The Impact of Rebranding on Brand Image and Purchase Intention: The case of Discover Airlines

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ABSTRACT

Title: The Impact of Rebranding on Brand Image and Purchase Intention: The case of Discover Airlines

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Rebranding occurs with the change of elements of an established brand, e.g., the logo, to develop a differentiated market positioning and increase competitiveness. It can impact brand equity and, more precisely, brand image, the perception of a brand as reflected by the brand associations held in a consumer's memory. However, in existing academia, it has been studied that rebranding and logo redesign can negatively affect consumers' perceived brand image. This dissertation investigates the current rebranding and logo redesign of the Lufthansa airline Discover Airlines and the impact on consumer's purchase intention and brand image. The logo before and after the rebranding acted as the stimuli and independent variable, and purchase intention was the dependent variable mediated by the brand image. At the same time, the customer status (customer vs. noncustomer of Lufthansa or Discover Airlines) was the moderator in the research design. An online survey was conducted where the stimuli were randomly presented to 167 respondents. The findings suggest an insignificant relationship between the logo and purchase intention, while the brand image fully mediates the interaction. Moreover, the brand image significantly impacts the purchase intention, while the customer status does not moderate the interactions—the brand image before the rebranding was perceived as more positive.

This thesis contributes to the limited existing literature about rebranding. It provides a contemporary, practical insight into its impact on brand image/equity and purchase intention with the real-life current case of Discover Airlines and managerial insights.

Keywords: Rebranding, rebranding strategies, logo, logo redesign, brand elements, airline, Lufthansa, Discover Airlines, brand image, brand equity, purchase intention, customer status

SUMÁRIO

Título: O Impacto do Rebranding na Imagem de Marca e na Intenção de Compra: O caso da Discover Airlines

Autor: Carmen Eva Schwarz

O rebranding ocorre com a alteração de elementos de uma marca estabelecida, por exemplo, o logótipo, para desenvolver uma posição diferenciada e aumentar a competitividade. Pode ter impacto no valor da marca e, mais precisamente, na imagem da marca, a perceção de uma marca reflectida pelas associações de marca mantidas na memória de um consumidor. No entanto, nos meios académicos existentes, tem sido estudado que o rebranding e o redesenho do logótipo podem afetar negativamente a imagem de marca percebida pelos consumidores. Esta dissertação investiga o atual rebranding e redesenho do logótipo da companhia aérea Discover Airlines da Lufthansa e o impacto na intenção de compra e na imagem de marca dos consumidores. O logótipo antes e depois do rebranding actuou como estímulo e variável independente, e a intenção de compra foi a variável dependente mediada pela imagem da marca. Ao mesmo tempo, o estatuto de cliente (cliente vs. não cliente da Lufthansa ou da Discover Airlines) foi o moderador no desenho da investigação. Foi realizado um inquérito em linha em que os estímulos foram apresentados aleatoriamente a 167 inquiridos. Os resultados sugerem uma relação insignificante entre o logótipo e a intenção de compra, enquanto a imagem de marca medeia totalmente a interação. Além disso, a imagem da marca tem um impacto significativo na intenção de compra, enquanto o estatuto do cliente não modera as interacções - a imagem da marca antes do rebranding era vista como mais positiva.
Esta tese contribui para a limitada literatura existente sobre rebranding. Fornece uma visão contemporânea e prática do seu impacto na imagem/equidade da marca e na intenção de compra, com o caso real da Discover Airlines e com conhecimentos de gestão.

Palavras-chave: Rebranding, estratégias de rebranding, logótipo, redesenho do logótipo, elementos da marca, companhia aérea, Lufthansa, Discover Airlines, imagem da marca, brand equity, intenção de compra, estatuto do cliente

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CHAPTER 1: INTRODUCTION

1.1 Background

On September 5th, 2023, Eurowings Discover, a German airline and part of the Lufthansa Group, launched its rebranding into Discover Airlines (Discover Airlines, 2023). Discover Airlines positions itself as a vacation airline, the "quality leisure airline" within the worldwide operating aviation group (Deutsche Lufthansa AG, 2021). The rebranded airline operates out of the Frankfurt and Munich airports, from which it flies out to 50 short-, medium-, and long-haul vacation destinations. The Lufthansa Group is a leading European airline group consisting of "passenger airlines" and "aviation services" companies (Deutsche Lufthansa AG, 2022). The following airlines are included in the passenger airline segment (Deutsche Lufthansa AG, 2022), which operate under a multi-hub strategy (offering a range of flights from their global hubs, e.g., Frankfurt, Munich, Zurich, Vienna, and Brussels): Lufthansa German Airlines, SWISS, Austrian Airlines, Brussel Airlines. Lufthansa German Airlines includes the airlines Lufthansa CityLine, Air Dolomiti, and finally, Discover Airlines, formerly Eurowings Discover, "the Lufthansa Group's holiday airline" (Deutsche Lufthansa AG, 2022). Within the passenger airline segment, Eurowings, the group's low-cost airline (Eurowings GmbH, 2023), provides point-to-point connections for European short-haul destinations from German-speaking countries (Deutsche Lufthansa AG, 2022).

