The Role of Brand Perception and Perceived Authenticity in the Impact of Intersectional Diversity Representation on Purchase Intent Among Young Adults in the Netherlands

Author: Eleftherios Fountos

University of Twente
P.O. Box 217, 7500AE Enschede
The Netherlands

ABSTRACT,

In response to growing societal awareness around diversity, equity, and inclusion, this study investigates how intersectional diversity representation in advertising, specifically the simultaneous portrayal of racial and sexual orientation diversity, affects brand perception and purchase intent among young adults in the Netherlands. A conceptual model was tested in which brand perception mediates this relationship, and perceived authenticity moderates the link between brand perception and purchase intent. Based on survey data from 97 respondents, results show that intersectional representation improves brand perception, which in turn increases purchase intent. Additionally, perceived authenticity significantly strengthens this effect. These findings advance the literature on diversity marketing by highlighting the importance of authentic intersectional representation in shaping consumer behavior within multicultural contexts.

Graduation Committee members:

Dr. Hatice Kizgin

Dr. Letizia Alvino

Keywords

"*During the preparation of this work, the author used Quillbot and ChatGPT in order to refine the bachelor thesis by checking grammar and spelling. After using these tools, the author reviewed and edited the content as needed and takes full responsibility for the content of the work.*"

1. Introduction
1.1. Knowledge Gap

Recent social movements and growing awareness of diversity, equity, and inclusion (DEI) have shifted consumer expectations towards inclusive representation in advertising (Eisend, Muldrow, & Rosengren, 2022; Ferraro et al., 2023). Evidence indicates that consumers are increasingly requiring diversity, but research focuses on specific dimensions of diversity, such as gender, race, or sexual orientation, independently (Eisend, 2022; Grieco, 2024). In particular, intersectionality, the simultaneous portrayal of multiple diversity attributes like race and sexual orientation, has not been sufficiently examined despite its potential significant impact on brand perception and purchase intent (Arsel et al., 2022; Campbell et al., 2023). The first, significantly influences consumers' purchasing behavior, loyalty, and overall evaluation of the brand (Ferraro et al., 2023). Understanding how diverse representation affects this perception is crucial for effective and inclusive marketing (Arsel et al., 2022; Campbell et al., 2023). Therefore, a significant research gap remains regarding the influence of intersectional representations (both racial and sexual orientation attributes simultaneously) on brand perception and purchase intention of young adults in the Netherlands.

While intersectionality constitutes a key research gap, it is not the only one. Existing research has a tendency to treat brand perception and purchase intent as distinct and separate outcomes rather than examining their possible interconnected nature (Spears & Singh, 2004). Little attention has been given to examining the mediating role of brand perception in transmitting the effects of intersectional diversity representations on consumer behavioral intentions, specifically purchase intent. Examining brand perception as a mediator can provide profound insights into the mechanisms that shape consumer decision-making processes affected by advertising techniques. Lastly, perceived authenticity—the consumer's perception of how genuine and sincere the diversity portrayals are—has been identified as crucial in determining the effectiveness of DEI initiatives (Campbell et al., 2023; Morhart et al., 2015). However, its potential moderating role within the brand perception–purchase intent relationship remains underexplored.

Therefore, this study aims to address these significant gaps by investigating how intersectional diversity representation influences purchase intent among young adults in the Netherlands through the mediating effect of brand perception, and how this relationship is moderated by perceived authenticity.

1.2. Research Objective

The primary objective of this research is to investigate the impact of intersectional diversity representation (racial and sexual orientation) in advertising on purchase intent among young adults living in the Netherlands, with a focus on the mediating role of brand perception and the moderating role of perceived authenticity in the relationship between brand perception and purchase intent.

1.3. Research Question

The central research question guiding this thesis is:

"How does intersectional diversity representation (racial and sexual orientation) in advertising influence brand perception and purchase intent among young adults in the Netherlands, and under what conditions does perceived authenticity strengthen or weaken this relationship?"

1.4. Academic Relevance

This research provides an academic contribution by addressing significant gaps (intersectionality and authenticity) in existing diversity representation literature, with a particular emphasis on intersectionality and culturally specific responses (Campbell et al., 2023; Eisend et al., 2022). Intersectional visual representations have not yet sufficiently been examined, and therefore questions arise regarding their effect on consumer behaviors in comparison to single-attribute diversity narratives. This study, by specifically analyzing intersectionality within the multicultural Dutch setting and investigating the mediating role of brand perception and the moderating role of perceived authenticity within this context (Entzinger, 2003), offers crucial insights into consumer responses and contributes to the theoretical discussion on diversity and inclusion in advertising, particularly concerning standardized versus adaptive marketing strategies. This paper contributes to the academic debate of whether and how representations of intersectional identities influence consumer-brand relationships.

1.5. Practical Relevance

In practice, the findings of this study have significant impacts for marketers and advertisers aiming to effectively correspond to the evolving consumer expectations of diversity and inclusion (Campbell et al., 2023). Understanding how young adults in the Netherlands perceive intersectional advertisements, through brand perception and the effect of perceived authenticity, can benefit marketers in developing more effective and culturally aligned strategies. These insights can guide companies in creating authentic and effective advertising strategies that resonate with young adults in diverse markets like the Netherlands. The findings can also help brands avoid performative diversity representations, thereby enhancing consumer trust, positive brand evaluations, and ultimately increasing purchase intent (Grieco, 2024; Walter et al., 2024).

2. Theoretical Framework & Literature Review
2.1. Definitions and Key Concepts

In this study, important topics regarding consumer behavior, brand perception, and diversity representation are examined. To begin with, in this research, the concept of diversity representation in advertising, refers to the portrayal of people from different racial backgrounds and sexual orientations in marketing campaigns (Campbell et al., 2023). Inclusion refers to the meaningful and authentic presentation of diverse identities in marketing campaigns that ensures representation reaching the target consumers in a substantive and sincere way (Eisend et al., 2022). Furthermore, intersectionality describes

how different identities, specifically racial and sexual orientation diversity, intersect with each other and overlap, creating unique implications on consumer attitudes and behavior (Arsel et al., 2022). Moreover, brand perception refers to the mental schemes and attitude individuals possess regarding a brand, influencing their purchase decisions, loyalty, and brand valuation (Ferraro et al., 2023). Last but not least, purchase intent refers to the likelihood that a consumer will buy or use a brand based on their perceptions and evaluations influenced by the advertisement's diversity portrayals (Grieco, 2024).

2.2. Theoretical Background

Throughout this research, several key theoretical frameworks guide the understanding of how intersectional diversity representation influences consumer responses. According to Social Identity Theory, consumers tend to connect positively with brands reflecting their identity, values, and self-concept, and respond positively to advertisements depicting their perceived social identities (Ferraro et al., 2023). Complementing this, Representation Theory emphasizes that advertisements serve as cultural texts shaping societal norms and individual perceptions. Authentic portrayals of diversity validate consumer identities, resulting in constructive brand perceptions, whereas perceived inauthentic portrayals can lead to skepticism or rejection of brands (Campbell et al., 2023; Eisend et al., 2022). Additionally, Congruence Theory supports that advertising effectiveness is enhanced when the portrayed attributes, such as representation of diversity, align closely with consumer expectations and perceptions of the advertised product (Eisend et al., 2022). Finally, Self-Congruity Theory posits that consumers indicate a stronger preference for brands consistent with their self-concept, either aligning with their actual self or their ideal self-image (Grieco, 2024). Therefore, when individuals watch advertisements featuring intersectional diversity (race and sexual orientation) that match their identity, they are more likely to develop positive attitudes towards the brand.

2.3. Empirical Evidence

Existing literature has demonstrated that diversity representation in advertising effectively impacts brand perception and consumer engagement when executed authentically. Ferraro et al. (2023) found that consumers are more likely to develop favorable attitudes towards a brand that promotes diversity in a non-performative and authentic manner. Furthermore, Grieco (2024) highlights that inclusive marketing campaigns contribute to higher consumer trust and emotional connection with the brands. Moreover, Erdil (2015) and Foroudi

et al. (2018) have suggested that brand perception may mediate the relationship between diversity representation and behavioral outcomes such as purchase intent.

However, prior research also suggests that inauthentic depictions of diversity can lead to negative brand evaluations. Campbell et al. (2023) discuss how consumers tend to reject brands engaging in "diversity-washing," where inclusivity efforts appear performative rather than genuine. Eisend et al. (2022) further argue that advertising effectiveness is significantly influenced by the degree of alignment between consumer expectations and how diversity is represented. This suggests that perceived authenticity plays a crucial role in shaping consumer reactions to diverse advertising. Furthermore, perceived authenticity has been identified as a key moderator, specifically concerning the way it influences how positive brand perceptions translate into action. Despite this, its moderating role has primarily been studied in broad contexts, leaving a gap in its application to intersectional diverse advertising targeted at young, socially aware consumers.

Studies focusing on intersectional diversity (race and sexual orientation combined) are still limited. While previous research has examined the impact of racial or LGBTQ+ representation separately (Nielsen 2023; University of Oregon, 2023), few studies have explored their combined effects on brand perception and purchase intent. This gap highlights the need for further research on the effects of intersectional diversity on consumer responses, particularly among young adults in the Netherlands.

2.4. Theoretical Framework and Hypotheses

Based on the theories outlined above, this study proposes a conceptual framework in which brand perception is introduced as a mediating variable that explains how diversity representation in advertising (specifically racial and sexual orientation intersectionality) leads to purchase intent. Prior research has shown that consumers who perceive a brand positively, considering it as ethical, inclusive, and socially aligned, are more likely to purchase its products or services (Erdil, 2015; Foroudi et al., 2018). Additionally, perceived authenticity is proposed as a moderator, specifically influencing the strength of the relationship between brand perception and purchase intent, which determines whether diversity efforts are seen as genuine or performative. Authenticity makes diversity representations more impactful and credible by fostering trust and reducing consumers' disbelief (Campbell et al., 2023; Morhart et al., 2015). The aforementioned relationships can be found in the following framework in Figure 1.
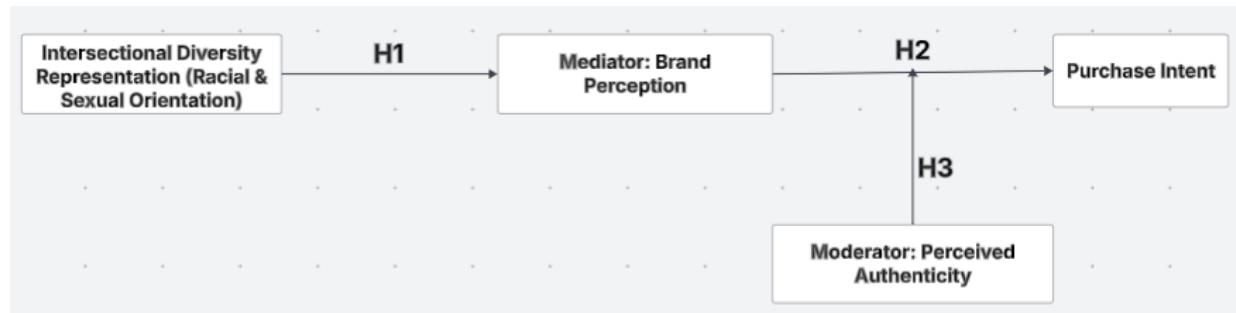
Figure 1. Conceptual Framework indicating the relationships between Intersectional Diversity Representation, Brand Perception, Perceived Authenticity and Purchase Intent.

