations prefer diverse representation of society in marketing (Shao et al., 2023, pp. 1378, 1389). Though prior research emphasised the importance of race matching (Jones, 2010, p. 57), creating ethnically congruent ads (Khan et al., 2015, p. 224), and indicating that consumers prefer mono-ethnic (i.e., same-race) ads (Shao et al., 2023, p. 1378). Compared to previous generations, younger generations continue to grow up in more multi-ethnic environments, making their identities more cosmopolitan, global, and less ethnocentric, consequently igniting the preferences of ads that reflect similar identities and traits (Shao et al., 2023, pp. 1378, 1389). In fact, it appears that, for example, Millennials can be regarded as advocates for diverse and inclusive marketing efforts (Shao et al., 2023, p. 1389).

Furthermore, the moderated multiple regressions found that the three dimensions of social identity are significantly positively associated with advertising effects (main effects). Meaning, the level of belief congruence, diversity ad sentiment, and social connectedness significantly predicts more favourable attitude towards the ad, attitude towards the brand and a stronger purchase intention. This is in line with prior research as several studies found that different social identities are significantly associated with attitudes and intentions in different types of research (e.g., ethnic marketing ads and influencer marketing ads) (Baxter et al., 2016, p. 973; Farivar & Wang, 2022, p. 3; Khan et al., 2015, p. 219; Sierra et al., 2009, pp. 41-42).

Having said that, these three subdimensions do not significantly moderate the relationship between advertising type and advertising effects. This can be explained by the fact that, though social identity theory is ideal for explaining consumers' responses to ads (Sierra et al., 2009, p. 41), there are several factors that should be considered.

Firstly, as mentioned prior, the salience of an individual's social identity can influence perceptions and behaviour (Forehand et al., 2002, p. 1086). It has been argued that social identity can be a great predictor when the consumers' (social) identity has been explicitly labelled (Forehand et al., 2002, p. 1086). This can be determined by two factors: identity primes and social distinctiveness. Priming refers to "the use of cues (for example the perception or experience of something) to activate certain mental frames (for example values or norms) that then go on to act as guides for subsequent mental processes and behaviour" (Van Hoorn, 2018, p. 147). In this light, identity primes refer to a stimulus that cues or triggers an aspect of an individual's personal identity. In ads, identity priming can be done with references (e.g., through language, symbols, and/or visual imagery) that resonate with a particular social group (Forehand et al., 2002, p. 1087). Social distinctiveness describes how the perception of an individual's distinctive trait(s) become more salient than other (more common) traits when in a particular group environment because it is the most deviant trait compared to the rest of the group. When individuals become aware of their distinct differences, their social identity becomes more salient (Forehand et al., 2002, p. 1087). Thus, social distinctiveness is depended on the environment/context. To illustrate this McGuire et al. (1978) provided the following clarification:

"If I am a black woman in a group of white women, I tend to think of myself as a black; if I move to a group of black men, my blackness loses salience and I become more conscious of being a woman." (McGuire et al., 1978, p. 512).

In terms of ethnic marketing, the consumers' attitudes and intentions towards a specific ethnic-related stimulus depends on their own understanding of their self-concept or self-identity (Sierra et al., 2009, p. 42). Moreover, social identity theory can be categorised into specific identities (Maldonado et al., 2003, p. 5; Forehand et al., 2002, p. 1086). Prior research indicates that a particular social identity (e.g., ethnic identity, gender identity, generational identity, personal identity etc.) (Maldonado et al., 2003, p. 5) can be more predictive for consumers' attitudes and intentions (Forehand et al., 2002, p. 1086). Thus, concepts such as identification or distinctiveness help further explain the consumer's reaction to ads that contain ethnicity cues (Sierra et al., 2009, p. 42). Therefore, a more complex analysis, that considers the consumers' self-concept and a specific category of social identity, might help better determine if a moderation effect is present or not.