On August 13th, 2011, the Lufthansa Group acquired Eurowings by increasing its shareholding to 100% of the airline's shares (Deutsche Lufthansa AG, 2011). Starting in 2013, Eurowings, as a quality carrier in the low-cost segment, covered the point-to-point traffic in Germany and Europe, complementing the global route network outside the most prominent airport hubs, Frankfurt and Munich (Deutsche Lufthansa AG, 2012). Lufthansa founded the new airline Eurowings Discover in 2021 (Annual Report 2021) under the affiliate Eurowings brand to expand its product and service portfolio further. The new airline started operating in July of that year as the group's holiday airline, focusing on the tourist segment. By fully integrating into the Lufthansa Group network, Discover Airlines aims to provide end-to-end bookings and seamless connecting flights for vacation travelers (Discover Airlines, 2023). Eurowings continued its focus on short-haul traffic in European point-to-point traffic, connecting European cities outside the airport hubs (Annual Report 2021). Although both airline brands of the Lufthansa Group – Eurowings and Eurowings Discover – operate independently from each other, following different business strategies, the branding strategy was conducted under the same umbrella brand, using the same brand elements, including the name "Eurowings," colors,

and, most strikingly, the Eurowings logo. Ultimately, the rebranding process of Eurowings Discover to Discover Airlines included the quality leisure airline dropping the umbrella brand Eurowings by creating an independent brand name, overall appearance, and logo (Discover Airlines, 2023).

Rebranding occurs with the change of elements of an established brand by creating a new name, term, symbol, or design or changing all brand elements to develop a differentiated market positioning among stakeholders and competitors (Muzellec & Lambkin, 2006). It is considered an "interesting conceptual challenge for the marketing discipline" (Muzellec & Lambkin, 2006), posing an impact on brand equity, and more precisely, brand image, the perception of a brand as reflected by the brand associations held in a consumer's memory (Keller, 1993). Nonetheless, rebranding, especially concerning its impact on brand equity and image, has gained a manageable amount of attention in academic literature. When rebranding, it is a common practice for companies to change the logo of their brands. Logos are a highly "critical component of brand aesthetics" that activate the memory associations of a brand (Walsh et al., 2010).

Moreover, the brand logo functions as a brand's "signature" and summarizes its identity. Therefore, changing a brand's logo when rebranding can have a crucial impact on the brand image and consumer's attitude towards a brand. Especially for airlines operating transnationally, the logo poses a vital brand element, as it is a graphical, visual representation of the brand, allowing the brand to communicate beyond borders (Thurlow & Aiello, 2007). With the real-life case of Discover Airlines, this dissertation aims to extend the academic literature regarding rebranding by examining the change in the airline's logo and its relationship with its perceived brand image derived from consumer-based brand equity and consumer purchase intention. Exploring rebranding further under the consideration of this recent case of Discover Airlines provides a contemporary perspective and valuable managerial insights.

1.2 Problem Statement

This dissertation examines consumers' perception of the rebranding of Discover Airlines by changing the logo measured by the consumers' purchase intention. The perceived brand image in this investigation takes on a mediating role, where the customer status (existing or noncustomer of Lufthansa group or Discover Airlines, formerly Eurowings Discover) is considered a moderator. In conclusion, the problem statement of this study reads "The impact

of rebranding by logo change on consumers' perceived brand image and purchase intention: The case of Discover Airlines," which will be explored by the following research questions:

RQ 1: How does the rebranding of Eurowings Discover to Discover Airlines by logo change impact the perceived brand image?

RQ 2: How does the rebranding by logo change impact the consumer purchase intention?

RQ 3: How does the impact vary for customers of Lufthansa and Discover Airlines, formerly Eurowings Discover, versus noncustomers?

1.3 Relevance

Rebranding is a recognized marketing strategy various companies use to achieve new positioning and unlock new market potential. Therefore, it is an intriguing subject that can provide valuable insights in both an academic and managerial context. With a broad and competitive airline landscape, rebranding is relevant to differentiate from the competition by adopting a unique positioning. To comprehend the reach of rebranding, specifically in the airline industry, researchers and managers must be aware of rebranding strategies and the impact of rebranding on brand image and purchase intention. Specifically, a logo is an essential element for airline brands, as it is a visual communication of the brand's values and identity, which can be understood globally and cross-lingually. Hence, rebranding through logo change and its influence is even more relevant for airline brands and deserves special academic and managerial attention.

For academia, this study further highlights rebranding in connection with customer-based brand equity with the aid of the practical and recent case of Discover Airlines. It could provide valuable findings on how rebranding impacts brand image as a brand equity factor and influences the purchase intention that helps illustrate existing marketing theories.

For management, this study can help identify the impact of rebranding on the brand image and the consumers' purchase intention. Specifically, the findings will help Discover Airlines and Lufthansa managers to elaborate on whether the rebranding has been executed successfully and supports aspired company objectives. These findings can also assist other corporations considering a rebranding strategy to execute the change in brand elements and positioning.

As the competition in the airline industry increases, requiring effective marketing strategies, it is necessary to investigate rebranding with a contemporary, practical outlook.

1.4 Research Methods

This dissertation's research methodology is composed of several approaches. A literature review was conducted to gain an initial understanding of the existing academic knowledge regarding the research topic, collected from academic journals, papers, books, and studies targeting rebranding through logo change in the context of brand image, brand equity, purchase intention, and customer status. This study and the related operational model are based on the literature review, providing a conceptual framework. The operational model contains the evaluated variables' specifications and the applied measurement scales. According to this model, an online survey was created, which measured the relationship between Discover Airlines' rebranded, new logo and its old logo as Eurowings Discover and consumers' purchase intention, including its impact on the brand image. The survey moreover differentiates between existing customers of the Lufthansa Group and Discover Airlines, formerly Eurowings Discover, and noncustomers. The sample size collected by the online survey included 202 initial responses, of which 167 were considered valid. The statistical software IBM SPSS Statistics analyzed the gathered data by performing statistical tests. The performed statistical tests suitable for the underlying data to answer the formulated research questions were Simple Linear Regressions, followed by the comparison of means through Independent T-tests and the PROCESS Model 1, 4, and 10 by Hayes (2018).