Based on the conceptual framework and existing literature, the following hypotheses will be tested:

Younger audiences, especially Gen Z and Millennials, who place a high value on inclusivity, social responsibility, and ethical brand practices, respond favorably to inclusive ads that authentically represent intersectional identities (combining diversity in race and sexual orientation) (Ferraro et al., 2023; Smith & Turner, 2015). Authentic representation of intersectional diversity aligns closely with young adults' values, enhancing their overall evaluation of the brand. Therefore, it is hypothesized that:

> **H1:** Intersectional diversity representation in advertising is positively related to brand perception among young adults in the Netherlands.

Consumers are more likely to express purchasing intentions when they have favorable perception about a brand due to qualities like trustworthiness, inclusivity, and ethical alignment. Prior studies consistently support that a positive brand image significantly increases consumer intentions to purchase or recommend the brand (Diallo et al., 2015; Porral & Mangin, 2019). Therefore, it is hypothesized that:

> **H2:** Brand perception is positively related to purchase intent among young adults in the Netherlands.

Perceived authenticity influences how positive brand perceptions are translated effectively into tangible consumer actions, such as purchasing. Authentic brands encourage stronger emotional connections, credibility, and loyalty, leading to higher consumer willingness to act on their positive brand evaluations (Carvalho et al., 2023; Morhart et al., 2015). Therefore, the authentic presentation of diversity is expected to strengthen the positive relationship between brand perception and purchase intentions. Thus, it is hypothesized that:

> **H3:** Perceived authenticity positively moderates the relationship between brand perception and purchase intent.

The approach discussed in the next part will help implement this theoretical framework thus allowing practical verification of the proposed relationships.

3. Methodology
3.1. Research Design

A quantitative survey-based research design is used in this study. To collect empirical data, university students will participate in a structured online survey. The purpose of the survey is to find out how young adults' perceptions of brands and intent to buy are influenced by intersectional diversity representations (race and sexual orientation) in advertising, while brand perception serves as a mediator in this relationship and perceived authenticity as a moderator between the mediator and the dependent variable. Using a quantitative survey-based approach is appropriate for efficiently collecting standardized data from large populations in an effective manner, which improves the outcome's statistical reliability and universality (Babbie, 2021).

3.2. Sample and Data Collection

Young adults in the Netherlands between the ages of 18 and 30 make up the study's target group, with a particular emphasis on University of Twente students. The target sample size is at least 150 responders, and potential participants will be reached through personal network and social media communication channels. Such a sample size can ensure reliability in statistical testing (including mediation and moderation analyses) (Hair et al., 2019b). An online survey platform (Qualtrics) will be used to gather data, and participants will have access to it via email invitations and group chats. The survey will take approximately 5–7 minutes to complete and responses will be kept anonymous and stored securely in the password-protected and access-restricted Qualtrics environment.

3.3. Measurement Instruments

This study uses established and validated measurement items for each variable to guarantee construct validity and comparability with prior research. A 7-point Likert scale, which is commonly used in consumer behavior research, is used to measure each item and ranges from 1 (Strongly disagree) to 7 (Strongly agree) (Hair et al., 2019). Such a scale allows for enhanced measurement precision (Dawes, 2008) as well as for improved reliability and validity (Finstad, 2010). The measurement items for Intersectional Diversity Representation (IV), Brand Perception (Mediator), and Purchase Intent (DV) are adapted from Eisend (2022), Ipsos (2021), Kumar (2018), Oğuz et al. (2023) and Reichheld (2003), Spears and Singh (2004). The moderator variable, Perceived Authenticity, follows

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the framework developed by Morhart et al. (2015), which includes four key dimensions: credibility, integrity, symbolism, and continuity. The full list of constructs, items, and sources is presented in Table 1 below.

Table 1. The measurement instruments for Intersectional Diversity Representation, Brand Perception, Purchase Intent, and Perceived Authenticity

Variable	Measurement Items (Examples)	Scale Type	References
Intersectional Diversity Representation (IV)	1. "This ad effectively represents intersectional diversity (race & sexual orientation)" 2. "I recognize both racial and LGBTQ+ representation in this ad" 3. "The diversity portrayed in this ad feels intentional and inclusive."	7-point Likert (1 = Strongly disagree, 7 = Strongly agree)	Adapted from Eisend (2022); Ipsos (2021); Kumar (2018); Oğuz et al. (2023)
Brand Perception (Mediator)	1. "This brand has a positive image" 2. "I have a favorable attitude towards this brand." 3. "This brand aligns with my values" 4. "I trust this brand."	7-point Likert (1 = Strongly disagree, 7 = Strongly agree)	Adapted from Spears & Singh (2004)
Purchase Intent (DV)	1. "I would consider buying from this brand" 2. "I intend to purchase this brand in the future." 3. "I would probably purchase from this brand." 4. "I would recommend this brand"	7-point Likert (1 = Strongly disagree, 7 = Strongly agree)	Adapted from Reichheld (2003); Spears & Singh (2004)
Perceived Authenticity (Moderator)	**Credibility:** 1. "This brand delivers on its promises." 2. "This brand's claims are credible." **Integrity:** 3. "This brand acts with integrity." 4. "This brand is honest." **Symbolism:** 5. "This brand reflects values important to me." 6. "This brand adds meaning to my life." **Continuity:** 7. "This brand is consistent in its messages." 8. "This brand remains true to itself."	7-point Likert (1 = Strongly disagree, 7 = Strongly agree)	Adapted from Campbell et al. (2023); Morhart et al. (2015)

In order to avoid potential sampling biases and explore possible differences in perceptions and intentions across various demographic groups, the impact of demographic variables will also be taken into account. Furthermore, Hughes et al. (2016) argue that accurately describing a sample through demographic data allows researchers to determine if their participants represent the intended population. This clarity impacts the generalization of findings and the possibility of replicating studies. Therefore, participants will be suggested to provide demographic information namely age, gender and nationality.

3.4. Data Analysis

After collection, the data will be securely exported to Google Sheets for initial preparation (cleaning, labeling, and organizing the dataset) and saved into the UT OneDrive provided by the University of Twente. The dataset will then be imported into R-Studio, where the analysis will be conducted in several steps.

First, a general overview of the responses for each variable will be given using descriptive statistics (means, standard deviations, and frequency distributions). In order to evaluate the internal consistency of the multi-item scales as well as the accuracy of the reflection of the concepts, reliability and validity analyses will also be performed for each construct using Cronbach's alpha and Confirmatory Factor Analysis (CFA) respectively. According to Hair et al. (2019b), constructs with alpha values greater than 0.70 are considered trustworthy, but values between 0.6–0.7 may be acceptable for exploratory research. Furthermore, to assess the validity of the model, key indices will be reported, such as the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR). These indicators will be also interpreted based using established thresholds (Hair et al., 2019b).

Subsequently, to formally test the hypotheses, a series of regression analyses will be performed. First, using the 'lavaan' package, mediation analysis will test whether Brand Perception mediates the relationship between Intersectional Diversity Representation and Purchase Intent. Then, a moderation analysis will examine whether Perceived Authenticity moderates the relationship between Brand Perception and Purchase Intent by including an interaction term in a regression model.

For these analyses, packages from R-Studio such as tidyverse, psych, and lm() functions will be used. Confidence intervals and p-values ($\leq$ 0.05) will be used to assess the results' significance. When necessary, moderation effects will be supported by visualizations like interaction plots, and the results will be interpreted to assess whether the hypotheses are true or false.

3.5.   Ethical Considerations

Maintaining ethical standards and research integrity is a challenge that a lot of researchers fail to do. Thus, this study will adhere to the following considerations to avoid this issue. One of the main problems when it comes to surveys is the anonymity and confidentiality of the respondents. Therefore, they will be strictly maintained in this survey to guarantee that no personal data are captured or disclosed. Participants will also receive clear information about the goal of the study and their freedom to discontinue participation at any time without facing consequences. Finally, ethical approval from the University of Twente's Ethics Committee will be obtained to make sure the study complies with ethical and institutional standards.

4.   Results

This section presents the findings of the statistical analyses conducted to test the proposed hypotheses regarding the relationship between intersectional diversity representation (IDR), brand perception (BP), perceived authenticity (PA), and purchase intent (PI). The questionnaire was answered by 151 people, but the data used in the analyses consist of the answers of 97 people, as after the data cleaning step, empty responses or participants exceeding the specified age limit (18-30 years old) were removed.

4.1.   Reliability and Validity Analysis

To assess the internal consistency of the constructs, Cronbach's alpha was calculated as a measure of scale reliability. Three out of the four constructs had satisfactory reliability according to Cronbach's alpha values: Purchase Intent (PI: α =.94), Perceived Authenticity (PA: α =.88), and Brand Perception (BP: α =.88). However, the reliability of Intersectional Diversity Representation (IDR) was lower (α =.59), falling below the predefined reliability threshold (α >.70). A possible explanation could be the limited number of items (only three) used to measure IDR or ambiguity within the items themselves, suggesting that additional or clearer items might be necessary to improve internal consistency. Overall, except for IDR, the reliability measures met the established threshold and a short summary of the results can be found in Table 2.

Table 2. Cronbach's Alpha for each construct.

