Mirror, mirror on the screen

The impact of perceived physical similarity with fashion models on purchase intentions.

Student Name: Manouk Weynschenk
Student Number: 704654

Supervisor: P. M. A. Tenbült, PhD

Master Media Studies - Media & Business
Erasmus School of History, Culture and Communication
Erasmus University Rotterdam

Master's Thesis
June 30, 2025

Word Count: 17.921

Mirror, mirror on the screen: The impact of perceived physical similarity with fashion models on purchase intentions.

ABSTRACT

The lack of body and skin tone diversity in fashion marketing has long been criticized for reinforcing narrow beauty standards and underrepresenting many consumer groups. This study investigates whether perceived similarity between consumers and models, in terms of body type and skin tone, affects consumers' purchase intention in online apparel contexts. While earlier research shows that objective similarities can influence consumer behavior, the direct effect of subjective perceived similarity, particularly in these two dimensions, has received limited quantitative attention. Moreover, few studies have examined their combined influence, leaving a gap in understanding how visual identification shapes fashion purchase decisions.

To address this gap, the study poses the following research question: *How do consumers' perceptions of similarity to a model in terms of body type (low vs. high) and skin tone (low vs. high) influence their purchase intentions of clothing items?* A between-subjects experimental survey was conducted among Dutch women aged 18 and older ($N = 175$) using snowball sampling via social media. All participants viewed the same AI-generated model wearing jeans. They rated their perceived similarity to the model in body type and skin tone, after which they were grouped into one of four similarity conditions. The main dependent variable was purchase intention, and the data were analyzed using two-way ANOVA and additional non-parametric tests due to violations of test assumptions.

Results show a significant main effect of perceived body type similarity on purchase intention, indicating that consumers who saw the model as highly similar in body type reported higher purchase intentions than those who perceived low similarity. However, no significant effect was found for skin tone similarity, nor for the interaction between the two dimensions. Exploratory non-parametric analysis suggests that body type may moderate the effect of skin tone, but this pattern is not statistically significant.

These findings contribute to marketing theory by emphasizing the importance of subjective similarity, particularly body type, in shaping consumer behavior. From a managerial perspective, the results suggest that fostering identification through diverse model representation may function as a form of visual mirroring, enhancing persuasiveness and potentially boosting conversion rates in online retail. However, the non-significant findings for skin tone similarity underscore the need for more nuanced research into how different aspects of identity interact in visual marketing.

KEYWORDS: *Fashion model, Physical similarity, Body type, Skin tone, Purchase intention*

Table of Contents

ABSTRACT **2**

Acknowledgements **5**

1 Introduction **6**

1.1 Academic relevance *6*

1.2 Managerial relevance *7*

1.3 Research question *8*

1.4 Research outline *8*

2 Theoretical framework **10**

2.1 Purchase intention *10*

2.1.1 Online purchase intentions of apparel 10

2.1.2 Product-specific influences on purchase intentions of apparel 11

2.2 Perceived similarity *12*

2.2.1 Perceived physical similarity 13

2.2.2 Perceived body type similarity 14

2.2.3 Perceived skin tone similarity 15

2.3 Interaction of perceived body type and skin tone similarity on purchase intent *17*

2.4 Covariates *18*

2.5 Hypotheses *19*

3 Method **20**

3.1 Method choice *20*

3.2 Sampling *20*

3.2.1 Sampling method 21

3.2.2 Sampling size 21

3.3 Materials *21*

3.3.1 Pre-test 22

3.3.2 Main study 25

3.4 Operationalization *25*

3.4.1 Purchase Intention 25

3.4.2 Perceived Body Type Similarity 25

3.4.3 Perceived Skin Tone Similarity 26

3.4.4 Control questions 26

3.4.5 Covariates 26

3.5 Procedure *27*

3.6 Validity & reliability *28*

3.7 Data analysis *29*

3.8 Ethical considerations *30*

4 Results **32**

4.1 Descriptive results *32*

4.2 Control questions *33*

4.3 Main analysis *33*
4.3.1 Violation of assumptions 34
4.3.2 Covariates 35
4.3.3 Results two-way ANOVA 36

4.4 Additional analysis *38*

4.5 Overview of accepted/rejected hypotheses *39*

5 Discussion & conclusion 40

5.1 Discussion of results *40*
5.1.1 Hypothesis 1 40
5.1.2 Hypothesis 2 41
5.1.3 Hypothesis 3 42

5.2 Limitations and directions *43*
5.2.1 Validity 43
5.2.2 Reliability 44
5.2.3 Directions for future research 45

5.3 Conclusion *45*
5.3.1 Answering the research question 45
5.3.2 Generalizability and ethics 46
5.3.3 Academic, societal, and managerial implications 46

References 48

Appendix A: Pretest survey 56

Appendix B: Descriptive statistics Pretest analysis 62

Appendix C: One-sample t-test 66

Appendix D: Main study survey 70

Appendix E: Descriptive statistics main study 82

Appendix F: Reliability test 86

Appendix G: Correlation tests 89

Appendix H: Violation of assumptions 90

Appendix I: Two-way ANOVA 94

Appendix J: Non-parametric tests 96

Appendix K: Declaration page - use of generative AI tools in thesis 100

Appendix L: Prompts to AI tools 102

Acknowledgements

Looking back on the process of writing this thesis, I would like to thank my supervisor, Petra Tenbült, for her motivation and for making the journey feel manageable. Her practical advice, swift feedback, and consistently positive tone made a real difference.

I am also grateful to my family and friends for their ongoing encouragement, support, and belief in my abilities. Most of all, I want to thank my boyfriend, Pim, who continuously challenges me to go beyond what I believe are my limits and reminds me to strive for the best in myself.

I hope you enjoy reading,
Manouk Weynschenk

1 Introduction

"People prefer to look at skinny models, and those who do not are fat mummies" (Connolly, 2009, para. 1-3). Fifteen years ago, this was fashion designer Karl Lagerfeld's reaction to the magazine Brigitte announcing it would feature ordinary, realistic women instead of professional models. The fashion industry has often faced criticism for promoting unrealistic beauty standards and for lacking diversity in body types and sizes (Press & Stark, 2024). Since then, advocacy for diversity and inclusion (D&I) is growing across gender, age, race, and ability (Adegeest, 2024, para. 7-8). In addition to a preference for thinner body types, the industry favors models with lighter skin tones (Cavusoglu & Atik, 2022, pp. 393-394). For example, a computational analysis of retail websites shows that lighter-skinned models appear more frequently, and some images even show signs of skin-lightening edits (Butkowski et al., 2022, p. 298).

These biases result in the underrepresentation of many consumers in fashion media. Representation through models matters because seeing someone who looks like you can foster a sense of recognition and belonging (Cavusoglu & Atik, 2022, p. 400). Research shows that consumers are more likely to identify with models who resemble them, especially in terms of body type or skin tone (Plotkina & Saurel, 2019, pp. 364, 371). This cannot only improve self-image but also increase purchase intention (Campbell et al., 2023, pp. 9-13; Plotkina & Saurel, 2019, p. 371). Especially among marginalized groups, the lack of representation can have negative psychological effects. For example, some women even report feeling pressured to lighten their skin to align with dominant beauty ideals (Cavusoglu & Atik, 2022, p. 399).

The societal relevance is clear: diverse representation in fashion media can influence not only individuals' shopping experiences but also their self-image. To understand how identification with models affects both purchase decisions and broader beauty ideals, academic research is necessary.

1.1 Academic relevance

Academically, identification with models can be understood as perceived similarity. In marketing research, perceived similarity is typically described as attitudinal congruence between an endorser and a consumer (Hughes et al., 2020, p. 184). Such perceived similarity has been shown to increase likability and persuasiveness in advertising contexts (McGuire, 1985, as cited in Frank & Mitsumoto, 2021, p. 1093; Ohanian, 1990, p. 41). A common tactic to increase perceived similarity is mirroring, which involves subtly imitating a consumer's posture, tone, or mood to evoke identification (Cialdini, 2009, p. 173). This study investigates whether this extends to physical identification with a clothing model, and if mirroring in an online setting can enhance perceived similarity and increase persuasiveness. The study focuses on two specific dimensions of perceived similarity: body type and skin tone.

First, earlier studies show that objective similarity in body type, such as a shared or matching size between consumer and model, can increase purchase intention (Lou & Tse, 2022; Zhang et al., 2024). In those cases, perceived similarity acts as a mediator. The current study builds on that work by focusing instead on subjective perceived similarity. This choice aligns with research emphasizing that similarity is also shaped by individuals' self-perceptions (Cinelli & Yang, 2016, p. 480). The study, therefore, examines whether subjective perceived body type similarity can directly influence purchase intention.

Second, perceived similarity in skin tone is linked to consumer responses in prior research, particularly in relation to ethnicity. Studies show that shared ethnic features between consumers and models can influence purchase intentions. These show that a higher degree of identification with the models' ethnicity results in higher purchase intentions compared to a lower degree of identification (Forbes-Bell et al., 2019; Sierra et al., 2009). However, evidence on the specific role of perceived skin tone similarity in clothing purchase decisions remains limited. This study contributes to that literature by investigating whether subjective skin tone similarity influences purchase intention.

Lastly, Zhang et al. (2024, p. 666) call for research that examines the combined effects of multiple model attributes, such as body type, skin tone, and gender, rather than isolating each variable. Responding to this, the current study investigates whether body type and skin tone similarity interact in shaping purchase intentions. A qualitative study found that fashion ads featuring both ethnic and body diversity are more positively received than ads focusing on just one (Mends & Hahn, 2025). This study expands on that finding by testing whether such an interaction effect can be demonstrated quantitatively in terms of purchase intention.

These insights not only have possible contributions to academic literature but also potentially offer practical insights for fashion marketeers or brands.

1.2 Managerial relevance

Managerially, enhancing perceived similarity is not only ethically responsible, but it could also be strategically beneficial for fashion marketeers or brands. For example, consumers, especially those of ethnic minority groups, indicate they purposely switch to brands committed to D&I (Accenture, 2019, p. 4). This suggests that brands that actively commit to D&I can enhance their reputation and foster consumer loyalty, particularly among underrepresented groups.

This study adds to that perspective by highlighting the potential of perceived similarity as a driver of purchase intention (Forbes-Bell et al., 2019; Lou & Tse, 2022; Sierra et al., 2009; Zhang et al., 2024). Providing a wide range of models in terms of body type and skin tone supports D&I while increasing the likelihood that consumers identify with a model. In turn, this may lead to higher conversion rates.

Interactive tools, such as "pick your model" features, allow consumers to filter fashion items based on perceived characteristics like body type or skin tone (Butkowski et al., 2022; Douglass,

2024; Pinterest, 2024). This kind of personalization may be particularly effective in e-commerce, where model representation can influence user engagement and purchase decisions. However, incorporating diverse photography or building such tools can be costly, and the industry remains cautious about how consumers respond to less traditionally aspirational imagery (Zhang et al., 2024, p. 644).

As such, fostering perceived similarity through D&I practices can be a valuable strategy for fashion marketers by encouraging identification and potentially boosting purchase intentions. Therefore, further research is needed to assess their impact on consumer behavior.

1.3 Research question

Some studies have shown or suggested that objective similarity in body type or skin tone between consumers and models can influence purchase intention (Forbes-Bell et al., 2019; Lou & Tse, 2022; Sierra et al., 2009; Zhang et al., 2024). However, the direct effects of perceived similarity in body type and skin tone remain underexplored. Moreover, while these dimensions have been explored qualitatively (Mends & Hahn, 2025), they have not yet been quantitatively examined in combination. This study addresses that gap by investigating how perceived similarity in body type and skin tone between consumers and models affects clothing purchase intentions. Therefore, the research question is: *How do consumers' perceptions of similarity to a model in terms of body type (low vs. high) and skin tone (low vs. high) influence their purchase intentions of clothing items?*

To examine the research question, an experimental survey was conducted using an AI-generated model wearing jeans. The online questionnaire was distributed via snowball sampling through social media among women aged 18 and older living in the Netherlands. All participants were shown the same model and asked to rate their perceived similarity to her in terms of body type and skin tone. Based on these self-reported perceptions, participants were grouped into perceived similarity conditions. The effects on purchase intention of jeans were analyzed using a two-way analysis of variance (ANOVA) and additional non-parametric tests.

1.4 Research outline

The remainder of the thesis is structured as follows: Chapter 2 provides the theoretical framework by first discussing the dependent variable of purchase intention in the context of online apparel shopping and its relation to actual buying behavior. It then introduces perceived similarity as the key independent variable, focusing on body type and skin tone. Drawing from marketing and advertising literature, the chapter explores how attitudinal similarity with an endorser relates to physical similarity with a model. Moreover, it considers the mirroring effect in online retail. It also distinguishes between objective and subjective similarity and proposes a potential interaction effect between body type and skin tone similarity. In addition, several covariates are considered, such as demographic (e.g., age and income) and product-related (aesthetic and quality) variables.

Next, Chapter 3 provides an overview of the research set-up and methods used within the context of an online survey questionnaire among adult women in the Netherlands.

Subsequently, Chapter 4 presents the results of the two-way ANOVA examining the effects of perceived body type and skin tone similarity on purchase intention. Outcomes of additional non-parametric analyses are included to validate the findings and explore interaction patterns. These results are discussed in Chapter 5, which also answers the central research question. The final sections outline the study's limitations, offer directions for future research, and reflect on its academic, societal, and managerial implications.

2 Theoretical framework

This section discusses the theoretical background of the study and introduces the main hypotheses. It begins with an overview of purchase intention in the context of online apparel shopping and the product-specific factors that can influence it. Next, the concept of perceived similarity is explored, focusing on perceived physical similarity and its dimensions: body type and skin tone. The section then considers how these two dimensions may interact in shaping purchase intentions. Potential covariates are addressed, after which the research question is restated, together with an overview of the hypotheses of the study is presented.

2.1 Purchase intention

Purchase intention refers to a consumer's willingness to buy a product. This intention is one stage within the broader decision-making process (Hutter et al., 2013, p. 346). It marks the transition from where a consumer recognizes a need and evaluates a product, to forming an intent to purchase (p. 343). Furthermore, the Theory of Planned Behaviour (TPB) explains that a behavioural intention (e.g., purchase intention) is a direct predictor of actual behaviour (Ajzen, 2012, p. 447). Therefore, a higher purchase intention signifies a stronger likelihood of purchase. This makes it a key indicator of the effectiveness of marketing strategies, such as those employed on fashion e-commerce product pages. The following section explores how this applies to online apparel purchases.

2.1.1 Online purchase intentions of apparel

This study was set in an online shopping context, as this channel continues to grow in popularity among consumers (Venkatesh et al., 2022, p. 1590). Moreover, recent data from Klarna's Shopping Pulse (Q2 2023) revealed that online shopping has become the most preferred shopping method for the first time (Lijbaart, 2023, para. 2). 32% of Dutch consumers reported a preference for shopping online, compared to 30% who prefer physical stores, while the remaining respondents have no preference. Complementary data from the Dutch Central Bureau of Statistics (CBS) showed that in 2024, 81% of Dutch individuals aged 12 and older had made an online purchase (CBS, 2024d, para. 1). This was the highest rate in the past decade. Among various product categories, clothing and shoes were the most commonly purchased items online, with 59% of the population reporting such purchases (para. 4). While physical stores are still perceived as offering a richer social experience, particularly by 81% of Dutch consumers, online shopping is a preferred option for its convenience and efficiency (Klaassen, 2022, para. 5). As such, conducting this study on apparel purchases within an online setting aligned with current usage patterns.

Moreover, Klarna's and CBS's data both indicate gender differences in online apparel shopping among Dutch consumers. Klarna's 2023 Shopping Pulse reported that more men (36%) than women (28%) preferred shopping online, while women were more likely to favor physical stores (31%) (Lijbaart, 2023, para. 3). However, data from the CBS showed that in 2024, 63% of

women and 54% of men reported purchasing clothing, shoes, or accessories online (CBS, 2024c). Compared to the national average of 59%, women's participation in online fashion shopping is above average, while men's is below. The nearly 10 percentage point gap highlights gender as a relevant factor in online clothing consumption. While Klarna's (2023) data shows men reported to prefer to shop online over women, women actually shop online more frequently.

Furthermore, previous research showed more distinctions, such as women being more likely to purchase experience goods online, such as apparel and beauty products, while men prefer shopping online for digital, entertainment, and tech-related items (Kanwal et al., 2021, p. 38). Additionally, men are more influenced by trust during the shopping process, whereas women are more affected by emotional and practical aspects (Pradhana & Sastiono, 2019, p. 127). Since women and men prioritize different factors when shopping, it is relevant to distinguish between the two in consumer research. Based on these patterns, this study focused on women's purchase intentions regarding online apparel shopping.

Lastly, in this study, jeans were selected as the product for which purchase intention is measured due to their widespread popularity and continued relevance both globally and within the Netherlands. The Netherlands is often referred to as a "jeans country," largely due to the high concentration of denim-related companies, particularly situated in the "jeans capital" of Amsterdam (Feitsma, 2014, pp. 143-146). Moreover, jeans align closely with the Dutch fashion mentality and clothing culture because of their versatility, practicality, and adaptability across genders, ages, social classes, and occasions (pp. 146-151). Globally, the jeans market was valued at $78.5 billion in 2024 and is expected to grow by 6.5% annually, reaching an estimated $114.6 billion by 2030 (Research and Markets, 2025, para. 1). The online segment in particular is expected to expand rapidly, with an annual growth rate of 13% (para. 6). Given this economic significance and cultural familiarity, jeans serve as a fitting product for examining purchase intentions among Dutch women. Building on this, the next section considers product-specific factors that may shape consumers' purchase intentions, particularly concerning jeans.

2.1.2 Product-specific influences on purchase intentions of apparel

Within the apparel category, several product-related factors are known to influence purchase intentions. A qualitative study identified aesthetic appeal as a key determinant in consumers' purchase decisions, particularly during the initial evaluation of a clothing item (Eckman et al., 1990, p. 13). Elements such as colour, pattern, styling, and fabric contribute to this appeal and shape whether an item is perceived as desirable or worth purchasing. Additionally, aspects related to fit and how the garment appears on the body become especially important during the trial phase, such as in a dressing room. Moreover, quality is a key consideration for consumers when purchasing jeans (Karunaratne, 2020, p. 220).

Understanding these product-specific factors is important because they are known to influence clothing purchase decisions, more specifically in offline contexts. When examining online settings, it is useful to consider how these traditional influences, such as aesthetic appeal, fit, quality, and appearance, might still play a role. This highlights that, alongside perceived similarity, other established product-level factors may also affect purchase intentions in apparel e-commerce.

To account for these influences in the current study, aesthetic appeal, jeans' quality, perceived fit, and perceived appearance were measured and treated as potential covariates in the analysis, as discussed in Section 4.3.2. While aesthetic appeal and quality are considered product-level factors, fit and appearance are more complex and are also closely related to the notion of perceived similarity between the model and the consumer. These two dimensions will therefore be further discussed in Chapter 2.2, which focuses on perceived similarity. For the operationalization of all three variables, see Section 3.4.5.

2.2 Perceived similarity

Perceived similarity, sometimes referred to as assumed similarity, describes the tendency for individuals to view others as resembling themselves, particularly in terms of personality traits (Hughes et al., 2020, p. 184). This concept is distinct from actual similarity, which relies on objective comparisons such as personality assessments (Montoya et al., 2008, pp. 891-892). Moreover, although both perceived and actual similarity can influence attraction between people, they represent distinct constructs. For example, research shows that partners in a romantic relationship may believe they share similar attitudes, even when objective measures suggest otherwise (Buunk & Bosman, 1986, p. 134).

In advertising, perceived similarity contributes to persuading consumers to adopt a message or purchase a product. In this context, perceived similarity refers to the extent to which consumers feel they resemble an endorser. This perceived resemblance increases the endorser's attractiveness and likability, which in turn enhances their persuasiveness (McGuire, 1985, as cited in Frank & Mitsumoto, 2021, p. 1093). This idea aligns with the source attractiveness model, which identifies similarity as a key factor that influences how consumers evaluate and respond to endorsers (Ohanian, 1990, p. 41). Cialdini's (2009) principles of persuasion similarly note that people are more likely to be influenced by those they like, and perceived similarity is a relevant factor contributing to likability. This similarity can relate to lifestyle, background, personality, or values (Cialdini, 2009, p. 173; Schouten et al., 2021, p. 211). A well-known tactic for endorsers to increase perceived similarity with their customers is mirroring (Cialdini, 2009, p. 173). Mirroring can be described as subtly imitating a consumer's posture, tone, or mood, which can create feelings of similarity. This study focuses on the identification with a clothing model as an endorser. Moreover, it examines whether mirroring in an online setting can also enhance perceived similarity and increase the likelihood of a favorable response to a message or product.