1.5 Dissertation Outline

The first chapter of the dissertation contains the introduction, which presents the problem statement and related research questions. Chapter 2 contains an extensive literature review, providing insights into current academic research regarding the topic and deriving the conceptual framework and this dissertation's hypothesis. The following chapter describes this research's methodology. The fourth chapter presents the conducted analysis and its results that evaluate the formulated hypothesis. The final chapter, Chapter 5, concludes this research's main findings and limitations and poses managerial implications and suggestions for future research.

CHAPTER 2: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

This chapter provides a critical view of the existing research related to the main research question and study purpose. The literature review aims to present background information on the topic and emphasize the importance of this work and further research. The existing knowledge from previous research is summarized, compared, and critically analyzed, laying the foundation for generating hypotheses for the case of Discover Airlines. The first part of this chapter concentrates on the definition of rebranding, the different types of rebranding, and its impact on an organization's brand image and consumer behavior, precisely purchase intention. Moreover, the customer status as a moderator in this context is elaborated, followed by the conceptual framework summarizing the relationship between the presented variables.

2.1 Rebranding

Per definition, a brand includes a name, logo, and other visual elements (Kumar Singh et al., 2013). It symbolizes all information connected with a product or service, including the expectations towards the product or service that are typically embedded in the minds of consumers, buyers, or other target audiences (Kumar Singh et al., 2013). Branding differentiates a product or service from competitors and highlights its uniqueness (Kumar Singh et al., 2013; Murphy, 1988). It creates and maintains a brand and its promise of quality or characteristic of the product or service while developing and aligning the target audience's expectations and brand experience through branding activities (Kumar Singh et al., 2013). Overall, brands are a valuable asset to a company (Kumar Singh et al., 2013). If they are appealing, they create value, leading consumers to purchase them (Kumar Singh et al., 2013).

Rebranding occurs when an organization changes its brand elements, for instance, its name, logo, symbol, or slogan (Roy & Sarkar, 2015). According to Muzellec & Lambkin (2006), changing the elements of an established brand by creating a new name, term, symbol, design, or the combination of all develops a differentiated, new position in the minds of stakeholders and competitors. Rebranding is revitalizing, redefining, and or reviving a brand (Merrilees & Miller, 2008). In the past, marketing researchers have investigated rebranding despite the scarcity of existing research, as the topic has been chiefly discussed in practitioner journals and the business press (Alshebil, 2007).

The modification of a brand proposition and branding esthetics revitalize and reposition the brand, which is a natural and necessary part of the task of brand management – managing the brand long-term and adapting to new market perspectives (D. A. Aaker, 2009; Daly & Moloney,

2004; Kapferer, 2008). There are multiple reasons and motivations for brand managers to execute rebranding. One reason is to maintain the desirability of a brand by allowing it to evolve through rebranding (Daly & Moloney, 2004). It can respond to external factors such as changing market conditions and competitive environments, external perceptions, or internal factors (Boyle, 2002; Goi & Goi, 2011; Lomax et al., 2002; Muzellec & Lambkin, 2006). Change in ownership or the need to re-establish and reenergize the brand, embedding a new vision, mission, or new values, for instance, when a brand or product is underperforming, are considered internal factors. (Causon, 2004; Kapferer, 2008; Lomax et al., 2002; Muzellec & Lambkin, 2006; Stuart & Muzellec, 2004). Moreover, Gotsi & Andriopoulos (2007) state that a negative brand image can be another reason for rebranding.

The various reasons and motivations for rebranding acquire different rebranding strategies. Rebranding is a specific brand strategy and continuum consisting of three different levels of changing brand elements (Daly & Moloney, 2004): minor, intermediate, and complete. A brand undergoes a total rebranding and complete change if the name is new to stakeholders, thus not knowing what the apparent new brand stands for (Daly & Moloney, 2004). It can also be considered as revolutionary rebranding that involves a significant, identifiable change in a company's positioning or brand element, such as the logo, redefining the brand (Daly & Moloney, 2004; Muzellec & Lambkin, 2006; Stuart & Muzellec, 2004). Based on the brand hierarchy by Keller (2000), researchers differ between rebranding strategies that either target corporate brand, family, or individual brands or modifiers, applying them to the entire company, a business unit, or sole product (Muzellec et al., 2003; Muzellec & Lambkin, 2006; Roy & Sarkar, 2015).

