



Fame, Fit, and Influence:
How Celebrity Endorsement Shapes Purchase Intentions
Across Generations and Genders

Imke Therese Hilgemann
156123163

Dissertation written under the supervision of professor
Paulo Romeiro

Dissertation submitted in partial fulfilment of requirements for the MSc in
International Management with the Specialization in Marketing, at the
Universidade Católica Portuguesa,
1st of June 2025.

Abstract

This thesis investigates how celebrity endorsement attributes, namely “familiarity” and “congruence” affect consumers' purchase intention in the luxury fragrance industry, hereby focusing on the moderation of generation (Z & Y) and gender. Drawing on the Source Credibility Theory (Hovland & Weiss, 1951) and the Match-Up construct by Kamis (1990), it was hypothesized that both familiarity and product endorser congruence would positively influence purchase intention. The research seeks to answer the following questions: “*What type of celebrity endorsement has the most impact on the purchase intention of each generation?*”, “*Does generation moderate the impact of celebrity endorsement on purchase intention?*”, “*Does gender moderate the relationship between celebrity endorsement and purchase intention?*” Therefore, a mixed-methods approach, combining a qualitative focus group and a between-subjects online survey with 283 participants, was applied. The findings revealed that, against the theoretical framework, gender and generation do not significantly moderate the purchase intent in this study, which may be caused by overlapping identity norms or media habits of the sample size. It, however, confirmed that high familiarity and high congruence significantly increased purchase intention, which validates prior research. For luxury brands, it suggests a thoughtful emphasis on congruence, emotional alignment, and cross-generational appeal over broad demographics. It underscores the need for a diversified celebrity strategy, including both traditional and social media influencers, to eliminate the financial risk of this marketing approach.

Title: *Fame, Fit, and Influence: How Celebrity Endorsement Shapes Purchase Intentions Across Generations and Gender*

Author: Imke Therese Hilgemann

Keywords: Celebrity Endorsement, Fragrance, Familiarity, Congruence, Purchase Intention

Sumário

Esta dissertação analisa de que forma os atributos do endosso de celebridades, nomeadamente a “familiaridade” e a “congruência” entre o endossante e o produto, influenciam a intenção de compra dos consumidores no setor de fragrâncias de luxo. O estudo dá especial atenção à possível moderação deste efeito por fatores demográficos, como a geração (Z e Y) e o gênero dos consumidores. Com base na Teoria da Credibilidade da Fonte (Hovland & Weiss, 1951) e na Hipótese da Compatibilidade (Kamins, 1990), formulou-se a hipótese de que tanto a familiaridade quanto a congruência com o produto aumentariam significativamente a intenção de compra. Para responder às questões de investigação, adotou-se uma abordagem metodológica mista, composta por um grupo focal qualitativo e uma pesquisa quantitativa online entre grupos, envolvendo 283 participantes. Os resultados demonstraram que, contrariamente às expectativas teóricas, nem o gênero nem a geração moderaram significativamente a intenção de compra, o que pode ser explicado por normas de identidade ou hábitos de consumo de mídia semelhantes entre os grupos. No entanto, verificou-se que altos níveis de familiaridade e congruência aumentam significativamente a intenção de compra, o que confirma estudos anteriores. Estes achados sugerem que as marcas de luxo devem valorizar mais o alinhamento simbólico e emocional com o público do que segmentações demográficas tradicionais, adotando uma estratégia diversificada de endosso que inclua tanto celebridades tradicionais quanto influenciadores digitais, minimizando riscos reputacionais e ampliando o alcance intergeracional.

Título: *“Fame, Fit, and Influence: How Celebrity Endorsement Shapes Purchase Intentions Across Generations and Gender”*

Autor: Imke Therese Hilgemann

Palavras-Chave: Endosso de Celebridades, Fragrância, Familiaridade, Congruência, Intenção de Compra

Artificial Intelligence Disclaimer

I hereby declare that the following AI tools were used in this thesis:

1. **Grammarly (Basic Version):** To elevate the grammatical syntax of this thesis and correct spelling errors
2. **DeepL.com (Basic Version):** To translate and rewrite German sentences into academic English, and to translate the Abstract into Portuguese
3. **Canva (Basic Version):** To create the visuals used for the experimental condition
4. **ChatGPT (Version 4.0):**
 - Title: To create an attention-catching title for the dissertation
 - Abstract: To transfer the English version into a shorter Portuguese paragraph that does not exceed 250 words
 - Methodology: To structure an outline for the thesis and the focus group, write the discussion guideline for the focus group, to clearly define the hypothesis
 - Data Analysis: To finalize the SPSS Syntax with the right codes for the statistical tests
 - Interpretation: To structure the argumentation and reflection of results
 - Syntax: To rephrase and restructure sentences and paragraphs from German to English to achieve a more academic tone

All content was independently reviewed, critically evaluated, and responsibly integrated into the work by the author. The scientific elaboration, analysis, and conclusions of this work originate exclusively from the author

Acknowledgments

Reaching this academic milestone has been a challenging journey of learning and personal development, which I could not have completed alone.

First and foremost, I would like to express my deepest gratitude to my parents, who allowed me to study at Católica in Lisbon and supported me with love, guidance, and patience in every step of my academic and personal growth.

Secondly, I would like to thank my supervisor, Professor Paulo Romeiro, for his invaluable guidance, support, and encouragement throughout this research. His expertise and insights have been instrumental in shaping this thesis.

Thirdly, I would like to expressly thank Professor Isabel Moreira for allowing me to turn to her with all questions concerning statistical procedures and my survey. I really appreciate your support and time.

I would also like to thank the faculty and staff of Católica for providing me with a scholarship for this university and an academic environment in which I could feel comfortable.

My sincere thanks go to my colleagues and friends for the many discussions, feedback, and moments of camaraderie that enriched this journey.

Finally, I acknowledge all those who, directly or indirectly, contributed to the completion of this thesis. Thank you!

Table of Contents

Abstract	ii
Sumário	iii
Artificial Intelligence Disclaimer	iv
Acknowledgments	v
Table of Contents	vi
Table of Figures	viii
Table of Tables	ix
Table of Appendices	x
Abbreviations	xi
1. Introduction	1
1.1 <i>Background</i>	1
1.2 <i>Problem Statement</i>	1
1.3 <i>Research Methods</i>	2
1.4 <i>Dissertation Outline</i>	2
2. Literature Review	3
2.1 <i>Introduction to the topic</i>	3
2.2 <i>Definitions</i>	3
2.2.1 <i>Celebrity Endorser (IV)</i>	3
2.2.2 <i>Purchase Intention (DV)</i>	4
2.2.3 <i>Generation (Moderator)</i>	4
2.2.4 <i>Gender (Moderator)</i>	5
2.3 <i>Effects of Endorsement</i>	5
2.3.1 <i>Theoretical Background</i>	5
2.3.2 <i>Celebrity familiarity and purchase intention</i>	6
2.3.3 <i>Celebrity product congruency and purchase intention</i>	7
2.4 <i>Moderation</i>	8
2.4.1 <i>Generation Y/ Millennials</i>	8
2.4.2 <i>Generation Z</i>	8
2.4.3 <i>Purchase Intention in Luxury Beauty Products</i>	9
2.4.4 <i>Celebrity Endorsement in Luxury Beauty Products</i>	11
2.5 <i>Research Gap</i>	11
2.6 <i>Conceptual Model</i>	13
3. Methodology	13
3.1 <i>Research Approach</i>	13
3.2 <i>Data Collection</i>	14
3.2.1 <i>Data Type</i>	14
3.2.2 <i>Primary and Secondary Data</i>	14
3.3 <i>Collection Method</i>	14
3.3.1 <i>Focus Group</i>	14
3.3.2 <i>Quantitative Survey</i>	15

3.4	<i>Variable Measurement</i>	16
3.5	<i>Stimuli Design</i>	17
3.5.1	Creating the Stimuli	17
3.5.2	Validating the Stimuli	17
3.5.3	Final Stimuli	18
3.6	<i>Questionnaire Design</i>	19
3.7	<i>Data Analysis</i>	20
4.	Data Analysis	21
4.1	<i>Data Preparation</i>	21
4.1.1	Missing Data	21
4.1.2	Manipulation Check	22
4.1.3	Outlier Analysis	22
4.1.4	Measurement Creation & Reliability	22
4.1.5	Variables	23
4.2	<i>Descriptive Analysis</i>	24
4.3	<i>Hypothesis Testing</i>	25
4.3.1	Multicollinearity Assessment	25
4.3.2	Hypothesis 1 – Type of Endorser	26
4.3.3	Hypothesis 2 – Generation	27
4.3.4	Hypothesis 3 – Gender	28
4.3.5	Full Model	29
4.4	<i>Exceeding Findings</i>	29
5.	Discussion	30
5.1	<i>Main Findings</i>	30
5.1.1	Overall Effect of Celebrity Type	30
5.1.2	Moderation by Generation	31
5.1.3	Moderation by Gender	31
5.2	<i>Managerial Implications</i>	32
5.3	<i>Limitations</i>	33
5.4	<i>Future Research</i>	34
	References	I
	Appendices	X

Table of Figures

Figure 1 - Conceptual Model	13
Figure 2 - Stimuli Construct after Focus Group.....	15
Figure 4 - Control Stimuli	18
Figure 5 - Final Celebrity Stimuli	19
Figure 6 - Process Model 2 (Hayes, 2018).....	20
Figure 7 - Distribution of Final Survey Sample.....	25
Figure 8 - Full Model Visualization	29

Table of Tables

Table 1 - Fundamental Theories on Celebrity Endorsement	6
Table 2 - Construct of Measurement	17
Table 3 - Hypotheses & Statistical Testing.....	21
Table 4 - Distribution of Stimuli by Gender and Generation	22
Table 5 - Cronbach's Alpha & Quality	23
Table 6 - Model Variables	24
Table 7 - Average Mean for IV per Condition and DV	24
Table 8 - Multicollinearity Values	26

Table of Appendices

Appendix 1 – Focus Group	X
Appendix 1.1 – Discussion Guideline	X
Appendix 1.2 – Results of the discussion	XI
Appendix 1.3 – Questionnaire.....	XIII
Appendix 1.4 – Fragrance Design Options	XV
Appendix 2 – Survey.....	XV
Appendix 3 – Manipulation check	XXI
Appendix 3.1 – Multicollinearity	XXII
Appendix 3.2 – Descriptive Statistics	XXIII
Appendix 3.3 – Reliability	XXIV
Appendix 4 – Hypothesis 1a &b	XXIV
Appendix 5 – Hypothesis 2a	XXV
Appendix 6 – Hypothesis 2b	XXVI
Appendix 7 – Hypothesis 2c	XXVI
Appendix 8 – Hypothesis 3	XXVII
Appendix 9 – Full Model	XXVII
Appendix 10 – Exceeding Findings	XXVIII

Abbreviations

- AS – Adam Sandler (Experimental Condition)
- CB – Cate Blanchett (Experimental Condition)
- CG – Control Group
- DV – Dependent Variable
- DACH – Germany, Austria, Switzerland
- ELM – Elaboration Likelihood Model
- Gen – Generation
- Gen Y – Generation Y / Millennials, born between 1981 - 1995
- Gen Z – Generation Z, born between 1996 - 2010
- HS – Hunter Schafer (Experimental Condition)
- IV – Independent Variable
- LC – Luke Combs (Experimental Condition)
- PI – Purchase Intention
- P1 – Person 1 (Focus Group)
- RQ – Research Question
- TVCs – Television Commercials
- W – Moderator (Process Model)
- X – Independent Variable (Process Model)
- Y – Dependent Variable (Process Model)
- Z – Moderator (Process Model)

1. Introduction

1.1 Background

Luxury perfume brands historically relied on celebrity endorsements as a core marketing strategy, investing significant sums in well-known personalities to promote their products. Actress Charlize Theron earned \$55 million as the face of J'adore Dior, while L'Oréal paid Julia Roberts \$20 million for representing Lancôme's "La vie est belle" fragrance (Paul, 2023). Celebrity endorsements not only serve as an attention-grabbing advertising approach but also bring a significant financial commitment for brands. When chosen right, the celebrity endorser can positively influence the attitude and behavior of consumers and shape brand perception in the long term (Erdogan, 1999; Block & Atkin, 1983). Yet, the effectiveness of this marketing approach can be influenced by factors such as familiarity or product congruence (Till & Busler, 2000; Fleck et al., 2012), and consumer reactions may depend on demographics or personal values. Furthermore, a wrong choice in the endorser can impact the brand image negatively (Erfgen et al., 2015). In the context of luxury marketing, where the emotional appeal and the symbolic value of the product are decisive, understanding how celebrity attributes interact with the consumer's perception is crucial for the long-term success of a brand.

1.2 Problem Statement

While celebrity endorsement has been a common marketing approach and its methods have been studied since the 1950s, there is a lack of empirical differentiation of how endorsers' familiarity and product congruence impact the purchase intention in fragrance marketing, while considering generations and gender segments of the audience. Younger consumers, especially Generation Z and Millennials, are increasingly influenced by digital media and show a preference for authenticity in brand communication (Hoefel & Francis, 2018). Major cosmetics companies are progressively faced with the challenge of selecting the right celebrity endorser to effectively target younger audiences, who are driven towards authentic communication, and influence their purchasing decisions, necessitating a re-evaluation of the impact of traditional celebrity endorsement on purchase intent in the luxury fragrance industry. This paper examines the influence of celebrity endorsements on Generations Z and Y, focusing on the aspects of familiarity and congruence between product and endorser. This is of particular importance as brands seek to deal with changing consumer values and maintain relevance across all age groups.

The research questions this thesis aims to answer are:

RQ₁: *Which type of celebrity endorser has the most impact on the purchase intention of each generation?*

RQ₂: *Does generation moderate the relationship between celebrity endorsement and purchase intention?*

RQ₃: *Does gender moderate the relationship between celebrity endorsement and purchase intention?*

1.3 Research Methods

This thesis applies a mixed-methods research approach to provide a holistic understanding and investigation of the topic. Both secondary and primary data are examined. As a first step, fundamental theories and current literature are reviewed, and relationships between the variables will be explained. After identifying the research gap, a focus group will be carried out to determine the right corresponding stimuli for the following survey. Consequently, a pilot survey, which ensures that the experimental conditions are set right and that the sequence of the survey flow is logical, is carried out. Thereafter, the final survey is distributed via social media and scientific survey platforms, targeting participants aged 18 to 44 who bought perfume in the respective year. With a randomized sample, each person is shown one advertisement of a fictitiously created unisex fragrance. Each condition differs in familiarity and product celebrity congruence. In the survey, the participant must answer questions regarding perceived familiarity and congruence, general consumer behavior, purchase intention, and demographics, which are relevant to the characterization of the sample.

1.4 Dissertation Outline

This dissertation is divided into a total of five chapters. The first chapter introduces the research topic, problem statement, and research objectives, which are crucial to make the reader aware of the topic and the underlying problem. The second chapter reviews theoretical frameworks and sets this study into an academic perspective while identifying the gap it addresses. In the third part, the methodology is outlined, as well as analytical strategies and data collection are explained, enabling replicability of the study and ensuring transparency. The collected data is analyzed in the fourth part of this dissertation, where empirical methods are applied to examine the hypotheses. It translates the given survey results into insights, which are then discussed in the final chapter, also highlighting limitations and giving an outlook on future research.

2. Literature Review

The literature review serves as the foundation for this research, providing a comprehensive overview of existing studies and theories relevant to the topic. By analyzing prior work, this chapter identifies key concepts and gaps in the current body of knowledge. It establishes the theoretical framework and highlights how this study contributes to the ongoing academic discourse. Examining scholarly sources aims to position the study within its broader academic context, ensuring a well-grounded basis for further investigation.

2.1 Introduction to the topic

The use of celebrities in advertising has been a widely employed marketing strategy for decades, with its psychological effects extensively studied in recent years (Block & Atkin, 1983; Schimmelfennig & Hunt, 2020). This approach is particularly prevalent in the luxury and beauty industries, where celebrity endorsement has become essential in shaping brand perception and brand sales. Luxury fragrance brands invest heavily to differentiate themselves in a saturated market, aiming to create an aspirational connection with the consumer. By associating a product with a well-known figure, exclusivity, sophistication, and beauty standards are supposed to be transmitted, enhancing brand identity and consumer appeal. This review examines the impact of celebrity endorsements on purchase intention in the luxury fragrance industry, focusing on Generation Z and Millennials.

2.2 Definitions

2.2.1 Celebrity Endorser (IV)

An endorser can take up many different roles in marketing: an expert, a typical consumer, the brand's founder, or a celebrity (Kamins, 1989). The definition of “celebrity endorser” was characterized by the researcher Grant McCracken as *“any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement”* (McCracken, 1989, p. 310). Compared to traditional advertising communication, focusing on rational persuasive approaches, celebrity endorsement implies a symbolic meaning to the product and the brand (McCracken, 1989). However, in today’s world, celebrities not only appear in classic out-of-home advertisements and TVCs but can also act as brand testimonials or ambassadors on social media or offline. Bergkvist & Zhou, therefore, elaborated on this definition and defined celebrity endorsement as

“an agreement between an individual who enjoys public recognition (a celebrity) and an entity (e.g., a brand) to use the celebrity for the purpose of promoting the entity” (Bergkvist & Zhou, 2016, p. 644).

Looking at the promotion mix by Kotler, which plays a key role in marketing as it combines various tools a company uses to communicate with its audience, it can be detected that celebrity endorsement falls into both categories, advertising and public relations, because a celebrity endorser not only advertises a specific product but may represent a whole brand (Kotler & Armstrong, 2018).

2.2.2 Purchase Intention (DV)

According to Spears & Singh, purchase intention is *“an individual’s conscious plan to make an effort to purchase a brand”* (Spears & Singh, 2004, p. 56). It is influenced by different internal and external factors, such as social influences, marketing measures, personal beliefs or emotions, and social status (Kirchgeorg, 2018). How likely a consumer is to buy a product or service also depends on the assumption of how well it will satisfy desired wants and needs (Bakshi, 2012). Purchase intention is an important measurement used to predict sales or the success of a marketing approach in general, as it leads to a purchase decision (Akar & Nasir, 2015; Morrison, 1979).

2.2.3 Generation (Moderator)

The German theologian Wilhelm Dilthey was one of the first to try to define what characterizes a generation. He stated that a generation is

“a circle of individuals who, through dependence on the same great facts and changes that occurred in the age of receptivity, are united into a homogeneous whole despite the diversity of other factors that may be added” (Weisbrod, 2005).

For a long time, it was assumed that a generation spans an average of 25 years, from the birth of a parent to the birth of a child (Willems, 2023). However, the length of a generation depends on many factors such as technological progress, demographics, or culture, which makes it difficult to determine an exact timeframe (Berger, 1960; Twenge, 2023; Willems, 2023). In addition, generations can also overlap, implying that people do not necessarily identify with just one generation. Thus, a generation is not only determined by the decade of birth alone but by its similar social location and the experience of similar social events (Gabrielova & Buchko, 2021). These nuanced social and cultural experiences still challenge academic research to define it.

2.2.4 Gender (Moderator)

Compared with the term “sex”, which describes the biological characteristics of a person, the term “gender” defines the sociologically determined and individually learned gender role a person has. It is developed by cultural, ethical, and economic means and can vary among societies. Unlike biological sex, the gender roles of men and women can change (Wiechmann, 2025). Historically, gender has been defined binary, as male and female (Meyerowitz, 2008). However, in the past decade, gender criticism has become more present globally, and non-binary, transgender, or cis definitions have been established (Walgenbach, 2021). Since 2018, a third official sex, “divers”, used for non-binary people, has been specified by German law, reflecting the importance of gender identity roles in today’s world (Gesetz Zur Änderung Der in Das Geburtenregister Einzutragenden Angaben [Act Amending the Information to Be Entered in the Register of Births], 2018).