Construct	Number of Items	Cronbach's Alpha
Intersectional Diversity Representation (IDR)	3	0.59
Brand Perception (BP)	4	0.88
Perceived Authenticity (PA)	8	0.88
Purchase Intent (PI)	4	0.94

To check whether the survey items accurately reflected the underlying concepts, a Confirmatory Factor Analysis (CFA) was performed using the lavaan package in R. This validity analysis tested the 4 variables of the model: Intersectional Diversity Representation (IDR), Brand Perception (BP), Perceived Authenticity (PA), and Purchase Intent (PI). The CFA model indicated suboptimal fit with the following indices: CFI = 0.828, TLI = 0.798, RMSEA = 0.132 (90% CI [0.116, 0.148]), and SRMR = 0.105. These values did not meet the commonly accepted thresholds for good model fit (CFI and TLI $\geq$ 0.95; RMSEA $\leq$ 0.06; SRMR $\leq$ 0.08), indicating room for improvement in measurement validity (Hair et al., 2019b).

Even though the overall fit was not ideal, the analysis of individual items still provided valuable insights. The loadings for the IDR construct were relatively low, with IDR1 loading at 0.369, IDR2 at 0.313, and IDR3 at 0.807. This inconsistency indicates that the overall construct validity for IDR is weak. On the other hand, the Brand Perception scale showed strong and consistent results, with item loadings ranging from 0.689 to 0.868. Specifically, BP2 and BP3 showed particularly high standardized loadings of 0.860 and 0.868, respectively, confirming the internal consistency of this factor.

Similarly, the Perceived Authenticity construct, measured with eight items, also showed solid internal validity overall. Most loadings were satisfactory (e.g., PA3 = 0.888, PA1 = 0.845), although PA8 had a notably low loading of 0.234, indicating it did not align as strongly with the underlying construct. Lastly, the Purchase Intent construct demonstrated excellent construct validity, with item loadings ranging from 0.879 to 0.956. The item PI2, in particular, had a very high loading of 0.956, confirming the strength of this measure. A detailed overview of the results from the CFA can be found in Appendix H and a short summary in Table 3.

Table 3. Summary of Standardized Factor Loadings for Each Construct

Construct	Number of Items	Lowest Std. Loading	Highest Std. Loading
Intersectional Diversity Representation (IDR)	3	0.313	0.807
Brand Perception (BP)	4	0.689	0.868
Perceived Authenticity (PA)	8	0.234	0.888
Purchase Intent (PI)	4	0.879	0.956

Overall, the CFA results indicate that Brand Perception, Perceived Authenticity, and Purchase Intent were measured consistently and reliably. However, the IDR construct and the PA8 item showed weaker performance. These limitations were acknowledged and taken into account during the interpretation of the model and the study's overall findings and conclusions.

Histograms of the composite scores for each variable provided visual evidence regarding the distribution patterns (Appendix D). Overall, distributions appeared near-normal with slight skewness, particularly for IDR and PI. The slightly skewed distributions suggest that most participants responded positively, especially when it came to intersectional diversity and their intention to purchase. Detailed descriptive statistics including means, standard deviations, minimum, and maximum scores for each scale are available in Appendix A. These descriptive analyses confirmed that the data were suitable for the next steps of the analysis, such as testing for mediation and moderation effects.

4.2. Demographic Information

The final sample comprised 97 respondents, with an average age of 23.52 years (SD = 3.09). The age range of participants was between 18 and 30 years, effectively representing the target young adult demographic. Regarding gender distribution, the sample predominantly consisted of male participants with 59 respondents (60.8%), while female participants, namely 34, comprising approximately 35% of the sample and non-binary or people that preferred not to share their gender information consist the rest 4.2% of the sample, specifically 2.1% each of the two groups and 2 respondents respectively. Regarding nationality, the respondents represented diverse backgrounds. The largest groups were Greek (33%), Dutch (18.6%), and German (11.3%), while 37.1% of the sample identified with other nationalities, categorized as 'Other' to ensure representativeness and anonymity. A detailed breakdown of these demographic characteristics can be found in Appendix A.

4.3. Hypothesis Testing

Hypothesis 1: Positive Relationship Between IDR and BP
To test whether intersectional diversity representation (IDR) predicts brand perception (BP), a regression analysis was conducted within the mediation model using lavaan package. Results revealed a significant positive effect of IDR on BP (β = 0.670, p < .001), confirming Hypothesis 1 and thus Intersectional diversity representation in advertising is positively related to brand perception among young adults in the Netherlands.

Hypothesis 2: Mediation Analysis (IDR → BP → PI)
To test the mediation effect of brand perception (BP) on the relationship between intersectional diversity representation (IDR) and purchase intent (PI), a mediation analysis was performed using the lavaan package in R with 5,000 bootstrap samples. The detailed results from the mediation analysis regarding Hypothesis 2, as well as the confirmation of Hypothesis 1, can be found in Appendix B.

The analysis revealed that IDR significantly predicted BP (a = 0.670, p < .001), and BP significantly predicted PI (b = 0.781, p < .001). The indirect effect of IDR on PI through BP (a × b = 0.523, p < .001) was significant. This result indicates that brand perception fully mediates the relationship between intersectional diversity representation and purchase intent and thus Hypothesis 2 was supported. A short summary of the results from the mediation analysis can be found on Table 4.

Table 4. Summary of the mediation analysis results

Relationship Tested	Estimate (β)	p-value
IDR → BP (a)	0.67	< .001
BP → PI (b)	0.781	< .001
IDR → BP → PI (indirect effect, a x b)	0.523	< .001

Hypothesis 3: Moderation Analysis (BP × PA → PI)
To test whether perceived authenticity (PA) moderates the relationship between brand perception (BP) and purchase intent (PI), a moderation model was tested using multiple regression with mean-centered predictors and an interaction term (BP × PA).

The results revealed a strong direct effect of Brand Perception on Purchase Intent (β = 0.567, p < .001), while Perceived Authenticity on its own did not have a statistically significant impact (β = 0.229, p = .101 > .05). However, the interaction between the two was significant (β = –0.113, p = .049), supporting moderation and suggesting that the effect of brand perception on purchase intent becomes weaker at higher levels of perceived authenticity. An interaction plot was modelled, to visually explain the aforementioned effect. Although a significant moderation effect was found, Hypothesis 3, predicting a positive moderation effect, was not supported. Instead, the analysis revealed a negative moderation effect, indicating that higher perceived authenticity actually weakens rather than strengthens the relationship between brand perception and purchase intent. An overview of the moderation analysis along with the interaction plot can be found in Appendix C.

The regression diagnostics included residual plot (Appendix E) and the Q-Q plot (Appendix F) to assess key regression assumptions. The Residuals vs. Fitted plot displayed a random dispersion of residuals around zero, fulfilling both constant variance (homoscedasticity) and linearity assumptions. Moreover, since the data was collected via a cross-sectional online survey, the assumption of independent errors is reasonably met. The Q-Q plot of standardized residuals closely followed the theoretical diagonal line, confirming the assumption of normality of residuals. Lastly, multicollinearity was assessed using Variance Inflation Factors (VIF), and all VIF values (2.56, 2.54, and 1.01 for BP, PA and their interaction respectively) remained below the established threshold (VIF < 5, considered acceptable and not problematic) (Hair et al., 2019a), confirming no multicollinearity issues. Together, these diagnostics confirm that no significant violations of the regression assumptions occurred, thus supporting the robustness and validity of the moderation analysis results.

5.   Discussion

The findings of this study provide strong support for the proposed conceptual model and offer meaningful contributions to both academic literature and marketing practice. Hypothesis 1 was supported, showing that Intersectional Diversity Representation (IDR) has a positive effect on Brand Perception (BP), indicating that when participants were exposed to advertisements that clearly and inclusively represented both racial and sexual orientation diversity, they tended to view the brand more favorably. This underscores the importance of diverse advertising in shaping how young adults evaluate brands.

These findings are in line with earlier research, which has consistently shown that inclusive representation can enhance brand evaluations (Campbell et al., 2023; Ferraro et al., 2023). Moreover, the results align with Representation Theory, which suggests that when media portray diversity in authentic ways, it helps consumers feel more confident about their identities and shape positive attitudes towards the brands (Eisend et al., 2022).

Further support for the proposed model was found through the mediation analysis, with the results of it confirming Hypothesis 2, which means that Brand Perception fully mediates the relationship between Intersectional Diversity Representation (IDR) and Purchase Intent (PI). In simpler terms, diverse representation in advertising did not directly lead to higher purchase intent. Instead, it improved how participants perceived the brand, which then increased their willingness to buy.

These results align with Social Identity Theory and Self-Congruity Theory, both of which highlight the role of identity alignment and positive brand attitudes in shaping consumer behavior (Ferraro et al., 2023; Grieco, 2024). In addition, the results of the research agree with Erdil (2015) and Foroudi et al. (2018) suggestions that brand perception may mediate the relationship between diversity representation and behavioral outcomes such as purchase intent. Therefore, the findings confirm that the psychological pathway from inclusive advertising to consumer action is driven by how the brand is perceived, not just by the presence of diversity itself.

In contrast, Hypothesis 3 was not supported. Although perceived authenticity (PA) significantly moderated the relationship between BP and PI, the effect was negative.

Specifically, as PA increases, the strength of the relationship between brand perception and purchase intent decreases. This unexpected result suggests a saturation or ceiling effect, so when brands are already perceived as highly authentic, further improvements in brand perception may not significantly increase purchase intent. While this finding partially contradicts some previous studies that emphasized authenticity as a reinforcing factor (Morhart et al., 2015), it raises questions about the limits of authenticity's influence on behavioral outcomes. These findings provide new opportunities for researching Congruence Theory's boundaries, particularly when authenticity becomes redundant rather than reinforcing.

Overall, the results suggest that intersectional diversity in advertising can be an effective brand-building strategy, especially when it positively influences consumer perceptions. This implies that companies should consider the promotion of both authentic diversity portrayals and effective brand-building strategies to maximize consumer engagement and market success. However, the connection with authenticity may be more complex than initially assumed, and its significance may need further research to better understand the conditions under which it strengthens or limits consumer responses.

5.1.   Conclusion

This study was set out to investigate how intersectional diversity representation (IDR) in advertising, specifically regarding race and sexual orientation, impacts brand perception and purchase intent among young adults in the Netherlands, and under what conditions does perceived authenticity strengthen or weaken this relationship. The analysis confirmed that IDR significantly enhances brand perception, which in turn increases purchase intent, thereby supporting the mediating role of brand perception. However, perceived authenticity negatively moderates the relationship between brand perception and purchase intent, which means that at higher levels of authenticity, the impact of brand perception on purchase intent becomes weaker.