Table 1: Overview of Applied Rebranding Strategies in the Case of Discover Airlines

Strategy	**Author**	**Application with Discover Airlines**
Change of brand elements	Daly & Moloney (2004)	Complete change of brand elements and marketing esthetics: change of name, colors, and logo, but no change in marketing positioning as travel leisure airline
Evolutionary and revolutionary rebranding	Muzellec & Lambkin (2006) Stuart & Muzellec (2004)	Revolutionary rebranding through the change of marketing esthetics, but no change in positioning. Evolutionary

		rebranding as only logo and name change, no slogan changes recognizable
Rebranding corporate hierarchy level	Keller (2000) Muzellec et al. (2003) Roy & Sarkar (2015)	Rebranding of business unit/family brand Discover Airlines within the Lufthansa company/corporate brand

2.1.1 Logo Change

By creating new elements through rebranding, e.g., a logo, for an established brand, a company intends to develop a differentiated, new positioning in the minds of stakeholders and competitors (Muzellec & Lambkin, 2006; Williams et al., 2021). A logo enables a business to communicate visually and surpass cultural barriers (Urde, 2003). As one of the brand elements, it symbolizes and communicates a brand mission and ideology (Henderson & Cote, 1998; Walsh et al., 2010), identifying a company, product, or service as a "signature" and graphic visual representation (Adîr et al., 2014). It represents the company's beliefs and attitudes, influencing attitude formation and image generation with consumers (Adîr et al., 2014; Henderson & Cote, 1998; Walsh et al., 2010).

Scholars have argued the effects of logo changes on a company. For one, a minimal change in a logo may have a minimal effect on the brand image. Significant changes, such as revolutionary rebranding, can transport an existing negative brand image, related associations, and consumer perception into a positive, more favorable direction and higher consumer commitment. (Muzellec & Lambkin, 2006; Park et al., 2013; van Grinsven & Das, 2016; Williams et al., 2021). A company can benefit from a logo redesign economically as it enhances its overall performance (Williams et al., 2021). Moreover, a logo can increase brand equity, as a strong logo is a critical factor in brand awareness and loyalty (Jiang et al., 2016; Kohli et al., 2022).

Despite the promising outcomes due to rebranding by logo redesign, researchers have pointed out the associated risks. Van Grinsven & Das (2016) mention that brands with limited brand equity should consider a revolutionary rebranding strategy and logo redesign rather than a brand with high, valuable equity. When a logo is modified, it can not only result in positive consumer evaluation and image but can harm a brand's image, as the logo poses an essential brand component (Henderson & Cote, 1998; Miller et al., 2014; Williams et al., 2021).

According to Williams et al. (2021), consumers with a solid commitment to the brand or high brand familiarity, perhaps by having purchased and consumed the brand in the past, respond more negatively towards logo modifications. The research by Walsh et al. (2010) recognizes that negative consumer attitudes increased with the degree of logo modifications, meaning that the more significant the modification, the higher the negative response of consumers towards the new logo. The response differed between highly- and lowly-committed consumers: the more committed a consumer was, the stronger the logo change weakened the brand attitude and image. Consumers' attitudes and perceived brand image decrease when being introduced to an unfamiliar logo (Kim et al., 2013). However, Das & van Hooft (2015) argue that a more significant rebranding through a more substantial logo change could improve consumer attitudes and the perceived image of a brand. According to the study, participants' inability to identify the brand and associate the new logo with its perceived value was reduced.

In contrast, their attitude toward the brand increased with a greater degree of logo modification. Despite the inconsistent results, this research demonstrated that logo modification significantly affects customer attitudes. Since logo colors and shapes largely shape brand perception, meanings, and image, different redesign and rebranding strategies may have varying effects on consumers (Aronoff et al., 1992; Bottomley & Doyle, 2006; Henderson & Cote, 1998). In summary, it can be said that the impact of rebranding a company through a logo redesign remains controversial, as scholars cannot agree on whether rebranding has a positive or negative effect on brand image and consumer perceptions.

2.2 Brand Equity

Brand equity is a term that evolved while defining the relationship between customers and brands in the marketing literature, becoming increasingly crucial for brand management (Wood, 2000). This study and the literature review focus on the literature provided by Aaker (1992, 2009), Farquhar (1989), Keller (1993, 2000, 2003, and Keller & Brexendorf (2019). Per the definition by Aaker (2009), "brand equity is a set of brand assets and liabilities" composed of a brand, its name, and its logo. In connection with brand equity, the brand adds or subtracts from the value provided by a product or service to a company or the company's customers (D. A. Aaker, 2009). Brand equity represents the value generated by a brand and its name, associations, and emotional connection a consumer holds (Shariq, 2019). Keller (1993) defines customer-based brand equity as the "differential effect of brand knowledge" on consumers' response to a company's marketing efforts, such as rebranding. The differential response results from the consumer's brand knowledge memory structure when comparing a consumer's

response to the marketing of a brand to the same marketing of a fictitious version of the product or service (Keller, 1993).

2.2.1 Brand Image

In consumer-based brand equity, brand knowledge comprises brand awareness and brand image. Brand image is the perception of a brand as reflected by the brand associations held in a consumer's memory, thus representing a holistic summary of brand associations (Faircloth et al., 2001; Keller, 1993). When further defining brand image, Keller (1993) described the brand image as the evaluation or attitude towards a brand made up of perceptual beliefs about a brand's attributes, benefits, and attitude associations. Brand associations are acquired through a company's marketing mix activities or product use. The strength of a brand depends on the number of experiences a consumer has with a brand or the exposure to communication (Shariq, 2019). Thus, it is in the hands of the marketers to form the brand associations that add to the brand image (Shariq, 2019). Ultimately, these brand associations leading to the brand image shape the purchase or consumption decision of consumers (Keller, 1993)

When connecting rebranding to brand equity and brand image, it is vital to recall that brand equity is formed by a brand, its name, and its symbols and logos. Thus, researchers remark that a change in a brand's logo can lead to the loss or change of value the old logo signifies, challenging traditional marketing wisdom regarding brand equity (Roy & Sarkar, 2015). An established brand and its logo develop a knowledge structure in the consumer's mind (Keller, 1993). If a logo changes through rebranding, it can modify the brand knowledge, thus modifying the brand image and associations, affecting the brand equity, and bringing forth positive or negative perceptions with the consumer (D. A. Aaker, 2009). Rebranding by changing the logo of an established brand can create dissonance in the perceived brand equity and image built over time, leading to an overall perceived negative brand image (Aaker & Joachimsthaler, 2012; Keller & Lehmann, 2006). By merging the presented findings of past research regarding rebranding through logo change and the debate about its impact on the perceived brand image, this dissertation hypothesizes that:

Hypothesis 1a: The brand logo impacts the brand image.