2.3 Effects of Endorsement

2.3.1 Theoretical Background

Regarding the impact of celebrity endorsers on consumers’ purchase intention, there are four main concepts research is based (Schimmelpfennig, 2018). The first important model is the source credibility model by Hovland & Weiss, which argues that the impact of marketing messages highly depends on the source credibility and the expertise it conveys (Hovland & Weiss, 1951). Applying this concept to celebrity endorsement, it can be argued that the product or brand seems more appealing if the celebrity is known and valued as credible in the context of the product they are promoting. A study from Ohanian (1991) adopted this theory and revealed that this perception applies to both genders. Kamis et al. 1989 further added to the source credibility model with the Match-Up Theory, suggesting that an endorser would be most effective with perceived congruence between the product, target audience, and endorser (Kamis et al., 1989; Till et al., 2000). In 1985, Kahle & Homer developed the source attractiveness model, concluding that physically attractive celebrity endorsers increase purchase intention and product ratings, especially for beauty products (Kahle & Homer, 1985). Nevertheless, Till & Busier (2000) stated that attractiveness only serves as a mediator to credibility and is not alone a subject for increased purchase intent. The meaning transfer model, developed by McCracken, is described in literature as the most holistic model (Roy, 2018; Schimmelpfennig, 2018) as it investigates how the meaning, based on gender, lifestyle, age, or personality, of a prominent endorser is passed onto the product and, thereafter, on the self-image of the consumer (Schimmelpfennig & Hunt, 2020). Compared to the previous models, it explains why celebrity

endorsement can result in higher purchases. Concerning the effectiveness, McCracken stated that “it depends, (...), upon the meanings he or she brings to the endorsement process” (McCracken, 1989, p. 312) and, therefore, also influences the purchase intention of potential buyers. Still, it is also crucial to emphasize that marketers cannot determine the meaning or the significance attributed to the celebrity and the product, as it is on the individual discretion of the consumer. Consequently, an endorser must be well chosen and may just as well discourage customers from buying the product if the values and images conveyed do not match those of the end consumer (Block & Atkin, 1983). In 2005, Burberry, for example, ended its cooperation with model Kate Moss due to a public drug abuse scandal, afraid of demolishing its reputation (Frankfurter Allgemeine Zeitung, 2005). Current literature still frames its research on the original theories but also focuses on the economic value behind celebrity endorsements, stating that celebrity endorsers, when chosen right, have a positive impact on the brand sales (Elberse & Verleun, 2012). Celebrity endorsement itself is not initially a direct, measurable construct, as it can take up many different aspects. Thus, this study operationalizes it through the dimensions of the celebrity's familiarity and product-endorser congruence to establish a statistically analyzable construct.

Table 1 - Fundamental Theories on Celebrity Endorsement (Schimmelpfennig 2018; Erdogan 1999)

Theory	Authors	Title	Main Findings	Source	Published
Source Credibility Model	Hovland et. al	„The Influence of Source Credibility on Communication Effectiveness“	Credibility of the source significantly influences the persuasiveness of the message. Two dimensions: 1. Credibility 2. Expertise	Oxford University Press	1951
Source Attractiveness Model	Lynn R. Kahle, Pamela M. Homer	„Physical Attractiveness of the Celebrity Endorser: A Social Adaption Perspective“	Attitude and purchase intentions change due to the attractiveness of the celebrity source → Supporting social adaptation theory	Journal of Consumer Research	1985
Meaning Transfer Model	Grant McCracken	„Who is the Celebrity Endorser? Cultural Foundations of the Endorsement Process“	Meanings associated with an endorser can be transferred to the product. → The effectiveness of the endorsers stems from his/her cultural meaning → Meaning passes from celebrity to product to consumer	Journal of Consumer Research	1989
Match-Up Theory	Michael A. Kamis et. al	„Celebrity and Non-celebrity Advertising in a Two-Sided Context“	The higher the „match“ between the endorser characteristics with them of the product is, the higher the effectiveness of the marketing measure. → High match between both – high purchase intention → Low match of person and product – lower purchase intention	Journal of Advertising	1989

2.3.2 Celebrity familiarity and purchase intention

Who is considered famous not only depends on the reason the person became recognized but also on geographical, social, and historical circumstances. Lee (2024) defined celebrity as a condition of fame wherein

“individuals lack control over how they circulate and wherein information or images about them beyond any one particular endeavor, product, or event are constructed (and often perceived) as interesting or relevant.”

Unfortunately, a universal index measuring the global awareness of an actor, athlete, musician, etc., does not exist. However, in research and marketing, the Q score, developed by Jack Landis in the 1960s (MARKETING EVALUATIONS, 2025), is a tool that helps to evaluate celebrities based on familiarity and how liked they are (Chalanyova & Mikulas, 2017; Hollensen & Schimmelpfennig, 2013). In social media marketing, metrics such as followers, reach, or engagement rates are now consulted to evaluate a person's familiarity (Peters et al., 2013). As mentioned, the success of an endorsing strategy can depend on the credibility and expertise it brings. Concerning the high familiarity of a celebrity, it is stated that a more well-known person appears more credible and, therefore, benefits the product compared to an unknown endorser (Afifah, 2022; Block & Atkin, 1983). The increased purchase intention resulting from a more familiar endorser can be attributed to the peripheral route of the Elaboration Likelihood Model (ELM), in which consumers rely on heuristic cues such as the endorser's familiarity and perceived credibility rather than engaging in deep cognitive processing of the message content (Petty & Cacioppo, 1986). Consequently, the celebrity becomes more persuasive solely through being recognized. Spry et al. (2011) found that familiarity can enhance message acceptance when consumers recognize the endorser and process the ad more readily. Nevertheless, there is a risk of the “vampire effect” (Erfgen et al., 2015) that occurs if the prominence of a celebrity overshadows the brand, diverting consumer attention from the product and message itself. Purchase intention can take a negative turn as the consumer remembers the celebrity but does not equate them with the brand or product, reducing the overall effectiveness of the endorsement (Erdogan, 1999). A negative impact on the product and the purchase intention might also occur if the celebrity promotes various products at the same time, decreasing the credibility of the advertisement (Tripp et al., 1994)

→ H1a: Consumers exposed to a high-familiarity celebrity will have a significantly higher purchase intention than those exposed to a low-familiarity celebrity.

2.3.3 Celebrity product congruency and purchase intention

The concept of celebrity-brand congruence, based on the Match-Up hypothesis, plays a crucial role in the effectiveness of endorsements and consumer purchase intention. Congruence refers to the perceived fit between a celebrity's image, values, and expertise and the brand or product they endorse (Malodia et al., 2017). It is defined in relevance and expectancy dimensions. Relevance indicates how the information given helps or hinders the clear understanding of the

main idea or message being conveyed. Expectancy describes how well a piece of information aligns with an expected structure associated with that main idea. (Fleck et al., 2012). Studies based on the Match-Up theory suggest that a high degree of congruency strengthens the credibility of the message, trust in the brand, and consumer attitudes, ultimately increasing purchase intent (Kamins, 1990; Till & Busler, 2000). In fragrance marketing, this means the endorser's image should match the product's positioning. An elegant, sophisticated perfume will likely be more effective with a celebrity known for elegance, whereas a playful, young fragrance might pair better with a young, vibrant talent. Furthermore, the Self-Congruity Theory by Sirgy (1985) plays an important role in the effectiveness. It states that products and brands possess a personal image based on emotions and symbolic meanings that is distinct from their functional tangible image, shaped by factors like advertising, pricing strategies, user characteristics, and prevailing stereotypes. A match between the consumers' actual self-image and the product image is called *self-congruity*. A match between the product and the consumer's ideal self-image, the person aspires to be, is called *ideal self-congruity* (Sirgy, 1985). Meaning that consumers usually buy from brands whose brand personality matches their self-image, to act in a way that is consistent with them. Consumers feel motivated to buy products that match their ideal self-image, as it helps them reach their aspirational identity (Sirgy, 1985).

→H1b: Consumers exposed to a high celebrity-product congruency will have a significantly higher purchase intention than those exposed to a low celebrity-product congruency.

2.4 Moderation

2.4.1 Generation Y/ Millennials

Millennials, often referred to as Generation Y, are the cohort of people born between the years 1981 and 1995 (Finneman et al., 2020), forming the biggest group of adults today (Neufeld, 2021). Important events that impacted this generation across countries include the emergence of the internet with the launch of Google in 1998, the turn of the millennium, the terrorist attacks on 9/11, and the global financial crisis in 2008. They have grown up alongside the first steps of a global network and are the first users of social platforms like Facebook or ICQ, making them the first digital natives. Furthermore, they experienced political and financial instabilities due to higher unemployment rates after the recession (Greenstone & Looney, 2011).

2.4.2 Generation Z

Most sources define Gen Z as those born between 1996 and 2010 (Kotler & Armstrong, 2018, p. 670; Statista Research Department, 2024). It is the second youngest generation after Generation Alpha (2012- present) (Statista Research Department, 2024). This generation is

distinguished by growing up as digital natives with constant access to smartphones, the internet, and social media. Additionally, they are the first generation actively addressing climate change and whose youth was affected by the coronavirus pandemic (McKinsey & Company, 2024). Today, this generation includes young professionals who are beginning their careers or starting to have children. By 2030, Gen Z will make up a quarter of the population (Amed et al., 2023, p.46)

2.4.3 Purchase Intention in Luxury Beauty Products

According to Kapferer (1997), fragrance and luxury beauty products are hedonic high-involvement products, as they express desired status and personal preference, associated with excitement and pleasure driven by emotions. Growing up in technologically evolving landscapes, Generation Z and Millennials show unique yet overlapping purchasing behaviors in luxury beauty purchases (Levy, 2024). TikTok emerged as one of the major beauty trend drivers in Gen Z's consumption, as they make up more than 60% of their users (Muliadi, 2020). In 2023, the #perfumetok hashtag alone generated over 4.5 billion views (Silverman, 2023). Millennials, who were part of the internet evolution, also use social media platforms for purchase suggestions but are less present on TikTok. Instead, Instagram and Pinterest are used more frequently. They exhibit different product needs, e.g., anti-aging ingredients, as they are in different life stages (Shim et al., 2024), show more brand loyalty and do not adapt as quickly to trends compared to Gen Z. They tend to spend more money on beauty products as they are likely to earn more money compared to Gen Z, some of whom are not yet fully employed (nielseniq.com, 2024). Millennials place significant importance on customer reviews when purchasing beauty products and show strong interest in "clean beauty" products, which are formulated without any harmful ingredients (PowerReviews.com, 2023). 50% of Gen Z consumers say they conduct extensive research on beauty products online before buying and are willing to try out new brands (Amed et al., 2023). Despite the rise of e-commerce, brick-and-mortar stores such as Sephora (Petruzzi, 2024) and Douglas are important sales channels, where Gen Z finds inspiration and experiences products. Consequently, they enjoy buying beauty products in-store, while 31% of Gen Y shop online multiple times per month (Statista Research Department, 2025). Social media platforms act as marketplaces where products can be purchased directly. Hoefel & Francis concluded that Gen Z purchase patterns are "*access rather than possession, (...) as an expression of individual identity, and (...) as a matter of ethical concern*" (Hoefel & Francis, 2018). When shopping for fragrances, Amed et al. (2023) stated that sustainability, innovation, and social responsibility are major purchase criteria for

Gen Z. Additionally, unisex fragrances, luxury, and niche fragrances are also becoming increasingly popular with Gen Z & Millennials and are seen as collectibles instead of occasional purchases. (Morosini, 2025; Sandler, 2025; Upton-Clark, 2024). Consequently, fragrance marketing shifts towards gender fluidity. Building on these generational distinctions, it is assumed that Gen Z values authenticity and social alignment (Deloitte, 2024), responding strongly to congruent endorsements. Millennials who grew up in a rather traditional media landscape and are more used to established brand narratives may place greater value on familiarity, recognizing and trusting celebrities they already know. Although these generational differences in the perception of endorsement have not been conclusively confirmed in previous studies, they provide a solid theoretical foundation for hypothesis testing in this work.

→ H2a: *Generation moderates the relationship between celebrity endorsement and purchase intention*

→ H2b: *Among Gen Z consumers, a celebrity with high congruency will have a significantly greater impact on purchase intention than a celebrity with high familiarity*

→ H2c: *Among Gen Y consumers, a celebrity with high familiarity will have a significantly greater impact on purchase intention than a celebrity with high congruency.*

Regarding the purchase behavior of genders, consumption patterns differ significantly due to product preferences and social expectations. In beauty products, men follow a pragmatic shopping approach, do not spend much time on decision-making, and show increased brand loyalty (Bakewell & Mitchell, 2004; Silverman, 2023). Women have historically been the high-frequency buyers in the beauty sector and show great interest in skincare, makeup, and haircare. They spend more time choosing the right product and are more emotionally involved (Pezoldt et al., 2010). They are also more flexible when it comes to trying out new products and ingredients. The beauty industry also sees high revenue potential in men, especially for grooming and skin care products. Hereby, the focus is still on multi-usage products and practicality. As asserted by Guo (2022), male consumers continue to prefer online shopping over in-store purchases. Once a satisfactory product is found, men demonstrate high loyalty to the product and have a high repurchase rate. Nevertheless, the beauty industry responded to the increasing gender fluidity with the introduction of unisex makeup and skin care products for a gender-neutral customer base. Well-known perfume brands such as Armani Privé or Tom Ford now offer unisex fragrances (Zirngast, 2024)

→ H3: *Gender moderates the relationship between celebrity endorsement and purchase intention*

2.4.4 Celebrity Endorsement in Luxury Beauty Products

The current literature on celebrity endorsement mainly examines the impact on online purchasing behavior (Yolanda Veybitha et al., 2023; Muliadi, 2020). In addition, there is a smooth transition to the study of influencer endorsement, as knowledge of its positive impact is not yet as widely researched (Lu et al., 2025). However, the term social media influencer (SMI) needs to be distinguished from the typical celebrity endorser, as it describes

“people who publish content (...) on a topic area on their own initiative at a high and regular frequency, thereby initiating social interaction. This takes place via internet-based communication channels.” (Degens, 2018).

Moreover, an SMI primarily gained fame due to its online presence, whereas a typical celebrity endorser became famous through traditional media. (Schouten et al., 2021). Compared to celebrity endorsement, SMI strategies center around authenticity and continuous engagement rather than reaching a broad audience (Schimansky & Oloko, 2021), as SMI often have strong online communities and interact personally with followers. Contemporary research indicates that, although the aspirational appeal of celebrities remains influential, Gen Z and Millennials are more skeptical of overtly commercial messaging (McKinsey & Company, 2024; Wilson, 2019). Instead, they favor authentic endorsements that fit seamlessly into digital and social media contexts. A cross-generational comparative study by Schouten et al. (2021), where the sample consisted of women between 18 and 40, found that these female consumers trust and identify more with influencers than with celebrity endorsers, resulting in higher purchase intent when promoted by SMI. As a result, the effectiveness of celebrity endorsements is now contingent on the strategic congruence between the celebrity’s image and the brand’s values, as well as the ability to engage consumers through interactive, trust-building communication (Schimansky & Oloko, 2021).

2.5 Research Gap

Decades of research have extensively examined the overall impact and benefits of using prominent figures in brand communications. However, as summarized by Wang & Liu (2023) as well as Bergkvist & Zhou (2016), there is limited research on the topic of target audiences’ especially generations responses to celebrity endorsement. Although research has continuously demonstrated the efficacy of celebrity endorsements in branding and consumer engagement, McCormick (2016) stated that a significant gap exists in comprehending how various generations, particularly Gen Z and Gen Y, react to these endorsements within the realm of luxury brand marketing. Moreover, as it is known that both congruence between the celebrity

and the brand (Match-Up hypothesis) and familiarity with the advertiser (source credibility theory) influence the effectiveness of advertising, whether different generations weigh these psychological factors differently has yet to be explored. Furthermore, regarding luxury brands, many of the research articles deal with the impact on brand equity rather than purchase intention (Muniz & Guzmán, 2021; Infante do Carmo, 2020) or examine the effects of influencer marketing rather than celebrity endorsement (von Mettenheim & Wiedmann, 2021). The geographic focus identified in the literature is another drawback mentioned in current research. Schimmelpfenning (2014) points out that much of the work in this area is conducted in the U.S., thereby restricting its applicability to diverse cultural and economic situations. Additionally, several studies have looked at endorsement effects with a focus on one gender (McCormick, 2016; Sirgy, 1985), ignoring possible gender-based variations in consumer responses. This oversight limits our understanding of how male and female consumers may differ in their reception of celebrity-endorsed messaging, which is particularly relevant in the luxury fragrance market, where gender plays a significant role in both product development and marketing strategies. Given these research gaps, the purpose of this study is to address the intersection of generational and gender disparities in the efficacy of celebrity endorsements in the fragrance sector. By investigating how Generation Z and Generation Y, along with distinct gender groups, respond to these marketing strategies, this thesis seeks to help brand managers of luxury beauty companies such as L'Oréal or LVMH to understand which way of celebrity communication is the most effective across various demographics. Assessing whether brands investing heavily in celebrity figures remains a worthwhile strategy for influencing fragrance purchases. The thesis should also bring further insights into how any luxury beauty brand can remain successful in the future, attracting young, affluent buyers from both genders across generations.

2.6 Conceptual Model

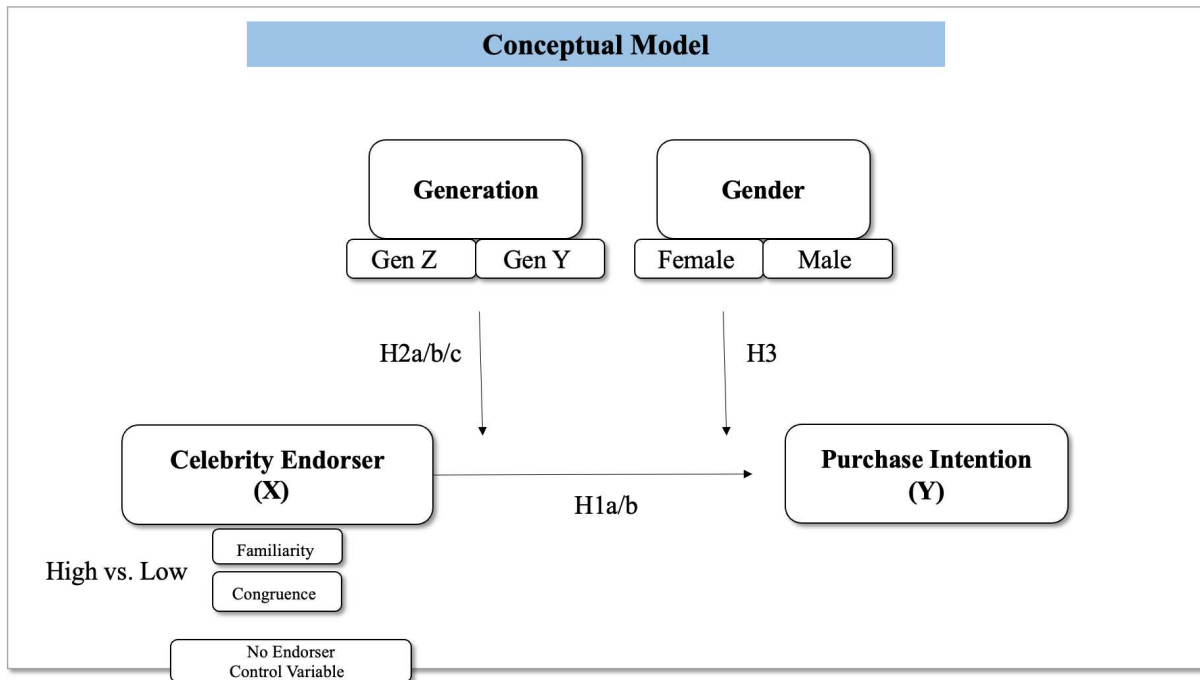


Figure 1 - Conceptual Model

3. Methodology

This chapter outlines how the research questions and stated hypotheses are translated into measurable variables, whose relationship is examined using statistical methods. Furthermore, it sets out how the data is analyzed, making it easier for the reader to understand how the findings and results come about.