Secondly, it should be noted that the types of social identities are not mutually exclusive, meaning consumers can have multiple types of social identities that overlap (Forehand et al., 2002, p. 1087; Ross & Rouse, 2020, p. 1108). This phenomenon is also referred to as the concept of social identity complexity (Ross & Rouse, 2020, p. 1108) and considers "the nature of the subjective representation of multiple ingroup identities" (Roccas & Brewer, 2002, pp. 88-89). This theory considers that individuals belong to multiple social groups and that the degree of overlap between

social groups may vary considerably (Roccas & Brewer, 2002, p. 89). This variation is based on the individual's subjective perception on how much they differ or overlap with their ingroup members (Brewer et al., 2012, p. 531). Social identity complexity is mainly shaped by the individual's experienced social environment (e.g., race, religion, the environment individuals grow up in, etc.) (Brewer et al., 2012, p. 542). When the social environment is diverse, individuals are confronted with perspectives or group prototypes of different social groups, which can increase the formation of a complex social identity (Brewer et al., 2012, p. 531). In other words, in more heterogeneous social environments, the formation of complex social identities is more encouraged when there are more distinctive social groups and when the integration and management of new social identities lead to greater differentiation (Brewer et al., 2012, p. 542). Thus, an individual's social identity complexity may vary depending on the individual's development and the societal context (Brewer et al., 2012, p. 542).

Lastly, the consumers' response towards ads may vary depending on the type of product that is being advertised (Shao et al., 2023, p. 1379). Here a distinction is made between publicly (e.g., cosmetics) and privately (e.g., hygienic) consumed products. It was found that publicly consumed products are an extension of an individual's social image, and therefore enhances a consumers' social identity whilst privately consumed products are more associated with personal needs, used as an expression of an individual's internalized self-concept (Shao et al., 2023, pp. 1379, 1408). In terms of ethnic marketing, it has been found that multi-ethnic ads are more effective for both privately and publicly consumed products, whilst mono-ethnic ads are more effective for only privately consumed products (Shao et al., 2023, p. 1408).

In sum, it is crucial to consider the salience of an individual's social identity as this can be a greater predictor for attitudes and intentions (Forehand et al., 2002, p. 1086), especially when social identity has been explicitly labelled. This salience depends on several factors, such as an individual's self-concept. Though as individual can belong to multiple social groups, and therefore have multiple social identities, it is important to use specific cues to trigger an aspect of an individual's personal identity (i.e., identity primes) (Forehand et al., 2002, p. 1087). It should be noted that consumer's attitudes may vary depending on whether the products are consumed privately or publicly as this consumption can be perceived as an expression of oneself (Shao et al., 2023, pp. 1379, 1408). Furthermore, to further define an individual's self-concept, social distinctiveness, should be considered as context or the environment can also trigger a particular aspect of one's social identity, and is therefore of great importance (Sierra et al., 2009, p. 42). Lastly, individuals can have multiple social identities and as society becomes more heterogeneous, the manifestation of social identity complexity increases as the differentiation amongst (new) social groups become more distinctive and integrated (Brewer et al., 2012, pp. 531, 542).

5.3 Implications

This research provided empirical research regarding to what extent mono-ethnic vs. multi-ethnic ads influence advertising effects amongst Millennials and Gen Z by using the concept of social identity. Prior research often focuses on to what extent ads are ethnically congruent and often containing only one model. Therefore, this research contributed by utilizing a different concept, investigating the advertising effects when multiple models are displayed, specifically investigating these advertising effects with the perception of the younger generations, Millennials and Gen Z.