Hypothesis 1b: The rebranded Discover Airlines logo has an inferior brand image compared to the Eurowings Discover logo.

2.3 Purchase Intention

The relationship between brand image and purchase intention has been derived and highlighted in past marketing literature (Alif Fianto et al., 2014; Chang & Liu, 2009; Chen & Chang, 2008; Cobb-Walgren et al., 1995; Jalilvand et al., 2011; Jeng, 2016; Tharmi & Senthilnathan, 2012).

Purchase intention is often considered when analyzing consumer behavior, as Fishbein & Ajzen (1975) define it as a consumer's subjective attitude towards a product or service, posing a decisive factor when predicting consumer behavior. Consumers make a purchasing decision based on their individual qualities, personalities, characteristics, and decision-making process, resulting in a choice of brand and determining their purchasing behavior (Kotler, 2001). Moreover, consumers base their purchase intention on brand associations that create value (Jalilvand et al., 2011). Brand associations, which sum up brand image, help the consumer retrieve and process information, differentiate the brand from competing brands, elaborate reasons to buy, and create positive feelings or attitudes towards the brand (D. A. Aaker, 2009). Accordingly, a consumer's feelings towards a brand, thus the perceived brand image, impact the purchase intention. If a brand triggers positive emotion and the brand image is perceived as positive, it can create a positive purchase intention with the consumer (D. A. Aaker, 1996, 2009).

In conclusion, purchase intention results from brand equity and, consequently, brand image (Cobb-Walgren et al., 1995; Jeng, 2016). Therefore, this research studies purchase intention in the context of Eurowings Discover's rebranding to Discover Airlines, searching empirical evidence to test Aaker's determinations from 1996 and 2009. In general, a logo poses a significant esthetic brand stimulus and builds up consumers' attitudes towards a brand, especially for transnationally operating airlines, that supports their purchasing behavior (Roy & Sarkar, 2015). According to the cue utilization theory, brand cues, respectively brand elements, such as a logo, have a substantial impact on a consumer's mind and attitude (Maheswaran et al., 1992; Miyazaki et al., 2005). When assessing this theory in a rebranding context, the change in a logo can be considered an extrinsic brand cue in the consumer process, concluding that the logo acts as a cue that can have a significant effect on consumers' attitudes and purchase intention (Chu et al., 2014; Ing, 2012; Roy & Sarkar, 2015). As discussed in previous research, a logo redesign potentially creates dissonance in the perceived brand image and visual perception and processing, negatively impacting consumers' purchase intention. Based on the provided discussion of the impact of rebranding through logo change on the perceived brand image, which in turn influences consumers' purchase intention, this study hypothesizes that:

Hypothesis 2a: The brand logo has an impact on the purchase intention.

Hypothesis 2b: The rebranded Discover Airlines Logo has an inferior purchase intention compared to the Eurowings Discover Logo.

Hypothesis 3: The brand image impacts the purchase intention.

Hypothesis 4: The brand image mediates the relationship between the brand logo and the purchase intention.

2.4 Customer Status

As Aaker (1992) stated, brand equity, including brand image, can support the consumer in interpreting, processing, and storing a large quantity of information about products/services and brands. Moreover, they can affect a consumer's confidence in their purchase behavior, meaning they will usually be more comfortable with a familiar or last-used brand since it is considered high quality (D. A. Aaker, 1992). These consumers are classified as existing customers, people who have purchased a product/service of the brand at least once. Customers are the company's primary stakeholders (Shamma & Hassan, 2009). They have personal experience with a brand, which affects their perceived brand image (Shamma & Hassan, 2009). Understanding customer's perception of a company's image is essential for the brand to succeed in a competitive environment (Shamma & Hassan, 2009). Noncustomers, as secondary stakeholders, and their perception of a brand is increasingly influential on marketing activities, as they can develop into future customers (Shamma & Hassan, 2009). Rebranding does not only target, for instance, attracting new noncustomers but also maintains existing customers or increases the frequency level of consumption (Keller, 1999). The Information Integration Theory by Anderson (1981) confirms that consumers' attitudes or beliefs towards a brand are based on integrating information through stimuli, like the brand's logo, they receive, evaluate, and integrate into their existing beliefs or attitudes. The existing beliefs and attitudes are more prominent with an established brand that consumers have purchased and used in the past (Roy & Sarkar, 2015). Therefore, consumers are more likely to base their purchasing behavior on the observed cues, for example, through a logo and the perceived image associated with the brand (Roy & Sarkar, 2015). Changing a brand's logo when rebranding can significantly affect existing customers and their purchasing intentions because their perception of the brand and its image/equity is disrupted, creating an information asymmetry (Girard, 2013; Roy & Sarkar, 2015). This review has explored that rebranding through logo change has a more negative effect on consumers

familiar with a brand, thus on the perceived brand image and purchase intention. Concludingly, the rebranding of Eurowings Discover to Discover Airline perhaps has a more considerable, negative impact on existing consumers of the brand or parent brand Lufthansa than on consumers who have not used both brands, which is worded in the following hypothesizes:

Hypothesis 5a: Lufthansa's customer status (customer vs. noncustomer) moderates the relationship between the brand logo and brand image.