3.1 Research Approach

The study uses a qualitative and quantitative research design to investigate the impact of celebrity endorsement, familiarity, and product congruence on purchase intention. The quantitative study uses a 2x2 factorial experimental design in which celebrity familiarity (high vs. low) and product congruence (high vs. low) are manipulated in a fictional fragrance advertisement. In addition, the study integrates two moderators, generation (Gen Y vs. Gen Z) and gender (female vs. male), to examine differential effects across demographic segments. A survey-based between-subjects experimental approach is used to test the hypothesized relationships empirically. The shown advertisements are still gendered, aligning the study with industry standards and making results applicable. The investigation approach can be presented chronologically as follows: (1) problem identification (2) finding empirical and statistical hypotheses (3) conducting a focus group (4) test outcome in a pilot survey (5) running the main

study (6) analyzing data (7) discuss findings and limitations (8) implications and further research

3.2 Data Collection

3.2.1 Data Type

The study collected primary quantitative data through an online survey. The responses provide empirical insights into participants' attitudes toward celebrity-endorsed fragrances and their purchase intentions. To identify the right celebrities to be the face of the experimental stimuli, an exploratory focus group of 7 people across both generations was held. This qualitative approach serves as a measure to identify potential questions for the survey and errors that could occur. As suggested by Masadeh, (2012), it also highlights potential further research directions and brings in-depth insights into the topic. The qualifying question, both for the focus group and for the survey, is whether the participant has bought a fragrance in the past year for themselves or as a gift, ensuring that individuals with recent and relevant consumer experience are included. After the focus group, a brief pilot survey with a second group of participants was conducted to assess the validity and reliability of the construct (Masadeh, 2012).

3.2.2 Primary and Secondary Data

Primary and secondary data were collected in the literature chapter, aiming to gain a holistic picture of existing theories and findings and identify a research gap. Academic books and journal articles were used and accessed in public and electronic libraries (Google Scholar, Ebsco, or EconBiz). Based on this, the conceptual framework and hypotheses were developed. Topics related to current perfume trends, the beauty industry, and generational insights are based on consulting agency reports (McKinsey & Company, 2024) or online branch magazines like “*Business of Fashion*” (Muliadi, 2020; Sandler, 2025; Upton-Clark, 2024).

3.3 Collection Method

3.3.1 Focus Group

The purpose was to identify the most suitable celebrity endorser for the experimental stimuli. It took place in person as it made it easier to interact and see reactions and emotions. The target population was defined as young adult consumers of luxury fragrances in Europe, belonging to Gen Z or Gen Y. The author operationalized Gen Z as individuals approximately 18-30 years old and Gen Y (Millennials) as individuals approximately 31- 44 years old (at the time of data collection). It was focused on adults only, ensuring respondents had the potential purchasing

power for luxury perfume. The discussion was semi-structured and separated into six parts, starting with an introduction and the general identification of celebrity endorsements. As participants were from various nationalities (see Appendix 1.1), the discussion took place in English and lasted approximately one hour. Adapted from Ohanian (1991), after the introduction, participants had 30 seconds to write down all the celebrities that came to mind in the context of fragrance advertisements. Afterward, it continued with a familiarity and congruence assessment. Ten celebrities named and discussed prior were evaluated based on familiarity on a self-developed questionnaire (Appendix 1.3). Continuing, the participants had to choose between two different fragrance designs, selected for the main survey, and state which bottle, in their opinion, was a better fit as a unisex fragrance. In addition, they also discussed what kind of design and layout the key visual could have. For the design of the flacons, luxury unisex fragrance brands (i.e., Byredo, Tom Ford, Le Labo) served as inspiration (Appendix 1.4). Afterward, it was discussed which celebrity they thought would be a good match for the fragrance and which celebrity would not. Also, they had to discuss lesser-known prominent figures among each generation. As a result, the following matches were established:

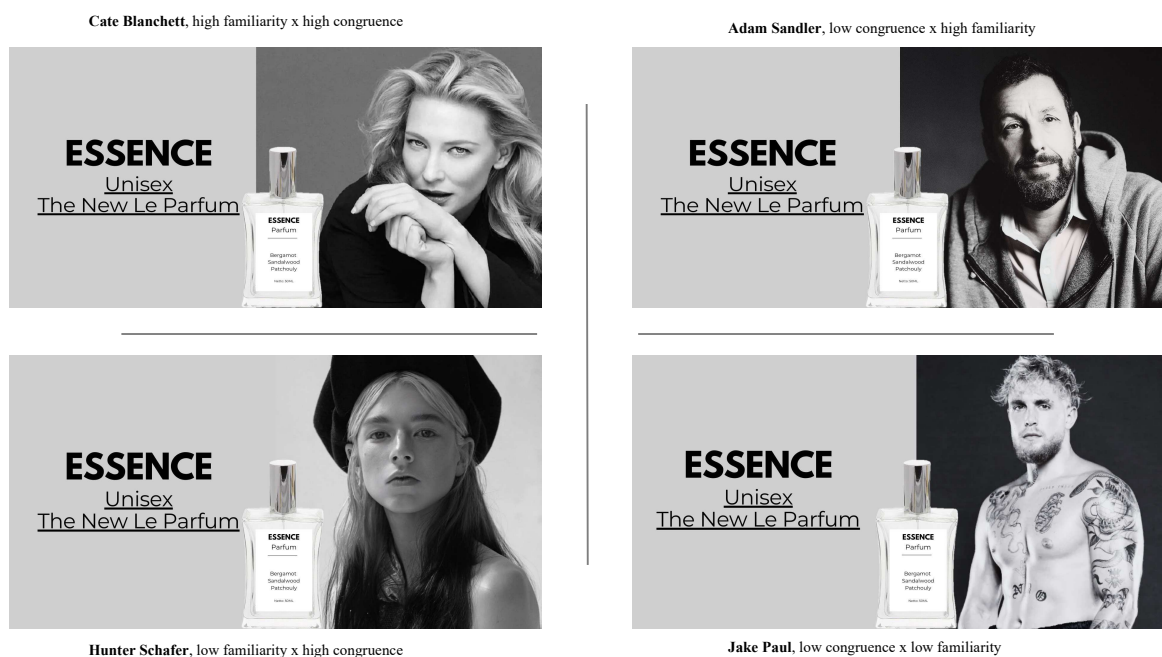


Figure 2 - Stimuli Construct after Focus Group

3.3.2 Quantitative Survey

The survey was distributed via social media platforms (Instagram, LinkedIn, WhatsApp) or direct links to reach a broad sample. Furthermore, it was published on scientific survey websites

like surveycircle.com and prolific.com to ensure that a statistically relevant sample could be collected within the given amount of time. The online format secures a diverse and representative sample size. Non-random sampling generated feedback from Gen Z and Gen Y, aligning with the research objectives. The collection process was anonymous to protect the rights of the participants. It is a cross-sectional study distributed across two weeks. The questionnaire is provided in English to make the study accessible to as many people as possible. A pilot survey has been run before the actual launch of the main study to ensure that everything operates seamlessly, with the option to rework the survey, incorporating feedback from participants.

3.4 Variable Measurement

The moderator's gender and generation are captured within demographic questions. To determine their gender, the participants will be asked, "*Which of the following best describes your gender?*" by which they can choose between five options (male, female, non-binary, other, prefer not to say). This scale is recommended by the Equality and Diversity Unit of the University of Oxford, ensuring that anyone can answer that question without having to choose an option they do not identify with (University of Oxford, 2025). To make concrete assignments to a specific generation, there are national long-term studies that compare certain aspects, such as behavior, beliefs, income, and political values of people over decades (ggp.org, 2025; Twenge, 2023). Due to the complexity of the generation definition, and for this thesis scope, there are no representative questions in the current state of research that validly define the generation using factors other than the year of birth (Dimock, 2019; Gentile et al., 2010; Shim et al., 2024). Consequently, the selected period in which they were born determines the generation. Based on Keller & Aaker (1992) and adapted by Spry et al. (2011), with a Cronbach's Alpha of 0.96, the congruence of the celebrity will be defined by three attributes (brand fit, logical match, and appropriateness) that must be valued on a 7-point Likert scale. Those attributes refer to both dimensions of the congruence theory (Fleck et al., 2012). According to Field (2009), it shows a very high reliability. Familiarity is measured based on Simonin & Ruth (1998) and adapted in Spyr et al. (2011); three familiarity items must be measured on a 7-point Likert scale. The attributes familiarity, recognition, and "have heard of before" show a Cronbach's Alpha of 0.93, indicating high reliability. Purchase Intention is measured using a 7-point Likert scale based on the definition of the term ("*I would consider purchasing this fragrance*") (Morrison, 1979). Hereby, the participants must evaluate the

probability of trying, willingness, and likelihood of buying, based on Grewal et al. (1998) and adapted by Bao et al. (2011), with a reliability score of 0.98.

Table 2 - Construct of Measurement

Framework	Construct Measurement	Reference	Scale	Item	Questions	Cronbachs Alpha
Independent Variable	Celebrity Familiarity	Adapted from Simonin & Ruth (1998) in Spyr, Pappu, Cornwell (2009)	7- Point Likert Scale	3	Please tell us how familiar you are with the celebrity shown in this advertisement 1. Not familiar – very familiar 2. Do not recognize – do recognize 3. Have not heard of before – have heard of before	0.93
Independent Variable	Celebrity Congruence	Adapted from Spyr, Pappu, Cornwell (2009)	7- Point Likert Scale	3	Please tell us how suitable you think the person in this advertisement is for endorsing the shown fragrance 1. Bad fit – great fit between person & product 2. Not logical – very logical for the person to endorse the product 3. Not appropriate – very appropriate for the person to endorse	0.96
Dependent Variable	Purchase Intent	Adapted from Grewald et al. (1998) in Bao Bao (2011)	7- Point Likert Scale	3	1. My likelihood of purchasing Essence is 2. The probability that I would try this Essence 3. My willingness to purchase Essence is	0.98
Moderator	Gender	University of Oxford, 2025		1	Which of the following best describes your gender?	
	Generation	Dimock, 2019, Gentile et al., 2010, Shim et al 2024		1	Between which years were you born?	

3.5 Stimuli Design

3.5.1 Creating the Stimuli

As a result of the focus group, four fictional branded, unisex fragrance advertisements, including real celebrities, were developed using Canva and OpenAI. The key visuals of each person were derived from the internet and edited with a black and white color code to make them uniform. The name “ESSENCE” (“*the most significant element, quality or aspect of a thing or person*” (Merriam-Webster, 2025)) was chosen due to its gender-neutral, elegant, and universal image, it linguistically transfers, seeming to be equally appealing to all gender identities. Using Chat GPT, ensuring industry wording, the product description was created incorporating popular ingredients like sandalwood and bergamot (Armanibeauty.com, 2025). Based on the focus group’s assessment and their ranking on familiarity and congruence, a different celebrity appears in each advertisement. To gauge the baseline purchase intention, a control advertisement showing just the fragrance bottle is also included in the survey.

3.5.2 Validating the Stimuli

The stimuli must be validated to obtain representative results. To ensure that the manipulation in the experiment operates following the experimental design, a pilot survey involving 35

people was conducted. Additionally, open-ended questions were included in the pilot survey, asking why they valued the shown celebrity as a good or bad fit. Within both surveys, a manipulative question is included, ensuring that the participant understands the questions and topic of the research. After generating feedback from pilot survey participants, minor adaptations were made to the wording. The overall stimuli and the fragrance description were perceived as valuable, realistic, and a creative execution for a luxury fragrance. All matches worked according to the experimental conditions except for Jake Paul, who was more familiar than expected (mean = 4.3), especially among Gen Z. Therefore, his key visual was exchanged for the US Country Singer Luke Combs, also defined in the focus group. As some participants mentioned, because of the gender of the endorser, especially Cate Blanchett, they would not assume that it is a unisex fragrance. In the purchase intention block, the wording of the question was slightly adapted to “*regardless of the celebrity’s gender, you saw...*” to prevent people from not buying because of the endorsers gender.

3.5.3 Final Stimuli



Figure 3 - Control Stimuli

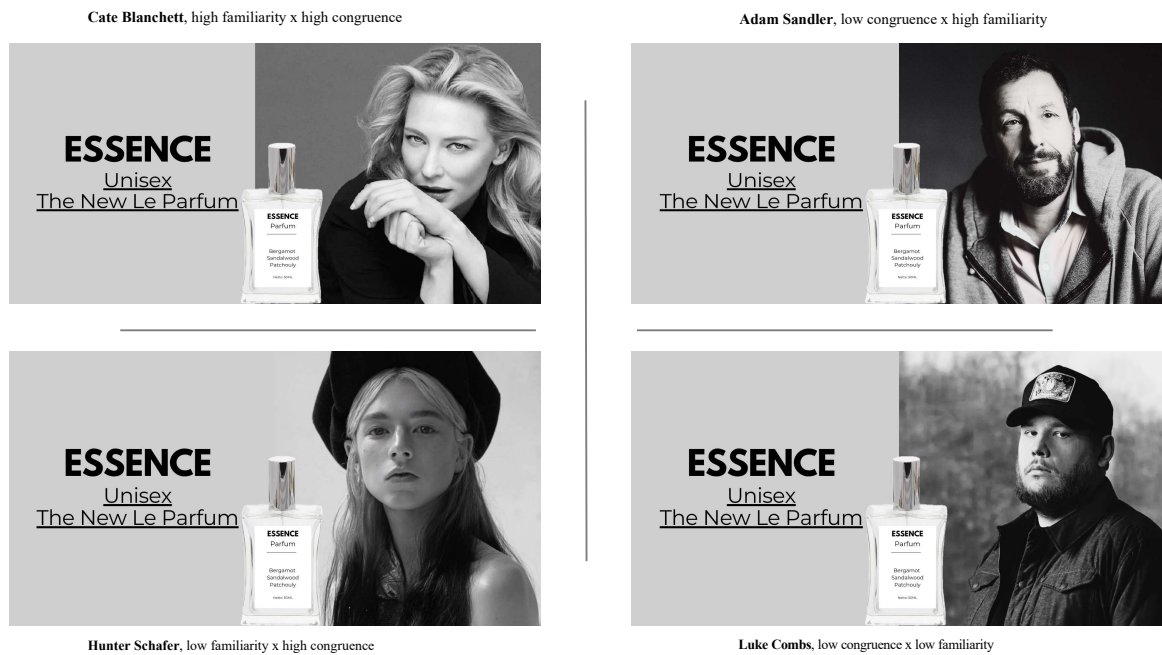


Figure 4 - Final Celebrity Stimuli

Product description given in survey: Essence – A Fragrance Without Limits. Step into the boundless horizon where light meets earth, where warmth and freshness intertwine. *Essence* is a captivating **unisex fragrance** that blends the grounding depth of **sandalwood** with the luminous zest of **bergamot**. A scent of balance—serene yet bold, timeless yet modern. Encased in an elegantly minimalist bottle, *Essence* evokes the purity of nature and the sophistication of effortless style. It is more than a fragrance—it is an invitation to explore, to breathe, to embrace the infinite.

3.6 Questionnaire Design

The survey was designed with Qualtrics.com, incorporating randomized stimuli and a between-subjects design, showing each participant just one condition for less time commitment (Bühner, 2006), avoidance of overlapping and the carryover effect (Malhotra et al., 2017). A block design is used for the question outline, starting with the consent form and introduction, in which the purpose of the study will be explained (Appendix 2). Afterward, the qualifying questions are asked to eliminate unsuitable candidates from a different generation or those not interested in fragrance. Furthermore, behavior questions, like the number of fragrances used or the money spent per 50ml, are asked for a holistic characterization. A stimulus will be presented in the second block, followed by the independent variable measurement. The jobs and the person’s name will be given for each key visual, so that people can answer the “heard of” item in familiarity. In between, a check-up and manipulation question is asked to ensure that the participant pays attention to the survey and understands the stimuli. After evaluating the two

independent variables, the participant must conclude about the purchase intent in the third block. In the final part, the moderator variable, gender, and general demographics are asked. While there were five options presented in the gender allocation, examining whether gender moderates, the author will only focus on males and females, as the sample size of non-binary individuals was not representative.

3.7 Data Analysis

The collected data is analyzed using the statistical program SPSS. To ensure the integrity of the dataset, data cleansing procedures are carried out as a first step to exclude invalid or incomplete responses. Subsequently, descriptive statistics are used to generate an overview of the study sample. Cronbach’s Alpha measures scale consistency and reliability of the questions and was given based on previous data, as seen in the table below (Field, 2009). For moderation, Process Model 2 (Hayes, 2018) will be applied to examine whether the two moderators (generation and gender) influence the relationship between the independent variable (celebrity endorsement) and the dependent variable (purchase intention). For hypothesis testing, linear and ANOVA regressions will be used. For all tests, the significance level is set at p-value < 0.05 (Field, 2009). Post Hoc Tests are needed to assess the differences between the experimental conditions. Linear regressions on the generations and the corresponding stimuli will be used to examine which kind of celebrity has the most impact on PI.

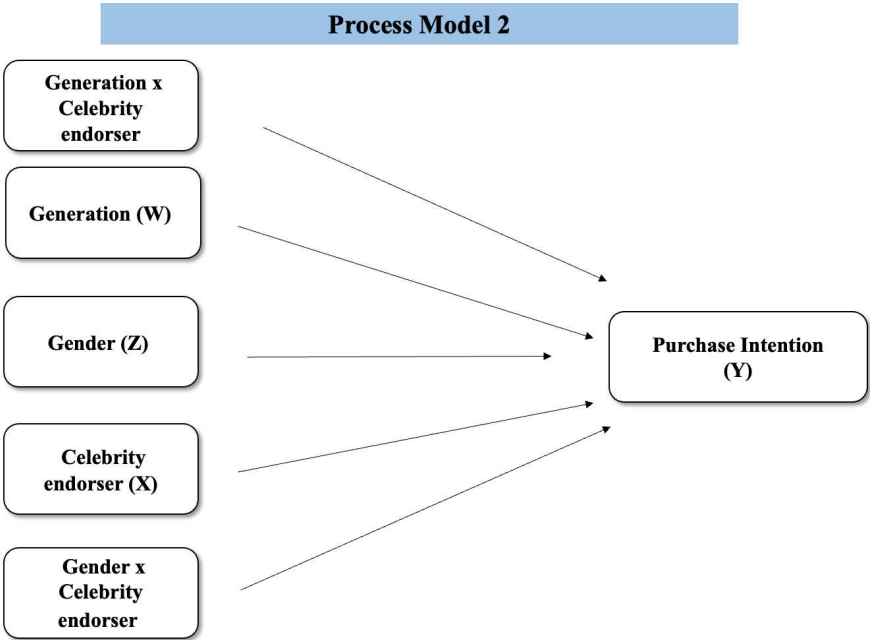


Figure 5 - Process Model 2 (Hayes, 2018)

4. Data Analysis

The following chapter is dedicated to the evaluation of the collected data. This includes a general review of the study sample and its character, and a detailed evaluation of the hypotheses put forward.

Table 3 - Hypotheses & Statistical Testing

Hypothesis	Statistical Test
H1a: Consumers exposed to a high-familiarity celebrity will have a significantly higher purchase intention than those exposed to a low-familiarity celebrity.	One Way Anova
H1b: Consumers exposed to a high celebrity-product congruency will have a significantly higher purchase intention than those exposed to a low celebrity-product congruency.	One Way Anova
H2a: Generation moderates the relationship between celebrity endorsement and purchase intention	Hayes Process Model 1
H2b: Among Gen Z consumers, a celebrity with high congruency will have a significantly greater impact on purchase intention than a celebrity with high familiarity.	Linear Regression
H2c: Among Gen Y consumers, a celebrity with high familiarity will have a significantly greater impact on purchase intention than a celebrity with high congruency.	Linear Regression
H3: Gender moderates the relationship between celebrity endorsement and purchase intention	Hayes Process Model 1
Full Model	Hayes Process Model 2


4.1 Data Preparation

In the main survey, a total of 439 answers were recorded. The data deck was cleaned, and participants who failed the screening questions were excluded from the sample, leading to N=353 valid responses. Afterward, people who failed the attention check were also excluded from the sample since it must be assumed that they did not pay full attention to the survey, leading to N=335. Furthermore, as people failed the manipulation question in a few cases, the analysis continues with pairwise deletion, ensuring that as many cases as possible are included in the analyses, leading to N=283 in purchase intention. Consequently, the sample size can differ depending on the topic analyzed. To measure the overall familiarity and congruence for each stimulus, the independent variables (IV) were recoded and summarized into one mean for familiarity and one for congruence for each celebrity endorser. To easily identify which condition was shown to which participant, each participant was assigned to experimental conditions numbered 1- 5.