However, in static e-commerce environments, such as product photos of models, the potential for perceived personality similarity may be limited. This is because such similarity often arises through interpersonal interactions, like those exchanged during conversations with an endorser (Hughes et al., 2020, p. 198). These interpersonal dynamics are typically missing when consumers evaluate product images with models. As a result, consumers may rely more on visible, surface-level cues such as body type or skin tone when judging how similar they feel to a model. This raises the question of whether physical characteristics, such as body type or skin tone, can function as a form of visual mirroring in online contexts. That is, can online clothing models evoke a sense of physical similarity, and thereby influence purchase intention? To explore this possibility, the next section focuses on perceived physical similarity.

2.2.1 Perceived physical similarity

In the absence of interpersonal interaction, physical characteristics can become more important in forming impressions of similarity in online retail. This study explores whether perceived physical similarity between a consumer and a model, in terms of body type or skin tone, can fulfill a similar function as mirroring of personality traits in offline settings. In other words, can static images of models in online stores reflect consumers' physical characteristics enough to trigger identification and likability, and with that influence purchase intentions?

This line of reasoning is especially relevant in the context of Diversity and Inclusion (D&I), which have become central to representation in fashion. Diversity refers to recognizing differences in characteristics such as gender, race, and body type, while inclusion means creating a sense of belonging and respect for everyone, regardless of these differences (Arsel et al., 2021, p. 920). Consumers increasingly expect brands to embody these values and are even willing to switch brands or pay more for those that prioritize D&I (Accenture, 2019, pp. 3-4). In fashion advertising, diverse representation through models of different ethnicities and body sizes can enhance brand perception and consumer support (Mends & Hahn, 2025, p. 2). Limited diversity may lead to dissatisfaction and weakened brand connection.

When consumers see themselves reflected in advertisements, through models who look like them, it can lead to identification (Campbell et al., 2023, p. 9). Research confirms that consumers identify more strongly with models who share their ethnicity and body type than with those who do not (Plotkina & Saurel, 2019, p. 371). However, actual physical similarity does not always predict perceived similarity. For example, research on plus-size models in advertising shows that overweight and obese women do not always respond positively, even when the model matches their body type (Cinelli & Yang, 2016, p. 480). This discrepancy is explained by subjective views of one's own body, for instance, when individuals believe their body size might change in the future. Therefore, this study focuses specifically on the influence of perceived similarity on consumer behavior.

Recognizing the relevance of physical resemblance, some retail brands have introduced "choose your model" tools that allow consumers to select a model with a similar body type and skin tone (Mintel, 2024, para. 4; Pinterest, 2024, para. 3-7). While promising, these tools are still relatively new and not yet a common practice in online fashion retail. Moreover, there is limited academic research examining how such personalization affects perceived similarity and subsequent purchase behavior. This highlights the need to better understand whether and how perceived similarity with models in static product photos can foster identification and drive purchase intentions.

Building on this, the following sections examine how perceived similarity in body type and skin tone, both individually and in combination, influences consumers' intention to purchase clothing items.

2.2.2 Perceived body type similarity

A model's body type can influence how consumers feel about themselves (Zhang et al., 2024, p. 3). For instance, seeing a model with an aspired body type that differs from their own may lower self-esteem for certain individuals. These emotional reactions can affect how consumers perceive the brand the model poses for, and may influence whether they choose to buy the product she's wearing. While thinness has long been the industry standard for models in fashion advertising, research suggests consumers do not always respond most positively to these portrayals. Lou and Tse (2022, pp. 617-618) found that women generally perceive greater similarity to average-sized models than to both thin and plus-sized models. Across their two studies, perceived similarity mediated the relationship between a model's size and purchase intentions. Specifically, in both studies, participants reported higher perceived similarity to average-sized models than to thin models, which in turn led to increased purchase intentions compared to those evoked by thin models. In one of two studies, participants also reported higher perceived similarity to average-sized models than to plus-sized models, which in turn led to increased purchase intentions compared to those evoked by plus-sized models. Across both studies, purchase intentions were highest for average-sized models compared to thin or plus-sized models.

Contrasting, Zhang et al. (2024) examined how not a specific body type, but a matching body size between a consumer and a model, affects perceptions and behavior. They found that when a model's body size matches the consumer's own, perceived similarity increases compared to no objective match (p. 654). This higher similarity lowers concerns about whether the clothing will fit well (i.e., perceived fit risk), which makes people more likely to buy an item. They describe this process as the "Dissimilarity-Risk Deterrence Effect." While Lou and Tse (2022) focused on the influence of specific body types on perceived similarity and purchase intention, Zhang et al. (2024) showed that body size matching is the basis for perceived similarity. Additionally, they found that perceived similarity affects fit risk, which then influences purchase intention.

Moreover, Cinelli and Yang (2019, pp. 477-478) offer another perspective. They argue that a certain body size is not the only factor affecting perceived similarity, nor is objective size matching the full story. Instead, self-views shape perceived body type similarity. Their study on plus-size female models in advertising showed that objective physical similarity between the model and consumer does not lead to uniformly positive consumer reactions. Specifically, among entity theorists, who believe their body size is relatively fixed, perceived similarity depends largely on the objective similarity between the model and the consumer. However, incremental theorists, who believe their body size is malleable, tend to imagine themselves as thinner than they are. This leads them to feel similar to models with an objectively smaller body size.

So, one specific body type does not fit all, and perceived similarity may exist even without an objective size match. While earlier research shows that perceived similarity can mediate the effect of a model's body type on purchase intention, less is known about its direct influence. This study addresses that gap by examining perceived body type similarity as an independent predictor. Accordingly, it is hypothesized that:

H1: Perceived similarity in body type has a significant influence on purchase intention.
H1a: High perceived similarity in body type has a higher effect on purchase intention than low similarity in body type.

Since Zhang et al. (2024, p. 643) demonstrated the effect of fit risk as a mediator, this will be included in the current research as a possible covariate. The next section will explore how skin tone similarity can shape consumer behavior in online shopping settings.

2.2.3 Perceived skin tone similarity

Alongside body type, skin tone is an important indicator of diversity and inclusion in the fashion industry. While thinner body types are preferred for models, lighter skin tones are also favored (Cavusoglu & Atik, 2022, pp. 393-394). This bias leads to a lack of diversity, which especially affects women of colour. For example, a qualitative study found that the underrepresentation of women of colour due to a lack of diverse model types affects their psychological shopping experiences (Cavusoglu & Atik, 2022, p. 399). Some women even feel pressured to lighten their skin in order to meet these dominant beauty standards.

The fashion industry is making progress. For instance, models of colour represented 48.6% of models in the Fall 2022 fashion weeks in New York, London, Milan, and Paris, compared to 20% in Fall 2015 (Schimminger, 2022, fig. 1). While this progress is valuable, lighter skin tones are still more common in retail imagery. A study of Gap Inc.'s retail imagery revealed a bias toward lighter skin tones in models through computational analysis (Butkowski et al., 2022, p. 298). Some images were allegedly lightened to align with beauty ideals favoring lighter skin.

However, representation is necessary as it fosters feelings of recognition and helps challenge narrow beauty ideals (Zhang et al., 2024, p. 645). For example, women of colour appreciate seeing more models similar to them in skin tone in fashion media, as it increases representation and contributes to a broader acceptance of their features as beautiful (Cavusoglu & Atik, 2022, p. 400). In the context of this study, this recognition can be seen as an indicator of perceived similarity. While more representation has positive consequences for women of colour, underrepresentation contributes to feelings of exclusion and devaluation (Cavusoglu & Atik, 2022, p. 400). This can affect their behavior as consumers. Some consumers, particularly those from ethnic minority groups, indicate that they deliberately switch to brands that demonstrate a commitment to diversity and inclusion (Accenture, 2019, p. 4). Perceived similarity with models in terms of skin tone thus influences self-image and psychological shopping experiences and can also determine brand preferences.

Furthermore, representation not only influences how consumers feel about themselves or a brand, it can also influence purchase intention. For example, research found that Black participants reported a stronger intention to buy a product and were willing to spend more when it was advertised using a Black rather than a White model (Forbes-Bell et al., 2019, p. 609). This supports Social Identity Theory, which explains that people tend to prefer those who are similar to themselves (Tajfel et al., 1979, as cited in Forbes-Bell et al., 2019, p. 609). This effect was not observed in White participants, which may be because, as Distinctiveness Theory suggests, majority group members tend to notice representation less, as their group is already well-represented. In contrast, minority group members value seeing themselves represented more because it feels rarer (Brewer, 1999, as cited in Forbes-Bell et al., 2019, p. 609).

There is a lack of research on the influence of perceived similarity between consumers and models for skin shades other than Black and White (Cavusoglu & Atik, 2022, p. 397). Thus, the specific influence on purchase intentions for medium skin-toned consumers remains unknown. However, existing research on ethnic identification (Black, Hispanic, and White) in advertising shows that consumers respond more favorably to ads featuring models of their own ethnicity, leading to stronger purchase intentions (Sierra et al., 2009, pp. 62-63). As Black and White suggest, skin tone is a key visual marker of ethnicity. Thus, it is reasonable to expect that perceived skin tone similarity could produce similar effects on purchase intention.

In addition to psychological and identity-related effects, skin tone similarity may also influence consumers' evaluation of the clothing itself. Research found that skin tone systematically affects clothing colour preferences, with cooler hues preferred for fair skin and warmer hues for tanned skin (Perrett & Sprengelmeyer, 2021, pp. 14-17). If a model's skin tone differs significantly from the consumer's, the consumer may find it more difficult to assess whether the colour of the clothing would suit them personally. This could introduce a perceived risk of colour mismatch and, in turn, reduce purchase intention.

Based on these points about identity, representation, and colour perception it is hypothesized that:

H2: Perceived similarity in skin tone has a significant influence on purchase intention.
H2a: High perceived similarity in skin tone has a higher effect on purchase intention than low perceived similarity in skin tone.

2.3 Interaction of perceived body type and skin tone similarity on purchase intent

A recent study explored how different combinations of diversity in fashion advertisements (e.g., body type and skin tone diversity), influenced general female consumer responses (Mends & Hahn, 2025, pp. 1-3). The study consisted of three fashion ads, each with multiple female models, but in different clothing styles and settings. One ad featured both ethnic diversity (via differences in models' skin tone) and body diversity (via variations in models' body types). Another ad only included ethnic diversity, and a third had neither.

The study found that overall, ads with diversity increased feelings of empowerment and brand support, compared to ads with no diversity. More specifically, the ad with both ethnic and body diversity received the most positive responses. The ad with only ethnic diversity sparked mixed reactions, with some valuing the ethnic representation but criticizing the lack of body type diversity. The ad with no diversity led to negative perceptions.

These findings suggest an interaction effect between a model's body type and skin tone in fashion ads, with greater diversity on both elements increasing feelings of empowerment. This empowerment could stem from perceived similarity between the respondents and (one of) the models in the ad. However, the study did not measure perceived similarity with, or preference for, specific models.

This study builds on these insights to investigate specifically if featuring a single model, which may or may not be perceived as similar, has a direct effect on consumer responses and thus is an underlying explanation of the diversity impact in the previously mentioned study.

As stated before, in the study on fashion ads, when both dimensions of diversity were present in an ad, brand affinity was the strongest, while reactions were mixed with only ethnic diversity (Mends & Hahn, 2025, pp. 1-3). This pattern indicates that the impact of skin tone diversity on consumer attitudes may depend on body type diversity. Even though positive consumer and brand attitudes could lead to purchase intentions, the specific concept of product purchase intent was not measured. This study aims to investigate whether this could translate into purchase intentions. Based on the insights on the possible interaction effect between skin tone and body type similarity, it is hypothesized that:

H3: The effect of perceived similarity in skin tone on purchase intention will depend on perceived similarity in body type.
H3a: The effect of high perceived similarity in skin tone on purchase intention compared to low perceived similarity in skin tone will be higher when it concerns high perceived similarity in body type compared to low perceived similarity in body type.

2.4 Covariates

The main effects tested in this study are those of perceived body type and skin tone similarity on purchase intention. However, more variables possibly influence purchase intention. Therefore, this study included the following possible covariates: perceived fit-risk, perceived colour-risk, jeans' aesthetics, jeans' quality, age, ethnicity, income, and education.

First, perceived fit-risk, as discussed in 2.2.2, was found to be a mediator between perceived similarity and purchase intention in previous research (Zhang et al., 2024, p. 663). Fit-risk explains that low similarity between a consumer's body type and that of a model increases perceived risks related to product fit and appearance, compared to high similarity. This high risk then lowers purchase intentions compared to low risk.

Second, similarly to fit risk, a potential colour-risk is suggested. As per Section 2.2.3, perceived similarity in skin tone can influence how consumers evaluate clothing. Skin tone systematically affects clothing colour preferences, with participants preferring cooler hues for fair skin tones and warmer hues for tanned skin tones (Perrett & Sprengelmeyer, 2021, pp. 14-17). Therefore, a potential influence of concerns about colour coordination between the jeans and a participant's own skin tone is suggested.

Third, perceived jeans' aesthetics were included as a covariate, as visual appeal plays an important role in early apparel decision-making, which may influence purchase intention (Eckman et al., 1990, p. 13).

Fourth, perceived jeans' quality was included, as quality is especially important for jeans purchase intention (Karunaratne, 2020, p. 220).

Fifth, income may influence purchase intention, as individuals with higher disposable income have more to spend (CBS, n.d.-b, para. 1-2). The level of income could therefore affect the likelihood of purchasing products.

Sixth, age may influence purchase intention, partly due to generational differences in shopping behavior. Research showed that younger generations, such as Generation Z and Millennials, have a stronger preference for online shopping compared to older generations (Klaassen, 2022, para. 1). In 2024, 94% of people aged 25 to 45 purchased goods or services online, while this was only 41% among people aged 75 and older (CBS, 2024d, para. 8). Since this study is conducted in an online setting, age could therefore be related to purchase intention. Moreover, age is related to disposable

income, as older individuals often have more financial stability and therefore higher spending power (CBS, n.d.-b, para. 4-5).

Seventh, education may influence purchase intention both directly and indirectly. Higher education levels are often linked to higher disposable income, providing individuals with more to spend, which could increase purchase intention (CBS, n.d.-b, para. 4-5). In addition, research among first-generation bicultural consumers shows that higher education reduces the influence of social pressure on purchase decisions, suggesting that more educated individuals may make purchasing choices more independently (Aguilar-Rodríguez & Arias-Bolzmann, 2021, p. 30).

Last, ethnicity may also influence purchase intention. As mentioned previously, for bicultural consumers, education and ethnicity together affect how much purchasing decisions are influenced by social expectations (Aguilar-Rodríguez & Arias-Bolzmann, 2021, p. 30). Moreover, research shows that identifying with human models based on shared ethnicity can positively affect attitudes toward products and increase purchase intention, especially in online retail environments (Plotkina & Saurel, 2019, p. 371).

2.5 Hypotheses

To restate, the research question of this study is: *How do consumers' perceptions of similarity to a model in terms of body type (low vs. high) and skin tone (low vs. high) influence their purchase intentions of clothing items?*

The hypotheses developed to examine this relationship are outlined in Table 2.5 below.

Table 2.5 Overview of hypotheses

H1	*Perceived similarity in body type has a significant influence on purchase intention.*
H1a	*High perceived similarity in body type has a higher effect on purchase intention than low similarity in body type.*
H2	*Perceived similarity in skin tone has a significant influence on purchase intention.*
H2a	*High perceived similarity in skin tone has a higher effect on purchase intention than low perceived similarity in skin tone.*
H3	*The effect of perceived similarity in skin tone on purchase intention will depend on perceived similarity in body type.*
H3a	*The effect of high perceived similarity in skin tone on purchase intention compared to low perceived similarity in skin tone will be higher when it concerns high perceived similarity in body type compared to low perceived similarity in body type.*

3 Method

This chapter describes the methodological approach used in the study. First, the research design and sampling procedure are explained. Second, the materials, including the pretest, are introduced. Third, key constructs such as purchase intention and perceived similarity are operationalized. Fourth, the data collection procedure is outlined. Fifth, validity and reliability are addressed. Finally, the data analysis and ethical considerations are discussed.

3.1 Method choice

This study examined how the perceived similarity between consumers and fashion models, regarding their body type and skin tone, influences the purchase intentions of the items the models wear. To ensure that changes in the dependent variable resulted from manipulating the independent variables, it was essential to control for extraneous factors (Vargas et al., 2017, p. 101). Experimental research enables the isolation of these effects, making it a strong method for inferring causal relationships (Neuman, 2011, p. 282).

A 2x2 factorial design was used to examine the effects of perceived body type similarity (low vs. high) and perceived skin tone similarity (low vs. high) on purchase intention. Since perceived similarity could not be determined in advance for an unknown sample, participants could not be assigned to the four experimental conditions beforehand. Instead, they were categorized post hoc based on their similarity ratings. The experiment used a questionnaire to collect data from a large group in a standardized way (Babbie, 2016, p. 256).

3.2 Sampling

This experimental study aimed to examine the influence of perceived similarity, in terms of body type and skin tone, on consumers' purchase intentions for clothing. To accurately assess this relationship, controlling for other factors that may affect purchase behavior was important.

As described in section 2.1.1, there exist gender differences in prioritizing different factors when shopping. Therefore, this study focused on female respondents to reflect the primary target group in online fashion shopping in the Netherlands. Moreover, limiting the sample to females helps control for gender-based differences in shopping preferences that may otherwise influence purchase intentions. Furthermore, the target sample consisted of individuals aged 18 and above, living in the Netherlands. The age restriction of 18 and older is applied to avoid ethical concerns associated with surveying minors (Janssen & Verboord, 2024, p. 4). Lastly, the sample was limited to Dutch residents, as the study was conducted by a researcher based in the Netherlands, making this group the most accessible for recruitment. Moreover, the Netherlands has high online shopping rates on clothing, as discussed in Section 2.1.1. (CBS, 2024d, para. 1). Details on the final sample and its characteristics are presented in Section 4.1.

3.2.1 Sampling method

To gather female participants of 18 years and above within the Netherlands, this study employed a nonprobability sampling method. Such a method does not rely on random selection (Babbie, 2016, p. 195). Instead, participants are selected purposively, based on quotas, or from those who are readily available. The nonprobability method used in this study is called snowball sampling. This involves recruiting initial participants who then refer others within their network, creating a chain of referrals (pp. 196-197). Given the short timeframe and strict deadlines of this research, a fast and effective method for gathering respondents was required. Snowball sampling was chosen for its feasibility and efficiency in recruiting participants. The survey link was shared online through the social media accounts of the researcher (e.g., WhatsApp, Instagram, LinkedIn, and Facebook) with a brief description inviting females 18 years and older. All followers, friends, and acquaintances were encouraged to share the research with their networks.

3.2.2 Sampling size

When conducting an experiment, a sample with a minimum of 30 individuals per experimental condition is desirable to generalize the findings (Janssen & Verboord, 2024, p. 13). This study with a 2x2 factorial design therefore needed to acquire at least 120 participants, but aimed for a minimum sample size of 150 participants to account for potential data exclusions or dropouts. Due to the post hoc classification of the independent variables about perceived similarity, an equal distribution of participants across the four conditions could not be ensured. While the aim was to have at least 30 participants per condition, actual group sizes could differ depending on participants' self-reported similarity ratings. The final sample, as described in 4.1, consisted of 175 women.

After determining the target sample size, the next step involved designing the materials used for the experimental survey.

3.3 Materials

A visual stimulus was developed to examine how perceived similarity between consumers and models influenced purchase intentions. The stimulus was AI-generated and consisted of a photograph of a model wearing blue jeans. In the main study, participants rated their perceived similarity to the model on two dimensions: body type and skin tone. Based on their ratings, they were categorized into one of four experimental groups (low vs. high body type similarity × low vs. high skin tone similarity). By comparing purchase intentions of the blue jeans across these groups, the influence of perceived similarity on purchase behavior could be assessed. This section first describes the pretest conducted to select and validate the stimulus, followed by a description of the final stimulus used in the main study.