These findings highlight the importance of inclusive advertising in forming positive brand attitudes among Gen Z consumers. The results also indicate a more complex role of authenticity, suggesting that while it is important, its effect may cease after a certain point. Overall, this study enhances our understanding of how diversity, along with psychological factors like perception and authenticity, shapes consumer behavior in a generation that increasingly expects brands to reflect authentically their values.

5.2.   Practical Implications

The findings of this study offer several important practical implications, particularly valuable for marketing managers, brand strategists, and advertising practitioners targeting young adult audiences.

From a company's perspective, firms should acknowledge the significant role intersectional diversity representation plays in shaping brand perceptions. The fact that today's younger consumers increasingly value brands that reflect values of diversity and inclusion (Ferraro et al., 2023), suggests that firms should incorporate authentic portrayals of overlapping social identities, such as race and sexual orientation, not only visually in their advertising, but across various touchpoints, such as

influencer partnerships and hiring practices. This study confirms that when young consumers recognize genuine inclusion, it strengthens brand perception, which in turn drives purchasing behavior. Therefore, investing in diverse advertising is not just an ethical or social responsibility decision but a strategic investment that can enhance brand equity and consumer loyalty.

Furthermore, the confirmation of full mediation by brand perception emphasizes that diversity representation alone is insufficient to directly enhance purchase intent. This insight underscores the importance of message coherence and brand storytelling. Marketers should thus carefully align diversity efforts with consistent brand positioning and messaging to ensure consumers understand that diversity initiatives are genuine and integrated into the brand's identity. Positive brand perceptions can be successfully converted into noticeable purchasing behaviors by creating concrete and consistent brand narratives around diversity that reflect the brand's values, history and mission.

This study also revealed that authenticity plays a more complex role than expected. As aforementioned, for brands already perceived as highly authentic, investments in enhancing brand perception might even negatively affect consumer's purchase intent. This implies that brands should focus less on overemphasizing their authenticity and more on maintaining it consistently. Continuous authenticity monitoring through real-time consumer feedback loops and transparent communication can help brands maintain the optimal authenticity levels without wasting resources.

Lastly, from a managerial perspective, the insights suggest a clear opportunity for brand competitive differentiation. In markets where inclusivity is the norm, rather than a unique trait, brands can gain a first-mover or emotional advantage by embedding diversity into their entire value chain, not just advertising. This refers to inclusive product design, ethical supply chains, and partnerships with advocacy organizations. A potential action for managers would be to implement a "Diversity Consistency Audit" across all consumer touchpoints, ensuring that representation is not just visual but deeply embedded in the brand experience.

5.3.   Limitations

Although this study offers meaningful insights into how intersectional diversity representation affects brand perception and purchase intent, it is important to recognize a few limitations that should be kept in mind when interpreting the results.

Regarding the sample, it consisted primarily of university students, which may limit the generalizability of the results to broader demographic groups. Even though this group is representative of the Gen Z audience that the study aimed to explore, it does limit how well the findings can be applied to other populations with different levels of education, cultural backgrounds and digital literacy, as for example older or less socially conscious and digitally engaged populations may respond differently to diversity in advertising. Future research should aim for more diverse samples to avoid homogeneity bias and test whether these findings represent broader segments of the population.

Another potential limitation can be the use of self-reported survey data, which can sometimes lead to biased responses. For example, participants might have answered in ways they thought were more socially acceptable rather than being completely honest, a common challenge known as social desirability bias (Podsakoff et al., 2003). Although anonymity was ensured to minimize this effect, it remains a potential limitation inherent in survey-based research methods. Future studies could use experimental or observational methods to provide more objective data.

In addition, the study also relied on a cross-sectional design, capturing data at a single point in time. While this offers a snapshot of participant views, it restricts the ability to obtain concrete conclusions regarding how consumer responses change over time with repeated exposure or in different decision-making contexts (Rindfleisch et al., 2008). Future research could use longitudinal or experimental designs, such as A/B testing diverse ads over time, to better understand the development of these dynamic relationships.

Furthermore, a technical limitation was observed, the weaker performance of the Intersectional Diversity Representation (IDR) construct in the Confirmatory Factor Analysis. This may be due to lack of validated tools for measuring intersectionality in advertising. Existing scales focus on measuring single aspects of diversity, like race or sexual orientation, but not their intersection. Since no comprehensive scale exists for capturing intersectional diversity representation, the IDR items in this study were adapted from tools developed for individual diversity traits, which may have impacted their internal consistency, construct validity and contributed to the overall suboptimal model fit (Warner & Shields, 2013). Therefore, this highlights the need for future research to develop intersectionality-specific measurement scales and frameworks.

Lastly, the study used only one advertisement (Nike) to standardize exposure. While this approach controls variability, it also means that the results may not apply to other brands or industries. This may be partly explained by Nike's existing brand image, as prior research has shown that preexisting brand associations shape how consumers interpret and react to advertising content (Escalas & Bettman, 2005). Future studies should therefore include multiple advertising stimuli across diverse sectors to test if the patterns observed here are context-dependent or remain consistent across other business and marketing contexts.

These identified limitations provide clear pathways for future research to strengthen and deepen our understanding into intersectional diversity representation in advertising.

5.4.   Future Research

The aforementioned findings and limitations can become the starting point for future research in intersectional diversity representation in advertising.

To begin with, future studies should prioritize more demographically diverse samples to enhance external validity (Henrich et al., 2010). While this research focused on university students in the Netherlands, a highly relevant group of Gen Z, the question of how people from different age groups, backgrounds, cultures and less socially progressive markets might respond to intersectional diversity in advertising remains

unanswered. Expanding the sample to include broader demographics could provide a more complete picture and improve how confidently the results can be applied to real-world settings.

Beyond broadening the sample, it would also be valuable to move beyond single-time-point surveys. Longitudinal research could help track how brand perception and purchase intent change over time, especially after repeated exposure to inclusive advertising. For example, such research may reveal a specific threshold beyond which inclusive messages lose their effectiveness. Similarly, experimental studies could better establish cause-and-effect relationships, clarifying whether intersectional diversity directly shapes consumer behavior or interacts with other variables over time (Calder, Phillips, & Tybout, 1981).

In addition to quantitative approaches, future work could take a more qualitative perspective. Methods like interviews or focus groups would allow researchers to dive deeper into how people interpret concepts like authenticity and diversity, and what these ideas mean to them personally. These insights could uncover emotional or identity-driven responses to advertising content that are not always visible in surveys, enhancing theoretical models and practical applications.

Furthermore, future research should explore how different types of advertising across various industries, product categories, and platforms, affect consumer responses to intersectional diversity. A single campaign or brand does not allow for generalization of the results. Comparing responses to ads on social media, television, or in print, for example, could reveal valuable differences in how messages are received and processed in different media contexts and ad formats.

Another important area for future research involves the measurement of intersectional diversity itself. In this study, the items used to capture intersectionality were adapted from existing scales that focus on individual traits like race or sexual orientation. Unfortunately, no standardized tool currently exists for measuring intersectional representation as a combined concept. Future research should aim to conceptualize intersectionality as a unique construct, rather than an additive sum of identity components and develop a validated scale specifically for this purpose. This would allow researchers to more accurately study how different combined identities are portrayed in advertising and how these portrayals influence different audiences.

Moreover, a potential area for further research is the role of preexisting brand associations in moderating responses to intersectional diversity. Brands that already have a reputation for activism and social inclusivity may benefit differently from inclusive messaging compared to neutral or traditionally conservative brands. Therefore, future research could investigate whether such conditions influence perceived authenticity, campaign effectiveness, and long-term loyalty.

Lastly, researchers could explore individual-level factors that might shape how people respond to intersectional diversity. Personality traits, personal values, political ideology or prior experiences with inclusion and diversity could all potentially influence the strength or direction of the effects observed. Understanding these variables would help clarify when intersectional diversity is most effective, and for whom.

Together, these future directions offer a promising path forward. They not only deepen our understanding of the role of intersectionality in advertising, but also help businesses create more inclusive, authentic, and impactful campaigns that align with today's socially aware consumer beliefs.

6. References

Arsel, Z., Crockett, D., & Scott, M. L. (2022). Diversity, equity, and inclusion (DEI) in the Journal of Consumer Research: A curation and research agenda. *Journal of Consumer Research, 48*(5), 920-933. https://www-webofscience-com.ezproxy2.utwente.nl/wos/woscc/full-record/WOS:000761445300010

Babbie, E. R. (2021). *The Practice of Social Research* (15th ed.). Cengage Learning.

Calder, B. J., Phillips, L. W., & Tybout, A. M. (1981). Designing research for application. *Journal of consumer research*, *8*(2), 197-207.

Campbell, C., Sands, S., McFerran, B., & Mavrommatis, A. (2023). Diversity representation in advertising. *Journal of Business Research, 154*, 113-125. https://www-webofscience-com.ezproxy2.utwente.nl/wos/woscc/full-record/WOS:001134161600001

Carvalho, J. M. S., Nogueira, S., & Martins, N. (2023). Inclusivity and corporate social responsibility in marketing. *Innovative Marketing, 19*(1), 1-12. https://www-webofscience-com.ezproxy2.utwente.nl/wos/woscc/full-record/WOS:000915526700001

Dawes, J. (2008). Do data characteristics change according to the number of scale points used? An experiment using 5-point, 7-point and 10-point scales. *International journal of market research*, *50*(1), 61-104.

Eisend, M., Muldrow, A. F., & Rosengren, S. (2022). Diversity and inclusion in advertising research. *Journal of Business Research, 142*, 1-13. https://www-webofscience-com.ezproxy2.utwente.nl/wos/woscc/full-record/WOS:000857150900001

Entzinger, H. (2003). The rise and fall of multiculturalism: The case of the Netherlands. *Toward assimilation and citizenship: Immigrants in liberal nation-states*, 59-86.

Erdil, T. S. (2015). Effects of customer brand perceptions on store image and purchase intention: an application in apparel clothing. *Procedia - Social and Behavioral Sciences*, *207*, 196–205. https://doi.org/10.1016/j.sbspro.2015.10.088

Escalas, J. E., & Bettman, J. R. (2005). Self-construal, reference groups, and brand meaning. *Journal of consumer research*, *32*(3), 378-389.

Ferraro, C., Hemsley, A., & Sands, S. (2023). Embracing diversity, equity, and inclusion (DEI): Considerations and opportunities for brand managers. *Business Horizons, 66*(4), 463-479. https://www.sciencedirect.com/science/article/pii/S0007681322001240

Finstad, K. (2010). Response interpolation and scale sensitivity: Evidence against 5-point scales. *Journal of usability studies*, *5*(3), 104-110.