4.1.1 Missing Data

Descriptive tests were used to identify missing data. The amount of missing data was minimal as the survey was designed to limit the potential for incomplete surveys. Participants who did not complete at least 80% of the survey were excluded from the analysis (Bortz & Döring, 2006; Kang, 2013). This decision was made to minimize the potential bias caused by incomplete data. In total, 5 participants were removed based on this criterion.

Table 4 - Distribution of Stimuli by Gender and Generation

Introduction N= 335	Control Group N= 68	Cate Blanchett N= 66	Hunter Schafer N= 68	Adam Sandler N= 65	Luke Combs N= 68	Purchase Intention	Demographics
	Gen Z= 45 Gen Y= 23	Gen Z= 39 Gen Y= 27	Gen Z= 40 Gen Y= 28	Gen Z= 37 Gen Y= 28	Gen Z= 45 Gen Y= 23		
After Attention and Manipulation Check	N= 68 Male: 52,6% Female:47,4%	N= 66 Male: 47% Female: 53%	N= 47 Male: 37% Female:58,7% Other: 4,4%	N= 59 Male: 54% Female: 44% Other: 1%	N= 57 Male: 44% Female: 56%	N=283	<u>N=283</u>
							

4.1.2 Manipulation Check

As stated before, the manipulation checks were included in the survey to ensure that the stimuli were perceived as intended (Appendix 3). Therefore, the participant had to state whether a celebrity was shown in the advertisement or not. For those who failed the manipulation check, the survey ended as their data would not be advising for further research regarding PI. Secondly, to ensure sufficient variation in the sample, a one-way ANOVA was run. The Levene Test showed homogeneity as $p=.098 > .05$, as well as the purchase intention differs significantly between the groups ($p=.006$), concluding that the manipulation had an overall effect.

4.1.3 Outlier Analysis

Before conducting the main statistical analysis, an outlier detection had to be executed. By identifying extreme values, values that could distort the results should be replaced with the next highest score plus one (Field, 2009). To identify multivariate outliers that influence the regression, Cook's distances were calculated for each stimulus with Mean_PI as direct variables (DV), Mean_Fam and Mean_Con as IV, and descriptive behavior measures. This allowed a more sophisticated analysis of extreme responses. Any value > 1 would be a cause of concern to be an outlier (Field, 2009). However, all distances were below 1, thus no participant had to be excluded. While investigating the Cook's distances close to 1, it could be identified that they are based on behavior measures like the number of fragrances used and could therefore be neglected.

4.1.4 Measurement Creation & Reliability

As mentioned in the methodology chapter, the measurement questions regarding the indirect and direct variables were based on previous research and their stated Cronbach's alpha. According to them, the reliability was excellent across the variables (Forero, 2023). Nevertheless, it is important to revalidate the collected data. Therefore, Cronbach's alpha test

was used for the summarized familiarity, summarized congruence, and purchase intent (Appendix 3.3).

Table 5 - Cronbach's Alpha & Quality

Construct	Cronbachs Alpha	Quality (Forero, 2023)
Purchase Intention	0,991	Excellent
Familiarity	CB - 0,981	Excellent
	HS - 0,910	Excellent
	AS - 0,80	Good
	LC - 0,87	Good
Congruence	CB - 0,884	Good
	HS - 0,92	Excellent
	AS - 0,841	Good
	LC - 0,852	Good

4.1.5 Variables

Gender

Gender was recoded into the binary dummy variable “*Gender_REC*”, where male = 1 and female = 0. Non-Binary or others were neglected due to their minimal presence.

Generation

To which generation each candidate corresponds was recoded into the dummy variable “*Generation_REC*”, where Gen Z = 1 and Gen Y = 0.

Condition

Each participant was assigned a number based on the experimental condition that they saw. Therefore, the new variable “*Condition*” was established and used for the analysis. To have the control group as a reference in the Hayes Process Model, “*Condition_Process*” was also established.

Independent Variables

To better evaluate the IVs, each category was summarized into a mean based on the output of the three items. Consequently, the “*Mean_FAM_CB*” shows the overall familiarity that the experimental stimuli Cate Blanchett was assigned to by each participant. Likewise, “*Mean_CON_CB*” stands for the accounted product-endorser congruence. Furthermore, to answer the first hypothesis, the highly familiar and highly congruent celebrities, as set in the experiment, were each assigned to a corresponding new binary variable, “*HighCongruence_Celebrities*” and “*HighFam_Celebrities.*”

Dependent Variable

Purchase intention was summarized into an overall variable, “*Mean_PI*” used for further analysis.

Table 6 - Model Variables

Variable	Description	Values	Measure
Gender_REC	Demographic moderation variable representing gender	1= male 0= female	Nominal
Generation_REC	Demographic moderation variable representing generation	1= Gen Z 0= Gen Y	Nominal
Condition_Process	Categorical variable representing experimental condition	1- Control Group 2- Cate Blanchett 3- Hunter Schafer 4- Adam Sandler 5- Luke Combs	Nominal
Mean_PI	Predictor variable representing average purchase intention of each participant	1 to 7	Scale
Mean_FAM_XX	Independent variable representing the familiarity mean of each condition	1 to 7	Scale
Mean_CON_XX	Independent variable representing the congruence mean of each condition	1 to 7	Scale
HighFam_Celebrities	Categorical Variable representing highly familiar condition groups	1= high familiarity 0= low familiarity	Nominal
HighCongruence_Celebrities	Categorical Variable representing high congruence condition groups	1= high congruence 0= low congruence	Nominal

4.2 Descriptive Analysis

The sample is represented by 53,7 % females and 45,2% males. Non-binary answers represented 0,7%. Most respondents were from the DACH region (43,5%), with additional representation from the UK and US, as well as other European and international backgrounds. Regarding the generations, the split was 38,5% for Gen Y and 61,5% for Gen Z. Most of the people who answered the survey were employed (62,2%), and the average income was quite evenly distributed across the 1.000€ to 3.000€ + ratio. The average consumer currently uses 3 perfumes, where two outliers of 10 or 13 fragrances could be detected. The average spent per 50ml perfume is 61.50 €, with a standard deviation of 35.56. Looking at the purchase frequency, the mean accounts for 2,58, referring to “more than once a year”. Concerning celebrity endorsement, only 4% almost always bought a perfume because of the person advertising it, while 62% rarely or even never did. The control group measured the baseline purchase intention, resulting in a mean of 3,99, which corresponds to neutral to more or less high. However, it must be recognized that people were more willing to try (mean 4,57) than likely to purchase (mean =3,89) (Appendix 3.2).

Table 7 - Average Mean for IV per Condition and DV

	N	Minimum	Maximum	Mean	Std. Deviation
MEAN_PI	283	1,00	7,00	3,9929	1,55106
MEAN_FAM_CB	60	1,00	7,00	4,9611	1,81134
MEAN_CON_CB	60	2,33	7,00	5,4667	1,06688
MEAN_FAM_HS	47	1,00	7,00	3,6878	2,12783
MEAN_CON_HS	46	1,00	7,00	5,3841	1,19664
MEAN_FAM_AS	60	1,00	7,00	6,1222	,99900
MEAN_CON_AS	60	1,00	7,00	4,0167	1,64979
MEAN_FAM_LC	57	1,00	7,00	3,2281	1,92638
MEAN_CON_LC	57	1,00	7,00	4,0175	1,34728

Characteristics of the Sample

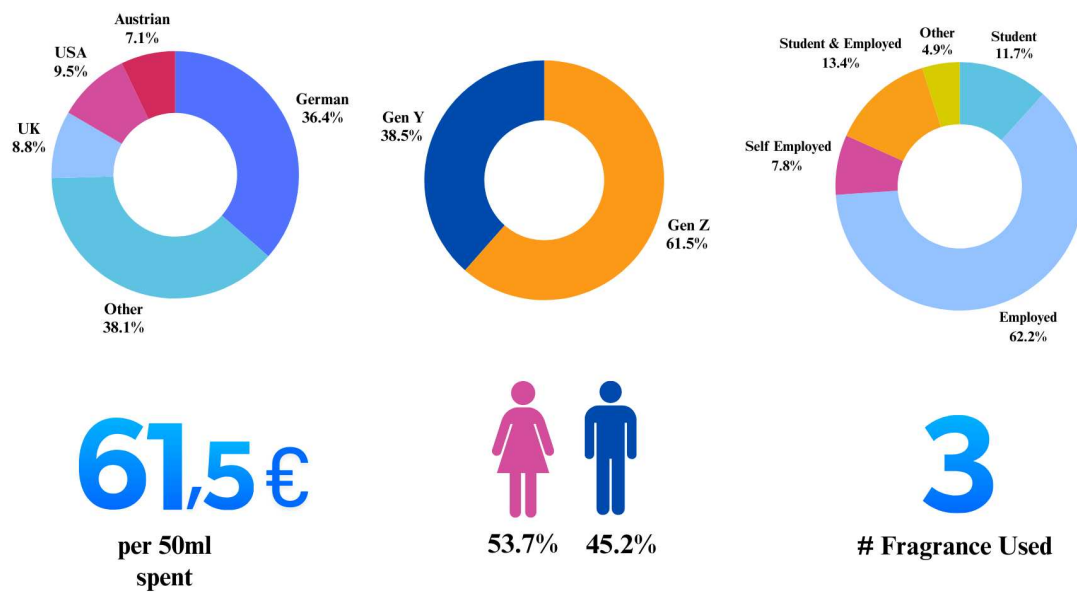


Figure 6 - Distribution of Final Survey Sample

4.3 Hypothesis Testing

Based on the construct of the survey, the independence of observation was given, as each participant was shown only one stimulus. The independent and dependent variables were measured on an ordinal scale, as 7-Point Likert Scales were used. Because of the central limit theorem and the size of the sample of 283 people, evenly distributed among the experimental groups ($n > 30$), it is assumed that the normal distribution holds across the values analyzed (Kwak & Kim, 2017). To ensure robust and reliable inference, bootstrapping of 5.000 was applied in both the linear regression analyses and the PROCESS macro models, allowing bias-corrected confidence intervals that enhance the validity of the statistical conclusions (Davison & Hinkley, 1997).

4.3.1 Multicollinearity Assessment

Before testing the hypothesis, it is important to assess that the independent variables and moderators are not excessively correlated. Therefore, Eigenvalue (> 0.01), VIF (< 2.50), and Condition index (< 30) (Field, 2009) were measured. The results indicate that there is no concern about multicollinearity and are summarized in the table below:

Table 8 - Multicollinearity Values

Variable	Stimulus	VIF	Eigenvalue	Condition Index
Gender_REC	-	1.012	0.513	2.212
Generation_REC	-	1.011	0.664	2.517
HighCongruence_Celebrities	Highly congruent celebrities	1.069	0.426	2.762
HighFam_Celebrities	Highly familiar celebrities	1.079	0.150	4.646

4.3.2 Hypothesis 1 – Type of Endorser

H1a: Consumers exposed to a high-familiarity celebrity will have a significantly higher purchase intention than those exposed to a low-familiarity celebrity.

To understand whether familiarity holds on the purchase intention impact, the stimulus groups with a highly familiar celebrity (Adam Sandler & Cate Blanchett) and the ones exposed to a low-familiarity celebrity were examined. Resulting in a significant difference between at least two of the conditions in the purchase intention, as $p=.004$ ($F=4.640$). Eta Squared shows an effect size of .060, which accounts for a small to medium, yet meaningful effect in consumer behavior research (Fern & Monroe, 1996; Field, 2009). Since there is a significant difference, a post hoc test with Bonferroni Correction was run, indicating that the main difference lies between Luke Combs and Cate Blanchett (Mean difference - 0,99) and a significance of $p=.003$. Other pairwise comparisons showed no significant differences but were close to the significance threshold in some cases (Adam Sandler & Luke Combs, $p=.076$) (Appendix 4).

→ H0, that there is no significant difference in the purchase intention, can therefore be rejected, and H1a is supported.

The Levene's Test of Variance Equality ($p=0.388 >0.05$) was not significant; thus, to further dive into the analysis, an independent t-test was used to test the contrast. Cohen'D measure of effect size between subject samples shows a small effect of 0,2 (Lovakov & Agadullina, 2021), resulting in the same conclusion that an influence exists, although a minor one.

H1b: Consumers exposed to a high celebrity-product congruency will have a significantly higher purchase intention than those exposed to a low celebrity-product congruency.

Similarly, the congruence analysis concerning the purchase intention had to be created for the congruence factor. As a result, the examination was conducted using the high-congruence celebrities, Hunter Schafer and Cate Blanchett (Appendix 4). Consequently, an independent t-test was conducted. Equal variances were rejected by the Levene's Test $=.788 >.05$. The results revealed a significant difference in purchase intention between the two groups. Participants with a higher product endorser congruency reported a higher purchase intention of 4.31 compared to

3.80. The effect size of Cohen's D indicates a small effect of 0.33 (Lovakov & Agadullina, 2021).

→ H0, that there is no significant difference in the purchase intention, can therefore be rejected, and H1b can be confirmed.

4.3.3 Hypothesis 2 – Generation

H2a: Generation moderates the relationship between celebrity endorsement and purchase intention

Aiming to understand whether one generation reacts differently to a celebrity endorser than another, Hayes' Process Model 1 was applied to the data (N=283). For the celebrity endorser Condition_Process (X), the Mean_PI (Y), and the Generation_REC (W), the interaction effect was calculated and the Condition No Celebrity Endorser (X1) was also included. However, preliminary diagnostics confirmed a methodological concern that the variable Generation is categorical and does not meet the assumption of being at least ordinal, which is required for meaningful interpretation of interaction terms in standard moderation models. An effect interaction was used to approach this issue by computing conditional effects for each group. Furthermore, bootstrapping of 5.000 was applied to meet the acceptance requirements. The model is overall significant ($p=.0443$) and explains 6,1% of the variance. However, none of the interaction effects showed a considerable effect (all $p>.05$). Furthermore, the Test of the highest order of interaction was not significant ($p=.925$). The test result showed that no experimental condition was significant compared to the control group (Appendix 5).

→H2a, therefore, must be rejected, and H0, that there is no significant moderation through generation, is accepted.

H2b: Among Gen Z consumers, a celebrity with high congruency will have a significantly greater impact on purchase intention than a celebrity with high familiarity.

To further investigate if Gen Z's purchase intention (N=173) is more impacted by congruence rather than the familiarity the endorser holds, the data set had to be filtered by the date of birth. Afterward, linear regression with purchase intention as the dependent variable and the variables HighFam_Celebrity and HighCongruence_Celebrity as the independent variables was applied. For more robust estimates, bootstrapping with 5.000 samples was used (Davison & Hinkley, 1997). The Durbin-Watson Test (1.496) showed that there is no multicollinearity, as well as the VIF for both predictors =1.043, which also indicates no multicollinearity. The residuals are normally distributed. Nevertheless, the overall model was not significant, $p=.111$, and R^2 accounted for only 2,6% of the model (Appendix 6). Regardless of whether neither predictor

reached statistical significance, the β coefficient of congruence was descriptively larger ($\beta=0.154$) than that of high familiarity ($\beta=.022$)

→ Consequently, H2b cannot be supported, yet the results point in the hypothesized direction.

H2c: Among Gen Y consumers, a celebrity with high familiarity will have a significantly greater impact on purchase intention than a celebrity with high congruency.

Similar to H2b, the same regression, this time focusing on the high familiarity celebrities, including bootstrapping, was used for the Gen Y (N= 110) data. The R^2 explains only 2.4% of the variance. As $p = .273$ ($F=1.314$), the overall model is not statistically significant, yet the VIF and Durbin Watson Test show no multicollinearity issues, which is confirmed by the condition index < 10 . Both predictors (High_Familiarity, HighCongruence) do not explain enough variance in the purchase intention to assume a reliable correlation for the target group studied (Appendix 7). Similar to H2b, no reached statistical significance, yet the β coefficient of congruence was descriptively larger ($\beta=0.145$) than that of high familiarity ($\beta=.041$).

→ H0: There is no significant difference in the impact on purchase intention between a celebrity with high familiarity and one with high congruency among Gen Y consumers, which must be assumed, and H2c is therefore rejected.

4.3.4 Hypothesis 3 – Gender

H3: Gender moderates the relationship between celebrity endorsement and purchase intention

To test whether the impact varies to the gender of the recipient, process model 1 (Hayes, 2018) was again applied to the sample, this time having Gender_REC (M) as the moderator. Hereby, the independent variable was again the experimental Condition_Process (X), and the dependent variable was Mean_PI (Y). As the condition holds 4 different stimuli, the multi-categorical effect has also been included. Bootstrapping of 5.000 was again applied to generate robust estimates. The overall model was significant ($p=.0069$) with R^2 of .0797, indicating that around 8% of the variance in purchase intention was explained by the model. Among the interaction terms, only condition 3 (Hunter Schafer) in correlation to Gender was statistically significant ($p=.0459$) compared to reference condition 1. No other significant moderation effects were found. In general, female participants (Gender=0) showed higher purchase intentions for conditions 2&3 (mean = 4,64) (Appendix 8). Although the overall condition x gender is not significant ($p=.1387$), the one significant interaction supports H3 partially, that gender does moderate the relationship between purchase intention and celebrity endorser.

→ H0 that Gender does not moderate the relationship between celebrity endorsers and purchase intention can therefore be partially rejected.

4.3.5 Full Model

Lastly, the whole model was tested using Hayes' Marco Model 2, as two moderators (Generation_REC and Gender_REC) were the subject of the research, including all experimental stimuli (Condition_Process). R² indicates that approximately 8,7% of the variance in PI is explained by the model (Appendix 9). The model is statistically significant as p=.0375, indicating that. Only condition 5 shows a significant negative effect vs. the control group (p=.040; -0.7052). The interaction between Celebrity Endorser x Generation was not significant (p > 0.05), confirming H2a. The interaction with Gender is only borderline significant for X2 (p=0.51). Combining both moderators, there was no significant moderation found (p=0.4791).