3.3.1 Pre-test

Pre-tests are valuable to validate materials and assess their intended effects before the main study (Neuman, 2011, p. 304). In this study, perceived similarity served as a key grouping variable: participants' ratings determined their categorization into experimental groups. Therefore, the pretest aimed to select a stimulus that participants would perceive as neither highly similar nor highly dissimilar, allowing enough variation in perceived similarity ratings in the main study. As described in Section 2.2, perceived similarity cannot be predicted by specific body types or skin tones. Though, to give participants a diverse representation, nine different models were created for the pretest with differences in body types and skin tones. Body type was divided into thin, medium, and plus-size. Skin tone was divided into light, medium, and dark. Combining these dimensions resulted in nine different model stimuli for the pretest.

The models were created using artificial intelligence (AI). AI image generators produce new images by learning patterns from online images and turning random pixels into complete pictures based on text prompts (Johnson, 2023, para. 10). AI can create lifelike images of people who do not exist because it is trained on large sets of real photos. Specifically, AI-generated white faces are often perceived as hyper-realistic (Thompson, 2024, para. 4). In this study, besides manipulating the body type and skin tone, the models' hairstyle, hair colour, eye colour, outfit, and pose were kept as similar as possible across all nine models. This was done to minimize the influence of extraneous variables on perceived similarity. The pre-test survey containing the nine models can be found in Appendix A, and the prompts for AI to create the models are in Appendix L.

3.3.1.1 Procedure and operationalization

The pre-test survey, as shown in Appendix A, started with informed consent, outlining participant rights, anonymity, and data usage. When participants consented and confirmed they were 18 years or older, they could proceed. Next, a gender screening was conducted, allowing only participants identifying as female to continue. For those who selected male, another gender identity, or preferred not to say, the survey ended at that point. Participants were then shown the nine different models in random order and were asked to rate their perceived similarity to each model in terms of body type and skin tone. Each dimension was measured with a single 7-point bipolar item (e.g., "The model's body type is similar to mine," ranging from Strongly Disagree to Strongly Agree), adapted from Packard et al. (2016, p. 30).

As a manipulation check, participants were asked to categorize the models into body type and skin tone categories. For the models' body type, the given categories were thin, medium, or plus-size. For skin tone, these were light, medium, or dark. Lastly, age and country of residence were assessed. Age was assessed with an open-ended question, and country of residence was measured with two options: The Netherlands or Other, with an open field. The estimated duration of the survey

was approximately 5-7 minutes. Before launching the pre-test, a small pilot test was conducted as described in the following section.

3.3.1.2 Pilot test

A pilot test was done with five individuals (a family member, two student peers unfamiliar with the study's purpose, an independent university professor, and a director of a research bureau). They completed the survey to check the clarity of the instructions, flow, and feasibility.

Some participants noted that as they saw more models, their earlier judgments about categorizing models into skin tone and body type groups felt inaccurate. This could reflect a learning effect, a type of order effect, where respondents adjust their judgments as they encounter more examples (Choi & Pak, 2005, p. 9). For instance, seeing models with a wider range of body types or skin tones later in the task may have led them to re-evaluate how they had classified earlier models. Moreover, it may have caused respondents to shift their upcoming answers as they refined their understanding of the categories. To reduce the likelihood of order effects, the presentation order of the models was randomized for each participant using a loop and merge design in Qualtrics. Randomization distributes any potential order bias across participants, limiting its impact on overall results (Perreault, 1975, p. 545).

Since no major issues were encountered during the pilot test, the pre-test could be distributed.

3.3.1.3 Data collection and sample

The pre-test was distributed through WhatsApp and Instagram to the researcher's personal network of friends, family, and student peers. Participants were encouraged to forward the survey to one additional person to broaden the reach through the snowball sampling approach. After excluding incomplete responses and ineligible participants, the final sample consisted of 32 female participants, aged between 19 and 63 ($M = 31.63$, $SD = 13.78$), all residing in the Netherlands. For validating measures, a small pre-test sample is generally sufficient and accepted in experimental research (Neuman, 2011, p. 304).

3.3.1.4 Data analysis and results

After cleaning the dataset and excluding one male respondent, the data were prepared for analysis. For each of the nine models, a new variable was created by calculating the combined average of the perceived similarity scores on both dimensions: body type and skin tone. The next step was to determine which model was perceived as most "neutral" in similarity, that is, the value of 4, i.e., the midpoint of the 7-point similarity scale. This indicates that the model scored neither low nor high on perceived similarity.

A one-sample t-test was conducted to compare the perceived skin tone and body type similarity of each model against the neutral scale point (4). A p-value $< .05$ indicates that perceived

similarity was significantly different from the test value, meaning the model was not perceived as neutral. To identify a model that was perceived as most neutral on both dimensions, models with no significant difference from 4 ($p > .05$) on both perceived skin tone and body type similarity were considered.

The results showed that the model characterized by a medium skin tone ($M = 3.97$, $SD = 1.66$) and medium body type ($M = 3.84$, $SD = 1.42$) was not significantly different from the neutral scale point on either dimension, skin tone $t\ (31) = -.107$, $p = .916$, and body type $t\ (31) = -.624$, $p = .537$. Moreover, the model characterized by a medium skin tone ($M = 4.38$, $SD = 1.36$) and thin body type ($M = 4.53$, $SD = 1.57$) was not significantly different from the neutral scale point on either dimension, skin tone $t\ (31) = 1.558$, $p = .129$, and body type $t\ (31) = 1.920$, $p = .064$. Both models were, therefore, statistically not different from the neutral test value. However, the medium skin tone, medium body type model was chosen because its mean scores were numerically closest to the neutral value of 4, and its p-values indicated the least difference from the test value. Additionally, the medium skin tone, thin body type model's body type similarity approached significance ($p = .064$), making it a less optimal choice. The remaining seven models had at least one dimension with a mean significantly different from 4 and were therefore not considered as neutral stimuli (see Appendix C2). Based on these findings, the medium skin tone, medium body type model was selected as the stimulus for the main study.

As a manipulation check, participants' categorizations of the models' body type and skin tone were also examined. All models were categorized as intended by the majority of the participants (see Appendix B2-10). Percentages of respondents who accurately categorized the models ranged from 68.8% to 100% for the models' skin tones and from 65.6% to 93.8% for the models' body types. Specifically, the medium body type and medium skin tone model selected for the main study was correctly categorized by 94% of participants for body type and 81% for skin tone (see Appendix B6). However, the percentage of failures in manipulation checks was not seen as a reason for excluding models or participants. As described in Section 2.2, actual similarity does not always predict perceived similarity, and subjective views of oneself can be influential (Cinelli & Yang, 2016, p. 480). Therefore, inaccurate objective categorizations do not invalidate the subjective perceived similarity ratings, which are the focus of the study. Moreover, the differing perceptions of body type and skin between participants are a finding that aligns with the subjective nature of perceived similarity and supports the decision to use participants' ratings as the basis for division into experimental groups in the main study.

To conclude, the medium/medium model was chosen based on perceived similarity ratings closest to the midpoint, making her the most neutral in perceived similarity and thus suitable as a stimulus for the main study.

3.3.2 Main study

In the main study, participants were shown a single model selected from the pre-test as the most "neutral" in both perceived body type and skin tone similarity (see Appendix D). This model's average perceived similarity ratings were closest to the midpoint (4) on a 7-point scale for both dimensions.

The model had a medium body type and medium skin tone. She was wearing a pair of blue jeans, a white top, and brown sandals. The model was depicted against a white background to simulate a typical product photo found in online webshops. The clothing items worn alongside the jeans were deliberately chosen to avoid distracting from the jeans or influencing purchase intentions based on style preferences. Using a stimulus that resembles an online model image situates the study within a relevant and realistic context for examining the purchase intentions of clothing.

3.4 Operationalization

This section outlines how the main constructs were measured, including purchase intention, perceived similarity in body type and skin tone, as well as control questions, covariates, and demographic variables. The internal consistency of the scales was examined using Cronbach's alpha (α). A value of $\alpha \geq .70$ is generally considered acceptable for indicating reliability (Taber, 2017, p. 1293).

3.4.1 Purchase Intention

Purchase intention was measured in the main study using three items adapted from White et al. (2015, p. 114). The scale originally reported $\alpha = 0.94$, while, in this study, it demonstrated a Cronbach's alpha of $\alpha = .95$ (see Appendix F2 for the reliability test results). The items assessed purchase intention on a 7-point scale: How likely would you be-, how willing would you be-, and how inclined would you be to buy the jeans the model is wearing (not at all/very much).

3.4.2 Perceived Body Type Similarity

Perceived body type similarity was measured using three items adapted from Packard et al. (2016, p. 30). The scale originally reported $\alpha = 0.97$. In this study, it resulted in an alpha of $\alpha = .98$ (see Appendix F8 for the reliability test results). Participants are asked to indicate how similar the model's body type is to theirs on three 7-point bipolar items (not at all/very much similar to me, not at all/very much like me, nothing in common/very much in common with me). For the pretest, this measure was reduced to one item to increase efficiency and reduce participant fatigue, while still capturing the core construct of perceived similarity.

3.4.3 Perceived Skin Tone Similarity

Perceived skin tone similarity was measured using the same three items adapted from Packard et al. (2016, p. 30). Again, originally the scale reported α = 0.97, while, in this study it resulted in α = .98 (see Appendix F5 for the reliability test results). Participants were asked to indicate how similar the model's skin tone is to theirs on three 7-point bipolar items (not at all/very much similar to me, not at all/very much like me, nothing in common/very much in common with me). Again, for the pretest, this measure was reduced to one item to increase efficiency and reduce participant fatigue, while still capturing the core construct of perceived similarity.

3.4.4 Control questions

As a control measure, two attention checks were done. The attention checks were included in the main study to ensure participants' attention and validate the measurements (Neuman, 2011, p. 304; Oppenheimer et al., 2009). Such checks are an effective method to ensure responses are valid and the data quality is high (Abbey & Meloy, 2017, pp. 63-64). One type of attention check done is an instructed response item, which directs a participant to choose a specific response to assess whether the instructions have been read carefully and were followed (Muszyński, 2023, pp. 9-11). Such an item can be implemented into an existing list of questions. In the study, the item was embedded into the purchase intentions list, and instructed participants to select a specific response on a 7-point Likert scale ("To ensure you're reading carefully, please select the number 7").

The second attention check was embedded after assessing all stimulus-related questions. This question asked respondents to indicate to what extent they had paid close attention to the model on a 7-point Likert scale. This approach aligns with Vargas et al. (2017, p. 110), who explain that most advertising experiments are designed to ensure attention to the stimulus, as this increases the likelihood of observing an effect.

While these control checks helped ensure the reliability of the responses, additional covariates were included to account for other factors that could influence participants' purchase intentions.

3.4.5 Covariates

As the influence of perceived similarity on purchase intention of jeans is tested, it is helpful to measure variables related to motivations or influences when it comes to the purchase of jeans and clothing, or general purchase intention. Multiple variables were measured as possible covariates in the study. Their construction and purpose are described in this section.

First, as described in Section 2.4, perceived body type similarity may influence purchase intention through a fit-risk, where low similarity increases perceived fit and appearance risks, reducing purchase intent (Zhang et al., 2024, p. 663). To control for this, one item from Zhang et al. (2024, p. 667) was adapted to assess whether this concern influenced participants' decisions: How

much risk would you say there would be that, if you purchase the jeans online, the product will not fit you like you expect? Responses were measured on a 7-point scale (1 = Very little risk, 7 = A great deal of risk).

Second, similarly to fit-risk, Section 2.4 suggested a colour-risk. Here, concerns about colour coordination between the jeans and a participant's own skin tone possibly influence purchase intention. Therefore, a colour-risk question was adapted in parallel to the fit-risk control item: How much risk would you say there would be that, if you purchase the jeans online, the product's colour will not match your skin tone in an aesthetically pleasing way? As before, responses were measured on a 7-point scale (1 = Very little risk, 7 = A great deal of risk).

Third, aesthetic appeal can influence the purchase intentions of clothing items, such as jeans (Eckman et al., 1990, p. 13). To account for this, one item was adapted from Zhang et al. (2024, p. 668): How attractive do you find the jeans the model is wearing? (1 = Not at all attractive, 7 = Extremely attractive).

Fourth, perceived quality of the jeans can also influence participants' purchase intention (Karunaratne, 2020, p. 220). To account for this, participants were asked: "How would you rate the quality of the jeans the model is wearing?" (1 = Very low quality, 7 = Very high quality).

Fifth, income, which may influence purchase intention through differences in disposable income (CBS, n.d.-b, para. 1-2), was measured using a categorical item with nine income brackets ranging from 0 to 7000 euros, based on 2023 CBS data and the Parade of Pen (2025). The middle and lower income ranges are more detailed, as most people fall within these groups. The higher income categories are broader due to fewer individuals with very high incomes.

Sixth, age, which may influence purchase intention through online shopping preferences (Klaassen, 2022; CBS, 2024d) and its link to income levels (CBS, n.d.-b, para. 5-6), was assessed with an open-ended question.

Seventh, education level, which may relate to purchase intention through higher income or more independent purchase decisions (Aguilar-Rodríguez & Arias-Bolzmann, 2021), was measured based on the CBS (n.d.-a) 5-level classification.

Last, ethnic origin, which may influence purchase intention through its interaction with education or by fostering identification with the model (Aguilar-Rodríguez & Arias-Bolzmann, 2021; Plotkina & Saurel, 2019), was measured using multiple-choice options based on the 16 largest ethnic groups in the Dutch population (CBS, 2024a).

3.5 Procedure

The recruitment of participants was done through social media channels such as Instagram, WhatsApp, LinkedIn, and Facebook. The questionnaire, as seen in Appendix D, was conducted on Qualtrics and took approximately 6 to 8 minutes to complete. Participants first read an introduction explaining the general purpose of the study, anonymity, confidentiality, and their right to withdraw at

any time. After confirming they were 18 or older and providing informed consent, participants were asked to indicate their gender. Only those identifying as female could continue with the survey.

All participants were then shown the same model image, selected in the pretest as the most neutral in terms of perceived body type and skin tone similarity. They were asked three questions measuring their purchase intention regarding the jeans worn by the model. This was followed by an instructed-response attention check.

Participants then answered six items assessing their perceived similarity to the model, with three items about body type and three about skin tone. Afterwards, several questions were presented to measure potential covariates, including perceived risk of fit mismatch, perceived risk of colour mismatch with skin tone, aesthetic appeal of the jeans, and perceived jeans quality.

Another attention check assessed the attention paid to the model. Demographic questions followed at the end of the survey, including age, country of residence, ethnic identification, income level, and education. Finally, participants were debriefed about the true purpose of the study, thanked for their time, and asked not to share any details of the study with others. The researcher's contact information and a space for comments were also provided.

3.6 Validity & reliability

To assess whether a concept is accurately measured, one looks at validity (Babbie, 2016, p. 152). Whether a measure is consistent in getting the same results every time depends on its reliability (p. 149). In this section, the validity and reliability of this study's methods are explained.

Firstly, there are different types of validity, such as face, content, and criterion-related (Babbie, 2016, pp. 152-156). Face validity refers to whether a measurement reflects what it aims to measure. In this study, face validity was present. The items for perceived similarity and purchase intention were straightforward. For instance, participants were asked how similar the model's body type or skin tone was to their own, and how likely, willing, or inclined they were to purchase the jeans. Moreover, content validity refers to whether all important aspects of a concept are included. The constructs of perceived similarity and purchase intention were specific and measured using multiple items that captured their core meaning. Because of this, the measurement was considered valid. In addition, criterion-related validity involves how well a measure predicts an outcome. Although actual purchase behaviour was not measured, purchase intention is widely used as an indicator of it. This provides some support for criterion-related validity.

Secondly, though the experiment was not conducted under laboratory conditions, survey-based studies tend to be reliable due to the use of standardized procedures (Babbie, 2016, p. 287). In this study, reliability was supported through the internal consistency of the scales used. As described in Section 3.4, the scales for purchase intention, perceived body type similarity, and perceived skin tone similarity were reliable in both previous and current research. Additionally, the use of a standardized survey and a single stimulus helped ensure consistent data collection and reduced potential

researcher influence. Moreover, the use of clear instructions improved the reliability of the finding as participants could know what was expected of them (Neuman, 2014, p. 309).

3.7 Data analysis

All data were analyzed using IBM SPSS Statistics (version 29). Before testing the hypotheses, the dataset was filtered for non-female respondents and participants with incomplete responses on the key variables of purchase intention and perceived similarity in body type and skin tone. Moreover, people who did not pass an attention check were removed, as well as one extreme outlier with inconsistent answers. Following data cleaning, a preliminary analysis was done.

First, descriptive statistics and frequencies of demographics were assessed, such as age, country of residence, ethnicity, income, and education level. Second, the reliability of the measurement scales was examined. To assess the internal consistency of the multi-item scales, Cronbach's alpha coefficients were computed. As reliability was acceptable ($\alpha \geq .70$), composite mean scores were calculated for each construct. The constructs of purchase intention, perceived body type similarity, and perceived skin tone similarity were thus computed into new variables. Each construct was measured using three items on a 7-point Likert scale ranging from 1 (not at all) to 7 (very much), resulting in continuous mean scores with possible decimal values, such as .33 or .67.

Third, participants were assigned to one of the four experimental groups. Perceived similarity scores served as independent variables in the 2x2 experimental design of perceived skin tone similarity (low vs. high) x perceived body type similarity (low vs. high). To assign participants to one of the four groups, similarity scores were categorized into low or high using a trichotomization method. Normal trichotomization divides a 7-point Likert scale into three categories: low (1-3), neutral (4), and high (5-7) (Jeong & Lee, 2016, p. 129). In this study, however, trichotomization was adjusted to account for the use of mean scores across three items, which could result in values with two decimals. Specifically, scores were divided into three equal intervals: 1.00-3.33 (low similarity), 3.34-4.33 (neutral), and 4.34-7.00 (high similarity). This approach accounted for the hypothetical possibility of rounding decimal values up or down. For example, a participant who scored 3.33 on body type similarity could be rounded down to 3 on the original Likert scale, and thus belong to the low group. This division ensured a categorization that closely mirrored standard trichotomization while accommodating decimal scores.

Participants with neutral scores were excluded from further analysis. A score around 4 on perceived similarity may reflect neither clear similarity nor dissimilarity, meaning such participants did not conceptually fit into either the low or high group. In addition, the number of participants in the neutral categories was too small (fewer than 10 per condition), which would have resulted in unequal and unreliable group comparisons.

Fourth to the preliminary analysis was the Pearson correlation of possible covariates with the dependent variable of purchase intention. Associations were explored between purchase intention

and several theoretically relevant control variables: age, income, education level, perceived aesthetic appeal of the jeans, perceived fit-risk of the jeans, perceived colour-risk of the jeans, and perceived quality of the jeans. While no additional analyses were conducted using these variables as covariates, their relationships are discussed in the results section to offer a broader understanding of possible influences on purchase intention.

Lastly, before running the main analysis were the assumption checks for an ANOVA. Several checks were performed for outliers, normality of distribution, and homogeneity of variance. Kolmogorov-Smirnov and Shapiro-Wilk tests were conducted to assess the normality of distributions of purchase intentions in the key grouped variables of perceived similarity. As the Shapiro-Wilk test is considered most powerful, these results were followed (Mohd Razali & Yap, 2011, p. 32). Levene's test for equality of variances using the trimmed mean was applied, as this method is more robust in the presence of non-normality and outliers (Zhou et al., 2023, p. 8).

The main analysis consisted of a two-way ANOVA to test the main and interaction effects of perceived similarity in body type and skin tone on purchase intention (H1-H3). In addition, two non-parametric Mann-Whitney U tests and a Kruskal-Wallis test were conducted because of violated assumptions of the ANOVA.

3.8 Ethical considerations

This study carefully considered several ethical principles, including voluntary participation, informed consent, anonymity, confidentiality, avoidance of harm, and post-study debriefing, as outlined by Babbie (2016, pp. 62-71).

First, the purpose of the study was to uncover whether people's perceptions of similarity to a model, in terms of body type and skin tone, could influence their purchase intention of the model's clothing. Because terms related to body size and skin tone can be sensitive or even offensive, neutral and respectful wording was used throughout (e.g., plus-size rather than fat or thick). Moreover, perceived similarity is a subjective experience, as outlined in Section 2.2. It was therefore measured using a 7-point scale to prevent participants from feeling forced into binary yes or no choices.

Second, participants were informed about the general aim of the study, namely, their perceptions and intentions related to product photos in online shopping environments. While the exact focus on perceived similarity and purchase intention was only revealed during debriefing, this was not considered deceptive, as no misleading information was provided during the study.

Third, at the start of the study, participants were informed of their voluntary and anonymous participation. They were also told that their responses would be stored securely on the university's platforms and treated confidentially. Participants could withdraw from the study at any time without providing a reason. Before starting the survey, informed consent was obtained to ensure participants understood and agreed with these conditions.