Foroudi, P., Jin, Z., Gupta, S., Foroudi, M. M., & Kitchen, P. J. (2018). Perceptual components of brand equity: Configuring the Symmetrical and Asymmetrical Paths to brand loyalty and brand purchase intention. *Journal of Business Research*, *89*, 462–474. https://doi.org/10.1016/j.jbusres.2018.01.031

Grieco, C. (2024). Conceptualizing inclusive marketing: A synthesis of theory and practice. *European Management Journal, 42*(1), 123-135. https://www.sciencedirect.com/science/article/pii/S0263237324001270

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019a). *Multivariate data analysis* (8th ed.). Cengage.

Hair, J.F., Page, M., & Brunsveld, N. (2019b). *Essentials of Business Research Methods* (4th ed.). Routledge.

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). New York: Guilford Press.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world?. *Behavioral and brain sciences*, *33*(2-3), 61-83.

Hughes, J. L., Camden, A. A., & Yangchen, T. (2016). Rethinking and updating demographic questions: Guidance to improve descriptions of research samples. *Psi Chi Journal of Psychological Research*, *21*(3), 138-151.

Ipsos. (2021). *Beyond gender: The impact of intersectional representation in advertising*. Ipsos. Retrieved from https://www.ipsos.com/sites/default/files/ct/news/documents/2021-10/beyond-gender-2-report.pdf

Kumar, R. (2018). Scale for Advertising Effectiveness: A study on traditional and interactive advertisements as per the Lavidge and Steiner model. *Indian Journal of Commerce & Management Studies*, *IX*(1), 53. https://doi.org/10.18843/ijcms/v9i1/08

Morhart, F. M., Malär, L., Guèvremont, A., Girardin, F., & Grohmann, B. (2015). Brand authenticity: An integrative framework and measurement scale. *Journal of Consumer Psychology*, 25(2), 200–218. https://doi.org/10.1016/j.jcps.2014.11.006

Nielsen. (2023, June 22). *Examining LGBTQ+ representation in media and advertising*. Nielsen. https://www.nielsen.com/insights/2023/examining-lgbtq-representation-in-media-and-advertising

Oğuz, E. A., Strle, G., & Košir, A. (2023). Multimedia ad exposure scale: measuring short-term impact of online ad exposure. *Multimedia Tools and Applications*, *82*(25), 38421–38445. https://doi.org/10.1007/s11042-023-14401-5

Park, Y. W., Voss, G. B., & Voss, Z. G. (2022). Advancing customer diversity, equity, and inclusion: Measurement, stakeholder influence, and the role of marketing. *Journal of the Academy of Marketing Science, 51*, 174–197. https://www-scopus-com.ezproxy2.utwente.nl/record/display.uri?eid=2-s2.0-85133159539&origin=resultslist&sort=plf-f&src=s&sot=b&sdt=b&s=TITLE-ABS-KEY%28advancing+customer+diversity+equity+inclusion%29

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, *88*(5), 879.

Reichheld, F. F. (2003). The one number you need to grow. Harvard business review, 81(12), 46-55.

Rindfleisch, A., Malter, A. J., Ganesan, S., & Moorman, C. (2008). Cross-sectional versus longitudinal survey research: Concepts, findings, and guidelines. *Journal of marketing research*, *45*(3), 261-279.

Smith, C., & Turner, S. (2015). The radical transformation of diversity and inclusion: The millennial influence. *Deloitte University*.

Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues & Research in Advertising*, 26(2), 53–66. https://www.researchgate.net/publication/233147146_Measuring_Attitude_Toward_the_Brand_and_Purchase_Intentions

University of Oregon. (2023, June 1). *Big brands benefit when ads are racially diverse, study finds*. University of Oregon News. https://news.uoregon.edu/content/big-brands-benefit-when-ads-are-racially-diverse-study-finds

Walter, N., Föhl, U., Sander, F., & Nies, A. (2024). Act as you preach! Authentic brand purpose versus "woke washing's" impact on brand credibility: The moderating role of cause involvement and consumer skepticism. *Journal of Business Research*, *184*, 114868.

Warner, L. R., & Shields, S. A. (2013). The intersections of sexuality, gender, and race: Identity research at the crossroads. *Sex roles*, *68*, 803-810.

7.   Appendix

Appendix A: Descriptive Statistics for Composite Variables (IDR, BP, PA, PI) & Demographics (Age, Gender, Nationality)

```
+    summarise_all(list(mean = mean, sd = sd, min = min, max = max), na.rm = TRUE)
# A tibble: 1 × 16
  IDR_mean BP_mean PA_mean PI_mean IDR_sd BP_sd PA_sd PI_sd IDR_min BP_min PA_min PI_min IDR_max
     <dbl>   <dbl>   <dbl>   <dbl>  <dbl> <dbl> <dbl> <dbl>   <dbl>  <dbl>  <dbl>  <dbl>   <dbl>
1     5.44    4.59    4.43    5.17   1.02  1.29  1.09  1.34       1    1.5   1.75      1       7
# i 3 more variables: BP_max <dbl>, PA_max <dbl>, PI_max <dbl>
> summary(data$Age)
   Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
  19.00   21.00   23.00   23.52   25.00   30.00
> table(data$Gender)

 1  2  3  4
59 34  2  2
> table(data$Nationality)

 Dutch German  Greek  Other
    18     11     32     36
> sd(data$Age, na.rm = TRUE)
[1] 3.085968
```

Appendix B: Mediation Analysis Results - Hypothesis 2

```
> summary(fit_med, fit.measures = TRUE, standardized = TRUE, rsquare = TRUE)
lavaan 0.6-19 ended normally after 1 iteration

  Estimator                                     ML
  Optimization method                       NLMINB
  Number of model parameters                     5

  Number of observations                        97

Model Test User Model:

  Test statistic                             0.000
  Degrees of freedom                             0

Model Test Baseline Model:

  Test statistic                           100.758
  Degrees of freedom                             3
  P-value                                    0.000

User Model versus Baseline Model:

  Comparative Fit Index (CFI)                1.000
  Tucker-Lewis Index (TLI)                   1.000

Loglikelihood and Information Criteria:

  Loglikelihood user model (H0)           -276.779
  Loglikelihood unrestricted model (H1)   -276.779

  Akaike (AIC)                             563.559
  Bayesian (BIC)                           576.433
  Sample-size adjusted Bayesian (SABIC)    560.644

Root Mean Square Error of Approximation:

  RMSEA                                      0.000
  90 Percent confidence interval - lower     0.000
  90 Percent confidence interval - upper     0.000
  P-value H_0: RMSEA <= 0.050                  NA
  P-value H_0: RMSEA >= 0.080                  NA
```

```
Standardized Root Mean Square Residual:

  SRMR                                    0.000

Parameter Estimates:

  Standard errors                     Bootstrap
  Number of requested bootstrap draws      5000
  Number of successful bootstrap draws     5000

Regressions:
                Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
  PI ~
    IDR    (c)   -0.113    0.148   -0.767    0.443   -0.113   -0.087
  BP ~
    IDR    (a)    0.670    0.101    6.630    0.000    0.670    0.530
  PI ~
    BP     (b)    0.781    0.108    7.205    0.000    0.781    0.755

Variances:
                Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
    .PI           0.870    0.151    5.745    0.000    0.870    0.492
    .BP           1.186    0.164    7.252    0.000    1.186    0.719

R-Square:
                Estimate
    PI            0.508
    BP            0.281

Defined Parameters:
                Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
    indirect      0.523    0.106    4.949    0.000    0.523    0.400
    total         0.410    0.155    2.640    0.008    0.410    0.313
```