Though diversity and inclusion advertising is not a new concept, the discussion surrounding novel marketing practises/approaches has increased to determine what is most effective in this current society. In more recent research, it has been established that social identity is an important concept for marketers to consider, especially in the future. Given that the three subdimensions of social identity positively influence advertising effects, it is recommended for marketers to consider this concept rather than only using race matching to create ads that align with its consumers. This is not to say that marketers should completely move away from creating ethnically resonant ads as prior research already established that this is an effective and recommended marketing practise. Nevertheless, as this and prior research established, marketers should be mindful of the recent paradigm shift in society that advocates for diversity and inclusion (Wilkie et al., 2023, pp. 735-736). Younger generations are becoming more ethnically and culturally diverse, they are growing up in more multi-ethnic, global environments and less ethnocentric societies, consequently, stimulating the preference and need of ads that reflect these similar identities and traits (Shao et al., 2023, pp. 1378, 1389).

Having said that, as noted above, one's social identity can be rather complex, therefore, it is recommended for marketers to explicitly label the social identity they want to target (Forehand et al., 2002, p. 1086). To do this, marketers would first need to evaluate to what extent this (new) shift impacts their marketing efforts and if it is worth the investment to change: is it possible for the business operate as is or should the business slowly adapt with this shift? The answer to this question does not only depend on the business' own resources but also on their target audience (e.g., older vs. younger generation) and the product type (e.g., publicly, or privately consumed products). When marketers decide to adapt with this shift, they should consider identity priming: triggering a particular social identity (i.e., making one social identity more salient) by utilizing different cues in the ad (e.g., language, symbolic, or visual cues), and be mindful of consumers' personal process of self-categorization, how they perceive their social distinctiveness based on the context and/or environment.

5.4 Limitations and future research

Now that the research implications have been discussed, the limitations of this research need to be discussed. Firstly, it should be noted that the use of non-probability sampling methods, convenience and snowball sampling, are sampling methods that do not permit control over the representativeness of the sample, and therefore, this research cannot be generalized across the entire population of Millennials and Gen Z (Babbie, 2017, pp. 197-198). Moreover, though a diverse group of ethnicities participated in this experiment, the majority of the respondents were Dutch and resided in the Netherlands. The concepts and theory discussed in this research may not be applicable to other parts of the world, therefore, the findings cannot be generalized to other regions of the world.

Furthermore, the general assumption that younger generations respond more positively towards multi-ethnic ads was used, and though this has been supported by multiple different research, it is still recommended to investigate this in the sample. As noted, per social identity theory the notion of self-categorization and comparison is of great importance, and one's social identity can be quite complex, especially when a particular social identity is being triggered. Therefore, for a more holistic comprehension of the findings, future research should first test this assumption for optimal results. To do this, it is recommended to extend the research by considering social distinctiveness and social identity complexity to determine the salience of one's social identity within a specific context/environment.

Second, the stimuli for this research had a few limitations. To start off, the manipulated element was based on phenotypic feature skin colour, as diversification in the cosmetics industry is mainly communicated through the diverse offer of foundation shades. However, as defined by Thomas et al. (2023, p. 620), phenotypic features include skin colour, physical characteristics, religion, and origin, and cosmetics ads do not only focus on skin colour but also on the other phenotypic features (Figuroa, 2019, para. 2). Therefore, it is highly encouraged for future research to consider extending the research and include more phenotypic features when investigating diverse and inclusive representation in cosmetic advertisements. Additionally, due to the limited time and complexity of the analyses, it is further recommended to utilize ethnicity as control variable. This can further deepen the analysis and determine to what extent one's social identity can influence advertising effects, without the influence of ethnicity.

Moreover, as skin colour of the models depicted in the ad was used to communicate diversity, it was decided for the control group to depict only the clear foundation bottle. This may have been perceived as confusing to some participants as some follow-up questions referred to "people in the ad". This is further illustrated by the relatively high drop-out rate of those who saw the control ad (38.9%) compared to those who saw the mono-ethnic (18.9%) or multi-ethnic ad (18.9%).