Fourth, the study only included women. This could have led other gender identities to feel excluded. Those who did not identify as women were thanked for their interest and informed that the study was focused on women only.

Fifth, in addition to the main variables, participants were asked for demographic information such as age, country of residence, ethnic background, income, and education level. Because these questions could be considered sensitive, none of them were mandatory.

Lastly, the study used AI to generate the models shown in the stimuli. This ensured that no real individuals were depicted and therefore no consent or protection of real persons was required. Even though AI-generated models have been used by retailers such as H&M and Levi's, the effects are not clearly positive or negative (Terra, 2023; McMahon, 2025). Some studies suggest they may negatively affect people's self-perception, especially in certain minority groups (Sands et al., 2024, p. 1396), while others find that these models are often seen as realistic and hardly distinguishable from real people (Thompson, 2024, para. 4).

4 Results

This chapter presents the results of the study. First, descriptive statistics for the sample are described. Second are the control questions that were examined to ensure data quality. Third, the main analysis tested the hypotheses using a two-way ANOVA. Fourth, additional analyses were conducted, including non-parametric tests to support the findings in light of assumption violations. Lastly, exploratory tests were done related to the potential interaction effect.

4.1 Descriptive results

Within two weeks, a total of 314 responses were collected. During data cleaning, 15 non-female respondents were excluded, along with 47 cases missing responses on key variables, including gender, purchase intention, perceived body type similarity, and perceived skin tone similarity. Moreover, 16 participants who failed the first attention check were removed. No exclusions were made based on the second attention check (see Section 4.2 for details).

Additionally, one outlier with internally inconsistent responses was removed from the dataset (see Section 4.3.1). Furthermore, 61 participants were excluded due to scoring within the mid-range ("neutral") category on at least one of the two perceived similarity scales (i.e., between 3.34 and 4.33 on a 7-point Likert scale). These neutral scores did not align with the defined low (1.00–3.33) versus high (4.34–7.00) grouping used in the hypothesis testing. In addition, the number of participants within each resulting mixed or neutral condition (e.g., 5 respondents in the neutral body type similarity × high skin tone similarity group) was too small to allow for reliable analysis. After these exclusions, the final sample consisted of 175 female respondents.

The sample distribution across the four experimental conditions was unequal: 87 participants were placed in the low body type × low skin tone similarity group, 23 in the low body type × high skin tone similarity group, 43 in the high body type × low skin tone similarity group, and 22 in the high body type × high skin tone similarity group. Although the group sizes were unequal and some had fewer than 30 participants, research by Hedges (1982, p. 490) supports that groups with at least 10 participants can still lead to reliable results. Their study showed that effect size estimates and homogeneity tests remained accurate in simulations when group sizes exceeded 10. Potential limitations related to group size and distribution will be tested and discussed further in Chapter 5.

The characteristics of participants in the sample regarding age, country of residence, ethnicity, education, and income will be described. First, participants' ages ranged from 18 to 66 years (M = 29.42, SD = 11.38). Most respondents (96.0%, n = 168) reported currently living in the Netherlands, while 4.0% (n = 7) did not answer this question. Regarding ethnic or cultural background, 81.0% of participants (n = 136) identified most with Dutch ethnicity. Smaller groups reported backgrounds such as Indonesian (1.8%, n = 3), Belgian and German (each 1.1%, n = 2), and others that were each mentioned by one participant (0.6% each), including Afghan, Bulgarian, Chinese, Czech, French, Indian, Iranian, Italian, Kurdish, Melanesian, Moroccan, Moluccan, Somali, Spanish, Surinamese,

Taiwanese, Ukrainian, and Vietnamese (see Appendix E6). One participant (0.6%) preferred not to disclose their background, and 4.0% (n = 7) left the question unanswered.

Moreover, regarding educational level, 53.3% of respondents (n = 73) had completed higher vocational education (HBO) or a university bachelor's degree. Another 21.9% (n = 30) held a university master's degree or PhD. Additionally, 20.4% (n = 28) had completed senior years of general secondary education (HAVO or VWO) or MBO level 2-4, and 4.4% (n = 6) reported a pre-vocational level (VMBO, MBO level 1, or the junior years of HAVO/VWO). Four participants (2.8%) did not answer this item.

Lastly, monthly personal gross income (before taxes) was distributed across various ranges. The most frequently reported range was €2,500 to €3,749, selected by 29.2% of participants (n = 49). Other income levels included less than €1,000 (19.6%, n = 33), €1,000 to €1,699 (15.5%, n = 26), €1,700 to €2,499 (13.7%, n = 23), €3,750 to €4,999 (10.1%, n = 17), €5,000 to €5,999 (3.0%, n = 5), and €6,000 to €6,999 (1.2%, n = 2). One participant (0.6%) reported earning €7,000 or more. A few participants indicated having no personal income in the past year (4.2%, n = 7), and 3.0% (n = 5) preferred not to answer. Seven participants (4.0%) did not respond to the income question.

4.2 Control questions

To ensure data quality, two attention checks were included in the study. The first was an instructed response item embedded within the purchase intention scale, and the second was a self-reported measure of attention placed after the stimulus-related questions.

Of the 265 participants who responded to the first attention check, 18 (6.8%) failed to select the instructed response ("7"), as directed. Consequently, 16 participants were excluded from the dataset. Two additional participants who failed this check had already been excluded earlier due to missing responses on key variables.

The second attention check asked participants to indicate how closely they had paid attention to the model, using a 7-point Likert scale. Of the 241 participants who completed this item, 1.2% selected "1 – not at all," 1.2% selected "2," 6.6% selected "3," 19.1% selected "4," 33.2% selected "5," 24.1% selected "6," and 14.5% selected "7 – very closely". No participants were excluded based on this measure. As Vargas et al. (2017, pp. 110-113) note, people often see advertising in cluttered environments and do not give it their full attention. Forcing participants to focus too much on a stimulus can make an experiment less realistic. Allowing for different levels of attention can make the results more reflective of real-world conditions and still meaningful.

4.3 Main analysis

In this chapter, the main analysis of the study is shown. First, assumptions were tested to ensure the data met the conditions for ANOVA. Next, potential covariates were examined to assess

their relevance for inclusion. Finally, the results of the two-way ANOVA are presented, testing the effects of perceived similarity in body type and skin tone on purchase intention.

4.3.1 Violation of assumptions

Before conducting a two-way ANOVA, there are several assumptions that need to be met. These include the level of measurement, random sampling, independence of observations, no outliers, normal distribution, and homogeneity of variance (Pallant, 2020, pp. 213-220).

First, the assumption regarding the level of measurement requires the dependent variable to be measured at the interval or ratio level (Pallant, 2020, p. 213). In this study, purchase intention was measured using three items on a 7-point Likert scale. Likert scales are commonly treated as interval-level data in practice. Therefore, this assumption can be considered met.

Second, the assumption of random sampling was not fully met. Participants were recruited using a non-probability snowball sampling method via social media, which means the sample may not be representative of the broader population. However, as Pallant (2020, p. 213) notes, random sampling is often not achieved in real-world research. Therefore, this deviation was not considered a serious threat to the validity of the ANOVA results.

Third, the independence of observations is assumed because all responses were collected anonymously and individually. Although participants were not randomly assigned beforehand, they were grouped afterward based on their own reported perceptions. Each participant appeared in only one group, so there was no overlap or influence between responses. This suggests independence of observations.

Fourth, the data was explored for possible outliers. Boxplots of the low body type x high skin tone similarity and low body type x low skin tone similarity both showed an outlying case. These two cases were examined individually, and one case was deleted from the dataset due to an outlier pattern. The participant reported the maximum purchase intention score (7) while simultaneously indicating very low perceived similarity scores (< 3.33) on both body type and skin tone scales, and scored the lowest point of 1 for both control variables of jeans aesthetic and perceived jeans quality. Moreover, this respondent showed inconsistent response behaviour, scoring 7 on one item of the body type scale while scoring 1 on all others. The other outlier respondent, however, showed consistent responses and thus was kept within the dataset. New boxplots without outliers can be found in Appendix H3, H5, and H7.

Fifth, the normality of distributions was tested. The Kolmogorov-Smirnov and Shapiro-Wilk tests were conducted to examine the normality of distributions of purchase intentions in the key grouped variables of perceived skin tone similarity and body type similarity. Both tests assess normality violations across groups, but only the Shapiro-Wilk results are reported, as it is considered more powerful (Mohd Razali & Yap, 2011, p. 32).

For the purchase intentions of the low perceived body type x low perceived skin tone similarity group, a Shapiro-Wilk test showed a significant departure from normality, W (87) = .87, p <.001. Similarly, a Shapiro-Wilk test for the purchase intentions of the low perceived body type x high perceived skin tone similarity group revealed a significant departure from normality, W (23) = .89, p = .013. Furthermore, in the high perceived body type x low perceived skin tone similarity group, there was also a significant departure from normality, W (43) = .90, p = .001. Lastly, in the high perceived body type x high perceived skin tone similarity group, there was no significant departure from normality, W (22) = .91, p = .051. Thus, the assumption of normality was not met for most groups, as shown by the Shapiro-Wilk tests, which could affect the reliability of ANOVA outcomes (Pallant, 2020, p. 214).

Last, the homogeneity of variances was tested. Levene's test was conducted to assess the assumption of equal variances across the four experimental groups. As the former test of normality of distributions showed a non-normal distribution, in this test the value of the trimmed mean was used, since this is considered most appropriate for skewed distributions (Zhou et al., 2023). The test, based on the trimmed mean, was significant, F (3, 171) = 3.76, p = .012, indicating that the assumption of homogeneity of variance was not met. This challenged the robustness of the parametric analysis (Pallant, 2020, p. 215).

4.3.2 Covariates

To examine whether participants' background or product-related factors influenced purchase intention, Pearson correlation analyses were conducted between the dependent variable (purchase intention) and several control variables. These included demographic factors (age, education, and income) and product-related factors (jeans aesthetic appeal, perceived jeans quality, fit risk, and colour risk). Ethnicity was assessed but excluded from the main correlation analyses due to limited diversity in responses and small subgroup sizes, which would not allow for reliable statistical interpretation.

If a variable is strongly correlated with the dependent variable, it can be included as a covariate in further analyses (Huitema, 2011, p. 596). A commonly used guideline is that a Pearson correlation coefficient (r) above .51 indicates a strong relationship (Janssen & Verboord, 2024, p. 19). Including covariates in an analysis of variance, specifically ANCOVA, has several advantages. It reduces the likelihood that the effect on purchase intention is due to confounding variables. Furthermore, it increases the power of the test, which improves the accuracy of the results (Huitema, 2011, p. 123).

As a result of the correlation test, jeans' aesthetic appeal showed a strong positive correlation with purchase intention (r = .700, p <.001). Perceived jeans' quality was also positively correlated, though moderately (r = .326, p <.001). Fit risk showed a weak but significant negative correlation with purchase intention (r = -.240, p = .002), and was also weakly and negatively correlated with

perceived body type similarity ($r = -.281$, $p < .001$). Other factors, such as colour risk, age, education level, and income level, did not show (strong) significant correlations with either the dependent variable or the independent variables, and were therefore excluded from further analysis (see Appendix G).

Based on these results, jeans' aesthetic appeal, which strongly correlated with purchase intention, was considered a potential covariate. Variables with weak or moderate correlations were not taken into account.

However, the assumption tests for an ANCOVA with jeans' aesthetic appeal as a covariate revealed a violation. Specifically, the test of homogeneity of regression slopes was violated for the interaction between body type and jeans' aesthetics, F (1, 163) = 4.35, p = .039, while no violation was found for the interaction between skin tone and jeans' aesthetics, F (1, 163) = 0.04, p = .848. This violation indicates that the relationship between the covariate and the dependent variable differs across the levels of the body type variable. Based on this finding, it can be suggested that the treatment (body type similarity) influenced participants' perception of the jeans' aesthetic appeal, causing the covariate to vary systematically across groups. When a covariate is influenced by the treatment, ANCOVA may wrongly reduce the treatment's true effect on the dependent variable, which can lead to inaccurate results (Huitema, 2011, p. 297). Since ANCOVA assumes that the relationship between the covariate and the dependent variable is consistent across groups, including a covariate affected by treatment breaks this assumption. Therefore, jeans' aesthetic appeal was excluded as a covariate, and the independent variables were analyzed without statistical control for it.

The next section thus describes the results of a two-way ANOVA, considering only possible perceived body type and skin tone similarity effects.

4.3.3 Results two-way ANOVA

A two-way ANOVA was conducted with perceived body type similarity and perceived skin tone similarity as independent variables, and purchase intention as the dependent variable.

4.3.3.1 Hypothesis 1

First, H1 and H1a were tested, which were as follows:

H1 *Perceived similarity in body type has a significant influence on purchase intention.*
H1a *High perceived similarity in body type has a higher effect on purchase intention than low similarity in body type.*

A significant main effect of perceived body type similarity on purchase intentions was found, F (1, 171) = 14.47, $p < .001$, partial $\eta 2$ = .08. Based on conventional benchmarks, this represents a moderate effect (Huitema, 2011, p. 16). Thus, purchase intention was higher in the high

perceived body type similarity condition (*M* = 3.14, *SD* = 1.57) than in the low perceived body type similarity condition (*M* = 2.31, *SD* = 1.30). Hypotheses 1 and 1a are therefore accepted.

4.3.3.2 Hypothesis 2

Then, hypotheses 2 and 2a were tested, which stated:

H2 *Perceived similarity in skin tone has a significant influence on purchase intention.*
H2a *High perceived similarity in skin tone has a higher effect on purchase intention than low perceived similarity in skin tone.*

No significant main effect of perceived skin tone similarity on purchase intentions was found, F (1, 171) = .03, p = .873, partial η2 = .00. Thus, purchase intention was not higher in the high perceived skin tone similarity condition (*M* = 2.73, *SD* = 1.51) than in the low perceived skin tone similarity condition (*M* = 2.58, *SD* = 1.44). Hypotheses 2 and 2a are therefore rejected.

4.3.3.3 Hypothesis 3

Lastly, the interaction effect between perceived body type similarity and perceived skin tone similarity on purchase intentions was tested. Their respective hypotheses were as follows:
H3 *The effect of perceived similarity in skin tone on purchase intention will depend on perceived similarity in body type.*
H3a *The effect of high perceived similarity in skin tone on purchase intention compared to low perceived similarity in skin tone will be higher when it concerns high perceived similarity in body type compared to low perceived similarity in body type.*

The results showed no significant interaction effect between perceived body type similarity and perceived skin tone similarity on purchase intentions, F (1, 171) = 1.00, p = .319, partial η^2 = .01. This means that the effect of high perceived skin tone similarity on purchase intention was not significantly stronger when body type similarity was high (*M* = 3.33, *SD* = 1.65) compared to when body type similarity was low (*M* = 2.15, *SD* = 1.10). Therefore, Hypotheses 3 and 3a are rejected.

4.4 Additional analysis

Additional non-parametric tests were conducted to validate the findings, given the violations of ANOVA assumptions (Pallant, 2020, p. 221). To test H1-H1a and H2-H2a, the Mann-Whitney U test was used as a non-parametric alternative to the independent-samples t-test. While interaction effects cannot be formally tested with non-parametric tests, the Kruskal-Wallis test was conducted to explore potential differences across the four combined similarity groups (body type × skin tone: low/low, low/high, high/low, high/high). An extended overview of the additional analyses, along with output, can be found in Appendix J. A shortened outline of the results is as follows:

The results of the Mann-Whitney U test for body type similarity, revealed a significant difference in purchase intention: participants in the high body type similarity group ($Md = 3.33$, $n = 77$) reported significantly higher purchase intention than those in the low body type similarity group ($Md = 2$, $n = 123$), $U = 3271.50$, $z = -3.71$, $p < .001$.

The results of the Mann-Whitney U test for skin tone similarity, showed that no significant difference was found between the purchase intention of the high skin tone similarity group ($Md = 2.33$, $n = 54$), and the low skin tone similarity group ($Md = 2$, $n = 152$), $U = 3888$, $z = -0.58$, $p = .562$.

Lastly, a Kruskal-Wallis test revealed a statistically significant difference in purchase intention across four perceived similarity groups (group 1, $n = 87$: low body / low skin; group 2, $n = 23$: low body / high skin; group 3, $n = 43$: high body / low skin; group 4, $n = 22$: high body / high skin), $\chi^2(3, n = 175) = 11.43$, $p = .010$. Group comparisons, found below in Table 4.4, suggested a pattern: purchase intention was higher in both high body type similarity conditions, regardless of skin tone similarity. This implies that the effect of skin tone similarity on purchase intention may depend on body type similarity, with body type acting as the stronger driver.

Table 4.4 Group comparisons of median purchase intention values

Similarity Group	***N***	***Md***
Low Body / Low Skin	87	2.00 [a]
Low Body / High Skin	23	2.00 [a]
High Body / Low Skin	43	3.33 [b]
High Body / High Skin	22	3.50 [b]

Note. Groups sharing the same superscript letter do not differ significantly at $p < .05$ (uncorrected). Groups with different superscripts differ significantly.

4.5 Overview of accepted/rejected hypotheses

The table below provides an overview of which hypotheses were supported or rejected based on the study's results.

Table 4.5 Accepted or rejected hypotheses

Hypotheses		Evidence in favor of hypothesis
H1	*Perceived similarity in body type has a significant influence on purchase intention.*	Yes
H1a	*High perceived similarity in body type has a higher effect on purchase intention than low similarity in body type.*	Yes
H2	*Perceived similarity in skin tone has a significant influence on purchase intention.*	No
H2a	*High perceived similarity in skin tone has a higher effect on purchase intention than low perceived similarity in skin tone.*	No
H3	*The effect of perceived similarity in skin tone on purchase intention will depend on perceived similarity in body type.*	No
H3a	*The effect of high perceived similarity in skin tone on purchase intention compared to low perceived similarity in skin tone will be higher when it concerns high perceived similarity in body type compared to low perceived similarity in body type.*	No

5 Discussion & conclusion

This chapter discusses the study's findings in relation to prior research. Moreover, limitations and directions for future research are outlined. Next, the research question is answered, followed by reflections on generalizability and ethics. The chapter concludes with academic, societal, and managerial implications.

5.1 Discussion of results

This section discusses the results of the study in light of the three hypotheses, evaluating how perceived similarity in body type and skin tone influenced purchase intentions.

5.1.1 Hypothesis 1

The first hypothesis of the study proposed that perceived similarity in body type had a significant influence on purchase intention (H1), specifically that high perceived similarity in body type would have a higher effect on purchase intention than low similarity in body type (H1a).

Results showed that perceived body type similarity had a significant influence on the purchase intention of jeans. Thus, participants who perceived greater similarity with the model in terms of body type also reported higher purchase intentions of the jeans the model was wearing. The first two hypotheses were therefore accepted.

These findings align with previous research by both Zhang et al. (2024) and Lou and Tse (2022), who identified perceived similarity as a mediator linking model characteristics to purchase intentions. Specifically, Zhang et al. (2024, p. 643) showed that a matching body size between a consumer and a model increased perceived similarity, which reduced perceived fit risk, ultimately increasing purchase intention of clothing. Lou and Tse (2022) found that average-sized models evoked greater perceived similarity than thin or plus-sized models, which in turn led to higher purchase intentions of perfume.

The current study builds on this work by demonstrating a direct effect of perceived body type similarity on purchase intention. Unlike Zhang et al. (2024), who focused on objective size matching, and Lou and Tse (2022), who compared fixed body type categories, this study assessed subjective perceived similarity without tying it to any specific body category or objective match. This approach aligns with Cinelli and Yang (2019), who argued that perceived similarity is shaped not just by physical features, but also by individuals' self-views and beliefs about body malleability.

Moreover, while Zhang et al. (2024) emphasized that perceived similarity influences purchase behavior through reduced fit risk, the current study found no significant correlation between fit risk and either perceived similarity or purchase intention. This suggests that perceived body type similarity can have a meaningful, direct effect on purchase intentions, independent of fit-related concerns.

5.1.2 Hypothesis 2

The second hypothesis of the study proposed that perceived similarity in skin tone had a significant influence on purchase intention (H2), specifically that high perceived similarity in skin tone would have a higher effect on purchase intention than low similarity in skin tone (H2a).

The results showed no significant effect of perceived similarity in skin tone on purchase intention. Hypotheses 2 and 2a were therefore rejected.