Appendix C: Moderation Analysis Results & Interaction Plot - Hypothesis 3

```
Call:
lm(formula = PI ~ BP_c + PA_c + BP_PA_interaction, data = data)

Residuals:
     Min       1Q   Median       3Q      Max
-2.42798 -0.52143 -0.01331  0.51041  2.88939

Coefficients:
                   Estimate Std. Error t value Pr(>|t|)
(Intercept)         5.29448    0.11213  47.215  < 2e-16 ***
BP_c                0.56573    0.11715   4.829 5.37e-06 ***
PA_c                0.22951    0.13858   1.656   0.1011
BP_PA_interaction  -0.11263    0.05657  -1.991   0.0494 *
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.9255 on 93 degrees of freedom
Multiple R-squared:  0.5353,    Adjusted R-squared:  0.5203
F-statistic:  35.7 on 3 and 93 DF,  p-value: 1.919e-15
```
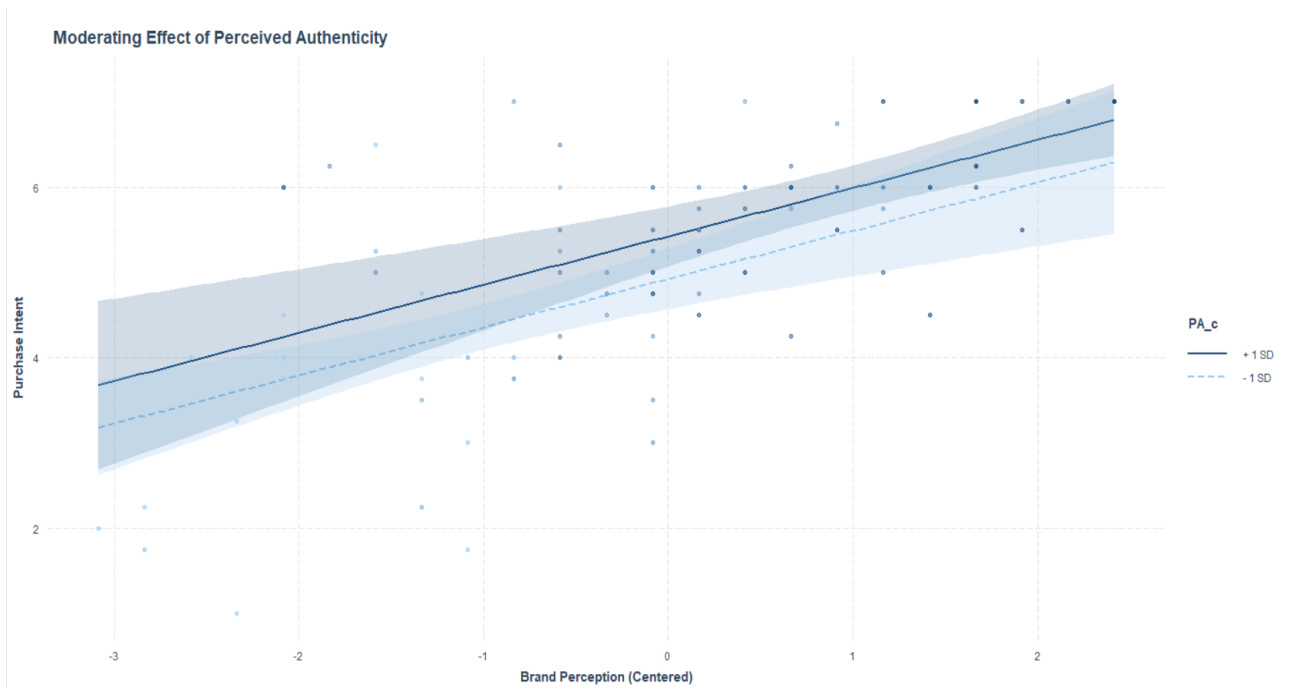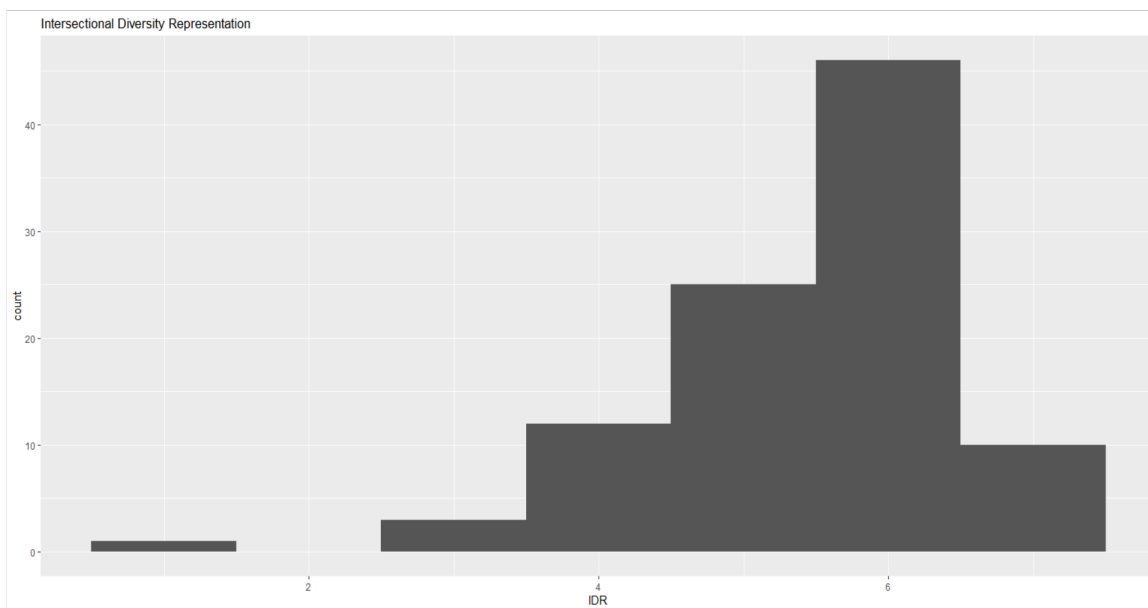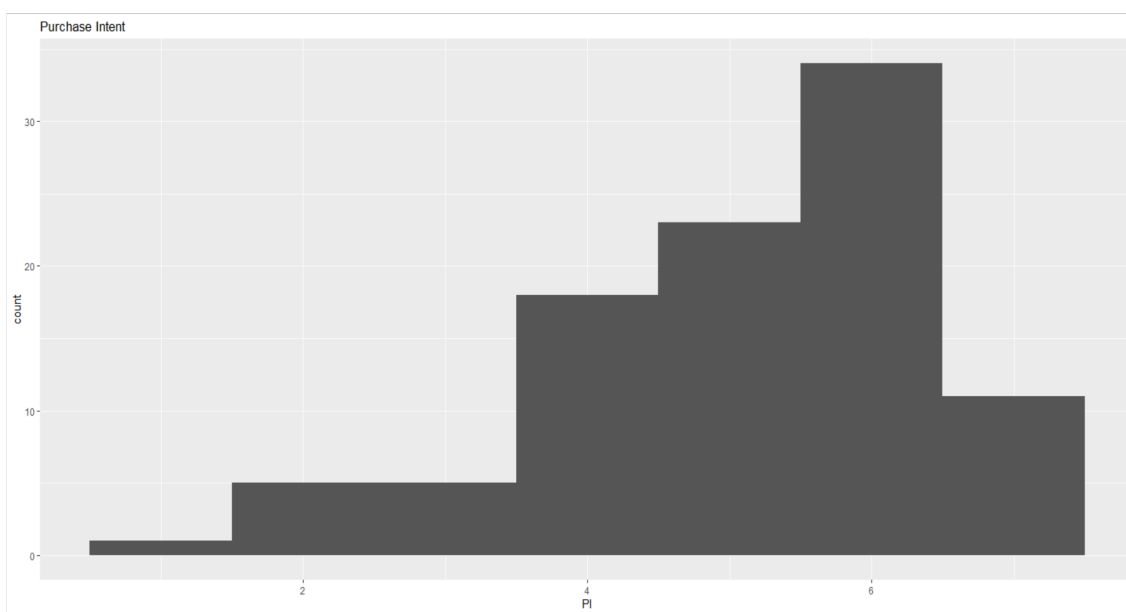
Moderating Effect of Perceived Authenticity

Appendix D: Histograms (Intersectional Diversity Representation, Brand Perception, Perceived Authenticity, Purchase Intent)

Intersectional Diversity Representation

Brand Perception

Perceived Authenticity

Purchase Intent

15
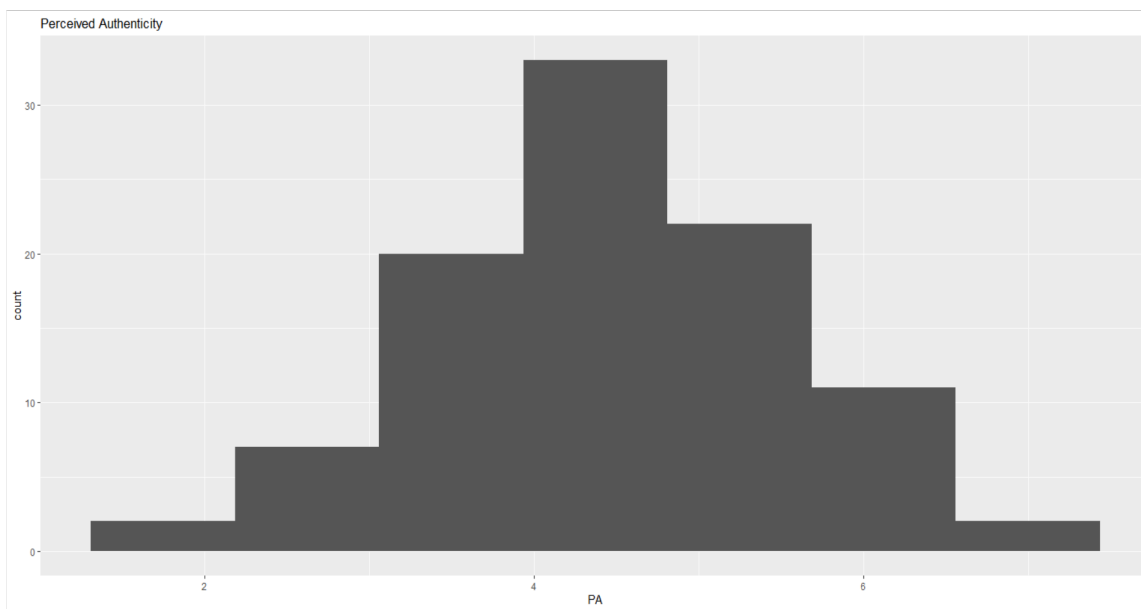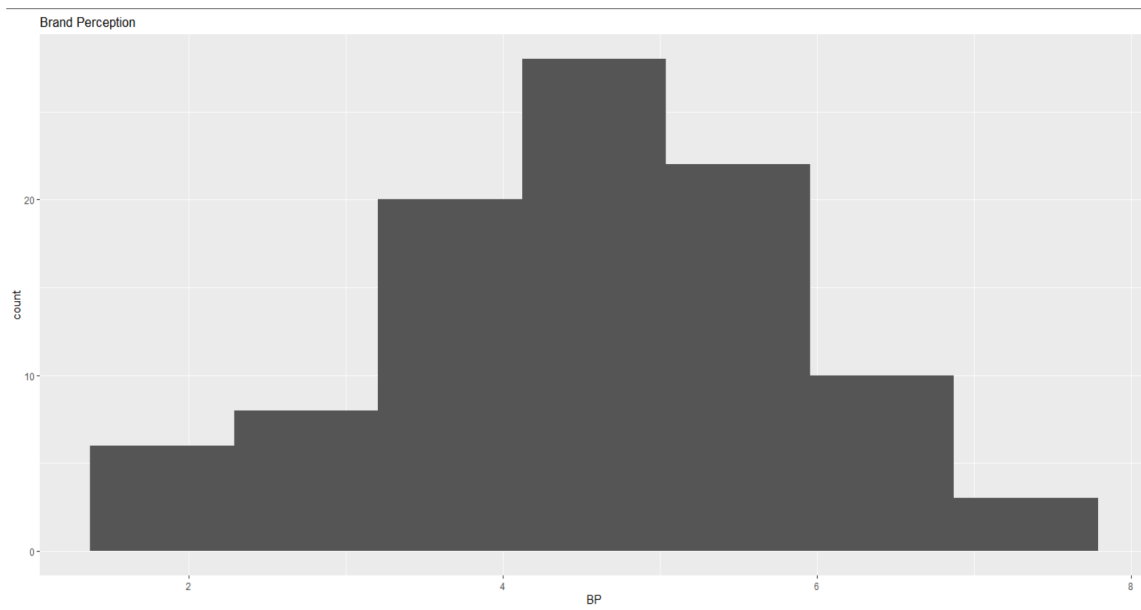
Appendix E: Residuals vs Fitted Values Plot (Regression Diagnostics)

Appendix F: Q-Q Plot of Standardized Residuals (Normality Check)