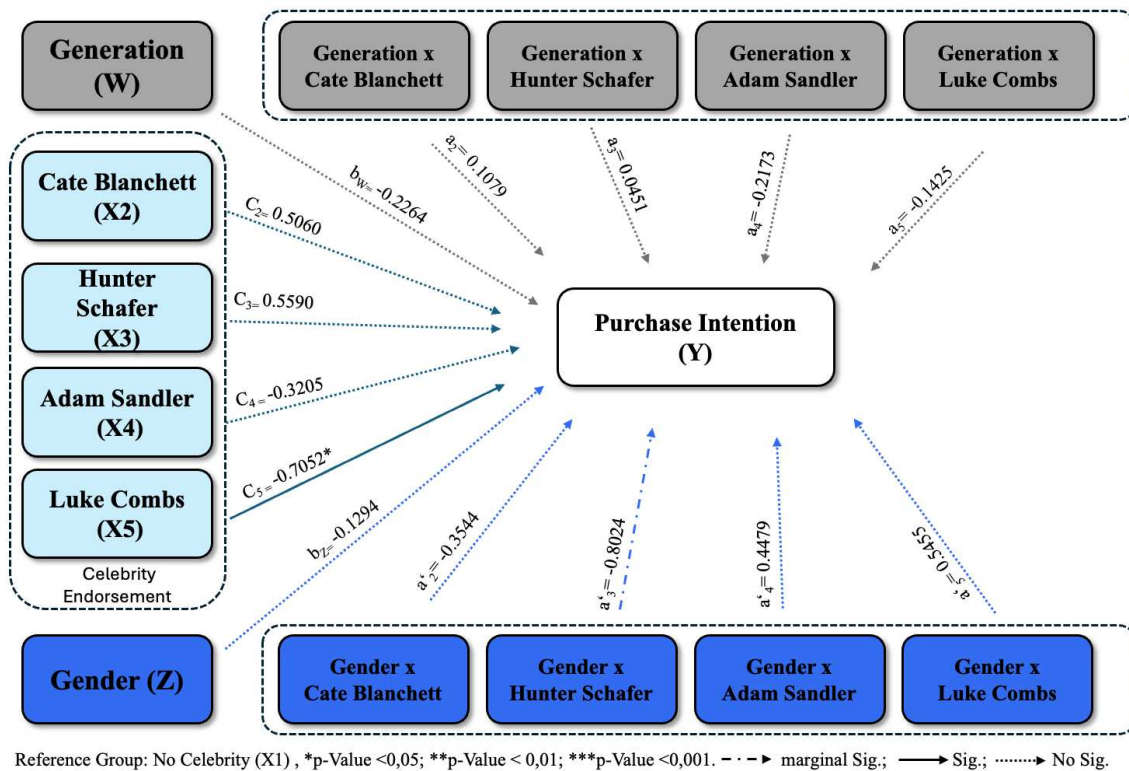


Figure 7 - Full Model Visualization

4.4 Exceeding Findings

Apart from the investigation of the hypotheses and the resulting answers to the research questions, further insights, interesting to mention, can be extracted from the dataset. Examining the usage behavior of men and women, it becomes clear that most consumers use at least two perfumes daily, whereas more female consumers use 3 or 4. An analysis of the distribution across both generations suggests that Generation Z appears to prefer a wider variety of

fragrances, whereas Generation Y tends to remain loyal to a smaller selection. This may indicate a greater willingness to experiment with different fragrances among members of Generation Z

5. Discussion

This study aimed to investigate how celebrity familiarity and product endorser congruence influenced purchase intention, and whether these relationships were moderated by generation (Gen Z vs. Gen Y) and gender (male and female). After the qualitative and quantitative analysis, this chapter discusses the research questions and presents limitations that occurred in this study.

5.1 Main Findings

5.1.1 Overall Effect of Celebrity Type

1st Research question: *Which type of celebrity endorser has the most impact on the purchase intention of each generation?*

The analysis in H1 revealed a significant overall effect of the celebrity type on the purchase intention, supporting the concept that not all celebrity endorsements are equally effective. In further evaluation, it became clear that Luke Combs, who was categorized as the low familiar x low congruence celebrity, led to significantly lower purchase intention compared to the high familiar x high congruence celebrity Cate Blanchett. These findings were confirmed in H1b and are consistent with prior research that familiarity enhances trust and recognition (Afifah, 2022; Till & Busler, 2000). Participants exposed to more congruent and familiar celebrities showed higher average PI, supporting the assumption that familiarity and product-endorser congruence both enhance the effectiveness of an advertisement, increasing authenticity and credibility. Testing which of the two categories had more impact on the purchase intention, in which generation, the models were statistically not significant, which could be due to the high standard deviation in purchase intention ($SD=1.59$), as the sample size was comparably small (Gen Y $N=110$ / Gen Z $N=173$). Against the given literature and generational studies (Hemantha, 2019; Hoefel & Francis, 2018), it can therefore not be confirmed that congruence is more important to Gen Z and familiarity to Gen Y. The discrepancy between prior research suggestions and this study may be a result of the increasing overlap of generational boundaries that are a result of media consumption habits, which were not captured in this study. Furthermore, the limited R^2 in this study (ranging from 2.4% to 10.6%) is a small variance, which is, however, common in human behavior studies (Cohen, 1988). Purchase Intention was measured using a 3-item Likert scale, where the intention to buy something is a multi-determined construct in real life, influenced by various factors such as mood, social norms, and experiences.

5.1.2 Moderation by Generation

2nd Research Question: Does generation moderate the impact of celebrity endorsement on purchase intention?

No significant interaction between generation, celebrity endorser, and purchase intention could be found (H2). The research question was based on generational cohorts expressing different values and consumption behavior (Hemantha, 2019; Hoefel & Francis, 2018; Noenickx, 2023). While different endorsement conditions do influence purchase intention, the two generations reacted alike to the various celebrity endorsers. It can be assumed that Cate Blanchett, for example, was equally familiar across both generations or could have also reached a higher average due to attractiveness effects, which were not captured in this course of work. This may reflect converging behavior patterns in the luxury fragrance segment or the endorsers themselves, regarded as classic endorsers rather than social media influencers, who might have caused a different outcome. Moreover, the selected stimuli might not have triggered a strong generation-specific association. As stated in Chapter 2, generation is not a fixed construct and relies on individual identification and values (Weisbrod, 2005). These aspects were not included in the age classification, participants classified as part of a specific generation may have behaved according to the next generation, explaining similar reactions. Additionally, it is possible that participants did not show strong emotional reactions to each endorser, referring to the ELM (Petty & Cacioppo, 1986), by which they used the peripheral route, concluding on purchase intention based on superficial factors like the design of the bottle rather than the celebrity, which were also not measured in this construct. Ultimately, another explanation could be that in the fragrance category, perfume purchases are preferably influenced by taste and smell, which are attributes that are not dependent on the generation.

5.1.3 Moderation by Gender

3rd Research Question: Does gender moderate the relationship between celebrity endorsement and purchase intention?

In H3, the only condition that showed significant interaction was the reaction to actress and model Hunter Schafer. The negative interaction term suggests that male consumers showed lower purchase intention compared to females, who responded more favorably. These findings point again to the congruence and identification assumption by Kamis or Fleck (Fleck et al., 2012; Kamins & Gupta, 1994). The actress being a prominent LGBTQ+ rights advocate might evoke a different response, whereby the female participants might perceive her as more desirable or identify more with the values she represents, while the male participants might still be more inspired by masculine attributes, as explained by the transference of meaning model (Roy, 2018; McCracken, 1989). Additionally, a relatively high number failed to recognize

Hunter Schafer as a celebrity, which indicates very low familiarity for some parts of the sample. Consequently, an unintended variance in how the stimulus was received could explain this outcome. The lack of other interactional terms suggests that the other characters shown did not elicit strong associations or meanings for the participants, possibly due to limited knowledge of them or a gender-neutral appearance. Furthermore, it is important to note that both low-congruence stimuli were male celebrities. This resulted from the focus group's subjective evaluation, which associated these celebrities with a lack of sophistication. This selection may have unintentionally biased the participants' responses, particularly among female participants. Moreover, referring to the descriptive findings, only 4% of the sample stated, they bought fragrance before due to celebrity endorsement (Appendix 3.2). Concluding that the participants are generally not very susceptible to this marketing measure and that other criteria, such as smell or price, play a much more decisive role in the purchasing process, which is confirmed by the fact that the usage of a celebrity endorser increased the intention to try a fragrance.

5.2 Managerial Implications

The findings can help brand managers and activation teams across the beauty and fragrance industry by highlighting potential drawbacks when attracting a specific generation with endorsers. Given the assumption and current market trends that fragrances are marketed in a more gender-neutral way, it is imperative to take a close look at which endorsers appear to be the most suitable for all genders and whether investing heavily in a singular, prominent face still delivers the proportional value. While generation and gender did not significantly moderate the effect, the data imply that some celebrities are naturally more appealing to both generations, suggesting that a cross-generational strategic focus would be the more effective strategy than just targeting a narrow age group. Instead of choosing an endorser with a specific demographic cluster, brands can benefit from personalities that represent a more universal appeal through cultural relevance and values. Moreover, the findings indicate familiarity alone does not generate a strong, distinct response. It emphasizes the growing shift towards choosing digital personalities and micro influencers, who maintain a stronger emotional and personal connection to their audience as they actively choose to follow them, creating higher congruence. However, it also reflects a broader fragmentation of the marketing landscape. Findings underscore that product congruence had a more influential role, suggesting that brands should align their products with the celebrity based on how brand values and storytelling are enhanced by them, instead of solely choosing a prominent face. From a risk management perspective, results highlighted the need for diversification, in the light of today's fast-paced political and social

climate, amplified by social media platforms, relying on a single person can create reputational vulnerabilities. Thus, a portfolio approach, incorporating a mix of high-impact celebrities and congruent micro-SMI, may help mitigate the financial risk associated with allocating millions of marketing dollars to a single celebrity who ultimately fails to resonate with the target audience. In conclusion, the study suggests that successful celebrity endorsement strategies in the luxury fragrance sector must think beyond traditional metrics of fame. A thoughtful emphasis on congruence, emotional alignment, cross-generational appeal, and brand safety, supported by ongoing testing, the usage of AI, and consumer insights, will better position brands to connect with today's more skeptical and segmented generations.

5.3 Limitations

While this research provides valuable insights on the effect that gender and generation have on purchase intention, it has limitations. The first limitation to be noted is the fact that the study only focuses on the luxury fragrance sector and must be delimited from generalized assumptions across product categories. Secondly, data collection was executed via an online survey. Unfortunately, despite the manipulative and attentive questions, it is not possible to measure how properly and conscientiously the respondents carried out the survey. Some were likely distracted, which may well lead to deviating results. Third, the experiment used a fictional perfume brand and specific celebrity stimuli, resulting from the opinion of a focus group, which was subjective and may not capture all real-world complexities. As stated, consumer purchase behaviors in fragrance are influenced not only by the endorser but also by the complex interplay of brand loyalty, word-of-mouth, or attributes like smell, design, or price. This was beyond the scope of this survey and therefore could not be captured. In general, time constraints were responsible for the limited sample size of the survey, as groups were randomized and only presented one stimulus. With a possible budget to distribute this survey via a professional research institute, serving a wider audience, the captured results could have been different. The sample, although distributed across various countries, mainly reached DACH consumers due to the author's nationality and social group. Hence, it may not adequately represent consumers in other regions, where cultural expectations could also affect endorsement perceptions. Moreover, as stated, Gen Z and Gen Y were defined by the period of birth, which varies for each person (e.g., early vs. late Millennials). As outlined, people cannot only feel belonging to a certain generation but are also shaped by many socio-cultural differences. This type of consumer was neglected in this survey. The independent variables „familiarity“ and

„congruence“ represented subjective measurements. Even if the Likert scale and the Cronbach Alpha indicated a valid qualification, the interpretation of the construct can vary.

5.4 Future Research

In conclusion, it is suggested that future studies address these limitations and build on the thesis findings or replicate the study with different celebrity endorsers or fragrances. Concerning gender perceptions, an interesting extension to this thesis would be to test if the endorser's gender influences the purchase intent of consumers in unisex products. Another avenue is to examine celebrity endorsements in luxury fragrances across different cultures or continents, i.e., comparing European Gen Z with Asian Gen Z to see if the patterns hold or how celebrities are valued differently. A different suggestion is to investigate older generations (Gen X, Baby Boomers) in the luxury fragrance context to see how they respond to celebrity endorsers, giving a full generational spectrum that managers can refer to. It would also be useful to conduct longitudinal research, following a campaign over time to see if initial attitudes towards one endorser translate into actual purchases or long-term brand loyalty. Moreover, it would be beneficial for future studies to investigate the emergence of social media influencers as endorsers in luxury branding, in contrast to traditional celebrities. Is a TikTok influencer's endorsement more impactful for Gen Z than that of an “A-List celebrity”, and how do Millennials view these trends? This could elaborate on the potential for luxury brands to collaborate with non-traditional celebrities. Conducting qualitative research and interviewing brand managers could enhance consumer research, gain insight into how luxury brand executives view the risks and benefits of celebrity endorsement, and offer a comprehensive perspective on marketing strategies. Moreover, it could be an interesting research approach to conduct a field study in which the fragrance advertisements are displayed in a retail environment, where the actual trail is measured. Another idea could be the elaboration of whether consumers really pay attention to the celebrity or instead show interest in the fragrance itself. This could be measured with the use of a heat map within a scientific setting. Lastly, this thesis could be a groundwork for a case study helping a specific brand in the sector, such as Sadie Sink as the new Armani Beauty face, and her effect on specific generations.

References

- Afifah, I. F. (2022). Expertise, Trustworthiness, Similarity, Familiarity, Likeability, Product-Match Up of Celebrity Endorsement to Purchase Intention. *Journal of Communication & Public Relations, 1*(2), 21. <https://doi.org/10.37535/105001220223>
- Akar, E., & Nasir, V. A. (2015). A review of literature on consumers' online purchase intentions. *Journal of Customer Behaviour, 14*(3), 215–233. <https://doi.org/10.1362/147539215X14441363630837>
- Amed, I., Jindal, D., Saint Olive, A., Weaver, K., Berg, A., Hudson, S., & Rao, P. (2023). *The State of Beauty Fashion: Beauty*.
- Armanibeauty.com. (2025). *fragrance philosophy*. <https://www.armanibeauty.com/int/fragrance-philosophy/fragrance-philosophy.html>
- Bakewell, C., & Mitchell, V.-W. (2004). Male Consumer Decision-Making Styles. *The International Review of Retail, Distribution and Consumer Research, 14*(2), 223–240. <https://doi.org/10.1080/0959396042000178205>
- Bakshi, S. (2012). IMPACT OF GENDER ON CONSUMER PURCHASE BEHAVIOUR. *Journal of Research in Commerce and Management, 1*(9), 1–8. www.abhinavjournal.com
- Berger, B. M. (1960). How Long Is a Generation? *The British Journal of Sociology, 11*(1), 10. <https://doi.org/10.2307/587038>
- Bergkvist, L., & Zhou, K. Q. (2016). Celebrity endorsements: A literature review and research agenda. *International Journal of Advertising, 35*(4), 642–663. <https://doi.org/10.1080/02650487.2015.1137537>
- Block, M. P., & Atkin, C. (1983). Effectiveness of Celebrity Endorsers. *Journal of Advertising Research, 23*, 57–61.
- Bortz, J., & Döring, N. (2006). *Forschungsmethoden und Evaluation [Researchmethods and Evaluation]*. Springer Berlin Heidelberg. <https://doi.org/10.1007/978-3-540-33306-7>
- Bühner, M. (2006). *Einführung in die Test- und Fragebogenkonstruktion [Introduction to test and questionnaire construction]* (Vol. 2). Pearson Studium .
- Carrillat, F. A., & Ilcic, J. (2019). The Celebrity Capital Life Cycle: A Framework for Future Research Directions on Celebrity Endorsement. *Journal of Advertising, 48*(1), 61–71. <https://doi.org/10.1080/00913367.2019.1579689>

- Chalanyova, O., & Mikulas, P. (2017). MEASURING THE CELEBRITY: CONTEMPORARY METRICS OF FAME. In A. Roncevic, A. Hunjet, & L. Yongqiang (Eds.), *20th International Scientific Conference "Economic and Social Development"* (pp. 363–371). <http://www.esd-conference.com>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Lawrence Erlbaum Associates .
- Davison, A., & Hinkley, D. (1997). *Bootstrap methods and their application* (Vol. 1). Cambridge University Press .
- Degens, F. Prof. Dr. (2018, October 16). *Influencer* . Gabler Wirtschaftslexikon - Das Wissen Der Experten [Gabler Business Dictionary - The Knowledge of the Experts]. <https://wirtschaftslexikon.gabler.de/definition/influencer-100360/version-340187>
- Deloitte. (2024). *2024 Gen Z and Millennial Survey: Living and working with purpose in a transforming world*.
- Dimock, M. (2019, January 17). *Defining generations: Where Millennials end and Generation Z begins*. Pew Research Center .
- Elberse, A., & Verleun, J. (2012). The Economic Value of Celebrity Endorsements. *Journal of Advertising Research*, 52(2), 149–165. <https://doi.org/10.2501/JAR-52-2-149-165>
- Erdogan, Z. B. (1999). Celebrity Endorsement: A Literature Review. *Journal of Marketing Management*, 15, 291–314.
- Erfgen, C., Zenker, S., & Sattler, H. (2015). The vampire effect: When do celebrity endorsers harm brand recall? *International Journal of Research in Marketing*, 32(2), 155–163. <https://doi.org/10.1016/j.ijresmar.2014.12.002>
- Fern, E. F., & Monroe, K. B. (1996). Effect-Size Estimates: Issues and Problems in Interpretation. *Journal of Consumer Research*, 23(2), 89. <https://doi.org/10.1086/209469>
- Field, A. (2009). *Discovering Statistics Using SPSS* (3rd ed.). SAGE Publications Inc.
- Finneman, B., Ivory, J., Marchessou, S., Schmidt, J., & Skiles, T. (2020). *Cracking the code on millennial consumers*.
- Fleck, N., Korchia, M., & Le Roy, I. (2012). Celebrities in Advertising: Looking for Congruence or Likability? *Psychology and Marketing*, 29(9), 651–662. <https://doi.org/10.1002/mar.20551>
- Forero, C. G. (2023). Cronbach's Alpha. In *Encyclopedia of Quality of Life and Well-Being Research* (pp. 1505–1507). Springer International Publishing. https://doi.org/10.1007/978-3-031-17299-1_622

- Frankfurter Allgemeine Zeitung. (2005, October 15). „Kate Moss wird zurückkommen“ [*Kate Moss will come back*]. <https://www.faz.net/aktuell/gesellschaft/menschen/persoendlich-kate-moss-wird-zurueckkommen-1277745.html>
- Gabrielova, K., & Buchko, A. A. (2021). Here comes Generation Z: Millennials as managers. *Business Horizons*, 64(4), 489–499. <https://doi.org/10.1016/j.bushor.2021.02.013>
- Gentile, B., Twenge, J. M., & Campbell, W. K. (2010). Birth Cohort Differences in Self-Esteem, 1988–2008: A Cross-Temporal Meta-Analysis. *Review of General Psychology*, 14(3), 261–268. <https://doi.org/10.1037/a0019919>
- Gesetz Zur Änderung Der in Das Geburtenregister Einzutragenden Angaben [Act Amending the Information to Be Entered in the Register of Births] (2018). <https://dip.bundestag.de/vorgang/gesetz-zur-änderung-der-in-das-geburtenregister-einzutragenden-angaben/239069>
- ggp.org. (2025). *The Generations and Gender Survey* . Generations & Gender Programm - A European Research Infrastructure . <https://www.ggp-i.org/deutschland/>
- Greenstone, M., & Looney, A. (2011, November 4). *COMMENTARY Unemployment and Earnings Losses: A Look at Long-Term Impacts of the Great Recession on American Workers*. Brookings.Edu. <https://www.brookings.edu/articles/unemployment-and-earnings-losses-a-look-at-long-term-impacts-of-the-great-recession-on-american-workers/>
- Grewal, D., Krishnan, R., Baker, J., & Borin, N. (1998). The effect of store name, brand name and price discounts on consumers’ evaluations and purchase intentions. *Journal of Retailing*, 74(3), 331–352. [https://doi.org/10.1016/S0022-4359\(99\)80099-2](https://doi.org/10.1016/S0022-4359(99)80099-2)
- Guo, H. (2022). The Preference for Male cosmetics: an empirical analysis. *BCP Business & Management*, 26, 864–872. <https://doi.org/10.54691/bcpbm.v26i.2049>
- Hayes, A. F. (2018). *Introduction to Mediation, Moderation, and Conditional Process Analysis Methodology in the Social Sciences* (D. Kenny & T. D. Little, Eds.; 2nd ed.). The Guilford Press. www.guilford.com/MSS
- Hemantha, B. Y. (2019). *CELEBRITY ENDORSEMENT OF LUXURY BRANDS IN PURCHASING PATTERN AMONG GENERATION Z CUSTOMERS*. <https://doi.org/10.2139/ssrn.3500626>
- Hoefel, F., & Francis, T. (2018). “True Gen”: Generation Z and its implication for companies.