There are several possible explanations for the absence of a significant effect of skin tone similarity on purchase intention. Forbes-Bell et al. (2019) found that black participants reported higher purchase intentions when products were advertised by black models compared to White models. This aligns with Social Identity Theory (Tajfel et al., 1979, as cited in Forbes-Bell et al., 2019, p. 609), which suggests that consumers prefer individuals who resemble them. However, this effect was not found for white participants, which Distinctiveness Theory by Brewer (1999) explains by pointing to the overrepresentation of White individuals in fashion media, making racial similarity less psychologically salient for this group (Forbes-Bell et al., 2019, p. 609). While the model in this study was AI-generated with an instruction to have a medium skin tone, this could have been unsuccessful. As a result, if the model was perceived as light-skinned, this could explain why participants who identified highly with her did not report higher purchase intentions. According to Distinctiveness Theory in Forbes-Bell et al.' (2019) study, white participant did not report higher purchase intentions because they are used to seeing their own skin tone in fashion media or advertising. This reduced sensitivity may have also weakened the effect of high skin tone similarity on purchase intentions in this study. As a result, both the high and low skin tone similarity conditions may have produced similar purchase intention scores.

Findings by Sierra et al. (2009) also offer insight. Their study included three ethnicities (Black, Hispanic, White) and allowed participants to choose the ad featuring a model they identified with most. Stronger ethnic identification led to more favorable attitudes toward the ad and increased purchase intention. In contrast, participants in the current study were exposed to only one model, which may have limited their ability to make a meaningful comparison or identification. This methodological difference might explain the lack of significant effects. Moreover, skin tone in their study was only one aspect of ethnicity. Other cues, such as hair, also played a role. Their absence in this study might have reduced the impact of skin tone similarity.

Another possibility is that skin tone similarity simply plays a smaller role in the evaluation of blue jeans, a product category in which physical fit and visual appearance on the body are more central. Body type similarity, in contrast, did have a significant effect on purchase intention, supporting the idea that such cues are more relevant in this context. This aligns with findings by Zhang et al. (2024), who showed that body similarity reduces fit risk, which in turn enhances purchase intention.

Moreover, to assess whether skin tone might influence another form of risk perception, a "colour-risk" item was included in the survey. This item, adapted from Zhang et al.'s (2024) fit-risk measure, asked participants to evaluate the likelihood that the jeans' colour would not match their skin tone in an aesthetically pleasing way. The item was based on findings by Perrett and Sprengelmeyer (2021), who showed that people prefer certain clothing hues depending on their skin tone. However, in the present study, colour-risk was not significantly correlated with either perceived skin tone similarity or purchase intention. This may suggest that concerns about colour coordination are less relevant for staple items like blue jeans, which are widely worn across genders, age groups, social classes, and occasions (Feitsma, 2014, pp. 146-151).

Finally, the sample characteristics may have played a role. The experimental groups were not equally balanced across the four conditions of skin tone and body type similarity, which may have reduced the statistical power needed to detect significant effects, particularly for skin tone similarity.

5.1.3 Hypothesis 3

The third hypothesis proposed that the effect of perceived skin tone similarity on purchase intention would depend on perceived body type similarity (H3). Specifically, it was predicted that skin tone similarity would have a stronger positive effect when participants also perceived high body type similarity with the model (H3a). However, the results showed no significant interaction between perceived body type and skin tone similarity on purchase intention. Hypotheses 3 and 3a were therefore not supported.

This finding contrasts with Mends and Hahn (2025), who found that fashion ads featuring both body and ethnic diversity elicited more positive responses than ads showing only one type of diversity or none. Ads that featured only ethnic diversity received mixed reactions, suggesting that body diversity may moderate how ethnic diversity is perceived. Several differences in study design could explain why this study did not replicate their suggested interaction pattern in terms of purchase intention.

First, Mends and Hahn (2025) used ads with multiple models, which increased the chance that viewers would identify with at least one model in terms of either skin tone or body type. In contrast, this study used a design with a single model, which limited the opportunity for viewers to perceive similarity across both skin tone and body type. Accordingly, the high skin tone x high body type similarity condition also had the lowest number of participants of all the experimental conditions.

Second, the outcome variables were different. Mends and Hahn (2025) measured feelings of empowerment and support for the brand, whereas this study specifically focused on purchase intention. While empowerment can lead to consumer behaviors such as deliberately switching to brands committed to diversity and inclusion (Accenture, 2019, p. 4), this may not have applied here. The current study presented participants with a single clothing model, without referencing a specific

brand or its values. As a result, participants may not have made any association with diversity and inclusion, which could explain the lack of an effect on purchase intention.

Third, the lack of interaction could suggest that body type and skin tone similarity influence purchase intention independently. In this study, only body type similarity had a significant main effect, suggesting that for a functional product like jeans, body type is a more immediately relevant factor than skin tone. Still, this study shows that perceived body type similarity can positively influence purchase intention, even without a perceived match in skin tone.

5.2 Limitations and directions

As described in Section 3.6, several types of validity and reliability were present in the study. Regarding validity, face validity, content validity, and criterion-related validity were discussed. In terms of reliability, the internal consistency of the scales, the standardized survey, and the single stimulus proved reliable. However, this chapter critically reflects on what may have limited the validity and reliability of the study. Therefore, the presence of construct validity, internal validity, and external validity is discussed. Moreover, directions for future research are outlined to address these limitations and further investigate the role of perceived similarity in online fashion contexts.

5.2.1 Validity

First, construct validity concerns whether a measure relates to other variables based on predictions in theory (Babbie, 2016, p. 153). In this study, the expected relationship between perceived body type similarity and purchase intention was supported, which suggests construct validity for that part of the model. However, no significant effects were found for skin tone similarity or the interaction between body type and skin tone similarity, which limits construct validity for those dimensions.

Second, internal validity refers to the degree to which observed effects can be attributed to the variables being studied rather than to other factors (Babbie, 2016, p. 243). Internal validity is partly supported in this study. All participants were exposed to the same model and answered the same questions. This ensured that differences in perceived similarity were not due to varying stimuli but to individual perceptions. Using one model also reduced the risk of multiple confounding variables that might emerge when using a variety of models. However, because only one model was used, the results are more dependent on the specific characteristics of that image (such as the attractiveness of the model).

Moreover, in terms of internal validity, a possible covariate was present. Perceived aesthetic appeal of the jeans showed a significant positive correlation with purchase intention. This variable could not be included as a covariate due to a violation of the assumption of homogeneity of

regression slopes. Though the correlation suggests that product aesthetics may have influenced participants' purchase intentions alongside perceived body type similarity.

In addition, regarding internal validity, are the violations of assumptions. Although an ANOVA was conducted to test for differences in purchase intention across the four perceived similarity groups, several assumptions underlying this test were not fully met. Specifically, Shapiro-Wilk tests indicated that the assumption of normality was violated in three of the four groups, and Levene's test (based on trimmed means, which is more appropriate for non-normal distributions) showed that variances across groups were unequal. Moreover, two experimental groups were smaller than the recommended size of 30, because equal sizes could not be assured. Participants were assigned to conditions post-hoc based on their perceived similarity ratings. According to Pallant (2020, pp. 213-220), such violations can affect the validity of ANOVA results. Specifically, this can potentially increase the risk of Type I errors (finding a group difference that isn't truly there) or Type II errors (missing a real group difference). While the analysis still provides useful insights into potential group differences, these limitations should be considered when interpreting the findings, as they may reduce the validity of the statistical conclusions.

Lastly, external validity is the extent to which results can be generalized to other populations or contexts (Babbie, 2016, p. 245). In this study, external validity is limited due to the use of snowball sampling via social media. This recruitment method does not guarantee a diverse or representative sample. Moreover, as mentioned, using a single model means the results are specific to that one image, rather than being supported across a range of stimuli. This also limits the generalizability of the findings to other models or visual contexts. However, the materials used do resemble typical images found on online shopping platforms. Moreover, the use of AI-generated models reflects a trend in digital retail environments, which makes the setup relevant for future e-commerce research (Terra, 2023; McMahon, 2025).

5.2.2 Reliability

In terms of reliability, the sampling method and the actual sample pose similar limitations as those described for external validity. Although the total sample size of 175 is acceptable, through snowball sampling, it may not be large or diverse enough to ensure consistent results across repeated studies. While the sample was already restricted to women living in the Netherlands, it also showed limited ethnic diversity, with 81.0% identifying most with Dutch ethnicity. Educational levels were relatively high: 53.3% had completed HBO or a university bachelor's degree, and 21.9% held a master's or PhD. Most participants reported a monthly income between €1,000 and €3,749, with the most common category being €2,500 to €3,749 (29.2%). These characteristics may limit the generalizability of the findings to more diverse ethnic, educational, and income populations. In addition, the unequal group sizes across the four conditions could have reduced the consistency of group comparisons.

5.2.3 Directions for future research

Future studies could be designed more explicitly around “pick your model” features. Participants could either be given the option to select a model that they feel represents them best, or be assigned a model without choice, to assess whether this influences purchase intention. This could help determine whether offering such personalization affects purchase intention. This idea is supported by findings from Sierra et al. (2009), who showed that perceived similarity influenced purchase intentions when participants were exposed to ads with multiple ethnic representations and allowed to choose the model themselves. It also builds on Cinelli and Yang’s (2023) claim that perceived similarity is subjective, and on the current study’s finding that perceived body similarity directly influenced purchase intention. Therefore, allowing consumers to actively select a model may strengthen the relationship between similarity and purchase behavior, and could possibly also reveal an effect for skin tone similarity.

In addition, future studies could directly compare AI-generated and real models to assess whether the use of AI influences perceived similarity or purchase intention. Some research suggests that AI models of certain minorities (e.g., LGBTQ2+ and disabled) may backfire by posing a threat to one’s self-identity (Sands et al., 2024, p. 1396). However, other studies indicate that AI-generated people are sometimes already perceived as hyper-realistic and indistinguishable from real people (Thompson, 2024, para. 4). Since the current study used AI models without controlling for possible effects of realism, further research could explore whether this plays a role.

Lastly, future studies could investigate whether body type or skin tone similarity have the same effects among men. While this study focused on female participants, shopping preferences can differ across genders. For example, women are more likely to purchase experience goods like clothing and beauty products online, whereas men are more likely to shop for digital, entertainment, and tech-related items (Kanwal et al., 2021, p. 38). A gender-comparative study could reveal whether the same similarity effects apply to male consumers.

5.3 Conclusion

5.3.1 Answering the research question

This study aimed to answer the research question: *How do consumers' perceptions of physical similarity to a model, in terms of body type (low vs. high) and skin tone (low vs. high), influence their purchase intentions of clothing items?* The results showed that high perceived body type similarity to a model increased consumers’ purchase intentions compared to low similarity. In contrast, perceived skin tone similarity did not have a significant effect on purchase intention. Additionally, no significant interaction effect between body type and skin tone similarity was found. However, exploratory analyses suggested that the effect of skin tone similarity may depend on the level of body type similarity.

To answer the research question, perceived similarity in body type played a key role in shaping purchase intention for jeans, while skin tone similarity did not show a statistically significant influence in this context.

5.3.2 Generalizability and ethics

Throughout the research process, ethical principles such as voluntary participation, informed consent, anonymity, confidentiality, avoidance of harm, and debriefing were upheld (Babbie, 2016, pp. 62-71). This study used a non-probability snowball sampling method, which may limit the generalizability and reliability of the findings. Furthermore, only individuals identifying as women were included, restricting applicability to other gender identities.

As the study relied on a single AI-generated model, findings are specific to that image and may not extend to other types of visuals. Still, the materials resemble typical product images used in online shopping, contributing to validity in that context. The ethicality of using AI-generated models is under discussion (Terra, 2023; Sands et al., 2024; Thompson, 2024; McMahon, 2025). However, in this study, it eliminated ethical concerns of involving images of real individuals.

5.3.3 Academic, societal, and managerial implications

Academically, this study contributes to the literature on consumer-model similarity. It demonstrated that perceived body type similarity, assessed subjectively rather than objectively, can directly influence purchase intention. It extends prior research by Zhang et al. (2024) and Lou and Tse (2022) by showing that perceived similarity is a direct predictor, rather than a mediator. Moreover, it doesn't rely on fit-risk as a mediator either. Additionally, the study introduced perceived similarity along two dimensions of body type and skin tone, as encouraged by Zhang et al. (2024, p. 666). However, no significant effect was found for skin tone similarity, nor for an interaction between body type and skin tone similarity. Earlier studies have shown that ethnic identification may enhance purchase intention when consumers see models who resemble them (Forbes-Bell et al., 2019; Sierra et al., 2009). This study did not find support for such effects in the context of medium-toned AI models and jeans. These findings raise questions for future research into when and how skin tone similarity affects consumer behavior.

Socially, the findings underscore the importance of visible representation in fashion media. Prior research shows that underrepresentation in body type and skin tone can negatively affect consumers' self-image and shopping experiences, particularly among marginalized groups (Cavusoglu & Atik, 2022). This study adds to that insight by showing that when consumers feel physically similar to a model, especially in terms of body type, they report higher purchase intentions. Because perceived similarity is subjective, offering a range of model representations allows consumers to see those they feel resemble them. This may not only improve consumer engagement but also help normalize appearances that are currently underrepresented. In light of Karl

Lagerfeld's 2009 remark that "people prefer to look at skinny models, and those who do not are fat mummies," this study suggests otherwise. People prefer to see models who reflect themselves. Perceived similarity may therefore meet consumer needs while also shifting dominant beauty standards toward a more inclusive norm.

Managerially, these findings offer insights for fashion marketers and e-commerce platforms. Incorporating diverse models with a range of body types is not only ethically responsible but may also increase purchase intention by fostering perceived similarity. The use of "pick your model" tools, already piloted by platforms like Pinterest (2024), can be an effective way to implement this strategy. Although implementing such tools entails costs, they can potentially enhance conversion rates. Moreover, once a consumer selects a model they identify with, this preference could be used to personalize future marketing through targeted ads. This approach extends the role of perceived similarity beyond initial persuasion into a consistent strategy across the customer journey.

While AI-generated models were not the focus of this study, they allowed quick and full control over visual features and avoided ethical concerns involving real individuals. As AI becomes more prevalent in online retail, it may offer an efficient way to create personalized representations that trigger perceived similarity and influence purchasing behavior. However, the psychological and behavioral effects of AI-generated models remain underexplored (Terra, 2023; Sands et al., 2024; Thompson, 2024; McMahon, 2025). Whether real or AI-generated models are most effective in mirroring consumers, thus remains an open question. Since consumers are the ones making the purchase, it might be best to let them pick the model they perceive as most similar to themselves.

References

Abbey, J. D., & Meloy, M. G. (2017). Attention by design: Using attention checks to detect inattentive respondents and improve data quality. *Journal of Operations Management*, *53–56*(1), 63–70. https://doi.org/10.1016/j.jom.2017.06.001

Accenture. (2019). *How inclusion and diversity drive shoppers' behavior*. Accenture. https://www.accenture.com/content/dam/accenture/final/a-com-migration/manual/r3/pdf/Accenture-Inclusion-and-Diversity-in-Retail.pdf

Adegeest, D. (2024, December 31). *Fashioning a better future for 2025.* Fashion United. https://fashionunited.com/news/fashion/fashioning-a-better-future-for-2025/2024123163700

Aguilar-Rodríguez, I. E., & Arias-Bolzmann, L. G. (2021). Lifestyle and Purchase Intention: The Moderating role of education in bicultural Consumers. *Journal of International Consumer Marketing*, *35*(1), 30–46. https://doi.org/10.1080/08961530.2021.2020702

Ajzen, I. (2012). The theory of planned behavior. In *SAGE Publications Ltd eBooks* (pp. 438–459). https://doi.org/10.4135/9781446249215.n22

Arsel, Z., Crockett, D., & Scott, M. L. (2021). Diversity, Equity, and Inclusion (DEI): A curation and research agenda. *Journal of Consumer Research*, *48*(5), 920–933. https://doi.org/10.1093/jcr/ucab057

Babbie, E. R. (2016). *The basics of social Research* (6th ed.). Cengage Learning.

Butkowski, C., Humphreys, L., & Mall, U. (2022). Computing colorism: skin tone in online retail imagery. *Visual Communication*, *23*(2), 289–308. https://doi.org/10.1177/14703572221077444

Buunk, B., & Bosman, J. (1986). Attitude similarity and attraction in marital relationships. *The Journal of Social Psychology*, *126*(1), 133–134. https://doi.org/10.1080/00224545.1986.9713583

Campbell, C., Sands, S., McFerran, B., & Mavrommatis, A. (2023). Diversity representation in advertising. *Journal of the Academy of Marketing Science*. https://doi.org/10.1007/s11747-023-00994-8

Cavusoglu, L., & Atik, D. (2022). Extending the diversity conversation: Fashion consumption experiences of underrepresented and underserved women. *Journal of Consumer Affairs*, *57*(1), 387–417. https://doi.org/10.1111/joca.12504

Centraal Bureau voor de Statistiek. (n.d.-a). *Education level*. https://www.cbs.nl/en-gb/news/2023/48/satisfaction-high-in-caribbean-nl-in-spite-of-low-material-well-being/education-level

Centraal Bureau voor de Statistiek. (n.d.-b). *Verdeling: Materiële welvaart* [Distribution: Material wealth]. https://www.cbs.nl/nl-nl/visualisaties/monitor-brede-welvaart-en-de-sustainable-development-goals/verdeling/verdeling-materiele-welvaart

Centraal Bureau voor de Statistiek. (2024a). *Bevolking - Integratie en samenleven 2024* [Population – Integration and coexistence 2024]. https://longreads.cbs.nl/integratie-en-samenleven-2024/bevolking/

Centraal Bureau voor de Statistiek. (2024b, September). *Wat is het onderwijsniveau van Nederland? - Nederland in cijfers 2024* [What is the education level of the Netherlands? – The Netherlands in figures 2024]. https://longreads.cbs.nl/nederland-in-cijfers-2024/wat-is-het-onderwijsniveau-van-nederland/

Centraal Bureau voor de Statistiek. (2024c, September 3). *Internetaankopen; persoonskenmerken*. [Online purchases; personal characteristics]. Retrieved May 24, 2025, from https://www.cbs.nl/nl/cijfers/detail/84889NED?q=keyword:online%20winkelen

Centraal Bureau voor de Statistiek. (2024d, November 29). *Ruim 8 op de 10 mensen deden online aankopen* [More than 8 out of 10 people made online purchases]. https://www.cbs.nl/nl-nl/nieuws/2024/48/ruim-8-op-de-10-mensen-deden-online-aankopen

Centraal Bureau voor de Statistiek. (2025, February 17). *Parade van Pen: de vermogensverdeling in 2023* [Parade of Pen: the distribution of assets in 2023]. https://www.cbs.nl/nl-nl/achtergrond/2025/08/parade-van-pen-de-vermogensverdeling-in-2023

Choi, B., & Pak, A. (2005). A Catalog of Biases in Questionnaires. *Preventing Chronic Disease*, *2*(1), 1–13. https://www.cdc.gov/pcd/issues/2005/jan/04_0050.htm

Cialdini, R. B., PhD. (2009). *Influence: The Psychology of Persuasion*. Harper Collins. https://learning.oreilly.com/library/view/influence/9780061899874/

Cinelli, M. D., & Yang, L. (2016). The role of implicit theories in evaluations of “Plus-Size” advertising. *Journal of Advertising*, *45*(4), 472–481. https://doi.org/10.1080/00913367.2016.1230838

Connolly, K. (2009, October 12). Karl Lagerfeld says only “fat mummies” object to thin models. *The Guardian*. https://www.theguardian.com/lifeandstyle/2009/oct/12/lagerfeld-size-zero-thin-models

Douglass, R. (2024, March 12). *Pinterest working on ‘body type’ tech.* Fashion United. https://fashionunited.com/news/business/pinterest-working-on-body-type-tech/2024031258836

Eckman, M., Damhorst, M. L., & Kadolph, S. J. (1990). Toward a model of the In-Store purchase decision process: consumer use of criteria for evaluating women’s apparel. *Clothing and Textiles Research Journal*, *8*(2), 13–22. https://doi.org/10.1177/0887302x9000800202

Feitsma, M. M. A. (2014). *Nederlandse mode? Een verkenning van mythevorming en betekenissen* [Dutch fashion? An exploration of myth-making and meanings]. [PhD proefschrift, Radboud Universiteit Nijmegen]. https://hdl.handle.net/2066/127127

Forbes-Bell, S., Bardey, A. C., & Fagan, P. (2019). Testing the effect of consumer-model racial congruency on consumer behavior. *International Journal of Market Research*, *62*(5), 599–614. https://doi.org/10.1177/1470785319865892

Frank, B., & Mitsumoto, S. (2021). An extended source attractiveness model: the advertising effectiveness of distinct athlete endorser attractiveness types and its contextual variation. *European Sport Management Quarterly*, *23*(4), 1091–1114. https://doi.org/10.1080/16184742.2021.1963302

Hedges, L. V. (1982). Estimation of effect size from a series of independent experiments. *Psychological Bulletin*, *92*(2), 490–499. https://doi.org/10.1037/0033-2909.92.2.490

Hughes, B. T., Flournoy, J. C., & Srivastava, S. (2020). Is perceived similarity more than assumed similarity? An interpersonal path to seeing similarity between self and others. *Journal of Personality and Social Psychology*, *121*(1), 184–200. https://doi.org/10.1037/pspp0000369

Huitema, B. E. (2011). *The Analysis of Covariance and Alternatives: Statistical methods for experiments, Quasi-Experiments, and Single-Case Studies* (2nd ed.) [E-book]. John Wiley & Sons, Inc. https://doi.org/10.1002/9781118067475

Hutter, K., Hautz, J., Dennhardt, S., & Füller, J. (2013). The impact of user interactions in social media on brand awareness and purchase intention: the case of MINI on Facebook. *Journal of Product & Brand Management*, *22*(5/6), 342–351. https://doi.org/10.1108/jpbm-05-2013-0299

Janssen, S., & Verboord, M. (2024). *Methodological Guidelines Thesis Research MA Media Studies* (10th ed.). Department of Media and Communication, Erasmus School of History, Culture and Communication.