Hypothesis 5b: Lufthansa's customer status (customer vs. noncustomer) moderates the relationship between the brand logo and purchase intention.

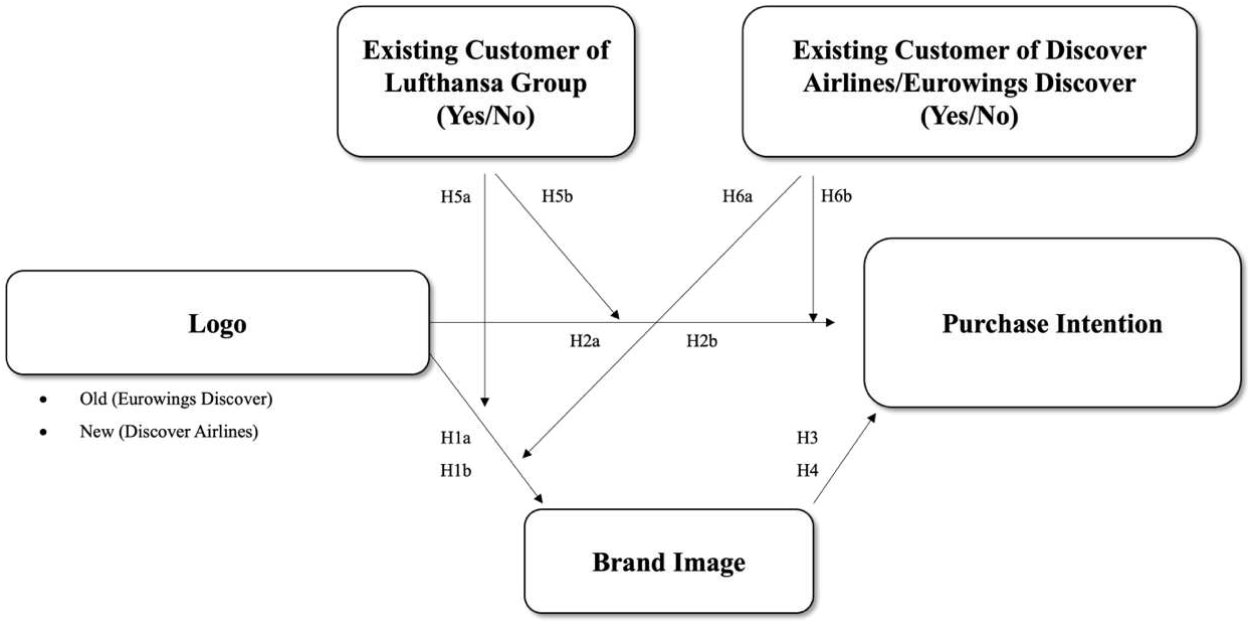
Hypothesis 6a: The customer status (customer vs. noncustomer) of Discover Airlines/Eurowings Discover moderates the relationship between the brand logo and brand image.

Hypothesis 6b: The customer status (customer vs. noncustomer) of Discover Airlines/Eurowings Discover moderates the relationship between the brand logo and purchase intention.

2.5 Conceptual Framework

The conceptual framework summarizes the relationship between the independent variable, provided by the rebranded logo of Discover Airlines, and the dependent variable, the purchase intention. This paper empirically explores the impact of the rebranded logo on purchase intention. Brand image is introduced as a mediator to explain the relationship between the logo and the purchase intention. Moreover, this research distinguished between existing and noncustomers of Lufthansa or Eurowings Discover/Discover Airlines as a moderator to explore the strength of the impact of the rebranded elements on the consumer's purchase intention and the brand image.

Figure 1: Conceptual Framework


Existing Customer of Lufthansa Group (Yes/No)
Existing Customer of Discover Airlines/Eurowings Discover (Yes/No)
H5a
H5b
H6a
H6b
Logo
H2a
H2b
Purchase Intention
Old (Eurowings Discover)
New (Discover Airlines)
H1a
H1b
H3
H4
Brand Image

CHAPTER 3: METHODOLOGY

This chapter of the dissertation illustrates the methodology utilized to explore the research problem and derived research questions mentioned in the first chapter. Moreover, this chapter shows how the elaborated hypotheses of chapter two are approached. The first part of this chapter describes the research approach, followed by an overview of the data analyzed in this study and a description of the stimuli identification and measurement of data.

3.1 Research Approach

As previously described, the main objective of this dissertation and research is to comprehend the impact and relationship of rebranding, specifically the rebranded logo, on consumers' purchase intention, with brand image acting as a mediator. Beyond that, the effect of the customer status, differentiated between customers and noncustomers of Lufthansa or Discover Airlines, on the observed relationships as a moderator is inspected by this study. Concludingly, a connection of different research approaches was applied to answer the research questions and test the validity of the hypotheses.