In sum, quantitative research was an appropriate method to use because it helped determine a causal effect of diversity and inclusion advertising type and advertising effects, particularly

confirming the notion that Millennials and Gen Z prefer multi-ethnic ads compared to mono-ethnic ads. By doing so, the finding further motivates the need for future research of younger generations and how their attitudes and intentions change as the world changes (e.g., due to more globalisation, diversification, and a less ethnocentric society etc) (Shao et al., 2023, pp. 1378, 1389). Though earlier research advocated for ethnic congruent ads and recommend marketers to utilize ethnic cues to reach ethnic (minority) groups (Khan et al., 2015, p. 224). More recent research emerged making it evident that ethnic centred ads may become less applicable in the future, especially as more generations become more ethnically mixed, culturally aware, gaining different perspectives from different cultures/walk of life (Shao et al., 2023, pp. 1378, 1389). The novelty of these notions indicate that future research should conduct more comprehensive qualitative research to further explore this shift amongst younger generations and apply these findings in quantitative research setting to investigate to what extent this shift has or can change consumers attitudes of behaviours.

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7 Appendices

7.1 Appendix A: Pretest survey

Survey Flow

Block: Welcome (8 Questions)

BlockRandomizer: 1 - Evenly Present Elements

Standard: Control Condition Foundation (1 Question)

Standard: Experimental Condition Mono-ethnic Foundation (1 Question)

Standard: Experimental Condition Multi-ethnic (1 Question)

Standard: Manipulation check (2 Questions)

Standard: Demographics (5 Questions)

Standard: End of survey (2 Questions)

Page Break

Start of Block: Welcome

Introduction:

“Dear respondent,

Thank you for your interest in this research. I am inviting you to fill in a questionnaire. In this questionnaire, you will be shown an advertisement, which I would like you to evaluate. The purpose of this study is to investigate the advertising effects of face make-up advertisements. The questionnaire will take approximately 5-10 minutes to fill in. Please answer each question carefully and honestly, I am sincerely interested in your personal opinions. There are no right or wrong answers.

CONFIDENTIALITY OF DATA

All research data remain completely confidential and are collected in anonymous form. I will not be able to identify you. There are no foreseeable risks or discomforts associated with participating in this research.

VOLUNTARY

If you now decide not to participate in this research, this will not affect you. If you decide to cease your cooperation while filling in the questionnaire, this will in no way affect you either. You can cease your cooperation without giving reasons.

FURTHER INFORMATION

If you have questions about this research, in advance or afterwards, you can contact the responsible researcher, email: surveyresearcheur@gmail.com. This study has been approved by the Ethics Committee of Erasmus University Rotterdam. If you want to invoke your rights or if you have a question concerning privacy about this study, you can contact Erasmus University's DPO (Data Protection Officer) at fg@eur.nl.”

Age: Are you 18 years old or older?

- Yes, I am 18 or older (1)
- No, I am younger than 18 (2)

Skip To: End of Survey If Age = 2

Consent I consent to participate in the research project and the following has been explained to me: my participation is completely voluntary, my right to withdraw from the study at any time without any implications to me.

- I agree (1)
- I do not agree (2)

Skip To: End of Survey If Consent = 2

Wear make-up: Do you wear make-up?

- Yes, I do wear make-up (1)
- No, I do not wear make-up (2)

Skip To: End of Survey If Wear make-up = 2

Page Break

Explanation focus of survey: The beauty industry can be categorised in distinct sub-segments. This research focuses on the sub-segment make-up, specifically focusing on face make-up (e.g., powder, concealer, foundations). **This survey will focus on foundations.** Foundation is a make-up product that is used all over your face and/or neck to create a base.

Wear face make-up: Do you wear face make-up products?

- Yes, I do wear face make-up products (1)
 - No, I do not wear face make-up products (2)
-

Wear foundation: Do you wear foundation?

- Yes, I do wear foundation (1)
 - No, I do not wear foundation (2)
-

Frequency purchase foundation: How frequently do you purchase a new foundation?