Jeong, H. J. (2016). "The level of collapse we are allowed: Comparison of different response scales in Safety Attitudes Questionnaire." *Biometrics & Biostatistics International Journal*, *4*(4). https://doi.org/10.15406/bbij.2016.04.00100

Johnson, A. (2023, April 28). *Here are the best AI image generators*. Forbes. https://www.forbes.com/sites/ariannajohnson/2023/04/28/here-are-the-best-ai-image-generators/

Kanwal, M., Burki, U., Ali, R., & Dahlstrom, R. (2021). Systematic review of gender differences and similarities in online consumers' shopping behavior. *Journal of Consumer Marketing*, *39*(1), 29–43. https://doi.org/10.1108/jcm-01-2021-4356

Karunaratne, P. (2020). A study on the factors influencing the preference of Sri Lankan consumers for the use of denim jeans. *Journal of Advanced Research in Social Sciences and Humanities*, *5*(6). https://doi.org/10.26500/jarssh-05-2020-0601

Klaassen, W. (2022, August 18). *NL - Voorkeur voor online shopping blijft groeien, vooral onder jonge generaties*. [NL - Preference for online shopping continues to grow, especially among younger generations]. Klarna International. https://www.klarna.com/international/press/nl-voorkeur-voor-online-shopping-blijft-groeien-vooral-onder-jonge-generaties/

Lijbaart, S. (2023, August 24). *Klarna: Online winkelen voor het eerst favoriete winkelmethode in Nederland.* [Klarna: Online shopping for the first time the favorite shopping method in the Netherlands]. Fashion United. https://fashionunited.nl/nieuws/retail/klarna-online-winkelen-voor-het-eerst-favoriete-winkelmethode-in-nederland/2023072557973

Lou, C., & Tse, C. H. (2020). Which model looks most like me? Explicating the impact of body image advertisements on female consumer well-being and consumption behaviour across brand categories. *International Journal of Advertising*, *40*(4), 602–628. https://doi.org/10.1080/02650487.2020.1822059

McMahon, L. (2025, March 27). *H&M to use digital clones of models in ads and social media*. BBC. https://www.bbc.com/news/articles/c3vwg73xndeo

Mends, T., & Hahn, K. H. (2025). The Influence of Diversity in Fashion Ads on Underrepresented Consumers: Exploring Body and Ethnic Representation in the Fashion Industry. *International Textile and Apparel Association Annual Conference Proceedings*, *81*(1), 1–3. https://doi.org/10.31274/itaa.18514

Mintel. (2024, September 16). *Diversity in Fashion*. Mintel. https://www.mintel.com/insights/retail/diversity-in-fashion/

Mohd Razali, N., & Yap, B. W. (2011). Power comparisons of Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling and Analytics*, *21–33*. https://www.researchgate.net/publication/267205556_Power_Comparisons_of_Shapiro-Wilk_Kolmogorov-Smirnov_Lilliefors_and_Anderson-Darling_Tests

Montoya, R. M., Horton, R. S., & Kirchner, J. (2008). Is actual similarity necessary for attraction? A meta-analysis of actual and perceived similarity. *Journal of Social and Personal Relationships*, *25*(6), 889–922. https://doi.org/10.1177/0265407508096700

Muszyński, M. (2023). Attention checks and how to use them: Review and practical recommendations. *Ask Research and Methods*, *32*(1), 3–38. https://doi.org/10.18061/ask.v32i1.0001

Neuman, W. L. (2011). *Social research methods: Qualitative and Quantitative Approaches* (7th ed.). Pearson Education.

Ohanian, R. (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, *19*(3), 39–52. https://doi.org/10.1080/00913367.1990.10673191

Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology*, *45*(4), 867–872. https://doi.org/10.1016/j.jesp.2009.03.009

Packard, G., Gershoff, A. D., & Wooten, D. B. (2016). When Boastful Word of Mouth Helps versus Hurts Social Perceptions and Persuasion. *Journal of Consumer Research*, *43*(1), 26–43. https://doi.org/10.1093/jcr/ucw009

Pallant, J. (2020). *Ebook: SPSS Surival Manual: A Step by Step Guide to Data Analysis using IBM SPSS*. McGraw-Hill Education (UK).

Perreault, W. D., Jr. (1975). Controlling Order-Effect Bias. *Public Opinion Quarterly*, *39*(4), 544. https://doi.org/10.1086/268251

Perrett, D. I., & Sprengelmeyer, R. (2021). Clothing aesthetics: consistent colour choices to match fair and tanned skin tones. *i-Perception*, *12*(6). https://doi.org/10.1177/20416695211053361

Pinterest Newsroom. (2024, October 23). *Pinterest's new 'body type ranges' deliver better and more inclusive search results.* Pinterest Newsroom. https://newsroom.pinterest.com/news/pinterests-new-body-type-ranges-deliver-better-more-inclusive-search-results/

Plotkina, D., & Saurel, H. (2019). Me or just like me? The role of virtual try-on and physical appearance in apparel M-retailing. *Journal of Retailing and Consumer Services*, *51*, 362–377. https://doi.org/10.1016/j.jretconser.2019.07.002

Pradhana, F., & Sastiono, P. (2019). Gender Differences in Online Shopping: Are Men More Shopaholic Online? *Advances in Economics, Business and Management Research*, *72*, 123–128. https://doi.org/10.2991/icbmr-18.2019.21

Press, C., & Stark, M. (Hosts). (2024, February 1). Magnificent Michaela Stark - From Insta Bans to Victoria's Secret, Meet the Body-Morphing Couture Lingerie Maker. [Audio podcast episode]. In *WARDROBE CRISIS.* Acast. https://open.spotify.com/episode/4VL3OZ2SDw2jxjaaQn1nU6?si=wmw063EzQ_Stfj5wfA3gZQ

Research and Markets. (2025, May). *Denim Jeans - Global Strategic Business Report*. Research and Markets Ltd 2025. https://www.researchandmarkets.com/reports/1206792/denim_jeans_global_strategic_business_report?srsltid=AfmBOorG-DI0YihZxYodNzFaX02XG_HzOPkzZfgkatfdlv8n_GgcLlKv

Sands, S., Demsar, V., Ferraro, C., Campbell, C., & Cohen, J. (2024). Inauthentic inclusion: Exploring how intention to use AI-generated diverse models can backfire. *Psychology and Marketing*, *41*(6), 1396–1413. https://doi.org/10.1002/mar.21987

Schimminger, M. C. (2022, March 22). *Report: Racial, Size and Gender Diversity up as Age Representation Drops at Fashion Month Fall 2022*. The Fashion Spot. https://www.thefashionspot.com/runway-news/869507-diversity-report-fashion-month-fall-2022/

Schouten, A. P., Janssen, L., & Verspaget, M. (2021). Celebrity vs. Influencer endorsements in advertising: the role of identification, credibility, and Product-Endorser fit. In *Routledge eBooks* (pp. 208–231). https://doi.org/10.4324/9781003155249-12

Sierra, J. J., Hyman, M. R., & Torres, I. M. (2009). Using a model's apparent ethnicity to influence viewer responses to print ads: A Social Identity Theory Perspective. *Journal of Current Issues & Research in Advertising*, *31*(2), 41–66. https://doi.org/10.1080/10641734.2009.10505265

Taber, K. S. (2017). The use of Cronbach's Alpha when developing and reporting research instruments in science education. *Research in Science Education*, *48*(6), 1273–1296. https://doi.org/10.1007/s11165-016-9602-2

Terra, C. (2023, May 3). *Fashion tech start-up Lalaland lanceert tool voor creatie AI-modellen.* [Fashion tech start-up Lalaland launches tool for creating AI models]. Fashion United. https://fashionunited.nl/nieuws/business/fashion-tech-start-up-lalaland-lanceert-tool-voor-creatie-ai-modellen/2022010452190

Thompson, S. A. (2024, January 21). *Test Yourself: Which Faces Were Made by A.I.?* The New York Times. https://www.nytimes.com/interactive/2024/01/19/technology/artificial-intelligence-image-generators-faces-quiz.html

Vargas, P. T., Duff, B. R. L., & Faber, R. J. (2017). A Practical guide to experimental advertising research. *Journal of Advertising*, *46*(1), 101–114. https://doi.org/10.1080/00913367.2017.1281779

Venkatesh, V., Speier-Pero, C., & Schuetz, S. (2022). Why do people shop online? A comprehensive framework of consumers' online shopping intentions and behaviors. *Information Technology and People*, *35*(5), 1590–1620. https://doi.org/10.1108/itp-12-2020-0867

White, K., Lin, L., Dahl, D. W., & Ritchie, R. J. B. (2015). When do consumers avoid imperfections? Superficial packaging damage as a contamination cue. *Journal of Marketing Research*, *53*(1), 110–123. https://doi.org/10.1509/jmr.12.0388

Zhang, Y., Ikonen, I., Eelen, J., & Sotgiu, F. (2024). One size does not fit all: Optimizing size-inclusive model photography mitigates fit risk in online fashion retailing. *Journal of the Academy of Marketing Science*. https://doi.org/10.1007/s11747-024-01034-9

Zhou, Y., Zhu, Y., & Wong, W. K. (2023). Statistical tests for homogeneity of variance for clinical trials and recommendations. *Contemporary Clinical Trials Communications*, *33*, 101119. https://doi.org/10.1016/j.conctc.2023.101119

Appendix A: Pretest survey

Start of Block: Informed consent

Informed consent

Dear participant,

Thank you for participating in this study for my Master's Thesis at Erasmus University Rotterdam - School of History, Culture and Communication. This study examines how people view clothing models in online shopping environments. You will be shown a series of models, followed by a few questions about your perceptions. The survey will take approximately **5 to 7 minutes** to complete.

Your rights

Participation is entirely voluntary. You may stop the survey at any time by closing your browser, without giving a reason and without any consequences. Only fully completed surveys will be included in the analysis.

Confidentiality & data storage

Your participation is anonymous. All responses will be treated confidentially and used solely for research purposes. Data will be stored securely following the university's guidelines.

Consent

If you are at least 18 years old, currently live in the Netherlands, and agree to voluntarily participate in this study, please click the 'Yes' button below. For any questions or concerns about this study, you may contact the researcher **Manouk Weynschenk** at **704654mw@student.eur.nl**

Do you consent?

○ Yes, I am at least 18 years old and consent to participate

○ No, I do not consent

End of Block: Informed consent

Start of Block: Gender Screening

Gender
What is your gender?

- ○ Male
- ○ Female
- ○ Another gender identity
- ○ Prefer not to say

End of Block: Gender Screening

Start of Block: Introduction

Intro explanation
In the next part of this survey, you will see a series of photos of women wearing the same pair of jeans. For each photo, we would like to know how similar you perceive the model to be to yourself. You will be asked about your perception of similarity in terms of body type and skin tone separately. There are no right or wrong answers — we are only interested in your personal impression.

End of Block: Introduction

Start of Block: Model evaluation

Model
Please take a moment to look carefully at the model before answering the questions.
Participants randomly viewed the following models, one at a time:

A1 Thin body – Light skin

A2 Thin body – Medium skin

A3 Thin body – Dark skin

A4 Medium body – Light skin

A5 Medium body – Medium skin

A6 Medium body – Dark skin

A7 Plus-size body – Light skin

A8 Plus-size body – Medium skin

A9 Plus-size body – Dark skin

Skin tone similarity

The model's skin tone is similar to mine

- ○ 1. Strongly disagree
- ○ 2.
- ○ 3.
- ○ 4.
- ○ 5.
- ○ 6.
- ○ 7. Strongly agree

Body type similarity

The model's body type is similar to mine

- ○ 1. Strongly disagree
- ○ 2.
- ○ 3.
- ○ 4.
- ○ 5.
- ○ 6.
- ○ 7. Strongly agree

Intro validation

We understand that every person is unique and may not fit neatly into one category. However, for the purpose of this study, please select the category that best fits your general impression of this model's body type and skin tone.

Validation skin tone

Based on your general impression, how would you categorize this model’s skin tone?

- ○ Light
- ○ Medium
- ○ Dark

Validation body type

Based on your general impression, how would you categorize this model's body type?

- ○ Thin
- ○ Medium
- ○ Plus-size

End of Block: Model evaluation

Start of Block: Demographics

Age

What is your age?

_____

Country of residence

Where do you currently live?

- ○ The Netherlands
- ○ Other: _____

End of Block: Demographics

Appendix B: Descriptive statistics Pretest analysis

Appendix B1: Descriptive statistics of gender, country of residence, and age

	Gender			***Country of residence***		***Age***	
Labels	*N*	*Percentage*	***Labels***	*N*	*Percentage*	Mean	31.63
Female	32	100%	**The Netherlands**	32	100%	SD	13.781
						Min	19
						Max	63

Appendix B2: Categorization accuracy of light skin tone, thin body type model

Light_Thin_Val_Skin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Light	32	100.0	100.0	100.0

Light_Thin_Val_Body

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Thin	28	87.5	87.5	87.5
	Medium	4	12.5	12.5	100.0
	Total	32	100.0	100.0	

Appendix B3: Categorization accuracy of medium skin tone, thin body type model

Medium_Thin_Val_Skin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Light	9	28.1	28.1	28.1
	Medium	23	71.9	71.9	100.0
	Total	32	100.0	100.0	

Medium_Thin_Val_Body

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Thin	22	68.8	68.8	68.8
	Medium	10	31.3	31.3	100.0
	Total	32	100.0	100.0	

Appendix B4: Categorization accuracy of dark skin tone, thin body type model

Dark_Thin_Val_Skin

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	Dark	32	100.0	100.0	100.0

Dark_Thin_Val_Body

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Thin	30	93.8	93.8	93.8
	Medium	2	6.3	6.3	100.0
	Total	32	100.0	100.0	

Appendix B5: Categorization accuracy of light skin tone, medium body type model

Light_Medium_Val_Skin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Light	22	68.8	68.8	68.8
	Medium	10	31.3	31.3	100.0
	Total	32	100.0	100.0	

Light_Medium_Val_Body

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Thin	2	6.3	6.3	6.3
	Medium	27	84.4	84.4	90.6
	Plus-size	3	9.4	9.4	100.0
	Total	32	100.0	100.0	

Appendix B6: Categorization accuracy of medium skin tone, medium body type model

Medium_Medium_Val_Skin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Light	5	15.6	15.6	15.6
	Medium	26	81.3	81.3	96.9
	Dark	1	3.1	3.1	100.0
	Total	32	100.0	100.0	

Medium_Medium_Val_Body

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Thin	2	6.3	6.3	6.3
	Medium	30	93.8	93.8	100.0
	Total	32	100.0	100.0	

Appendix B7: Categorization accuracy of dark skin tone, medium body type model

Dark_Medium_Val_Skin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dark	32	100.0	100.0	100.0

Dark_Medium_Val_Body

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Thin	3	9.4	9.4	9.4
	Medium	28	87.5	87.5	96.9
	Plus-size	1	3.1	3.1	100.0
	Total	32	100.0	100.0	

Appendix B8: Categorization accuracy of light skin tone, plus-size body type model

Light_Plus_Val_Skin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Light	29	90.6	90.6	90.6
	Medium	3	9.4	9.4	100.0
	Total	32	100.0	100.0	

Light_Plus_Val_Body

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medium	3	9.4	9.4	9.4
	Plus-size	29	90.6	90.6	100.0
	Total	32	100.0	100.0	

Appendix B9: Categorization accuracy of medium skin tone, plus-size body type model

Medium_Plus_Val_Skin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Light	1	3.1	3.1	3.1
	Medium	26	81.3	81.3	84.4
	Dark	5	15.6	15.6	100.0
	Total	32	100.0	100.0	

Medium_Plus_Val_Body

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medium	5	15.6	15.6	15.6
	Plus-size	27	84.4	84.4	100.0
	Total	32	100.0	100.0	

Appendix B10: Categorization accuracy of dark skin tone, plus-size body type model

Dark_Plus_Val_Skin

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medium	2	6.3	6.3	6.3
	Dark	30	93.8	93.8	100.0
	Total	32	100.0	100.0	

Dark_Plus_Val_Body

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medium	11	34.4	34.4	34.4
	Plus-size	21	65.6	65.6	100.0
	Total	32	100.0	100.0	

Appendix C: One-sample t-test

Appendix C1: Descriptive statistics of perceived similarity scores per model

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Light, thin model skin tone sim	32	4.69	1.712	.303
Light, thin model body type sim	32	3.84	1.706	.302
Medium, thin model skin tone sim	32	4.38	1.362	.241
Medium, thin model body type sim	32	4.53	1.565	.277
Dark, thin model skin tone sim	32	1.28	.813	.144
Dark, thin model body type sim	32	3.91	2.022	.357
Light, medium model skin tone sim	32	4.94	1.501	.265
Light, medium model body type sim	32	3.88	1.621	.287
Medium, medium model skin tone sim	32	3.97	1.656	.293
Medium, medium model body type sim	32	3.84	1.417	.250
Dark, medium model skin tone sim	32	1.28	.813	.144
Dark, medium model body type sim	32	3.75	1.666	.294
Light, plus model skin tone sim	32	4.38	1.561	.276
Light, plus body type sim	32	2.19	1.491	.263
Medium, plus model skin tone sim	32	2.91	1.594	.282
Medium, plus model body type sim	32	2.06	1.435	.254
Dark, plus model skin tone sim	32	1.22	.608	.108
Dark, plus model body type sim	32	2.16	1.194	.211

Appendix C2: One-sample t-test results comparing perceived similarity scores to the scale midpoint value 4

One-Sample Test

	t	df	Test Value = 4 Significance One-Sided p	Significance Two-Sided p	Mean Difference	95% Confidence Interval of the Difference Lower	Upper
Light, thin model skin tone sim	2.271	31	.015	.030	.688	.07	1.30
Light, thin model body type sim	-.518	31	.304	.608	-.156	-.77	.46
Medium, thin model skin tone sim	1.558	31	.065	.129	.375	-.12	.87
Medium, thin model body type sim	1.920	31	.032	.064	.531	-.03	1.10
Dark, thin model skin tone sim	-18.927	31	<.001	<.001	-2.719	-3.01	-2.43
Dark, thin model body type sim	-.262	31	.397	.795	-.094	-.82	.64
Light, medium model skin tone sim	3.532	31	<.001	.001	.938	.40	1.48
Light, medium model body type sim	-.436	31	.333	.666	-.125	-.71	.46
Medium, medium model skin tone sim	-.107	31	.458	.916	-.031	-.63	.57
Medium, medium model body type sim	-.624	31	.269	.537	-.156	-.67	.35
Dark, medium model skin tone sim	-18.927	31	<.001	<.001	-2.719	-3.01	-2.43
Dark, medium model body type sim	-.849	31	.201	.402	-.250	-.85	.35
Light, plus model skin tone sim	1.359	31	.092	.184	.375	-.19	.94
Light, plus body type sim	-6.879	31	<.001	<.001	-1.813	-2.35	-1.28
Medium, plus model skin tone sim	-3.883	31	<.001	<.001	-1.094	-1.67	-.52
Medium, plus model body type sim	-7.635	31	<.001	<.001	-1.938	-2.46	-1.42

Dark, plus model skin tone sim	-25.867	31	<.001	<.001	-2.781	-3.00	-2.56
Dark, plus model body type sim	-8.733	31	<.001	<.001	-1.844	-2.27	-1.41

Appendix D: Main study survey

Start of Block: Informed consent

Informed consent
Dear participant,
Thank you for participating in this study for my Master's Thesis at Erasmus University Rotterdam - School of History, Culture and Communication. This study examines how people view product photos in online shopping environments. You will be shown a picture, followed by a few questions about your perceptions and intentions. The survey will take approximately **6 to 8 minutes** to complete.
Your rights
Participation is entirely voluntary. You may stop the survey at any time by closing your browser, without giving a reason and without any consequences. Only fully completed surveys will be included in the analysis.