This study applies the exploratory and explanatory methods described by Saunders et al., 2009. The exploratory approach was conducted to gain an initial understanding of the research problem and important insights by extensively reviewing existing, pertinent literature. Based on this approach, the appropriate variables, conceptual framework, and hypothesis were defined. The explanatory research studied the research problem further by explaining the relation between these established variables and testing the derived hypotheses. As defined by Creswell, 2009, researchers can revert to qualitative, mixed, and quantitative approaches. The study conducted in the context of this dissertation utilized the latter by gathering data regarding the defined variables. This approach aims to explore the hypotheses, either validating or contradicting them, and statistically evaluate the relationships between the variables to form an ultimate conclusion.

3.2 Primary Data

Primary data was collected by conducting an online survey to fulfill the aim of this research and answer the research questions. Online surveys are a common practice when collecting data for the variables in a study. Nonetheless, it is crucial to know the advantages and disadvantages that occur when choosing this research method. The benefit of online surveys is the low cost. It is a fast and efficient method to collect data directly while having a potentially broad reach and, thus, a potentially high participant rate (Sue & Ritter, 2007). The disadvantages include

coverage bias, meaning that the research sample might not be representative, while researchers do not know who responds to the survey (Sue & Ritter, 2007). Online surveys are reliable on software, related to privacy/security problems, and less personal than other methods, which can lead to a lower response rate (Kothari, 2004; Sue & Ritter, 2007)

The online questionnaire designed for this research was a 17-question survey that contained control, manipulation checks, and demographic questions. The survey is structured into three topics: questions regarding how the consumer perceived the (rebranded) logo of Discover Airlines or Eurowings Discover in connection with the brand image, questions regarding how the consumer perceived the logo in connection with their purchase intention, questions about the consumers' customer status and their traveling behavior, and lastly, questions that gathered demographic information. All questions were provided in English and German. To guarantee that the survey was valid, easily understandable, and performed without any technical difficulties, a pilot survey was distributed to 9 people. After successfully conducting the pilot survey, the final poll was published from November 21st to December 3rd, 2023, and shared via various social media platforms. Appendix 1 shows the complete questionnaire in English and German.

3.2.1 Data Collection

The study aims to assess consumers' purchase intention and perception of Discover Airlines' brand image based on the airline's logo, among other brand elements, the subject of the rebranding.

The target sample for the questionnaire was defined as people above the age of 18 (the minimum age to book a flight) who have purchased a plane ticket in the last two years, meaning they have been exposed to airline brands recently. Two control questions were asked concerning their age and flight ticket purchasing behavior in the past two years to ensure the participants met the criteria to be part of the target sample. Respondents who replied positively to both control questions were allowed to proceed with the relevant survey.

To collect the required data for this study, a purposive, non-probability sampling technique, the convenience technique, was utilized. This method was chosen due to convenience and low cost, although the technique allows biased results, e.g., the non-representativeness of the population (Kothari, 2004). The questionnaire was created with the experience management software Qualtrics. Overall, the questionnaire had 216 responses, in which the target sample size was 50

answers per stimulus. One hundred sixty-seven responses were classified as valid due to respondents not passing the control questions or repeated IP addresses.

3.2.2 Measurement

This section visualizes the critical measurements used for the constructs and the justification for the stimuli identification determined through Discover Airlines' rebranding.

Brand Image/Brand Equity

With the numerous marketing literature on brand equity come various qualitative and quantitative approaches to measuring brand image and drawing conclusions about brand equity. The standard techniques are free association techniques, reflective techniques, and open-ended questions related to brand personality (Dirsehan & Kurtuluş, 2018). These brand personalities were developed by Aaker (1997) and focused on the relationship between brand and quality rather than elaborating on the connection of the associations to brands (Dirsehan & Kurtuluş, 2018; John et al., 2006). According to Dirsehan & Kurtuluş (2018), traditional brand image scales do not enlighten the network structures in the consumer's mind. Alternatively, concept mapping techniques based on assumptions and human associative models have gained popularity in brand measurement studies (Dirsehan & Kurtuluş, 2018). Measuring brand image with an associative network method and cognitive learning approach determines brand associations, measures the strength of these associations, and shows the favorability of associations.

This study utilizes the research methodology of Dirsehan & Kurtuluş (2018), where the brand image of Turkish airlines was measured by asking passengers about a defined set of brand associations related to airlines. The brand associations that sum up the brand image were collected via exploratory research with 50 passengers, which were then reduced from 100 passenger responses to essential brand associations. This survey used the brand associations provided by the study and applied to Eurowings Discover/Discover Airlines. Ultimately, the survey asked respondents to rate on a 7-point Likert scale (Dawes, 2008) the brand associations trustworthiness, high quality, expensive, reasonable prices, good service, good cabin crew, comfortable, timely departure, extensive flight network, being an airline from Germany and a subsidiary from Lufthansa.

Purchase Intention

In the past, scholars have often established a relationship between brand image and purchase intentions (Diamantopoulos & Winklhofer, 2001; Esch et al., 2006; Mohammad Shafiee et al., 2014), where brand image is considered the basis and essential factor defining purchaser's behavior (Burmann et al., 2008; Mohammad Shafiee et al., 2014). As previously described, consumers are most likely to purchase a product or service of a brand they are familiar with and where they perceive a positive brand image. (Burmann et al., 2008). Concludingly, studies have shown that a positive brand image leads to positive brand equity and performance and increased purchase intention (Hsieh, 2002).