- I do not purchase a new foundation (1)
- I purchase a new foundation once my current foundation is almost empty (2)
- I purchase a new foundation once my current foundation is expired (3)
- I purchase a new foundation if I want to try it out (4)

End of Block: Welcome

Start of Block: Control Condition Foundation

Instructions: Below you see an ad of Brand X promoting their newest foundation product, please take a careful look and answer the follow-up statements



End of Block: Control Condition Foundation

Start of Block: Experimental Condition Mono-ethnic Foundation

Instructions: Below you see an ad of Brand X promoting their newest foundation product, please take a careful look and answer the follow-up statements



End of Block: Experimental Condition Mono-ethnic Foundation

Start of Block: Experimental Condition Multi-ethnic

Instructions Below you see an ad of Brand X promoting their newest foundation product, please take a careful look and answer the follow-up statements.



End of Block: Experimental Condition Multi-ethnic

Start of Block: Manipulation check

Definition mono-ethnic vs. multi-ethnic advertising: Please carefully read the definition below and answer the questions:

“**Mono-ethnic advertising** is a single-ethnic marketing effort. In other words, it is a marketing approach used in advertisements to depicts models from the same ethnic background.

Multi-ethnic advertising is a multi-ethnic marketing effort. In other words, it is a marketing approach used in advertisements to depict diverse ethnic groups from different backgrounds.”

Manipulation check: Based on the aforementioned definitions: To what extent do you agree with the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I think that this make-up advertisement is a mono-ethnic ad (MC_1)	0	0	0	0	0
I think that this make-up advertisement is a multi-ethnic ad (MC_2)	0	0	0	0	0
I think that this make-up advertisement is neither a mono-ethnic nor a multi-ethnic ad (MC_3)	0	0	0	0	0

End of Block: Manipulation check

Start of Block: Demographics

Age: How old are you?

Gender: What is your gender

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

Nationality: What is your nationality?

Country of residence: In which country do you currently reside?

▼ Afghanistan (1) ... Zimbabwe (195)

Education level: What is the highest level of education that you have completed?

- Primary education (1)
- Secondary education (2)
- Bachelor's or equivalent level (3)
- Master's or equivalent level (4)
- Doctoral or equivalent level (5)
- Other (6)

End of Block: Demographics

Start of Block: End of survey

Debrief Thank you for your participation in this present study. This study aims to determine to what extent the effect of diverse and inclusive face make-up advertisements on advertising effects is influenced by someone's social identity. For this, a distinction has been made between mono- and multi-ethnic face make-up advertising strategies.

All participants answered the same questions about their perception of the ad and were shown one of the three images shown below. *These images were curated by the use of AI, therefore, the models in the advertisement are not actual people.*

Once again, this study is anonymous and confidential. If you have any further questions or concerns, please feel free to contact this email address: surveyresearcheur@gmail.com for more information.



The new foundation by Brand X for a satin finish.

The new foundation by Brand X for a satin finish.



The new foundation by Brand X for a

End of Block: End of survey

7.2 Appendix B: Final survey

Survey Flow

Block: Welcome (7 Questions)

BlockRandomizer: 1 - Evenly Present Elements

Standard: Control Condition Foundation (1 Question)

Standard: Experimental Condition Mono-ethnic Foundation (1 Question)

Standard: Experimental Condition Multi-ethnic (1 Question)

Standard: Manipulation check (2 Questions)

Standard: Measurements (6 Questions)

Standard: Demographics (6 Questions)

Standard: End of survey (2 Questions)

Page Break

Start of Block: Welcome

Introduction:

“Dear respondent,

Thank you for your interest in this research. I am inviting you to fill in a questionnaire. In this questionnaire, you will be shown an advertisement, which I would like you to evaluate. The purpose of this study is to investigate the advertising effects of face make-up advertisements. The questionnaire will take approximately 5-8 minutes to fill in. Please answer each question carefully and honestly, I am sincerely interested in your personal opinions. There are no right or wrong answers.

CONFIDENTIALITY OF DATA

All research data remain completely confidential and are collected in anonymous form. I will not be able to identify you. There are no foreseeable risks or discomforts associated with participating in this research.