Confidentiality & data storage
Your participation is anonymous. All responses will be treated confidentially and used solely for research purposes. Data will be stored securely following the university's guidelines.

Consent If you are at least 18 years old, currently live in the Netherlands, and agree to voluntarily participate in this study, please click the 'Yes' button below.

For any questions or concerns about this study, you may contact the researcher **Manouk Weynschenk** at **704654mw@student.eur.nl**
Do you consent?

- ○ Yes, I am at least 18 years old and consent to participate
- ○ No, I do not consent

End of Block: Informed consent

Start of Block: Gender screening

Gender
What is your gender?

- ○ Male
- ○ Female
- ○ Another gender identity
- ○ Prefer not to say

End of Block: Gender screening

Start of Block: Introduction

Intro explanation
In the next part of this survey, you will see a photo of a woman wearing a t-shirt and jeans. You will be asked about your intentions to purchase the jeans she is wearing. There are no right or wrong answers, we are only interested in your personal impression.

End of Block: Introduction

Start of Block: Product evaluation

Average model
Please take a moment to look carefully at the model before answering the questions.

Purchase intention

Please indicate how you feel about purchasing the jeans the model is wearing, using the scale below.

	1. Not at all	2.	3.	4.	5.	6.	7. Very much
How likely would you be to buy these jeans?	○	○	○	○	○	○	○
How willing would you be to buy these jeans?	○	○	○	○	○	○	○
How inclined would you be to buy these jeans?	○	○	○	○	○	○	○
To ensure you're reading carefully, please select the number 7 here	○	○	○	○	○	○	○

End of Block: Product evaluation

Start of Block: Model evaluation

Average model
You will now see the same model again. Please take a moment to look carefully at the model before answering the next questions.

Body type similarity
Please indicate the extent to which you feel the model's body type is similar to your own.

	1. Not at all	2.	3.	4.	5.	6.	7. Very much
The model's body type is similar to mine.	○	○	○	○	○	○	○
The model's body type is like mine.	○	○	○	○	○	○	○
The model and I have body types in common.	○	○	○	○	○	○	○

Skin tone similarity
Please indicate the extent to which you feel the model's skin tone is similar to your own.

	1. Not at all	2.	3.	4.	5.	6.	7. Very much
The model's skin tone is similar to mine.	○	○	○	○	○	○	○
The model's skin tone is like mine.	○	○	○	○	○	○	○
The model and I have skin tones in common.	○	○	○	○	○	○	○

End of Block: Model evaluation

Start of Block: Control question

Average model
Once more, you will see the same model as before. Please take a moment to look carefully at the model before continuing.

Fit-risk
How much risk would you say there would be that, if you purchase the jeans online, the product will not fit you like you expect?

- ○ 1. Very little risk
- ○ 2.
- ○ 3.
- ○ 4.
- ○ 5.
- ○ 6.
- ○ 7. A great deal of risk

Colour-risk
How much risk would you say there would be that, if you purchase the jeans online, the product's colour will not match your skin tone in an aesthetically pleasing way?

- ○ 1. Very little risk
- ○ 2.
- ○ 3.
- ○ 4.
- ○ 5.
- ○ 6.
- ○ 7. A great deal of risk

Jeans-aesthetics
How attractive do you find the jeans the model is wearing?

- ○ 1. Not at all attractive
- ○ 2.
- ○ 3.
- ○ 4.
- ○ 5.
- ○ 6.
- ○ 7. Very attractive

Jeans-quality
How would you rate the quality of the jeans the model is wearing?

- ○ 1. Very low quality
- ○ 2.
- ○ 3.
- ○ 4.
- ○ 5.
- ○ 6.
- ○ 7. Very high quality

Attention check
Please indicate to what extent you have paid close attention to the model you saw throughout this study

- ○ 1. Not at all
- ○ 2.
- ○ 3.
- ○ 4.
- ○ 5.
- ○ 6.
- ○ 7. Very closely

End of Block: Control question

Start of Block: Demographics

Age
What is your age?

_____

Country of residence
Where do you currently live?

- ○ The Netherlands
- ○ Other: _____

Ethnic origin
Which ethnic or cultural background do you identify with most? (Based on the most common

backgrounds in the Netherlands. Please select the one that best applies to you.)

- ○ Dutch
- ○ Polish
- ○ Bulgarian
- ○ Romanian
- ○ Ukrainian
- ○ Turkish
- ○ Moroccan
- ○ Surinamese
- ○ Dutch Caribbean (e.g. Curaçao, Aruba)
- ○ Indonesian
- ○ Afghan
- ○ Iraqi
- ○ Iranian
- ○ Somali
- ○ Eritrean
- ○ Syrian
- ○ Other _____
- ○ Prefer not to say

Income level
What is your approximate personal gross monthly income (i.e., before taxes)? Please select the option that best applies to you.

- ○ I had no personal income in the past year
- ○ Less than €1,000
- ○ €1,000 – €1,699
- ○ €1,700 – €2,499
- ○ €2,500 – €3,749
- ○ €3,750 – €4,999
- ○ €5,000 – €5,999
- ○ €6,000 – €6,999
- ○ €7,000 or more
- ○ Prefer not to say

Education level
What is the highest level of education you have completed? (Please select one option.)

- ○ Primary education (basisschool) or special needs primary education
- ○ Prevocational secondary education (VMBO), MBO level 1, or the first 3 years of HAVO or VWO
- ○ Senior years of HAVO or VWO, or MBO level 2, 3, or 4
- ○ Higher vocational education (HBO) or a university bachelor's degree
- ○ University master's degree or PhD
- ○ Prefer not to say

End of Block: Demographics

Start of Block: Debrief

Debrief & feedback

Thank you for participating! Your responses have been recorded and will contribute to my Master's Thesis research at Erasmus University Rotterdam.

The aim of this study is to examine how feeling similar to a model's body type and skin tone affects whether people intend to buy the clothes she's wearing. I would like to ask you not to share any details about the survey with others, so that future responses remain unbiased.

If you have any questions or concerns, feel free to contact the main researcher: Manouk Weynschenk - 704654mw@student.eur.nl

Thank you again for your time and support! You are welcome to leave comments or feedback below:

_____

_____

_____

_____

_____

End of Block: Debrief

Appendix E: Descriptive statistics main study

Appendix E1: Descriptive statistics of purchase intention by body type and skin tone similarity conditions

Descriptive Statistics

Dependent Variable: Purchase_Intention_mean

body type similarity	Skin tone similarity	Mean	Std. Deviation	N
Low body type	Low skin tone	2.3525	1.34525	87
	High skin tone	2.1449	1.10475	23
	Total	2.3091	1.29667	110
High body type	Low skin tone	3.0465	1.53026	43
	High skin tone	3.3333	1.65871	22
	Total	3.1436	1.56787	65
Total	Low skin tone	2.5821	1.44095	130
	High skin tone	2.7259	1.51139	45
	Total	2.6190	1.45635	175

Appendix E2: Overview of missing values and mode per demographic variable

Statistics

		Gender	Ethnicity	Age	Income level	Education level	Country of residence
N	Valid	175	168	168	168	167	168
	Missing	0	7	7	7	8	7
Mode		2	1	25.00	5	4	1

Appendix E3: Frequency of gender

What is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	175	100.0	100.0	100.0

Appendix E4: Descriptives of age

What is your age?

	N	Minimum	Maximum	Mean	Std. Deviation
What is your age?	168	18.00	66.00	29.4226	11.38362
Valid N (listwise)	168				

Appendix E5: Frequency of country of residence

Where do you currently live? - Selected Choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	The Netherlands	168	96.0	100.0	100.0
Missing	System	7	4.0		
Total		175	100.0		

Appendix E6: Descriptives of ethnic identification

Which ethnic or cultural background do you identify with most? (Based on the most common backgrounds in the Netherlands. Please select the one that best applies to you.) - Selected Choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dutch	136	77.7	81.0	81.0
	Bulgarian	1	.6	.6	81.5
	Ukrainian	1	.6	.6	82.1
	Moroccan	1	.6	.6	82.7
	Surinamese	1	.6	.6	83.3
	Dutch Caribbean (e.g. Curaçao, Aruba)	3	1.7	1.8	85.1
	Indonesian	3	1.7	1.8	86.9
	Afghan	1	.6	.6	87.5
	Iranian	1	.6	.6	88.1
	Somali	1	.6	.6	88.7
	Other	18	10.3	10.7	99.4
	Prefer not to say	1	.6	.6	100.0
	Total	168	96.0	100.0	
Missing	System	7	4.0		
Total		175	100.0		

Which ethnic or cultural background do you identify with most? (Based on the most common backgrounds in the Netherlands. Please select the one that best applies to you.) - Other - Text

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		157	89.7	89.7	89.7
	Allot of different curtural backgrounds	1	.6	.6	90.3
	Belgian	2	1.1	1.1	91.4
	Chinese	1	.6	.6	92.0
	Czech	1	.6	.6	92.6
	French	1	.6	.6	93.1
	German	2	1.1	1.1	94.3
	Indian	1	.6	.6	94.9
	italian	1	.6	.6	95.4
	Italian	1	.6	.6	96.0
	Kurdish	1	.6	.6	96.6
	Melanesian & Dutch	1	.6	.6	97.1
	Moluccan	2	1.1	1.1	98.3

	Spanish	1	.6	.6	98.9
	Taiwanese	1	.6	.6	99.4
	Vietnamese	1	.6	.6	100.0
	Total	175	100.0	100.0	

Appendix E7: Frequency of gross monthly income levels

What is your approximate personal gross monthly income (i.e., before taxes)? Please select the option that best applies to you.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I had no personal income in the past year	7	4.0	4.2	4.2
	Less than €1,000	33	18.9	19.6	23.8
	€1,000 – €1,699	26	14.9	15.5	39.3
	€1,700 – €2,499	23	13.1	13.7	53.0
	€2,500 – €3,749	49	28.0	29.2	82.1
	€3,750 – €4,999	17	9.7	10.1	92.3
	€5,000 – €5,999	5	2.9	3.0	95.2
	€6,000 – €6,999	2	1.1	1.2	96.4
	€7,000 or more	1	.6	.6	97.0
	Prefer not to say	5	2.9	3.0	100.0
	Total	168	96.0	100.0	
Missing	System	7	4.0		
Total		175	100.0		

Appendix E8: Frequency of education level

What is the highest level of education you have completed? (Please select one option.)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary education (basisschool) or special needs primary education	1	.6	.6	.6
	Prevocational secondary education (VMBO), MBO level 1, or the first 3 years of HAVO or VWO	7	4.0	4.2	4.8
	Senior years of HAVO or VWO, or MBO level 2, 3, or 4	34	19.4	20.4	25.1
	Higher vocational education (HBO) or a university bachelor's degree	92	52.6	55.1	80.2

	University master's degree or PhD	32	18.3	19.2	99.4
	Prefer not to say	1	.6	.6	100.0
	Total	167	95.4	100.0	
Missing	System	8	4.6		
Total		175	100.0		

Appendix E9: Attention check model

Please indicate to what extent you have paid close attention to the model you saw throughout this study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1. Not at all	2	1.1	1.2	1.2
	2.	2	1.1	1.2	2.4
	3.	10	5.7	5.9	8.2
	4.	31	17.7	18.2	26.5
	5.	57	32.6	33.5	60.0
	6.	41	23.4	24.1	84.1
	7. Very closely	27	15.4	15.9	100.0
	Total	170	97.1	100.0	
Missing	System	5	2.9		
Total		175	100.0		

Appendix F: Reliability test

Appendix F1: Purchase intention case processing summary

Case Processing Summary

		N	%
Cases	Valid	175	100.0
	Excluded[a]	0	.0
	Total	175	100.0

a. Listwise deletion based on all variables in the procedure.

Appendix F2: Purchase intention reliability statistics

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.953	.953	3

Appendix F3: Purchase intention item-total statistics

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Please indicate how you feel about purchasing the jeans the model is wearing, using the scale below. - How likely would you be to buy these jeans?	5.30	8.810	.895	.801	.936
Please indicate how you feel about purchasing the jeans the model is wearing, using the scale below. - How willing would you be to buy these jeans?	5.19	8.441	.907	.823	.927
Please indicate how you feel about purchasing the jeans the model is wearing, using the scale below. - How inclined would you be to buy these jeans?	5.22	8.795	.902	.815	.931

Appendix F4: Perceived skin tone similarity case processing summary

Case Processing Summary

		N	%
Cases	Valid	175	100.0
	Excluded[a]	0	.0
	Total	175	100.0

a. Listwise deletion based on all variables in the procedure.

Appendix F5: Perceived skin tone similarity reliability statistics

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.981	.982	3

Appendix F6: Perceived skin tone similarity item-total statistics

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Please indicate the extent to which you feel the model's skin tone is similar to your own. - The model's skin tone is similar to mine.	5.50	12.251	.961	.923	.971
Please indicate the extent to which you feel the model's skin tone is similar to your own. - The model's skin tone is like mine.	5.74	12.574	.957	.916	.974
Please indicate the extent to which you feel the model's skin tone is similar to your own. - The model and I have skin tones in common.	5.64	12.105	.960	.922	.972

Appendix F7: Perceived body type similarity case processing summary

Case Processing Summary

		N	%
Cases	Valid	175	100.0
	Excluded[a]	0	.0
	Total	175	100.0

a. Listwise deletion based on all variables in the procedure.

Appendix F8: Perceived body type similarity reliability statistics

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.977	.977	3

Appendix F9: Perceived body type similarity item-total statistics

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
Please indicate the extent to which you feel the model's body type is similar to your own. - The model's body type is similar to mine.	6.36	13.921	.946	.896	.968
Please indicate the extent to which you feel the model's body type is similar to your own. - The model's body type is like mine.	6.56	13.914	.957	.915	.960
Please indicate the extent to which you feel the model's body type is similar to your own. - The model and I have body types in common.	6.35	14.044	.946	.896	.968

Appendix G: Correlation tests

All correlations

		Icome level	Education level	Purchase Intention	Body type similarity	Skin tone similarity	Age	Perceived jeans quality	Jeans aesthetic appeal	Colour risk	Fit risk
Income level	Pearson Correlation	1	.183*	.015	.100	.030	.449**	-.092	-.160*	-.110	-.162*
	Sig. (2-tailed)		.020	.846	.202	.701	<.001	.243	.042	.162	.039
	N	163	161	163	163	163	163	163	163	163	163
Education level	Pearson Correlation	.183*	1	.080	.135	.030	.103	-.071	.067	-.041	-.152
	Sig. (2-tailed)	.020		.303	.083	.702	.187	.363	.390	.601	.050
	N	161	166	166	166	166	166	166	166	166	166
Purchase Intention	Pearson Correlation	.015	.080	1	.313**	.032	-.037	.326**	.700**	-.016	-.240**
	Sig. (2-tailed)	.846	.303		<.001	.678	.634	<.001	<.001	.839	.002
	N	163	166	175	175	175	168	170	170	170	170
Body type similarity	Pearson Correlation	.100	.135	.313**	1	.231**	-.041	-.021	.199**	.034	-.281**
	Sig. (2-tailed)	.202	.083	<.001		.002	.599	.789	.009	.656	<.001
	N	163	166	175	175	175	168	170	170	170	170
Skin tone similarity	Pearson Correlation	.030	.030	.032	.231**	1	-.202**	.096	-.068	-.039	.025
	Sig. (2-tailed)	.701	.702	.678	.002		.009	.213	.382	.616	.745
	N	163	166	175	175	175	168	170	170	170	170
Age	Pearson Correlation	.449**	.103	-.037	-.041	-.202**	1	.091	-.026	-.156*	-.048
	Sig. (2-tailed)	<.001	.187	.634	.599	.009		.242	.738	.044	.539
	N	163	166	168	168	168	168	168	168	168	168
Perceived jeans quality	Pearson Correlation	-.092	-.071	.326**	-.021	.096	.091	1	.321**	-.253**	-.059
	Sig. (2-tailed)	.243	.363	<.001	.789	.213	.242		<.001	<.001	.443
	N	163	166	170	170	170	168	170	170	170	170
Jeans aesthetic appeal	Pearson Correlation	-.160*	.067	.700**	.199**	-.068	-.026	.321**	1	-.035	-.175*
	Sig. (2-tailed)	.042	.390	<.001	.009	.382	.738	<.001		.654	.022
	N	163	166	170	170	170	168	170	170	170	170
Colour risk	Pearson Correlation	-.110	-.041	-.016	.034	-.039	-.156*	-.253**	-.035	1	.219**
	Sig. (2-tailed)	.162	.601	.839	.656	.616	.044	<.001	.654		.004
	N	163	166	170	170	170	168	170	170	170	170
Fit risk	Pearson Correlation	-.162*	-.152	-.240**	-.281**	.025	-.048	-.059	-.175*	.219**	1
	Sig. (2-tailed)	.039	.050	.002	<.001	.745	.539	.443	.022	.004	
	N	163	166	170	170	170	168	170	170	170	170

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Appendix H: Violation of assumptions

Appendix H1: Homogeneity of regression slopes covariate test

Tests of Between-Subjects Effects

Dependent Variable: Purchase_Intention_mean

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	184.702[a]	6	30.784	29.539	<.001	.521
Intercept	10.102	1	10.102	9.693	.002	.056
body_type_similarity_groups * Jeans_aesthetics	4.531	1	4.531	4.348	.039	.026
skin_tone_similarity_groups * Jeans_aesthetics	.038	1	.038	.037	.848	.000
body_type_similarity_groups * skin_tone_similarity_groups	1.556	3	.519	.498	.684	.009
Error	169.871	163	1.042			
Total	1524.667	170				
Corrected Total	354.573	169				

a. R Squared = ,521 (Adjusted R Squared = ,503)