- Hollensen, S., & Schimmelpfennig, C. (2013). Selection of celebrity endorsers: A case approach to developing an endorser selection process model. *Marketing Intelligence and Planning*, 31(1), 88–102. <https://doi.org/10.1108/02634501311292948>
- Hovland, C. I., & Weiss, W. (1951). The Influence of Source Credibility on Communication Effectiveness. *Oxford University Press*, 15(4), 635–650.
- Infante do Carmo, F. (2020). *The impact of celebrity endorsements on the brand equity of luxury companies*. Católica Lisbon School of Business and Economics.
- Kahle, L. R., & Homer, P. M. (1985). Physical Attractiveness of the Celebrity Endorser: A Social Adaptation Perspective. *Journal of Consumer Research*, 11(4), 954. <https://doi.org/10.1086/209029>
- Kamins, M. A. (1989). An Investigation into the “Match-Up” Hypothesis in Celebrity Advertising: When Beauty May be Only Skin Deep. *Journal of Advertising*, 19(1), 4–13. <https://doi.org/10.1080/00913367.1990.10673175>
- Kamins, M. A., & Gupta, K. (1994). Congruence between Spokesperson and Product Type: A Matchup Hypothesis Perspective. *Psychology & Marketing*, 11(6), 569–586. <https://doi.org/10.1002/mar.4220110605>
- Kang, H. (2013). The prevention and handling of the missing data. *Korean Journal of Anesthesiology*, 64(5), 402. <https://doi.org/10.4097/kjae.2013.64.5.402>
- Kapferer, J.-N. (1997). Managing luxury brands. *Journal of Brand Management*, 4(4), 251–260.
- Keller, K. L., & Aaker, D. A. (1992). The Effects of Sequential Introduction of Brand Extensions. *Journal of Marketing Research*, 29(1), 35. <https://doi.org/10.2307/3172491>
- Kirchgeorg, M. Prof. D. (2018, February 15). *Kaufabsicht [Purchase Intention]*. Gabler Wirtschaftslexikon - Das Wissen Der Experten. [Gable Business Dictionary - The Knowledge of the Experts]. <https://wirtschaftslexikon.gabler.de/definition/kaufabsicht-37559/version-260993>
- Kotler, P., & Armstrong, G. (2018). *Principles of Marketing* (D. Luiz, Ed.; 17th ed.). Pearson Education Limited .
- Kwak, S. G., & Kim, J. H. (2017). Central limit theorem: the cornerstone of modern statistics. *Korean Journal of Anesthesiology*, 70(2), 144. <https://doi.org/10.4097/kjae.2017.70.2.144>
- Lee, K. (2024). Fame and Celebrity. In *Encyclopedia of Heroism Studies* (pp. 588–592). Springer International Publishing. https://doi.org/10.1007/978-3-031-48129-1_10

- Levy, S. (2024, August 11). *What do millennials, Gen Z think about luxury purchases?* Drug Store News . https://drugstorenews.com/what-do-millennials-gen-z-think-about-luxury-purchases?utm_source=chatgpt.com
- Lovakov, A., & Agadullina, E. R. (2021). Empirically derived guidelines for effect size interpretation in social psychology. *European Journal of Social Psychology, 51*(3), 485–504. <https://doi.org/10.1002/ejsp.2752>
- Lu, S. Q., Seah, Z. Y., Huangfu, S., Nanda, M., & Wang, Z. (2025). Are social media influencers the right choice for global luxury brands? *Journal of Strategic Marketing, 1*–14. <https://doi.org/10.1080/0965254X.2025.2473376>
- Malhotra, N. K., Nunan, D., & Birks, D. F. (2017). *Marketing Research: An Applied Approach* (Vol. 5). Pearson .
- Malodia, S., Singh, P., Goyal, V., & Sengupta, A. (2017). Measuring the impact of brand-celebrity personality congruence on purchase intention. *Journal of Marketing Communications, 23*(5), 493–512. <https://doi.org/10.1080/13527266.2017.1322125>
- MARKETING EVALUATIONS, INC. T. Q. S. C. (2025). *The recognized industry standard for measuring consumer appeal of performers, brand ambassadors, influencers, characters, intellectual properties and brands*. <https://www.qscores.com/performer.html>
- Masadeh, M. A. (2012). Focus Group: Reviews and Practices. *International Journal of Applied Science and Technology, 2*(10), 63–68.
- McCracken, G. (1989). Who is the Celebrity Endorser? Cultural Foundations of the Endorsement Process. *Journal of Consumer Research, 16*(3), 310. <https://doi.org/10.1086/209217>
- McKinsey & Company. (2024). *What is Gen Z?* <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-gen-z#/>
- Merriam-Webster. (2025, March 25). *essence*. Merriam-Webster Est. 1828.
- Meyerowitz, J. (2008). A History of “Gender.” *The American Historical Review, 133*(5), 1346–1356.
- Morrison, D. G. (1979). Purchase Intentions and Purchase Behavior. *Journal of Marketing, 43*(2), 65–74. <https://doi.org/10.1177/002224297904300207>
- Muliadi, B. (2020, July 20). *What The Rise Of TikTok Says About Generation Z*. Forbes.Com. <https://www.forbes.com/councils/forbestechcouncil/2020/07/07/what-the-rise-of-tiktok-says-about-generation-z/>

- Muniz, F., & Guzmán, F. (2021). Overcoming the conflicting values of luxury branding and CSR by leveraging celebrity endorsements to build brand equity. *Journal of Brand Management*, 28(3), 347–358. <https://doi.org/10.1057/s41262-021-00230-0>
- Neufeld, D. (2021, November 8). *There are 1.8 billion millennials on earth. Here's where they live*. World Economic Forum. <https://www.weforum.org/stories/2021/11/millennials-world-regional-breakdown/>
- nielseniq.com. (2024, October 10). *Navigating beauty trends across generations: A glimpse into our latest report*. <https://nielseniq.com/global/en/insights/commentary/2024/navigating-beauty-trends-across-generations-a-glimpse-into-our-latest-report/>
- Noenickx, C. (2023, December 20). *The picky buying habits of Gen Z consumers*. <https://www.bbc.com/worklife/article/20231218-the-picky-buying-habits-of-gen-z-consumers#>
- Ohanian, R. (1991). The impact of celebrity spokespersons' perceived image on consumers' intention to purchase. *Journal of Advertising Research*, 31(1), 46–54.
- Peters, K., Chen, Y., Kaplan, A. M., Ognibeni, B., & Pauwels, K. (2013). Social Media Metrics — A Framework and Guidelines for Managing Social Media. *Journal of Interactive Marketing*, 27(4), 281–298. <https://doi.org/10.1016/j.intmar.2013.09.007>
- Petruzzi, D. (2024, November 14). *Leading beauty shopping destinations among Gen Z in the United States in 2024*. Statista.Com. <https://www.statista.com/aboutus/our-research-commitment/3185/d-petruzzi>
- Petty, R. E., & Cacioppo, J. T. (1986). The Elaboration Likelihood Model of Persuasion. In *Advances in Experimental Social Psychology* (pp. 123–205). American Press, Inc. [https://doi.org/10.1016/S0065-2601\(08\)60214-2](https://doi.org/10.1016/S0065-2601(08)60214-2)
- Pezoldt, K., Schlieve, J., & Willbrandt, K. W. (2010). Sexualdimorphismen im Kaufentscheidungsprozess [Sexual dimorphisms in the purchasing decision process]. *International Journal of Marketing*, 49(3–4), 185–199. <https://doi.org/10.1007/s12642-010-0040-9>
- PowerReviews.com. (2023). *Health and Beauty Shopping Trends in 2023*. <https://www.powerreviews.com/research/health-beauty-shopping-trends-2023/millennial-beauty-shopping/>
- Roy, S. (2018). Meaning transfer in celebrity endorsements: an explanation using metaphors. *Journal of Marketing Communications*, 24(8), 843–862. <https://doi.org/10.1080/13527266.2016.1197294>

- Sandler, E. (2025, January 8). *How to Keep the Gen-Z Fragrance Boom Going*. Business of Fashion . <https://www.businessoffashion.com/articles/beauty/how-to-keep-the-gen-z-fragrance-boom-going/>
- Schimansky, A., & Oloko, S. (2021). *Die Macht der Meinungsführer - Von Celebrities bis zu Influencern [The Power of Opinion Leaders - from Celebrities to Influencers]* (1st ed.). Frankfurter Allgemeine Buch .
- Schimmelpfennig, C. (2018). Who is the Celebrity Endorser? A Content Analysis of Celebrity Endorsements. *Journal of International Consumer Marketing*, 30(4), 220–234. <https://doi.org/10.1080/08961530.2018.1446679>
- Schimmelpfennig, C., & Hunt, J. B. (2020). Fifty years of celebrity endorser research: Support for a comprehensive celebrity endorsement strategy framework. *Psychology and Marketing*, 37(3), 488–505. <https://doi.org/10.1002/mar.21315>
- Schouten, A. P., Janssen, L., & Verspaget, M. (2021). Celebrity vs. Influencer endorsements in advertising: the role of identification, credibility, and Product-Endorser fit. In S. Yoon, C. R. Taylor, & Y. K. Choi (Eds.), *Leveraged Marketing Communications, The Importance of Studying the Transfer of Object-to-Brand Associations* (1st ed., pp. 208–230). Routledge. <https://doi.org/10.4324/9781003155249>
- Shim, J., Woo, J., Yeo, H., Kang, S., Kwon, B., Jung Lee, E., Oh, J., Jeong, E., Lim, J., & Gyoo Park, S. (2024). The Clean Beauty Trend Among Millennial and Generation Z Consumers: Assessing the Safety, Ethicality, and Sustainability Attributes of Cosmetic Products. *Sage Open*, 14(2). <https://doi.org/10.1177/21582440241255430>
- Silverman, C. (2023, October 3). *I'm Sorry, but the #PerfumeTok Influencers Have Got It All Wrong*. <https://www.cosmopolitan.com/style-beauty/beauty/a45244847/perfume-aesthetics-tiktok/>
- Simonin, B. L., & Ruth, J. A. (1998). Is a Company Known by the Company It Keeps? Assessing the Spillover Effects of Brand Alliances on Consumer Brand Attitudes. *Journal of Marketing Research*, 35(1), 30. <https://doi.org/10.2307/3151928>
- Sirgy, M. J. (1985). Using self-congruity and ideal congruity to predict purchase motivation. *Journal of Business Research*, 13(3), 195–206. [https://doi.org/10.1016/0148-2963\(85\)90026-8](https://doi.org/10.1016/0148-2963(85)90026-8)
- Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues and Research in Advertising*, 26(2), 53–66. <https://doi.org/10.1080/10641734.2004.10505164>

- Spry, A., Pappu, R., & Bettina Cornwell, T. (2011). Celebrity endorsement, brand credibility and brand equity. *European Journal of Marketing*, 45(6), 882–909.
<https://doi.org/10.1108/03090561111119958>
- Statista Research Department. (2024, October 28). *Generation Z - was kennzeichnet die Gen Z? [Generation Z - What characterizes Gen Z?]*.
<https://de.statista.com/themen/5349/generation-z/>
- Statista Research Department. (2025, March 3). *Share of global consumers purchasing cosmetics and beauty products online in 2024, by generation*. Statista.Com.
<https://www.statista.com/statistics/1339362/consumers-purchasing-beauty-products-online-generation/>
- Till, B. D., & Busler, M. (2000). The Match-Up Hypothesis: Physical Attractiveness, Expertise, and the Role of Fit on Brand Attitude, Purchase Intent and Brand Beliefs. *Journal of Advertising*, XXIX(3), 1–13.
- Tripp, C., Jensen, T. D., & Carlson, L. (1994). The Effects of Multiple Product Endorsements by Celebrities on Consumers' Attitudes and Intentions. *Journal of Consumer Research*, 20(4), 535. <https://doi.org/10.1086/209368>
- Twenge, J. M. (2023). *Generations: The Real Differences Between Gen Z, Millennials, Gen X, Boomers, and Silents—and What They Mean for America's Future*. Simon & Schusters .
- University of Oxford. (2025). *Gender identity survey questions*.
<https://edu.admin.ox.ac.uk/gender-identity-survey-questions#collapse1112746>
- Upton-Clark, E. (2024, October 24). *Smells like teen spirit - Inside Gen Z's obsession with luxury fragrances*. Businessinsider.Com. <https://www.businessinsider.com/gen-z-luxury-perfume-obsession-tiktok-fragrance-teen-boys-branding-2024-10>
- Van Der Wielen, R. (2022). *Celebrity endorsement in the new era of influencer marketing: understanding the impact of advertisement type, endorser type, and level of congruency on consumers' attitudes*. UNIVERSITY OF TWENTE.
- von Mettenheim, W., & Wiedmann, K. P. (2021). The complex triad of congruence issues in influencer marketing. *Journal of Consumer Behaviour*, 20(5), 1277–1296.
<https://doi.org/10.1002/cb.1935>
- Walgenbach, K. (2021). Gender als interdependente Kategorie [Gender as interdependent category]. In *Handbuch Intersektionalitätsforschung [Handbook Intersectionality research]* (pp. 1–15). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-26613-4_12-1

- Wang, S., & Liu, M. T. (2023). Celebrity endorsement in marketing from 1960 to 2021: a bibliometric review and future agenda. *Asia Pacific Journal of Marketing and Logistics*, 35(4), 849–873. <https://doi.org/10.1108/APJML-12-2021-0918>
- Weisbrod, B. (2005). Generation und Generationalität in der Neueren Geschichte [Generation and generationality in modern history]. In *Aus Politik und Zeitgeschichte [Politics and modern History]*. Bundeszentrale für politische Bildung [Federal Agency for Civic Education].
- Wiechmann, A. (2025). *Gender*. Bundesministerium Für Wirtschaftliche Zusammenarbeit Und Entwicklung [Federal Ministry for Economic Cooperation and Development]. <https://www.bmz.de/de/service/lexikon/gender-14414>
- Willems, W. (2023, February 3). *So veränderte sich die Generationsdauer in der Menschheitsgeschichte [How the duration of generations has changed in human history]*. GEO Wissen .
- Wilson, B. (2019). Book Review: Marketing to Gen Z: The Rules for Reaching This Vast and Very Different Generation of Influencers. *Journal of Macromarketing*, 39(2), 228–230. <https://doi.org/10.1177/0276146719830156>
- Yolanda Veybitha, Sari Sakarina, Frecilia Nanda Melvani, Muhni Pamuji, & Nur Resma Arianti. (2023). Meta-analysis: The Influence of celebrity endorsements on Generation Z's Online Purchasing Decisions. *International Journal of Management and Business Economics*, 2(1), 54–59. <https://doi.org/10.58540/ijmebe.v2i1.476>

Appendices

Appendix 1 – Focus Group

	Birth Year	Generation	Gender	Nationality	Education	Interest in Fragrance
Participant 1	2000	Gen Z	female	Austrian	Bachelors Degree	Buys more than one fragrance each year
Participant 2	1991	Gen Y	female	German	State Examination	Wears perfume every day
Participant 3	1987	Gen Y	male	German	Masters Degree	Bought fragrance because of celebrity endorsements
Participant 4	1998	Gen Z	female	American	Masters Degree	Just bought the new YSL Black Opium Glitter Perfume
Participant 5	2003	Gen Z	male	Austrian	Masters Degree	Likes unisex fragrances especially from Tom Ford
Participant 6	1996	Gen Z	male	English	Bachelors Degree	Preferes fresh scents and niche perfumes
Participant 7	1983	Gen Y	female	German	Bachelors Degree	Loves classic fragrances ie. Chanel N°5, loyal brand customer

Appendix 1.1 – Discussion Guideline

1. Introduction: (7 minutes)

- Summary of procedure: max. one hour, one moderator, a laptop used for showing pictures, a pencil and a questionnaire in front are needed, anonymous as names are not stated in the thesis
- Discussion rules: no right or wrong answers, interested in own opinion, do not interrupt others while talking, interact with others in the discussion
- Getting to know each other: please tell us your age, your nationality, and your consumption habit of fragrance, favorite fragrance
- Research topic: celebrity endorsement in fragrance, impact of familiarity & gender, unisex fragrance

2. Kick Off (10 min)

- Name collection: When you think about fragrances, please write down all the celebrities that come to your mind. You have 30 seconds.
- Please talk us through the names you wrote down and why they popped up in your head
- The moderator collects the names that were mentioned on a paper and hands out the questionnaire to the participants
- Ask participants about what is important for them in terms of fragrance endorsement. What do they pay attention to when trying/ buying a new fragrance? What makes a good celebrity endorser match for them?
- Can you think of a very successful endorsement? What makes it so successful for you?

3. Familiarity assessment (10 min)

- The moderator states the 10 names that are to be evaluated
- Participants of the group are now asked to fill in the names in the questionnaire and evaluate their familiarity with each of them.

- Once that is done, there is a short open discussion about the scores.
 - Ask if they think that familiarity is important in endorsement
4. Fragrance bottle decision (10 min)
- The moderator shows the two different fragrance bottles to the audience
 - Open discussion about their opinion on which design is the better option in regard to unisex fragrance, attractiveness, and purchase intent.
 - Discussion about the potential design for advertisement
 - Concluding on one bottle to proceed to the congruence assessment
 -
5. Congruence assessment (10 min)
- Participants are now asked to discuss in the context of the chosen fragrance and the familiar and unfamiliar celebrities noted down on their questionnaire, which they think would be good or bad endorsers for the fragrance
 - How well does the celebrity fit with the displayed fragrance?
 - How credible does this combination appear as an authentic advertisement?
 - To what extent does this combination influence your purchase intention for the fragrance?
 - What thoughts, emotions, or associations do you have regarding this specific combination?
 - Which attributes must they cover to be successful?
 - Can you think of other celebrities they know from all kinds of different areas (music, acting, politics, sport, etc.), that would be a bad match for this fragrance and why?
 - Can you think of any bad brand–celebrity match, not only in fragrance advertising? Why?
 - Do you think a celebrity’s persona and the image they have (e.g., sporty, sexy, political, etc) influences their credibility as a fragrance endorser?”
6. Final Stimuli findings (10 min)
- summarizing the ratings and discussion trends.
 - Participants are asked to pick their top choices for each category, and afterwards, it’s discussed in the group which combinations are chosen for the survey.
- High Familiarity – High Congruence:
 - High Familiarity – Low Congruence:
 - Low Familiarity – High Congruence:
 - Low Familiarity – Low Congruence
7. Wrap Up (2 min)
- Thanking them for their participation in the discussion
 - Informing them how their insights are used in the study

Appendix 1.2 – Results of the discussion

To begin with, the participants introduced themselves. The age range was from 22 to 42 years. All of them showed strong interest in fragrances, with different preferences in brand or smell. For example, person 6 (P6) talked about his interest in niche brands, whereas P7 showed a high brand loyalty to timeless, established fragrances like Chanel n°5. Writing down names of

celebrities they knew in the context of fragrance endorsement, 35 names were listed of which the following celebrities were named twice: Cate Blanchett, Zendaya, Rihanna, Julia Roberts, and Brad Pitt. It was interesting to see that P1, P4, and P5, all belonging to Gen Z primarily named current celebrities like Tom Holland, Dua Lipa or Olivia Rodrigo, compared to P7 or P2, who rather named traditional celebrities like Charlize Theron, Johnny Depp, or David Beckham. Asking about what is important in celebrity endorsement, P4 stated *“I pay attention to whether the celebrity genuinely uses the product or if it just feels like a marketing ploy”*, whereas P1 stated that she looks for general aesthetics transferred by product and celebrity. P5 indicated that for him, it is about the endorser's credibility, where he has a higher interest in the product if he likes the endorser. Regarding trying out new fragrances, they stated that they get their inspiration from social media influencers or TikTok channels. P7 stated that she reads a lot of women's magazines i.e. Gala, in which she often sees advertisements and then remembers the shown fragrance when she is in the perfume store. They also talked about the design of the bottle, which needs to be attention-catching to try it out. After evaluating the 10 celebrities, it became clear that the younger participants are especially familiar with current pop culture personalities such as Olivia Rodrigo (avg. 6 points) or Zendaya (7 points) whereas traditional celebrities such as Cate Blanchett scored decisively less, among them. Participants born within the 1990s however, indicated a much higher awareness of Brad Pitt or Cate Blanchett than of Dua Lipa (4 points) or Austin Butler (3 points). In the discussion, P3 stated, *“I think I've heard the name before, but I can't put a face to it”* while talking about Olivia Rodrigo. When asked about the fragrance design, the group decided relatively quickly and unanimously that option A was better. This was justified by the fact that the design looks more *“gender neutral”* (P3), has a more *“modern look”* (P5), and *“appears cleaner”* (P6). It was also stated that it looks like a fragrance that can be *“shared with the partner”* (P6). The option *“Wood Whisperer”* appeared to be gender-linked due to its color, and the name seemed more male-targeted, where the name recalled images such as *“forest”*, *“wood chopping”*, and *“mystic”* (P1). Agreeing on *“Essence”* as the new unisex fragrance, it was then discussed which of the celebrities named before would be a good match for the fragrance. The moderator also asked if they could think about any celebrity or famous person who would be an unqualified match. P2 argued that for the shown fragrance, she sees a celebrity like Cate Blanchett or Brad Pitt as a good fit as they stand for timelessness. P1 on the other hand stated that it should not lean too heavily into gender stereotypes and someone who fits the minimalistic, elegant look. When asking about matches that would not be working P4 stated that an artist who is covered in tattoos would probably not match, as it conveys a different image. P7 said that comedic actors like *“Adam Sandler or Kevin Hart”* would also not match as they do not stand for *“beauty and sophistication”*. P6 also stated that if a sports endorser is to promote the product, it should be from an *“old money”* sport like tennis or sailing, as the term is currently trending on social media and as it looks more congruent than someone who does, for example, boxing. Here, P6 named Jake Paul as a negative example, known for *“provocative very masculine behavior.”* Since the other group members had not heard of him before, it indicated a good match for the low x low stimuli. As another low x low match, P3 mentioned the country singer Luke Combs, as he said that he is a niche singer and has a *“crusty outback”* image, rather than a fresh and clean appearance. Finally, participants discussed the four stimuli for each category. P4 said that a good endorser should not be too *“masculine or feminine”*, as well as somehow connected to an elegant fashion image. P3 raised the concern that it could be misleading if there is a unisex fragrance but then a female face on the picture. Hereby, as a good match but not yet very familiar person, P1 named the German actor Jannis Niewöhner, who already had some fashion deals and appears at designer PR events. Another idea was the transgender actress Hunter Schafer (P3), who was already the face of Mugler fragrances but was not yet very well-known, especially among the older participants. They all agreed that a perfect match for Cate Blanchett would be, as she is a well-known actress

among both generations and has been the face of Armani Beauty for decades. For a bad match, with high familiarity, they agreed on Adam Sandler, who stands a “goofy” and “sloppy” image (P5) but was very well known among different generations for his movies like “Just Go With It” or “Grown Ups”. Finally, after concluding the faces for the stimuli, it was discussed what the advertisement could look like. Thereby, the focus group was shown different design examples on Canva. They stated that the advertisement should be very clean and uniform, as the bottle design was also very clean. They also suggested a black-and-white visual of the faces because it would make it easier to focus on the bottle.