VOLUNTARY

If you now decide not to participate in this research, this will not affect you. If you decide to cease your cooperation while filling in the questionnaire, this will in no way affect you either. You can cease your cooperation without giving reasons.

FURTHER INFORMATION

If you have questions about this research, in advance or afterwards, you can contact the responsible researcher, email: surveyresearcher@gmail.com. This study has been approved by the Ethics Committee of Erasmus University Rotterdam. If you want to invoke your rights or if you have a question concerning privacy about this study, you can contact Erasmus University's DPO (Data Protection Officer) at fg@eur.nl."

Age: Are you 18 years old or older?

- Yes, I am 18 or older (1)
- No, I am younger than 18 (2)

Skip To: End of Survey If Age = 2

Consent: I consent to participate in the research project and the following has been explained to me: my participation is completely voluntary, my right to withdraw from the study at any time (without any implications to me).

- I agree (1)
- I do not agree (2)

Skip To: End of Survey If Consent = 2

Wear make-up: Do you wear make-up?

- Yes, I do wear make-up (1)
- No, I do not wear make-up (2)

Skip To: End of Survey If Wear make-up = 2

Page Break

Explanation focus of survey: The beauty industry can be categorised in distinct sub-segments. This research focuses on the sub-segment make-up, specifically focusing on face make-up (e.g., powder, concealer, foundations). **This survey will focus on foundations.** Foundation is a make-up product that is used all over your face and/or neck to create a base.



Wear foundation: Do you wear face make-up product, such as foundation?

- Yes, I do (sometimes) wear face make-up products, such as foundation (1)
- No, I do not wear face make-up products, such as foundation (2)

Skip To: End of Survey If Complexion products = 2



Frequency purchase foundation: How frequently do you purchase a new foundation?

- I do not purchase a new foundation (1)
- I purchase a new foundation once my current foundation is (almost) empty (2)
- I purchase a new foundation once my current foundation is expired (3)
- I purchase a new foundation if I want to try it out (4)

End of Block: Welcome

Start of Block: Control Condition Foundation

Instructions: Below you see a face make-up ad made by Brand X promoting their newest foundation product, please take a careful look and answer the follow-up statements. You will not be able to return to this page.



End of Block: Control Condition Foundation

Start of Block: Experimental Condition Mono-ethnic Foundation

Instructions: Below you see a face make-up ad made by Brand X promoting their newest foundation product, please take a careful look and answer the follow-up statements. You will not be able to return to this page.



End of Block: Experimental Condition Mono-ethnic Foundation

Start of Block: Experimental Condition Multi-ethnic

Instructions: Below you see a face make-up ad made by Brand X promoting their newest foundation product, please take a careful look and answer the follow-up statements. You will not be able to return to this page.



End of Block: Experimental Condition Multi-ethnic

Start of Block: Manipulation check

Definition mono-ethnic vs. multi-ethnic advertising: Please carefully read the definition below and answer the questions:

“**Mono-ethnic advertising** is a single-ethnic marketing effort. Meaning, it is a marketing approach in advertising where a singular ethnicity (racial background) is depicted in an ad.

Multi-ethnic advertising is a multi-ethnic marketing effort. Meaning, it is a marketing approach in advertising where a diverse set of ethnicities (racial backgrounds) are depicted in an ad.”

Manipulation check: Based on the aforementioned definitions: To what extent do you agree with the following statements

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I think that this face make-up advertisement is a mono-ethnic ad (MC_1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that this face make-up advertisement is a multi-ethnic ad (MC_2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that this face make-up advertisement is neither a mono-ethnic nor a multi-ethnic ad (MC_3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Manipulation check

Start of Block: Measurements



A(ad): How do you feel about the advertisement?

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Irritating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Not irritating
Dislike very much	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Like very much

Page Break



A(b): How do you feel about Brand X?