Appendix H2: Low skin tone * low body type normality test

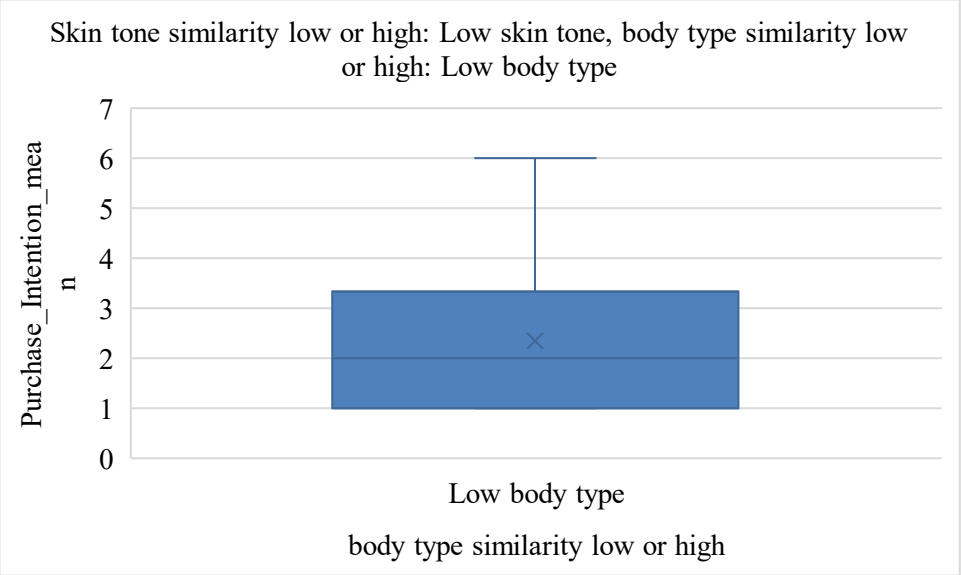
Tests of Normality[a]

	body type similarity low or high	Kolmogorov-Smirnov[b]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Purchase_Intention_mean	Low body type	.201	87	<.001	.874	87	<.001

a. Skin tone similarity low or high = Low skin tone, body type similarity low or high = Low body type

b. Lilliefors Significance Correction

Appendix H3: Low skin tone * low body type outliers plot



Appendix H4: Low skin tone * high body type normality test

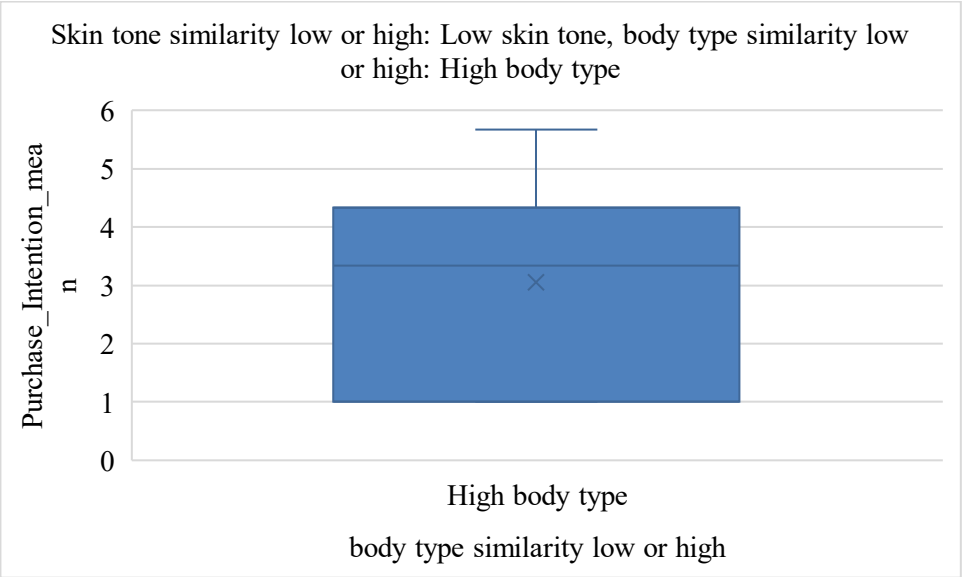
Tests of Normality[a]

	body type similarity low or high	Kolmogorov-Smirnov[b]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Purchase_Intention_mean	High body type	.165	43	.005	.901	43	.001

a. Skin tone similarity low or high = Low skin tone, body type similarity low or high = High body type

b. Lilliefors Significance Correction

Appendix H5: Low skin tone * high body type outliers plot



Appendix H6: High skin tone * low body type normality test

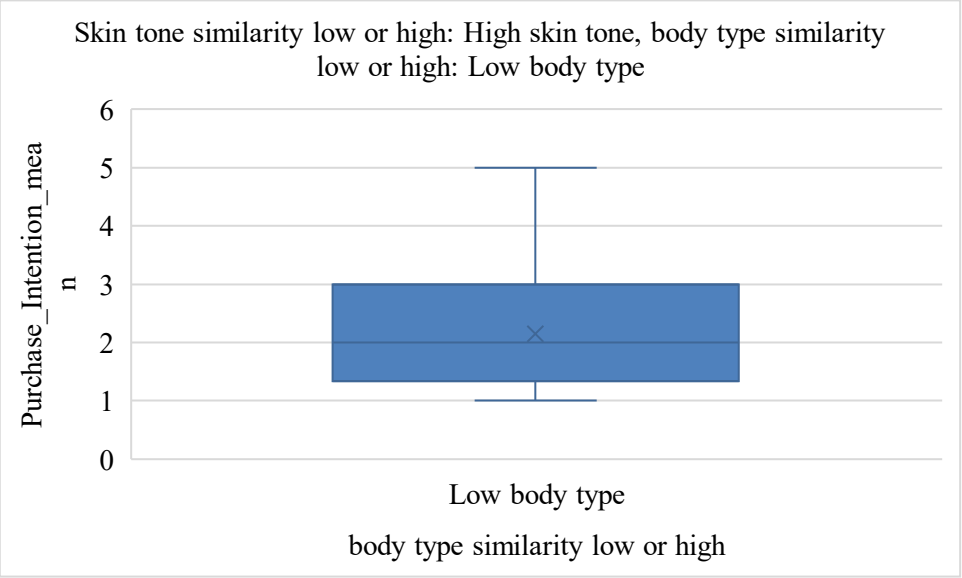
Tests of Normality[a]

	body type similarity low or high	Kolmogorov-Smirnov[b]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Purchase_Intention_mean	Low body type	.171	23	.078	.885	23	.013

a. Skin tone similarity low or high = High skin tone, body type similarity low or high = Low body type

b. Lilliefors Significance Correction

Appendix H7: High skin tone * low body type outliers plot



Appendix H8: High skin tone * high body type normality test

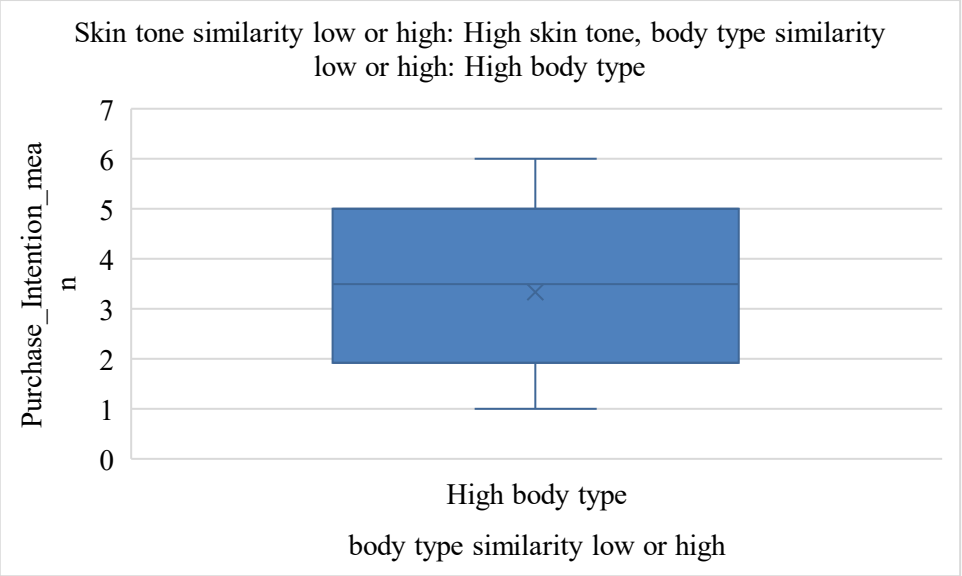
Tests of Normality[a]

	body type similarity low or high	Kolmogorov-Smirnov[b]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Purchase_Intention_mean	High body type	.156	22	.175	.912	22	.051

a. Skin tone similarity low or high = High skin tone, body type similarity low or high = High body type

b. Lilliefors Significance Correction

Appendix H9: High skin tone * high body type outliers plot



Appendix H10: Homogeneity of variances test

Levene's Test of Equality of Error Variances[a,b]

		Levene Statistic	df1	df2	Sig.
Purchase_Intention_mean	Based on Mean	3.710	3	171	.013
	Based on Median	3.342	3	171	.021
	Based on Median and with adjusted df	3.342	3	163.561	.021
	Based on trimmed mean	3.760	3	171	.012

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: Purchase_Intention_mean

b. Design: Intercept + body_type_similarity_groups + skin_tone_similarity_groups + body_type_similarity_groups * skin_tone_similarity_groups

Appendix I: Two-way ANOVA

Appendix I1: Descriptive statistics of purchase intention scores per condition

Descriptive Statistics

Dependent Variable: Purchase_Intention_mean

body type similarity	Skin tone similarity	Mean	Std. Deviation	N
Low body type	Low skin tone	2.3525	1.34525	87
	High skin tone	2.1449	1.10475	23
	Total	2.3091	1.29667	110
High body type	Low skin tone	3.0465	1.53026	43
	High skin tone	3.3333	1.65871	22
	Total	3.1436	1.56787	65
Total	Low skin tone	2.5821	1.44095	130
	High skin tone	2.7259	1.51139	45
	Total	2.6190	1.45635	175

Appendix I2: Test of between-subjects effects

Tests of Between-Subjects Effects

Dependent Variable: Purchase_Intention_mean

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	30.433[a]	3	10.144	5.123	.002	.082
Intercept	956.598	1	956.598	483.082	<.001	.739
body_type_similarity_groups	28.650	1	28.650	14.468	<.001	.078
skin_tone_similarity_groups	.051	1	.051	.026	.873	.000
body_type_similarity_groups * skin_tone_similarity_groups	1.976	1	1.976	.998	.319	.006
Error	338.614	171	1.980			
Total	1569.444	175				
Corrected Total	369.048	174				

a. R Squared = ,082 (Adjusted R Squared = ,066)

Appendix I3: Purchase intention means body type conditions

Purchase_Intention_mean * body type similarity low or high

Purchase_Intention_mean

body type similarity low or high	Mean	N	Std. Deviation	Minimum	Maximum
Low body type	2.3091	110	1.29667	1.00	6.00
High body type	3.1436	65	1.56787	1.00	6.00
Total	2.6190	175	1.45635	1.00	6.00

Appendix I4: Purchase intention means skin tone conditions

Purchase_Intention_mean * Skin tone similarity low or high

Purchase_Intention_mean

Skin tone similarity low or high	Mean	N	Std. Deviation	Minimum	Maximum
Low skin tone	2.5821	130	1.44095	1.00	6.00
High skin tone	2.7259	45	1.51139	1.00	6.00
Total	2.6190	175	1.45635	1.00	6.00

Appendix J: Non-parametric tests

The assumptions for Mann-Whitney U and Kruskal-Wallis tests include independent observations and random sampling (Pallant, 2020, p. 222). As discussed in Section 4.4.1, the assumption of random sampling was not fully met due to the use of a non-probability snowball sampling method. However, random sampling is rarely achieved in real-world research, and this violation is generally not considered problematic (Pallant, 2020, p. 213). The assumption of independence was satisfied, as each participant was assigned to only one condition and there was no overlap or interaction between responses. Therefore, both tests were deemed appropriate to use, and the corresponding output is provided in Appendix J1-12.

First, a Mann-Whitney U test was conducted with purchase intention as the (dependent) test variable and body type similarity as the (independent) grouping variable. This test assessed whether purchase intention differed between participants who perceived high versus low similarity in body type. This test mirrored the main effect analysis for body type similarity conducted in the ANOVA. The results revealed a significant difference in purchase intention: participants in the high body type similarity group ($Md = 3.33$, $n = 77$) reported significantly higher purchase intention than those in the low body type similarity group ($Md = 2$, $n = 123$), $U = 3271.50$, $z = -3.71$, $p < .001$.

Second, a Mann-Whitney U test was conducted with purchase intention as the (dependent) test variable, and skin tone similarity as the (independent) grouping variable. This test was conducted to examine whether purchase intention differed by level of skin tone similarity (H2 & H2a). This analysis served to re-examine the non-significant main effect of skin tone similarity found in the ANOVA. Consistent with those results, no significant difference was found between the purchase intention of the high skin tone similarity group ($Md = 2.33$, $n = 54$), and the low skin tone similarity group ($Md = 2$, $n = 152$), $U = 3888$, $z = -0.58$, $p = .562$.

Lastly, a Kruskal-Wallis test revealed a statistically significant difference in purchase intention across four perceived similarity groups (group 1, $n = 87$: low body / low skin; group 2, $n = 23$: low body / high skin; group 3, $n = 43$: high body / low skin; group 4, $n = 22$: high body / high skin), $\chi^2(3, n = 175) = 11.43$, $p = .010$. To explore where the differences between groups occurred, pairwise comparisons were conducted. The results are shown in Appendix J9-12.

Specifically, the high body / high skin group (group 4) reported a significantly higher median purchase intention score ($Md = 3.50$) than the low body / low skin group (group 1, $Md = 2.00$), $p = .009$, and the low body / high skin group (group 2, $Md = 2.00$), $p = .020$. Moreover, the high body / low skin group (group 3, $Md = 3.33$) also scored significantly higher than the low body / low skin group, $p = .019$, and the low body / high skin group, $p = .047$. No significant difference was found between the two high body similarity groups (group 3 vs. 4), $p = .489$, or between the two low body similarity groups (group 1 vs. 2), $p = .752$.

Although the ANOVA did not reveal a statistically significant interaction effect between perceived body type and skin tone similarity, the Kruskal-Wallis test suggested a pattern. In both

high body type similarity conditions, median purchase intention was higher than in the low body type similarity conditions. Within each body type group, however, median purchase intention remained the same regardless of whether skin tone similarity was perceived as high or low. This pattern suggests that the effect of skin tone similarity on purchase intention may depend on body type similarity. When perceived body type similarity was low, higher perceived skin tone similarity did not lead to higher purchase intention. The same was true when body type similarity was high. Thus, body type similarity appears to be a stronger driver of purchase intention than skin tone similarity. These findings offer partial support for hypotheses H3 and H3a, though no statistically significant interaction was found.

Appendix J1: Mann-Whitney U test body type similarity groups

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Purchase Intention	233	2.6409	1.47596	1.00	6.00
body type similarity	200	.3850	.48782	.00	1.00

Appendix J2: Body type report

Report

Purchase Intention

body type similarity	N	Median
Low body type	123	2.0000
High body type	77	3.3333
Total	200	2.3333

Appendix J3: Mean ranks body type

Ranks

	body type similarity	N	Mean Rank	Sum of Ranks
Purchase Intention	Low body type	123	88.60	10897.50
	High body type	77	119.51	9202.50
	Total	200		

Appendix J4: Test statistics body type

Test Statistics[a]

	Purchase Intention
Mann-Whitney U	3271.500
Wilcoxon W	10897.500
Z	-3.710
Asymp. Sig. (2-tailed)	<.001

a. Grouping Variable: body type similarity low or high

Appendix J5: Mann-Whitney U test skin tone similarity groups

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Purchase Intention	233	2.6409	1.47596	1.00	6.00
Skin tone similarity	206	.2621	.44087	.00	1.00

Appendix J6: Mean ranks skin tone

Ranks

	Skin tone similarity	N	Mean Rank	Sum of Ranks
Purchase Intention	Low skin tone	152	102.08	15516.00
	High skin tone	54	107.50	5805.00
	Total	206		

Appendix J7: Test statistics skin tone

Test Statistics[a]

	Purchase Intention
Mann-Whitney U	3888.000
Wilcoxon W	15516.000
Z	-.580
Asymp. Sig. (2-tailed)	.562

a. Grouping Variable: Skin tone similarity low or high

Appendix J8: Skin tone report

Report

Purchase Intention

Skin tone similarity	N	Median
Low skin tone	152	2.0000
High skin tone	54	2.3333
Total	206	2.0000

Appendix J9: Kruskal-Wallis test body type x skin tone similarity groups hypothesis test

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.[a,b]	Decision
1	The distribution of Purchase intention is the same across categories of perceived similarity	Independent-Samples Kruskal-Wallis Test	.010	Reject the null hypothesis.

a. The significance level is .050.

b. Asymptotic significance is displayed.

Appendix J10: Test summary

Independent-Samples Kruskal-Wallis Test Summary

Total N	175
Test Statistic	11.434[a]
Degree Of Freedom	3
Asymptotic Sig.(2-sided test)	.010

a. The test statistic is adjusted for ties.

Appendix J11: Pairwise comparisons

Pairwise Comparisons of Perceived similarity groups

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.[a]
Low body / High skin-Low body / Low skin	3.716	11.762	.316	.752	1.000
Low body / High skin-High body / Low skin	-25.718	12.959	-1.985	.047	.283
Low body / High skin-High body / High skin	-34.816	14.960	-2.327	.020	.120
Low body / Low skin-High body / Low skin	-22.002	9.352	-2.353	.019	.112
Low body / Low skin-High body / High skin	-31.100	11.972	-2.598	.009	.056
High body / Low skin-High body / High skin	-9.098	13.150	-.692	.489	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.

Appendix J12: Report

Report

Purchase Intention

Perceived similarity groups	N	Median
Low body / Low skin	87	2.0000
Low body / High skin	23	2.0000
High body / Low skin	43	3.3333
High body / High skin	22	3.5000
Total	175	2.0000

Appendix K: Declaration page - use of generative AI tools in thesis

Student Information
Name: Manouk Weynschenk
Student ID: 704654
Course Name: Master Thesis CM500
Supervisor Name: Petra Tenbült
Date: June 30, 2025

Declaration:

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 ChatGPT, DeepL, Quillbot, Grammarly, Scribbr, 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.

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

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

Signature:
Date of Signature: June 25, 2025

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:
Date of Signature: June 25, 2025

Appendix L: Prompts to AI tools

AI tools used were ChatGPT, Deepl, Quillbot, Grammarly and Scribbr. ChatGPT was used for the purpose of generating the study's materials. These were prompted as such:

- I am going to do a research on the influence of women's perceived similarity with models' physique (thin, medium, large) and skin tone (light, medium, dark) in online shop environments, on their purchase intentions of a garment worn by that model. Now for my pretest I want to take 9 photos with varying physique and skintone (so each model is different) with female models on them wearing the same outfit. I want to measure the purchase intentions of the jeans they are wearing because that might represent a garment that people might really want to look at someone with the same skin tone and/or build. Can you make sure I have 9 different pictures therefore?
- this is 1, you can now make a medium and thin version
- and now one wih dark skin
- can you also make a plussize dark skin model
- and also a thin, dark model
- also a thin, light skin model
- and a thin medium skin model
- and a plussize medium skin model
- and a medium light skin model
- she looks thinner than the other medium model, can you make her more medium?
- Her skin looks darker than the other light skin models, can you make her skin lighter?
- i need new models. their features outside of their skin tone and body type need to be the same. do you remember how you made it last time? maybe you can use one you made for reference: inserted model picture with medium skin & medium body type
- okay i need them seperately. can you first make a thin one with light skin
- a little more thin like last time? facial features and hair can stay the same
- yes now make her have a medium body type
- same skin tone, face and hair, just a more medium body type
- you changed the skin tone and the jeans? maybe you can just make them all 9 at once in one picture divided up in 9 different models? So a model with light skin and thin body type, one with light skin and a medium size body type and one with light skin and plussize body type. A model with medium skin tone and thin body type, one with medium skin tone and a medium size body type and one with medium skin tone and plussize body type. And a model with dark skin and thin body type, one with dark skin and a medium size body type and one with dark skin and plussize body type. the face and hair and outfit of all models can be based on this example model you made before who has a light skin tone and thin body type.
- okay take her and keep everything the same, skin tone, hair, face, outfit. just change her body type and make it medium sized
- and now 3 of them but plussize and position them with a little bit of space inbetween the models so they are not overlapping
- nice but more space between the models so they are in seperate spaces and with the same pose and expression so not one with an open mouth
- make this model again exactly the same but with her hands in her pockets
- more like her you made before, the length of the legs, colour of the pants

Moreover, ChatGPT was used to improve the flow and clarity of written sections in the paper. Furthermore, it was used to explain concepts, texts, and analyses processes to the researcher. Prompts included, but were not limited to:

- Please explain more simply: *sentence from own paper that was too jargon-ridden*
- Please revise: *sentence from own paper that was not flowing nicely*
- Could you please split up this sentence into multiple sentences: *own sentence that was too long*
- What is a synonym for: *specific word*
- What word am I looking for in this sentence: *own sentence with blank in it/ ending in blank*
- Please shorten this part/could you rephrase this more concise
- Can you give me tips on how to make my argumentation stronger (e.g., should I look for extra evidence)
- What does the author mean by this: *piece of jargon-ridden text from other research*
- Please explain this finding: *piece of text from other research*
- Can you suggest a more academic way to phrase this: *own text in overly layman terms*
- Is this argument logically structured, or should I adjust the order: *own argument*
- How can I make this transition smoother: *two own sentences*
- Can you help brainstorm how this study did or did not make use of *concept*
- Can you explain where I should look at when doing *certain SPSS action*
- Does this argument make sense: *own argument*
- Can you simply explain what *concept* means: *part from other research*

DeepL, Quillbot, Grammarly and Scribbr are not specifically given sentence long prompts. Instead DeepL was given Dutch words to translate into English, or vice versa, since the researcher's first language is Dutch. Moreover, it was used to find synonyms for words. Quillbot was used to rewrite own sentences that were put in and immediately were rewritten. Grammarly is an input into your computer that automatically gives suggestions for rewriting your existing text, as well as spelling and grammar improvements. Lastly, Scribbr is prompted with DOI's, or ISBN's to generate automatic APA references in text, as well as for a reference list. Sometimes page numbers, publishers, volume numbers, or editions were added manually. References were always checked before adopting them to the paper.