Appendix 1.3 – Questionnaire

Title: Questionnaire on Celebrity Familiarity and Congruence Assessment.

Date: March 24th, 2025

Note: This questionnaire is designed to determine which celebrities are best suited as endorsers for experimental stimuli in my thesis. Please answer all questions as honestly and precisely as possible

Section I: Celebrity Association (Free Listing)

1. Task (Duration: 30 seconds):

Please list all the celebrity names that come to mind when you think of celebrity endorsements in luxury fragrance advertising.

○

○

(You may list as many names as you can think of.)

Section II: Evaluation of the Mentioned Celebrities

For each celebrity that is named now, please write down their given name and provide the following evaluations:

Celebrity 1:

1. How familiar are you with ____?

(1 = Not at all familiar, 7 = extremely familiar)

○ 1 2 3 4 5 6 7

2. How well do you think ____ fits as an endorser for luxury fragrances?

(1 = Not at all fitting, 7 = Extremely fitting)

○ 1 2 3 4 5 6 7

3. Please briefly explain your rating:

Celebrity 2:

4. How familiar are you with ____?

(1 = Not at all familiar, 7 = extremely familiar)

○ 1 2 3 4 5 6 7

5. How well do you think ____ fits as an endorser for luxury fragrances?

(1 = Not at all fitting, 7 = Extremely fitting)

○ 1 2 3 4 5 6 7

6. Please briefly explain your rating:

Celebrity 3:

7. **How familiar are you with ____?**
(1 = Not at all familiar, 7 = extremely familiar)
 1 2 3 4 5 6 7
8. **How well do you think ____ fits as an endorser for luxury fragrances?**
(1 = Not at all fitting, 7 = Extremely fitting)
 1 2 3 4 5 6 7
9. **Please briefly explain your rating:**

Celebrity 4:

10. **How familiar are you with ____?**
(1 = Not at all familiar, 7 = extremely familiar)
 1 2 3 4 5 6 7
11. **How well do you think ____ fits as an endorser for luxury fragrances?**
(1 = Not at all fitting, 7 = Extremely fitting)
 1 2 3 4 5 6 7
12. **Please briefly explain your rating:**

Celebrity 5:

13. **How familiar are you with ____?**
(1 = Not at all familiar, 7 = extremely familiar)
 1 2 3 4 5 6 7
14. **How well do you think ____ fits as an endorser for luxury fragrances?**
(1 = Not at all fitting, 7 = Extremely fitting)
 1 2 3 4 5 6 7
15. **Please briefly explain your rating:**

Celebrity 6:

16. **How familiar are you with ____?**
(1 = Not at all familiar, 7 = extremely familiar)
 1 2 3 4 5 6 7
17. **How well do you think ____ fits as an endorser for luxury fragrances?**
(1 = Not at all fitting, 7 = Extremely fitting)
 1 2 3 4 5 6 7
18. **Please briefly explain your rating:**

Celebrity 7:

19. **How familiar are you with ____?**
(1 = Not at all familiar, 7 = extremely familiar)
 1 2 3 4 5 6 7
20. **How well do you think ____ fits as an endorser for luxury fragrances?**
(1 = Not at all fitting, 7 = Extremely fitting)
 1 2 3 4 5 6 7
21. **Please briefly explain your rating:**

Celebrity 8:

22. **How familiar are you with ____?**
(1 = Not at all familiar, 7 = extremely familiar)
 1 2 3 4 5 6 7
23. **How well do you think ____ fits as an endorser for luxury fragrances?**
(1 = Not at all fitting, 7 = Extremely fitting)
 1 2 3 4 5 6 7
24. **Please briefly explain your rating:**

Celebrity 9:

25. **How familiar are you with ____?**
(1 = Not at all familiar, 7 = extremely familiar)
 1 2 3 4 5 6 7
26. **How well do you think ____ fits as an endorser for luxury fragrances?**
(1 = Not at all fitting, 7 = Extremely fitting)
 1 2 3 4 5 6 7
27. **Please briefly explain your rating:**

Celebrity 10:

28. How familiar are you with ____?
(1 = Not at all familiar, 7 = extremely familiar)
○ 1 2 3 4 5 6 7
29. How well do you think ____ fits as an endorser for luxury fragrances?
(1 = Not at all fitting, 7 = Extremely fitting)
○ 1 2 3 4 5 6 7
30. Please briefly explain your rating:

Section III: Evaluation of Celebrity and Fragrance Combinations

Please choose one of the discussed celebrities for each category of stimuli for the experiment:

1. High Familiarity & High Product Match:
2. Low Familiarity & High Product Match:
3. High Familiarity & Low Product Match:
4. Low Familiarity & Low Product Match:

Appendix 1.4 – Fragrance Design Options



Source: Sephora.com; Douglas.de

Appendix 2 – Survey

Start of Block: Introduction

Thank you for taking the time to support this research study as part of my master's thesis as a marketing management student at Católica Lisbon School of Business and Economics. The survey **takes about 4 minutes to complete**. Your answers will remain completely anonymous, ensuring that your privacy is protected. Please note that once you have answered a question, you won't be able to withdraw your answer. Your participation is greatly appreciated and will be instrumental in advancing this research.

Page Break

Qualifying Question: Did you buy any perfume in the last two years (for yourself or as a gift)?

- Yes
- No

Skip To: End of Survey If Did you buy any perfume in the last two years (for yourself or as a gift)? = No

Page Break

Generation Q: Between which years were you born?

- before 1981
- 1981-1995
- 1996 - 2010
- 2011 and onwards

Skip To: End of Survey If Between which years were you born? = before 1981

Skip To: End of Survey If Between which years were you born? = 2011 and onward

Page Break

Frequency of buying: How frequently do you buy perfume?

- Every few months
- Once a year
- More than once a year
- Every other year

Page Break

Money spent: How much money do you approximately spend per 50ml perfume?

Money spent in €



Page Break

Numbers used: How many different perfumes (Eau de Parfum, Le Parfum, Eau de Toilette) do you currently use?

Number of perfumes currently used



Page Break

Endorser Purchase: How frequently do you purchase a perfume because of the person advertising it?

- Never
- Rarely
- Every once in a while
- Sometimes
- Almost always

End of Block: Introduction

Start of Block: Stimuli Introduction

You are now seeing an advertisement for a **new unisex fragrance**. Please take a close look at the advertisement and read the product description. Then please answer the following questions.

End of Block: Stimuli Introduction

Start of Block: Stimuli – Control



Essence – A Fragrance Without Limits Step into the boundless horizon where light meets earth, where warmth and freshness intertwine. Essence is a captivating **unisex fragrance** that blends the grounding depth of **sandalwood** with the **luminous zest of bergamot**. A scent of balance—serene yet bold, timeless yet modern. Encased in an elegantly minimalist bottle, Essence evokes the purity of nature and the sophistication of effortless style. It is more than a fragrance—it is an invitation to explore, to breathe, to embrace the infinite.

Page Break

Manipulate Control: Does the advertisement you saw feature a celebrity?

- Yes
- No

Skip To: End of Survey If Does the advertisement you saw feature a celebrity? = Yes

End of Block: Stimulus - Control

Start of Block: Stimuli

Note: each participant is just shown one of the key visuals, including a name & job description – All were asked the same manipulation and attention questions

Cate Blanchett, high familiarity x high congruence



Adam Sandler, low congruence x high familiarity



Hunter Schafer, low familiarity x high congruence



Luke Combs, low congruence x low familiarity

Essence – A Fragrance Without Limits Step into the boundless horizon where light meets earth, where warmth and freshness intertwine. Essence is a captivating **unisex fragrance** that blends the grounding depth of **sandalwood** with the **luminous zest of bergamot**. A scent of balance—serene yet bold, timeless yet modern. Encased in an elegantly minimalist bottle, Essence evokes the purity of nature and the sophistication of effortless style. It is more than a fragrance—it is an invitation to explore, to breathe, to embrace the infinite.

Page Break

Manipulate Q: Does the advertisement you saw feature a celebrity?

- Yes
- No

Skip To: End of Survey If Does the advertisement you saw feature a celebrity? = No

Page Break

Please indicate how familiar you are with the shown celebrity

	extremely unfamiliar	unfamiliar	somewhat unfamiliar	neutral	somewhat familiar	familiar	extremely familiar
I am familiar with the shown person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Please indicate if you recognized the shown celebrity

	extremely unrecogniz ed	unrecogniz ed	somewhat unrecogniz ed	neutra l	somewha t recognize d	recognize d	extremel y recognize d
I recognize d the shown person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Please indicate if you have heard of that shown celebrity before

	definitely never heard of before	never heard of before	somewhat never heard of before	neutral	somewhat heard of before	heard of before	definitely heard of before
I have heard of the person before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Attention_Q: What is the name of the fragrance you just saw?

- Essence
- Chanel n°4
- Sauvage
- Aqua di Gio

Skip To: End of Survey If What is the name of the fragrance you just saw ? != Essence

Page Break

Please rate how suitable you think this celebrity shown in the advertisement is for endorsing ESSENCE

	extremely bad	bad	somewhat bad	neutral	somewhat good	good	extremely good
Fit of the person for the shown perfume	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Please rate how logical you find the match between the celebrity shown as an endorser and ESSENCE

	extremely unlogic	unlogic	somewhat unlogic	neutral	somewhat logic	logic	extremely logic
Logic of the Celebrity - Perfume match	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Please rate how appropriate you think it is for this celebrity to advertise ESSENCE

	extremely inappropriate	inappropriate	somewhat inappropriate	neutral	somewhat appropriate	appropriate	extremely appropriate
Suitability of the match	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Stimuli -

Start of Block: Purchase Intent

Purchase intent: Regardless of the celebrity gender you saw, based on the advertisement and the description for the new fragrance, please rate the three statements

	extremely low	low	more or less low	neutral	more or less high	high	extremely high
My likelihood of purchasing Essence is...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The probability that I would try Essence is...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My willingness to purchase Essence is...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Purchase Intent

Start of Block: Demographics

Gender: Which of the following best describes your gender?

- Male
- Female
- Non-binary
- Prefer not to say
- Other

Education: What is your educational level?

- High school diploma or less
- Some college or associate degree
- Bachelor's degree
- Postgraduate degree (e.g., Master's, Ph.D.)
- Prefer not to say

Net Income: What is your monthly net income?

- Under €500
- €500 - €999
- €1,000 - €1,999
- €2,000 - €2,999
- €3,000 and above
- Prefer not to say

Occupation: What is your current occupation?

- Employed
- Self employed
- Student
- Student & employed
- Unemployed: not working and looking for work
- Unemployed: not working and not looking for work
- Retired
- Unable to work

Nationality: What is your nationality?

- German
- Austrian
- Swiss
- Dutch
- French
- British
- American
- Portuguese
- other

Appendix 3 – Manipulation check

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
MEAN_PI	Based on Mean	1,979	4	278	,098
	Based on Median	2,018	4	278	,092
	Based on Median and with adjusted df	2,018	4	273,436	,092
	Based on trimmed mean	1,993	4	278	,096

ANOVA

MEAN_PI

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	34,580	4	8,645	3,733	,006
Within Groups	643,850	278	2,316		
Total	678,430	282			

ANOVA Effect Sizes^{a,b}

		Point Estimate	95% Confidence Interval	
			Lower	Upper
MEAN_PI	Eta-squared	,051	,005	,097
	Epsilon-squared	,037	-,009	,084
	Omega-squared Fixed-effect	,037	-,009	,084
	Omega-squared Random-effect	,010	-,002	,022

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

Appendix 3.1 – Multicollinearity

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,121	,942		,129	,898		
	Generation_REC	,170	,319	,060	,534	,596	,931	1,075
	Gender_REC	-,336	,313	-,118	-1,074	,287	,964	1,038
	MEAN_FAM_CB	,025	,092	,031	,269	,789	,859	1,165
	MEAN_CON_CB	,774	,152	,576	5,098	<,001	,910	1,098

a. Dependent Variable: MEAN_PI

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	Generation_RE C	Gender_REC	MEAN_FAM_C B	MEAN_CON_C B
1	1	3,996	1,000	,00	,02	,02	,01	,00
	2	,517	2,780	,00	,18	,74	,00	,00
	3	,410	3,121	,00	,61	,13	,05	,01
	4	,061	8,113	,06	,11	,08	,93	,14
	5	,016	15,666	,93	,09	,04	,01	,85

a. Dependent Variable: MEAN_PI

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	2,2204	5,7111	4,4111	,86061	60

Appendices 1 - Multicollinearity Check

Appendix 3.2 – Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
How frequently do you buy perfume?	335	1	4	2,57	1,233
How much money do you approximately spend per 50ml perfume? – Money spent in €	335	4,00	200,00	61,0418	35,09847
How many different perfumes do you currently use? – Number of perfumes currently used	335	1,00	15,00	3,3761	2,38421
MEAN_FAM_CB	60	1,00	7,33	4,9667	1,81820
MEAN_CON_CB	60	2,33	7,00	5,4667	1,06688
MEAN_FAM_HS	47	1,00	7,00	3,6878	2,12783
MEAN_CON_HS	46	1,00	7,00	5,3841	1,19664
MEAN_FAM_AS	60	1,00	7,00	6,1222	,99900
MEAN_CON_AS	60	1,00	7,00	4,0167	1,65979
MEAN_FAM_LC	57	1,00	7,00	3,2281	1,92638
MEAN_CON_LC	57	1,00	6,67	4,0058	1,32361
MEAN_PI	283	1,00	7,00	3,9929	1,55106
Valid N (listwise)	0				

Experimental Condition

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Cate Blanchett	66	19,7	19,7	19,7
Hunter Schafer	68	20,3	20,3	40,0
Adam Sandler	65	19,4	19,4	59,4
Luke Combs	68	20,3	20,3	79,7
Control Group	68	20,3	20,3	100,0
Total	335	100,0	100,0	

Which of the following best describes your gender? – Selected Choice

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	128	38,2	45,2	45,2
Female	152	45,4	53,7	98,9
Non-binary	2	,6	,7	99,6
Other	1	,3	,4	100,0
Total	283	84,5	100,0	
Missing System	52	15,5		
Total	335	100,0		

Frequencies

Statistics

	N	Valid	Missing
how frequently do you buy because of the endorser?	335		
		335	0

how frequently do you buy because of the endorser?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1	97	29,0	29,0	29,0
2	112	33,4	33,4	62,4
3	65	19,4	19,4	81,8
4	13	3,9	3,9	85,7
6	48	14,3	14,3	100,0
Total	335	100,0	100,0	

Experimental Condition * Which of the following best describes your gender? – Selected Choice Crosstabulation

		Which of the following best describes your gender? – Selected Choice					
		Male	Female	Non-binary	Other	Total	
Experimental Condition	Cate Blanchett	Count	28	32	0	0	60
		% within Experimental Condition	46,7%	53,3%	0,0%	0,0%	100,0%
Hunter Schafer	Count	17	27	1	1	46	
	% within Experimental Condition	37,0%	58,7%	2,2%	2,2%	100,0%	
Adam Sandler	Count	32	26	1	0	59	
	% within Experimental Condition	54,2%	44,1%	1,7%	0,0%	100,0%	
Luke Combs	Count	25	32	0	0	57	
	% within Experimental Condition	43,9%	56,1%	0,0%	0,0%	100,0%	
Control Group	Count	26	35	0	0	61	
	% within Experimental Condition	42,6%	57,4%	0,0%	0,0%	100,0%	
Total	Count	128	152	2	1	283	
	% within Experimental Condition	45,2%	53,7%	0,7%	0,4%	100,0%	

What is your educational level?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid High school diploma or less	21	6,3	7,4	7,4
Some college or associate degree	46	13,7	16,3	23,7
Bachelor's degree	125	37,3	44,2	67,8
Postgraduate degree (e.g., Master's, Ph.D.)	87	26,0	30,7	98,6
Prefer not to say	4	1,2	1,4	100,0
Total	283	84,5	100,0	
Missing System	52	15,5		
Total	335	100,0		

What is your current occupation?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Employed	176	52,5	62,2	62,2
Self employed	22	6,6	7,8	70,0
Student	33	9,9	11,7	81,6
Unemployed: not working and looking for work	12	3,6	4,2	85,9
Unemployed: not working and not looking for work	1	,3	,4	86,2
Unable to work	1	,3	,4	86,6
Student & employed	38	11,3	13,4	100,0
Total	283	84,5	100,0	
Missing System	52	15,5		
Total	335	100,0		

What is your monthly net income?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Under €500	26	7,8	9,2	9,2
€500 – €999	40	11,9	14,1	23,3
€1,000 – €1,999	62	18,5	21,9	45,2
€2,000 – €2,999	70	20,9	24,7	70,0
€3,000 and above	71	21,2	25,1	95,1
Prefer not to say	14	4,2	4,9	100,0
Total	283	84,5	100,0	
Missing System	52	15,5		
Total	335	100,0		

What is your nationality? – Selected Choice

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid German	103	30,7	36,4	36,4
Austrian	20	6,0	7,1	43,5
Swiss	6	1,8	2,1	45,6
Dutch	2	,6	,7	46,3
French	4	1,2	1,4	47,7
British	25	7,5	8,8	56,5
American	27	8,1	9,5	66,1
Portuguese	7	2,1	2,5	68,6
other	89	26,6	31,4	100,0
Total	283	84,5	100,0	
Missing System	52	15,5		
Total	335	100,0		