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Dislike very much	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Like very much
Bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Good
Worthless	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Valuable

Page Break

PI: If you were in the market for foundation, how likely is it that you would choose Brand X?

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Unlikely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Likely
Improbable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Probable
Impossible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Possible

Page Break

SI (BC): To what extent do you agree with the following statements

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
This ad is consistent with how I see myself (SI (BG)_1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This ad is a mirror image of me (SI (BG)_2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This ad is consistent with how I would like to be (SI (BG)_3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This ad is a mirror image of the person I would like to be (SI (BG)_4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SI (DAS): To what extent do you agree with the following statements

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
This ad is very appealing to me (SI (DAS)_1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I dislike this ad (SI (DAS)_2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would probably skip this ad if I saw it again (SI (DAS)_3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This ad makes me feel good (SI (DAS)_4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This ad has little interest for me (SI (DAS)_5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
This ad makes me want to buy the brand it features (SI (DAS)_6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SI (SC): To what extent do you agree with the following statements

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
I belong (with the people) in the ad (SI (SC)_1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am similar to (the people in) the ad (SI (SC)_2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel positive towards (the people in) the ad (SI (SC)_3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Measurements

Start of Block: Demographics

Age: How old are you?

Gender: What is your gender

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

Nationality: What is your nationality?

Country of residence: In which country do you currently reside?

▼ Afghanistan (1) ... Zimbabwe (195)

Ethnicity: What is your ethnicity?

- White-European / -American / -Australian (e.g., German, British, French, Italian, Polish, Greek, Spanish, Australian, Kiwis etc.) (1)
- Caribbean (e.g., Aruban, Bonarian, Surinamese, Trinidadian, Jamaican, Cuban, etc.) (2)
- North-African / Middle Eastern (e.g., Lebanese, Iranian, Syrian, Moroccan, Egyptian, Turkish, UEA, etc.) (3)
- Sub Saharan African (Congolese, South-African, Nigerian, Sudanese, etc.) (4)
- African-American / Black-American (5)
- Latino (e.g., Mexican, Colombian, Argentinian, etc.) (6)
- Indigenous (American, Aboriginal, Alaska Native) (e.g., Navajo nation, Blackfeet tribe, Mayan, Aztec, Nome Inuit Community, etc.) (7)
- Native Hawaiian or Other Pacific Islander (e.g., Samoan, Chamorro, Tongan, Fijian, Maori, etc.) (8)
- East Asian (e.g., Japanese, Chinese, Korean, etc.) (9)
- South-East Asian (e.g., Indonesian, Malaysian, Thai, Vietnamese, Filipino, etc.) (10)
- South-Asian (e.g., Indian, Pakistani, Afghan, etc.) (11)

Education level: What is the highest level of education that you have completed?

- Primary education (1)
- Secondary education (2)
- Bachelor's or equivalent level (3)
- Master's or equivalent level (4)
- Doctoral or equivalent level (5)
- Other (6)

End of Block: Demographics

Start of Block: End of survey

Debrief:

“Thank you for your participation in this present study. This study aims to determine to what extent the effect of diverse and inclusive face make-up advertisements on advertising effects is influenced by someone's social identity. For this, a distinction has been made between mono- and multi-ethnic face make-up advertising strategies.

All participants answered the same questions about their perception of the ad and were shown one of the three images shown below. *These images were curated by the use of AI, therefore, the models in the advertisement are not actual people.*

Once again, this study is anonymous and confidential. If you have any further questions or concerns, please feel free to contact this email address: surveyresearcheur@gmail.com for more information.”



The new foundation by Brand X for a satin finish.

The new foundation by Brand X for a satin finish.



The new foundation by Brand X for a

End of Block: End of survey

7.3 Appendix C: The use of generative AI

This appendix contains the declaration page use of generative AI tools, mainly PIXLR and ChatGPT. The two experimental stimuli were created using AI imaging tool, PIXLR. The following prompts were used to generate the mono-ethnic ad: “Create a make-up (foundation) advertisement showcasing a group of white women. The ad must showcase only white European woman” and multi-ethnic ad: “Create a make-up (foundation) advertisement showcasing a group of a diverse set of women from different racial backgrounds”.