Appendix G: Reliability Analysis - Cronbach's Alpha (IDR1–IDR3, BP1-BP4, PA1–PA8, PI1–PI4)

```
> alpha(data[, c("IDR1", "IDR2", "IDR3")])          # IDR scale

Reliability analysis
Call: alpha(x = data[, c("IDR1", "IDR2", "IDR3")])

  raw_alpha std.alpha G6(smc) average_r S/N   ase mean sd median_r
     0.59      0.59    0.51      0.33 1.4 0.072  5.4  1     0.26

    95% confidence boundaries
         lower alpha upper
Feldt     0.43  0.59  0.71
Duhachek  0.45  0.59  0.73

 Reliability if an item is dropped:
    raw_alpha std.alpha G6(smc) average_r  S/N alpha se var.r med.r
IDR1     0.42      0.42    0.26      0.26 0.71    0.118    NA  0.26
IDR2     0.38      0.38    0.24      0.24 0.62    0.126    NA  0.24
IDR3     0.65      0.65    0.48      0.48 1.83    0.072    NA  0.48

 Item statistics
      n raw.r std.r r.cor r.drop mean  sd
IDR1 97  0.78  0.77  0.60   0.45  5.6 1.4
IDR2 97  0.78  0.78  0.62   0.47  5.3 1.4
IDR3 97  0.67  0.67  0.37   0.29  5.4 1.4

Non missing response frequency for each item
          1    2    3    4    5    6    7 miss
IDR1 0.02 0.03 0.03 0.11 0.12 0.40 0.28    0
IDR2 0.02 0.04 0.01 0.14 0.24 0.38 0.16    0
IDR3 0.02 0.02 0.07 0.08 0.22 0.42 0.16    0
```
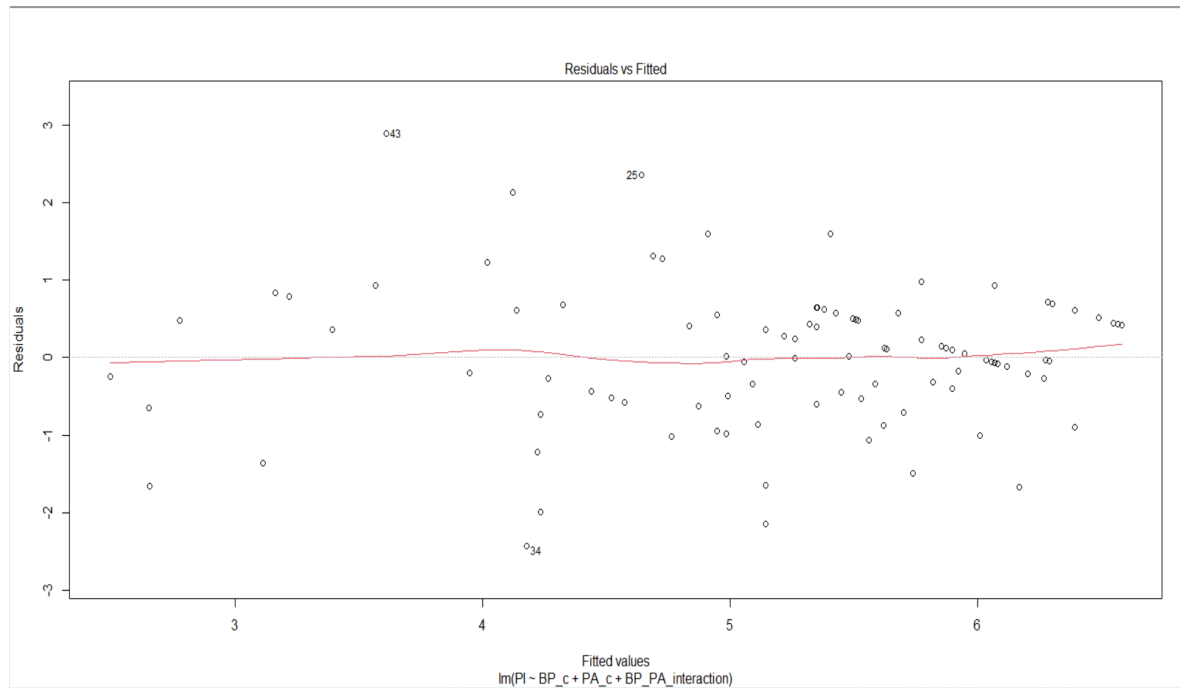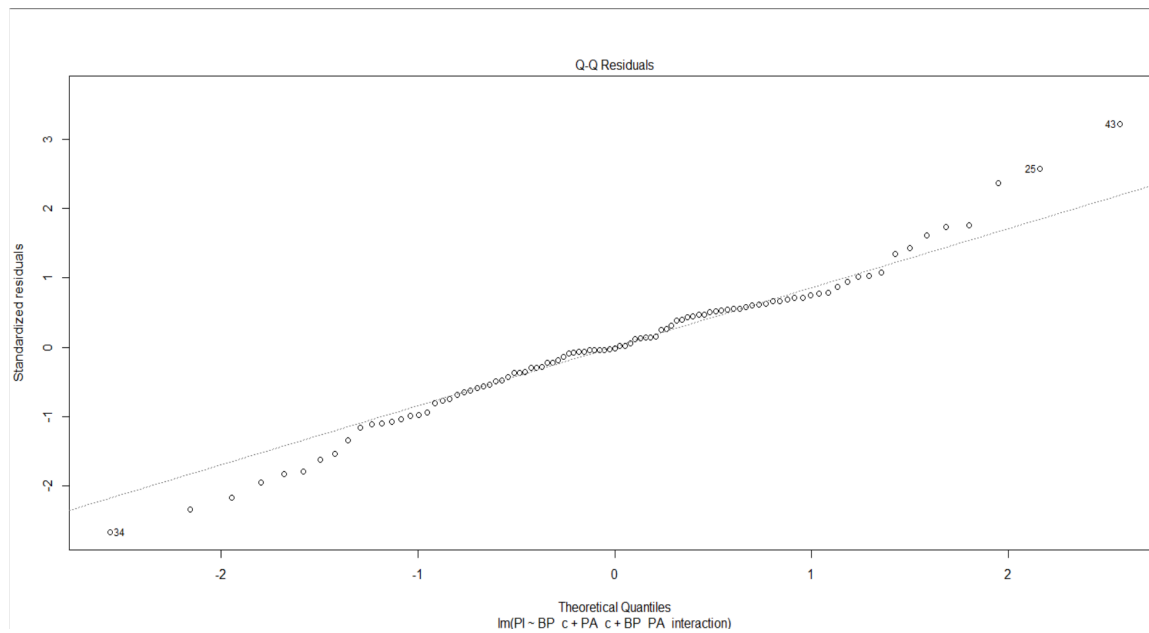
```
> alpha(data[, c("BP1", "BP2", "BP3", "BP4")])     # BP scale

Reliability analysis
Call: alpha(x = data[, c("BP1", "BP2", "BP3", "BP4")])

  raw_alpha std.alpha G6(smc) average_r S/N  ase mean  sd median_r
      0.88      0.87    0.85      0.64   7 0.02  4.6 1.3     0.64

    95% confidence boundaries
         lower alpha upper
Feldt     0.83  0.88  0.91
Duhachek  0.84  0.88  0.92

 Reliability if an item is dropped:
    raw_alpha std.alpha G6(smc) average_r S/N alpha se  var.r med.r
BP1      0.84      0.84    0.79      0.63 5.1    0.029 0.0148  0.61
BP2      0.83      0.83    0.77      0.61 4.8    0.030 0.0036  0.61
BP3      0.81      0.81    0.76      0.59 4.3    0.032 0.0095  0.56
BP4      0.88      0.88    0.83      0.71 7.4    0.021 0.0018  0.70

 Item statistics
     n raw.r std.r r.cor r.drop mean  sd
BP1 97  0.87  0.86  0.79   0.74  4.9 1.6
BP2 97  0.88  0.87  0.83   0.77  4.4 1.5
BP3 97  0.89  0.89  0.86   0.80  4.4 1.5
BP4 97  0.77  0.79  0.67   0.62  4.6 1.4

Non missing response frequency for each item
       1    2    3    4    5    6    7 miss
BP1 0.02 0.09 0.06 0.22 0.16 0.28 0.16    0
BP2 0.04 0.09 0.08 0.34 0.19 0.16 0.09    0
BP3 0.04 0.08 0.10 0.28 0.22 0.22 0.06    0
BP4 0.03 0.06 0.08 0.27 0.28 0.23 0.05    0
> alpha(data[, c("PA1", "PA2", "PA3", "PA4", "PA5", "PA6", "PA7", "PA8")])  # PA scale

Reliability analysis
Call: alpha(x = data[, c("PA1", "PA2", "PA3", "PA4", "PA5", "PA6",
    "PA7", "PA8")])

  raw_alpha std.alpha G6(smc) average_r S/N   ase mean  sd median_r
      0.88      0.88     0.9      0.48 7.5 0.018  4.4 1.1     0.54

    95% confidence boundaries
         lower alpha upper
Feldt     0.84  0.88  0.91
Duhachek  0.85  0.88  0.92

 Reliability if an item is dropped:
    raw_alpha std.alpha G6(smc) average_r S/N alpha se  var.r med.r
PA1      0.86      0.86    0.87      0.46 5.9    0.022 0.0400  0.52
PA2      0.86      0.86    0.87      0.47 6.1    0.022 0.0445  0.52
PA3      0.85      0.85    0.86      0.45 5.7    0.023 0.0344  0.52
PA4      0.86      0.87    0.88      0.48 6.5    0.021 0.0498  0.55
PA5      0.87      0.87    0.88      0.48 6.4    0.021 0.0397  0.55
PA6      0.87      0.87    0.88      0.48 6.5    0.020 0.0455  0.55
PA7      0.86      0.86    0.87      0.47 6.2    0.021 0.0449  0.53
PA8      0.91      0.91    0.91      0.59 9.9    0.015 0.0081  0.58

 Item statistics
     n raw.r std.r r.cor r.drop mean  sd
PA1 97  0.82  0.83  0.81   0.76  4.7 1.4
PA2 97  0.80  0.80  0.78   0.73  4.5 1.4
PA3 97  0.87  0.87  0.88   0.82  4.2 1.4
PA4 97  0.76  0.75  0.71   0.67  4.4 1.5
PA5 97  0.77  0.76  0.73   0.67  3.1 1.7
PA6 97  0.74  0.74  0.70   0.65  4.7 1.4
PA7 97  0.79  0.79  0.76   0.71  4.6 1.4
PA8 97  0.37  0.38  0.25   0.22  5.2 1.4
```

```
> alpha(data[, c("PI1", "PI2", "PI3", "PI4")])     # PI scale

Reliability analysis
Call: alpha(x = data[, c("PI1", "PI2", "PI3", "PI4")])

  raw_alpha std.alpha G6(smc) average_r S/N    ase mean  sd median_r
      0.94      0.94    0.93      0.81  17 0.0094  5.2 1.3     0.82

    95% confidence boundaries
         lower alpha upper
Feldt      0.92  0.94  0.96
Duhachek   0.93  0.94  0.96

 Reliability if an item is dropped:
    raw_alpha std.alpha G6(smc) average_r  S/N alpha se   var.r med.r
PI1      0.93      0.93    0.91      0.81 12.7    0.013 0.00544  0.84
PI2      0.91      0.91    0.87      0.77  9.9    0.016 0.00180  0.77
PI3      0.94      0.94    0.91      0.83 14.7    0.011 0.00034  0.84
PI4      0.93      0.93    0.91      0.83 14.2    0.012 0.00236  0.84

 Item statistics
     n raw.r std.r r.cor r.drop mean  sd
PI1 97  0.92  0.92  0.89   0.87  5.3 1.4
PI2 97  0.96  0.96  0.95   0.92  5.2 1.5
PI3 97  0.90  0.91  0.87   0.83  5.4 1.4
PI4 97  0.92  0.91  0.87   0.84  4.8 1.5

Non missing response frequency for each item
        1    2    3    4    5    6    7 miss
PI1 0.02 0.04 0.05 0.13 0.21 0.39 0.15    0
```