Appendix 3.3 – Reliability

		N	%
Cases	Valid	60	17,9
	Excluded ^a	275	82,1
Total		335	100,0

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

Reliability Statistics	
Cronbach's Alpha	N of Items
,873	3

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	47	14,0
	Excluded ^a	288	86,0
Total		335	100,0

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

Reliability Statistics	
Cronbach's Alpha	N of Items
,968	3

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	46	13,7
	Excluded ^a	289	86,3
Total		335	100,0

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

Reliability Statistics	
Cronbach's Alpha	N of Items
,938	3

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	60	17,9
	Excluded ^a	275	82,1
Total		335	100,0

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

Reliability Statistics

Cronbach's Alpha		N of Items
,948		3

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	283	84,5
	Excluded ^a	52	15,5
Total		335	100,0

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

Reliability Statistics

Cronbach's Alpha		N of Items
,922		3

Reliability

Scale: ALL VARIABLES

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	60	17,9
	Excluded ^a	275	82,1
Total		335	100,0

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

Reliability Statistics

Cronbach's Alpha		N of Items
,897		3

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	60	17,9
	Excluded ^a	275	82,1
Total		335	100,0

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

Reliability Statistics

Cronbach's Alpha		N of Items
,929		3

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	57	17,0
	Excluded ^a	278	83,0
Total		335	100,0

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

Reliability Statistics

Cronbach's Alpha		N of Items
,930		3

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	57	17,0
	Excluded ^a	278	83,0
Total		335	100,0

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

Reliability Statistics

Cronbach's Alpha		N of Items
,896		3

Appendix 4 – Hypothesis 1a &b

Oneway

ANOVA

MEAN_PI

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	32,450	3	10,817	4,640	,004
Within Groups	508,160	218	2,331		
Total	540,609	221			

ANOVA Effect Sizes^{a,b}

	Point Estimate	95% Confidence Interval	
		Lower	Upper
MEAN_PI Eta-squared	,060	,007	,120
Epsilon-squared	,047	-,006	,108
Omega-squared Fixed-effect	,047	-,006	,107
Omega-squared Random-effect	,016	-,002	,039

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

Post Hoc Tests

Multiple Comparisons

Dependent Variable: MEAN_PI
Bonferroni

(I) Experimental Condition	(J) Experimental Condition	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Cate Blanchett	Hunter Schafer	,22995	,29921	1,000	-,5667	1,0266
	Adam Sandler	,60885	,27993	,184	-,1365	1,3542
	Luke Combs	,99006*	,28239	,003	,2382	1,7419
Hunter Schafer	Cate Blanchett	-,22995	,29921	1,000	-1,0266	,5667
	Adam Sandler	,37890	,30030	1,000	-,4207	1,1785
	Luke Combs	,76011	,30260	,076	-,0456	1,5658
Adam Sandler	Cate Blanchett	-,60885	,27993	,184	-1,3542	,1365
	Hunter Schafer	-,37890	,30030	1,000	-1,1785	,4207
	Luke Combs	,38121	,28356	1,000	-,3738	1,1362
Luke Combs	Cate Blanchett	-,99006*	,28239	,003	-1,7419	-,2382
	Hunter Schafer	-,76011	,30260	,076	-1,5658	,0456
	Adam Sandler	-,38121	,28356	1,000	-1,1362	,3738

*. The mean difference is significant at the 0.05 level.

Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3,988	,199		20,043	<,001		
	Generation_REC	-,239	,189	-,075	-1,269	,206	,989	1,011
	Gender_REC	-,099	,185	-,032	-,538	,591	,988	1,012
	HighCongruence_Celebrities	,528	,196	,165	2,699	,007	,936	1,069
	HighFam_Celebrities	,039	,192	,012	,200	,841	,927	1,079

a. Dependent Variable: MEAN_PI

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	Generation_REC	Gender_REC	HighCongruence_Celebrities	HighFam_Celebrities
1	1	3,248	1,000	,02	,02	,03	,03	,03
	2	,664	2,212	,01	,09	,17	,41	,12
	3	,513	2,517	,01	,27	,36	,07	,22
	4	,426	2,762	,00	,06	,28	,40	,54
	5	,150	4,646	,97	,56	,16	,09	,09

a. Dependent Variable: MEAN_PI

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3,6489	4,5540	4,0083	,29869	280
Residual	-3,41609	3,35106	,00000	1,51887	280
Std. Predicted Value	-1,203	1,827	,000	1,000	280
Std. Residual	-2,233	2,190	,000	,993	280

a. Dependent Variable: MEAN_PI

T-Test

Group Statistics

HighFam_Celebrities	N	Mean	Std. Deviation	Std. Error Mean
MEAN_PI 1,00	119	4,1092	1,58329	,14514
,00	103	3,7605	1,52782	,15054

Independent Samples Test

MEAN_PI	Equal variances assumed	F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
	Equal variances assumed	,749	,388	1,663	220	,049	,098	,34873	,20965	-,06446	,76191
	Equal variances not assumed			1,668	217,392	,048	,097	,34873	,20911	-,06342	,76087

Independent Samples Effect Sizes

MEAN_PI	Cohen's d	Standardize ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
		1,55782	,224	-,041	,488
	Hedges' correction	1,56315	,223	-,041	,487
	Glass's delta	1,52782	,228	-,038	,493

a. The denominator used in estimating the effect sizes. Cohen's d uses the pooled standard deviation. Hedges' correction uses the pooled standard deviation, plus a correction factor. Glass's delta uses the sample standard deviation of the control (i.e., the second) group.

Appendix 5 – Hypothesis 2a

```

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.2 *****
Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.quilford.com/p/hayes3

*****
Model : 1
Y : MEAN_PI
X : Conditio
W : Generati

Sample Size: 283

Coding of categorical X variable for analysis:
Conditi  X1  X2  X3  X4
1,000 -1,000 -1,000 -1,000 -1,000
2,000 1,000 0,000 0,000 0,000
3,000 0,000 1,000 0,000 0,000
4,000 0,000 0,000 1,000 0,000
5,000 0,000 0,000 0,000 1,000

*****
OUTCOME VARIABLE:
MEAN_PI

Model Summary
R      R-sq   MSE      F      df1      df2      p
,2462  ,0686  9,0000  1,9579  9,0000  273,0000  ,0443

Model
      coeff  se      t      p      LLCI      ULCI
constant  4,1564  ,1479  28,1845  ,0000  3,8652  4,4475
X1        3,120  ,2716  1,1537  ,2505  -,2219  ,0474
X2        2,881  ,3157  ,9124  ,3624  -,3335  ,9896
X3       -,8923  ,2752  -,3253  ,7377  -,1483  ,0940
X4       -,5268  ,3157  -,1,6684  ,0964  -1,1483  ,0940
Generati  1,887  ,1887  -,1,4159  ,1598  -,6385  ,0843
Int_1     1,616  ,3684  ,4484  ,6542  -,5480  ,8712
Int_2    -,1654  ,4043  -,4092  ,6827  -,9613  ,6385
Int_3    -,2810  ,3632  -,7735  ,4384  -,1260  ,5140
Int_4    -,8377  ,3864  -,2,1700  ,0323  -,1,1985  ,7230

Product terms key:
Int_1 : X1 x Generati
Int_2 : X2 x Generati
Int_3 : X3 x Generati
Int_4 : X4 x Generati

Covariance matrix of regression parameter estimates:
      constant  Int_3  Int_4  X1  X2  X3  X4  Generati  Int_1
constant  4,1564  ,0219  ,0046  ,0041  -,0039  ,0041  -,0219  ,0046
Int_3     ,0219  ,0039  -,0041  ,0041  -,0039  ,0041  -,0219  ,0046
Int_4     ,0046  -,0039  ,0041  -,0219  -,0134  -,0214  -,0046  -,0737
X1        ,0041  ,0134  ,0214  ,0997  -,0228  -,0300  -,0041  ,0214
X2        ,0041  ,0228  ,0300  -,0228  -,0300  -,0041  ,0214
X3        ,0041  ,0228  ,0300  -,0228  -,0300  -,0041  ,0214
X4        ,0041  ,0228  ,0300  -,0228  -,0300  -,0041  ,0214
Generati  ,0041  ,0228  ,0300  -,0228  -,0300  -,0041  ,0214
Int_1     ,0041  ,0228  ,0300  -,0228  -,0300  -,0041  ,0214
Int_2     ,0041  ,0228  ,0300  -,0228  -,0300  -,0041  ,0214
Int_3     ,0041  ,0228  ,0300  -,0228  -,0300  -,0041  ,0214
Int_4     ,0041  ,0228  ,0300  -,0228  -,0300  -,0041  ,0214

```

```

X3      -,0039  -,0134  -,0228  ,0757  -,0228  ,0039  ,0134
X4      ,0220  -,0757  ,0228  ,0041  -,0214  -,0300  -,0220  ,0097  -,0041  ,0214
Generati ,0300  ,0220  -,0997  -,0041  ,0039  -,0041  ,0356  -,0042
Int_1    ,0070  -,0219  ,0046  -,0823  ,0023  -,0385  -,0280  -,0338
Int_2    ,1634  -,0041  ,0214  -,0449  ,0220  ,0300  ,0078  -,0385
Int_3    ,0391  ,0039  ,0134  ,0220  -,0757  ,0220  -,0035  -,0280
Int_4    -,0391  ,1319  -,0344  ,0300  ,0220  -,0997  ,0023  -,0338

Test(s) of highest order unconditional interaction(s):
R2-chng  F      df1  df2  p
X*W      ,0031  ,2247  4,0000  273,0000  ,9245

Focal predict: Conditi (X)
Mod var: Generati (W)

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/
Conditi  Generati  MEAN_PI .
BEGIN DATA.
1,0000  ,0000  4,1746
2,0000  ,0000  4,4691
3,0000  ,0000  4,4444
4,0000  ,0000  4,6641
5,0000  ,0000  3,6296
1,0000  1,0000  4,1580
2,0000  1,0000  4,3636
3,0000  1,0000  4,0119
4,0000  1,0000  3,5960
5,0000  1,0000  3,3248
END DATA.
GRAPH/SCATTERPLOT=
Conditi WITH MEAN_PI BY Generati .

***** ANALYSIS NOTES AND ERRORS *****

Level of confidence for all confidence intervals in output:
95,0000

WARNING: Variables names longer than eight characters can produce incorrect output
when some variables in the data file have the same first eight characters. Shorter
variable names are recommended. By using this output, you are accepting all risk
and consequences of interpreting or reporting results that may be incorrect.

----- END MATRIX -----

```

Appendix 6 – Hypothesis 2b

Descriptive Statistics

	Mean	Std. Deviation	N
MEAN_PI	3,8767	1,52039	173
HighFam_Celebrities	,3689	,48369	206
HighCongruence_Celebrities	,3835	,48742	206

Correlations

	MEAN_PI	HighFam_Celebrities	HighCongruence_Celebrities
Pearson Correlation	MEAN_PI	1,000	,053
	HighFam_Celebrities	,053	1,000
	HighCongruence_Celebrities	,158	,204
Sig. (1-tailed)	MEAN_PI	.	,243
	HighFam_Celebrities	,243	.
	HighCongruence_Celebrities	,019	,002
N	MEAN_PI	173	173
	HighFam_Celebrities	173	206
	HighCongruence_Celebrities	173	206

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Durbin-Watson	
						F Change	df1	df2		
1	,160 ^a	,026	,014	1,50962	,026	2,231	2	170	,111	1,496

a. Predictors: (Constant), HighCongruence_Celebrities, HighFam_Celebrities

b. Dependent Variable: MEAN_PI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10,168	2	5,084	2,231	,111 ^b
	Residual	387,424	170	2,279		
	Total	397,592	172			

a. Dependent Variable: MEAN_PI

b. Predictors: (Constant), HighCongruence_Celebrities, HighFam_Celebrities

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
							Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3,667	,162		22,573	<,001	3,346	3,988		
	HighFam_Celebrities	,069	,243	,022	,285	,776	-,411	,549	,958	1,043
	HighCongruence_Celebrities	,480	,241	,154	1,991	,048	,004	,956	,958	1,043

a. Dependent Variable: MEAN_PI

Appendix 7 – Hypothesis 2c

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
MEAN_PI	4,1758	1,58787	110
HighFam_Celebrities	,4264	,49647	129
HighCongruence_Celebrities	,4264	,49647	129

Correlations

	MEAN_PI	HighFam_Celebrities	HighCongruence_Celebrities
Pearson Correlation	MEAN_PI	1,000	,058
	HighFam_Celebrities	,058	1,000
	HighCongruence_Celebrities	,149	,113
Sig. (1-tailed)	MEAN_PI	.	,274
	HighFam_Celebrities	,274	.
	HighCongruence_Celebrities	,060	,102
N	MEAN_PI	110	110
	HighFam_Celebrities	110	129
	HighCongruence_Celebrities	110	129

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Durbin-Watson	
						F Change	df1	df2		
1	,155 ^a	,024	,006	1,58331	,024	1,314	2	107	,273	2,452

a. Predictors: (Constant), HighCongruence_Celebrities, HighFam_Celebrities

b. Dependent Variable: MEAN_PI

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6,588	2	3,294	1,314	,273 ^b
	Residual	268,236	107	2,507		
	Total	274,824	109			

a. Dependent Variable: MEAN_PI

b. Predictors: (Constant), HighCongruence_Celebrities, HighFam_Celebrities

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
							Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3,922	,231		16,991	<,001	3,464	4,380		
	HighFam_Celebrities	,133	,307	,041	,432	,667	-,477	,742	,987	1,013
	HighCongruence_Celebrities	,462	,307	,145	1,504	,136	-,147	1,072	,987	1,013

a. Dependent Variable: MEAN_PI

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	HighFam_Celebrities	HighCongruence_Celebrities
1	1	2,201	1,000	,07	,08	,08
	2	,509	2,080	,00	,56	,56
	3	,290	2,757	,93	,36	,36

a. Dependent Variable: MEAN_PI

Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3,9220	4,5171	4,1758	,24584	129
Residual	-3,38441	2,94525	,00062	1,56954	110
Std. Predicted Value	-1,032	1,389	,000	1,000	129
Std. Residual	-2,138	1,860	,000	,991	110

a. Dependent Variable: MEAN_PI

Appendix 8 – Hypothesis 3

```

Run MATRIX procedure:
***** PROCESS Procedure for SPSS Version 4.2 *****
Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.guilford.com/p/hayes3
*****
Model : 1
Y : MEAN_PI
X : Conditio
M : Gender_R

Sample
Size: 219

Coding of categorical X variable for analysis:
Conditio X1 X2 X3
1,000 -1,000 -1,000 -1,000
2,000 1,000 ,000 ,000
3,000 ,000 1,000 ,000
4,000 ,000 ,000 1,000

*****
OUTCOME VARIABLE:
MEAN_PI

Model Summary
R R-sq MSE F df1 df2 p
,3115 ,0970 2,2728 3,2387 7,0000 211,0000 ,0028

Model
coeff se t p LLCI ULCI
constant 4,8382 ,1400 28,8421 ,0000 3,7622 4,3142
X1 ,6161 ,2484 2,4887 ,0139 ,1265 1,1058
X2 -,4356 ,2516 -1,7313 ,0849 -,9316 ,0604
X3 -,7778 ,2348 -3,3129 ,0011 -1,2486 -,3158
Gender_R -,1768 ,2877 -,6189 ,5358 -,5863 ,2327
Int_1 -,7717 ,3908 -1,9767 ,0491 -1,5484 -,0029
Int_2 ,5325 ,3498 1,5223 ,1294 -,1571 1,2221
Int_3 ,5438 ,3523 1,5413 ,1247 -,1515 1,2375

Product terms keys
Int_1 : X1 x Gender_R
Int_2 : X2 x Gender_R
Int_3 : X3 x Gender_R

Test(s) of highest order unconditional interaction(s):
R2-chng F df1 df2 p
X*W ,6295 2,2974 3,0000 211,0000 ,0786

Focal predict: Conditio (X)
Mod var: Gender_R (W)

Conditional effects of the focal predictor at values of the moderator(s):
Moderator value(s):
Gender_R ,0000

Effect se t p LLCI ULCI

```

```

X1 ,6161 ,2484 2,4887 ,0139 ,1265 1,1058
X2 -,4356 ,2516 -1,7313 ,0849 -,9316 ,0604
X3 -,7778 ,2348 -3,3129 ,0011 -1,2486 -,3158

Test of equality of conditional means
F df1 df2 p
6,7396 3,0000 211,0000 ,0082

Estimated conditional means being compared:
Conditio MEAN_PI
1,0000 4,6354
2,0000 4,6543
3,0000 3,6826
4,0000 3,2664

Moderator value(s):
Gender_R 1,0000

Effect se t p LLCI ULCI
X1 -,1555 ,3087 -,5173 ,6055 -,7482 ,4372
X2 ,0069 ,2420 ,0288 ,9784 -,3822 ,3768
X3 -,2347 ,2627 -,8936 ,3725 -,7526 ,2831

Test of equality of conditional means
F df1 df2 p
,6485 3,0000 211,0000 ,5847

Estimated conditional means being compared:
Conditio MEAN_PI
1,0000 4,1548
2,0000 3,7859
3,0000 3,9583
4,0000 3,6267

***** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS *****
OUTCOME VARIABLE:
MEAN_PI

Coeff BootMean BootSE BootLLCI BootULCI
constant 4,8382 4,8382 ,1346 3,7729 4,3043
X1 ,6161 ,6151 ,2288 ,1599 1,0442
X2 -,4356 -,4347 ,2788 -,9646 ,0885
X3 -,7778 -,7776 ,2837 -1,1659 -,3883
Gender_R -,1768 -,1733 ,2143 -,5911 ,2518
Int_1 -,7717 -,7752 ,4244 -1,5828 ,0778

```

Appendix 9 – Full Model

```

***** PROCESS Procedure for SPSS Version 4.2 *****
Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2022). www.guilford.com/p/hayes3
*****
Model : 2
Y : MEAN_PI
X : Conditio
W : Generati
Z : Gender_R

Sample
Size: 280

Coding of categorical X variable for analysis:
Conditio X1 X2 X3 X4
1,000 -1,000 -1,000 -1,000 -1,000
2,000 1,000 ,000 ,000 ,000
3,000 ,000 1,000 ,000 ,000
4,000 ,000 ,000 1,000 ,000
5,000 ,000 ,000 ,000 1,000

*****
OUTCOME VARIABLE:
MEAN_PI

Model Summary
R R-sq MSE F df1 df2 p
,2953 ,0872 2,3028 1,8079 14,0000 265,0000 ,0375

Model
coeff se t p LLCI ULCI
constant 4,1961 ,1781 24,6659 ,0000 3,8612 4,5311
X1 ,5960 ,3187 1,5876 ,1136 -,1215 1,1335
X2 ,5590 ,3472 1,6099 ,1086 -,1246 1,2426
X3 -,3205 ,3452 -,9286 ,3548 -1,0001 ,3591
X4 -,7852 ,3419 -2,0627 ,0401 -1,3783 -,0320
Generati -,2264 ,1895 -1,1944 ,2334 -,5996 ,1468
Int_1 ,1879 ,3592 ,3083 ,7642 -,5994 ,0151
Int_2 ,0451 ,4085 ,1183 ,9123 -,7593 ,0495
Int_3 -,2173 ,3657 -,5941 ,5529 -,9374 ,0628
Int_4 -,1425 ,3879 -,3672 ,7137 -,9063 ,6214
Gender_R -,1294 ,1859 -,6964 ,4868 -,4954 ,2365
Int_5 -,3544 ,3566 -,9939 ,3212 -1,0564 ,3477
Int_6 -,8824 ,4100 -1,9571 ,0514 -1,6097 ,0049
Int_7 ,4479 ,3627 1,2348 ,2180 -,2663 1,1621
Int_8 ,5455 ,3675 1,4842 ,1389 -,1782 1,2692

Product terms key:
Int_1 : X1 x Generati
Int_2 : X2 x Generati
Int_3 : X3 x Generati
Int_4 : X4 x Generati
Int_5 : X1 x Gender_R
Int_6 : X2 x Gender_R
Int_7 : X3 x Gender_R
Int_8 : X4 x Gender_R

```