Furthermore, as PROCESS macro is not an extension that is taught at Erasmus University, explanation videos on YouTube were used to help clarify certain elements (e.g., how to use PROCESS, what to report etc.). However, as some videos did not explain certain elements (as my research differed from what was discussed), ChatGPT was used to help further clarify. For example, the following prompts were asked: “what is PROCESS macro?”, “explain what indicator coding is”. Lastly, other prompts were used to gain some insights on what the best type of analysis would be for this research in order to further discuss this with the thesis supervisor, such as “what is the difference between ANOVA and ANCOVA”, and “what is the difference between one-way ANOVA and one-way MANOVA?”.

Declaration Page: Use of Generative AI Tools in Thesis

Student Information

Name: Rahina Moentadj

Student ID: 592234

Course Name: Master Thesis CM5000

Supervisor Name: Dr. Kyriakos Riskos

Date: 24/06/2024

Declaration:

As acknowledged in my thesis, I have used generative AI to create the experimental stimuli. The imaging AI software, PIXLR was used to create these images. For which the following prompts were used: “Create a make-up (foundation) advertisement showcasing a group of white women. The ad must showcase only white European woman” and “Create a make-up (foundation) advertisement showcasing a group of a diverse set of women from different racial backgrounds”.

Moreover, the generative AI, ChatGPT, was sometimes used to help explain PROCESS macro, for example, the following prompts were used “what is/explain indicator coding in PROCESS macro?”. Regardless, all ideas and text has been written by me, Rahina Moentadj.

Acknowledgment of Generative AI Tools

I acknowledge that I am aware of the existence and functionality of generative artificial intelligence (AI) tools, which are capable of producing content such as text, images, and other creative works autonomously.

GenAI use would include, but not limited to:

- Generated content (e.g., ChatGPT, Quillbot) limited strictly to content that is not assessed (e.g., thesis title).
- ~~Writing improvements, including~~ grammar and spelling corrections (e.g., Grammarly)
- Language translation (e.g., DeepL), without generative AI alterations/improvements.
- Research task assistance (e.g., finding survey scales, qualitative coding verification, debugging code)
- Using GenAI as a search engine tool to find academic articles or books (e.g.,

I declare that I have used generative AI tools, specifically PIXLR, in the process of creating parts or components of my thesis. The purpose of using these tools was to aid in generating content or assisting with specific aspects of thesis work.

I declare that I have NOT used any generative AI tools and that the assignment concerned is my original work.

Signature: R.S. Moentadj

Date of Signature: 24/06/2024

Extent of AI Usage

I confirm that while I utilized generative AI tools to aid in content creation, the majority of the intellectual effort, creative input, and decision-making involved in completing the thesis were undertaken by me. I have enclosed the prompts/logging of the GenAI tool use in an appendix.

Ethical and Academic Integrity

I understand the ethical implications and academic integrity concerns related to the use of AI tools in coursework. I assure that the AI-generated content was used responsibly, and any content derived from these tools has been appropriately cited and attributed according to the guidelines provided by the instructor and the course. I have taken necessary steps to

distinguish between my original work and the AI-generated contributions. Any direct quotations, paraphrased content, or other forms of AI-generated material have been properly referenced in accordance with academic conventions.

By signing this declaration, I affirm that this declaration is accurate and truthful. I take full responsibility for the integrity of my assignment and am prepared to discuss and explain the role of generative AI tools in my creative process if required by the instructor or the Examination Board. I further affirm that I have used generative AI tools in accordance with ethical standards and academic integrity expectations.

Signature:

A handwritten signature in blue ink that reads "R.S. McEntady". The signature is written in a cursive style with a large, sweeping underline that loops back under the name.

Date of Signature: 24/06/2024