Appendix H: Summary of the Validity Analysis - CFA

Table 5. Model Fit Indices from Confirmatory Factor Analysis

Validity	
CFI	0.828
TLI	0.798
RMSEA	0.132
SRMR	0.105

Table 6. Standardized CFA Loadings per Construct

Construct	Item	Standardized Loading	Interpretation
IDR	IDR1	0.369	Low factor loading; may be weakly related to IDR construct
	IDR2	0.313	Low factor loading; may be weakly related to IDR construct
	IDR3	0.807	Strong loading; well represents IDR
BP	BP1	0.788	Strong loading; well represents BP
	BP2	0.866	Very strong loading; excellent representation of BP
	BP3	0.868	Very strong loading; excellent representation of BP
	BP4	0.689	Moderate loading; acceptable but lower than

			others in BP
PA	PA1	0.845	Very strong loading; excellent representation of PA
	PA2	0.78	Strong loading; well represents PA
	PA3	0.888	Very strong loading; excellent representation of PA
	PA4	0.682	Moderate loading; acceptable but lower than others in PA
	PA5	0.745	Moderate to strong loading; good representation of PA
	PA6	0.68	Moderate loading; acceptable but lower than others in PA
	PA7	0.735	Moderate to strong loading; good representation of PA
	PA8	0.234	Very low factor loading; poor representation of PA
PI	PI1	0.887	Very strong loading; excellent representation of PI
	PI2	0.956	Very strong loading; excellent representation of PI
	PI3	0.879	Very strong loading; excellent representation of PI
	PI4	0.884	Very strong loading; excellent representation of PI

Appendix I: Survey Questionnaire

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Thank you for participating in this survey!

This research examines how intersectional diversity (race and sexual orientation) portrayed in advertisements affects brand perception and purchase intentions among young adults (18-30 years old) in the Netherlands. Your participation is completely voluntary and anonymous, taking approximately 5–7 minutes. Your answers will remain confidential and will be used exclusively for academic purposes. Data collected through this survey will be securely stored on the researcher's personal drive and will be permanently deleted no later than 1 month after the thesis assignment has been graded and completed (expected by July 2025). Your responses will significantly contribute to important academic research on intersectional diversity in advertising. If you have any questions or wish to know the study's results, please contact the researcher Lefteris Fountos: e.fountos@student.utwente.nl.

First, please watch the short Nike advertisement carefully that is provided in the following link (≅ 2 mins): https://www.youtube.com/watch?v=kDevBGrAlCU.

After watching, please answer the following questions based on your opinion.

→

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In this section, it is asked to provide some personal information, such as your age, gender, and nationality. This information is completely confidential and will help in avoiding any potential research biases. However, if you do not feel comfortable sharing this information, this section is optional.

Age

Gender

○ Male

○ Female

○ Non-binary

○ Prefer not to say

Nationality

○ Dutch

○ Greek

○ German

○ Other

In this study, intersectional diversity refers to the combined representation of multiple identities, specifically focusing on individuals from different racial backgrounds and those identifying as LGBTQ+. Please indicate your agreement with each of the following 3 statements about the Nike advertisement you watched: (Adapted from Eisend (2022); Ipsos (2021); Kumar (2018); Oğuz et al. (2023))

1) "This ad effectively represents intersectional diversity (race and sexual orientation)."

○ 1 - Strongly Disagree

○ 2 - Disagree

○ 3 - Somewhat Disagree

○ 4 - Neutral

○ 5 - Somewhat Agree

○ 6 - Agree

○ 7 - Strongly Agree

2) "I recognize both racial and LGBTQ+ representation clearly in this ad."

- ○ 1 - Strongly Disagree
- ○ 2 - Disagree
- ○ 3 - Somewhat Disagree
- ○ 4 - Neutral
- ○ 5 - Somewhat Agree
- ○ 6 - Agree
- ○ 7 - Strongly Agree

3) "The diversity portrayed in this ad feels intentional and inclusive."

- ○ 1 - Strongly Disagree
- ○ 2 - Disagree
- ○ 3 - Somewhat Disagree
- ○ 4 - Neutral
- ○ 5 - Somewhat Agree
- ○ 6 - Agree
- ○ 7 - Strongly Agree

→

Thinking about the Nike brand as well as the content of the ad, indicate your agreement with each of the following 4 statements: (Adapted from Spears & Singh, 2004)

1) "Nike has a positive brand image."

- ○ 1 - Strongly Disagree
- ○ 2 - Disagree
- ○ 3 - Somewhat Disagree
- ○ 4 - Neutral
- ○ 5 - Somewhat Agree
- ○ 6 - Agree
- ○ 7 - Strongly Agree

2) "I have a favorable attitude towards Nike."

- ○ 1 - Strongly Disagree
- ○ 2 - Disagree
- ○ 3 - Somewhat Disagree
- ○ 4 - Neutral
- ○ 5 - Somewhat Agree
- ○ 6 - Agree
- ○ 7 - Strongly Agree

3) "Nike aligns with my personal values."

- ○ 1 - Strongly Disagree
- ○ 2 - Disagree
- ○ 3 - Somewhat Disagree
- ○ 4 - Neutral
- ○ 5 - Somewhat Agree
- ○ 6 - Agree
- ○ 7 - Strongly Agree

4) "I trust Nike."

- ○ 1 - Strongly Disagree
- ○ 2 - Disagree
- ○ 3 - Somewhat Disagree
- ○ 4 - Neutral
- ○ 5 - Somewhat Agree
- ○ 6 - Agree
- ○ 7 - Strongly Agree

→

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Reflecting on the Nike advertisement and the brand overall, indicate your agreement with each of the following 8 statements: (Adapted from Campbell et al., 2023; Morhart et al., 2015)

1) "Nike delivers on its promises."

○ 1 - Strongly Disagree

○ 2 - Disagree

○ 3 - Somewhat Disagree

○ 4 - Neutral

○ 5 - Somewhat Agree

○ 6 - Agree

○ 7 - Strongly Agree

2) "Nike's claims are credible."

○ 1 - Strongly Disagree

○ 2 - Disagree

○ 3 - Somewhat Disagree

○ 4 - Neutral

○ 5 - Somewhat Agree

○ 6 - Agree

○ 7 - Strongly Agree

3) "Nike acts with integrity."

○ 1 - Strongly Disagree

○ 2 - Disagree

○ 3 - Somewhat Disagree

○ 4 - Neutral

○ 5 - Somewhat Agree

○ 6 - Agree

○ 7 - Strongly Agree

4) "Nike is honest."

○ 1 - Strongly Disagree

○ 2 - Disagree

○ 3 - Somewhat Disagree

○ 4 - Neutral

○ 5 - Somewhat Agree

○ 6 - Agree

○ 7 - Strongly Agree

5) "Nike reflects values important to me."

- ○ 1 - Strongly Disagree
- ○ 2 - Disagree
- ○ 3 - Somewhat Disagree
- ○ 4 - Neutral
- ○ 5 - Somewhat Agree
- ○ 6 - Agree
- ○ 7 - Strongly Agree

6) "Nike adds meaning to my life."

- ○ 1 - Strongly Disagree
- ○ 2 - Disagree
- ○ 3 - Somewhat Disagree
- ○ 4 - Neutral
- ○ 5 - Somewhat Agree
- ○ 6 - Agree
- ○ 7 - Strongly Agree

7) "Nike is consistent in its messages."

- ○ 1 - Strongly Disagree
- ○ 2 - Disagree
- ○ 3 - Somewhat Disagree
- ○ 4 - Neutral
- ○ 5 - Somewhat Agree
- ○ 6 - Agree
- ○ 7 - Strongly Agree

8) "Nike remains true to itself."

- ○ 1 - Strongly Disagree
- ○ 2 - Disagree
- ○ 3 - Somewhat Disagree
- ○ 4 - Neutral
- ○ 5 - Somewhat Agree
- ○ 6 - Agree
- ○ 7 - Strongly Agree

→

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Consider your intention towards engaging with or buying Nike products based on your perceptions and indicate your agreement with each of the following 4 statements: (Adapted from Reichheld (2003); Spears & Singh (2004))

1) "I would consider buying from Nike."

○ 1 – Strongly Disagree

○ 2 – Disagree

○ 3 – Somewhat Disagree

○ 4 – Neutral

○ 5 – Somewhat Agree

○ 6 – Agree

○ 7 – Strongly Agree

2) "I intend to purchase Nike products in the future."

○ 1 – Strongly Disagree

○ 2 – Disagree

○ 3 – Somewhat Disagree

○ 4 – Neutral

○ 5 – Somewhat Agree

○ 6 – Agree

○ 7 – Strongly Agree

3) "I would probably purchase products from Nike."

○ 1 - Strongly Disagree

○ 2 - Disagree

○ 3 - Somewhat Disagree

○ 4 - Neutral

○ 5 - Somewhat Agree

○ 6 - Agree

○ 7 - Strongly Agree

4) "I would recommend Nike to others."

○ 1 - Strongly Disagree

○ 2 - Disagree

○ 3 - Somewhat Disagree

○ 4 - Neutral

○ 5 - Somewhat Agree

○ 6 - Agree

○ 7 - Strongly Agree

→