The study of Mohammad Shafiee et al. (2014) identified the most critical indicators for forming a brand image and explored its impact on consumer's purchase intention in Iran's aviation industry. Accordingly, this research utilizes the statement construct to measure the purchase intention related to the perceived brand image, adapted to Eurowings Discover/Discover Airlines:

1. If I need to travel by airplane again, I prefer this airline to other companies.
2. I have enough reasons for preferring this airline to other companies.
3. In general, in my opinion, using the services of this company is an appropriate decision.

The respondents were asked to rate on a 7-point Likert scale how they agreed or disagreed with the three statements related to purchase intention.

Customer Status

As explored in the literature review, rebranding can affect consumers, the perceived brand image, and associated purchase intention differently, depending on the customer status. Consumers who are more committed to a brand, for instance, by having purchased the brand in the past, are more negatively affected by a logo change when rebranding occurs. They hold stronger brand associations that form the perceived brand image and impact the overall brand equity, which can be disturbed through dissonance created by a logo change. Therefore, capturing the respondents' customers' status as a moderator is vital in this study to explain the impact of Discover Airlines' logo change on its perceived brand image and purchase intention.

Shamma & Hassan (2009) explored customer and noncustomer perspectives for examining corporate reputation. When reviewing the respondents, they were classified as "customers" and "general public," depending on whether the consumer had personal experiences with the

wireless telecommunications industry in the United States of America. If the respondents had a subjective experience, they were viewed as primary stakeholders and customers, while respondents without any experience with the industry were considered secondary stakeholders and noncustomers. Based on this approach, this study classified the respondents into customers and noncustomers of the Lufthansa and Eurowings Discover/Discover Airlines. In this case, customers are respondents who selected Lufthansa, Eurowings Discover, or Discover Airlines when asked to choose the airline brands they have purchased a ticket from. The questions offered multiple answer choices composed by the leading airlines in Germany, based on the number of departures in 2020 according to a statistic by Koptyug (2023). The answer choices were supplemented by Eurowings Discover/Discover Airlines for this research. The table below provides an overview of the operational model.

Table 2: Operational Model

Framework	**Measure**	**Items**	**Scale**	**Reference**	**Cronbach α**
IV	Logos	Stimuli	*na*	*na*	*na*
Mediator	Brand Image	18	7-point Likert scale	Dirsehan & Kurtuluş (2018)	0.812 0.722 0.774 0.834 0.707
DV	Purchase Intention	3	7-point Likert scale	Mohammad Shafiee et al. (2014)	0.81
Moderator	Customer Status	1	*na*	(Shamma & Hassan, 2009)	*na*

3.2.3 Stimulus Identification

Finally, the stimulus was based on Discover Airlines' rebranding strategy. Although multiple brand elements were changed through the rebranding, e.g., the colors, airplane painting, and the name, this study concentrates on the airline brand's logo change. The reviewed literature emphasizes the importance of airline logos as non-verbal, graphic depiction and summary of a brand's identity and values. Therefore, the logos of Eurowings Discover and Discover Airlines

were chosen as the stimuli before and after the rebranding. The logos are different in their appearance; on the one hand, different colors are used due to the general color change, but on the other hand, the two different brand names are also recognizable, summarizing the rebranding. The independent variable logo was shown on two levels (Eurowings Discover and Discover Airlines), where the logos were randomly and evenly assigned to the respondents through the survey. The table below shows both the two different logos:

Table 3: Summary of Stimuli

Brand	**Logo**
Eurowings Discover (before rebranding)	
Discover Airlines (after rebranding)	

CHAPTER 4: RESULTS

The online survey collected the data, which was then exported and analyzed using SPSS. SPSS is a software developed by IBM for statistical data analysis. The data was first prepared and cleaned before the examination. After characterizing and sorting the sample and conducting descriptive statics, multiple tests were executed to test the formulated hypotheses. Since a part of this study is to explore the mediation and moderation effect of brand image and customer status, it applies Models 1, 4, and 10 of Hayes (2018) with PROCESS Macro in SPSS. Further statistical examinations were performed to gain a deeper insight into the impact of the logo change through rebranding on brand image and purchase intention, as it could be relevant for managerial implications.

4.1 Data Preparation

Data cleaning, a manipulation check, and an outlier analysis were conducted to prepare the data for the analysis. Moreover, the relevant variables were created.

4.1.1 Data Cleansing

216 responses were collected between November 21st and December 3rd, 2023. From the 216 observations, 49 were removed overall. Therefore, 77.31 % of the responses were accepted. At the beginning of the survey, two initial screening questions were asked, which 14 respondents failed. Three respondents were below the age of 18, which means they were not able to purchase an airline ticket. Another 11 respondents did not buy an airline ticket in the last two years.

Furthermore, a manipulation check question asking which airline brand's logo was presented, Discover Airlines or Eurowings Discover, checked the effectiveness of the independent variable manipulation. Another five responses were abandoned correspondingly. All identical IP addresses were removed to prevent duplicate survey responses. As a result of this, 29 invalid responses were identified. Consequently, 167 valid responses were obtained once the data was thoroughly cleansed. The table below summarizes all data cleansing steps, split between the two stimuli, after the control questions.

Table 4: Summary of Data Cleansing Steps

	Stimuli 1: Discover Airlines	**Stimuli 2: Eurowings Discover**	**Total**
Initial Observations	108	104	202
Repeated Ips	13	16	29
Failed Manipulation	3	2	5
Outliers	1	0	0
Valid Observations	81	86	167

4.1.2 Outlier Analysis

In the process of cleansing the data, it was further examined for potential multivariate outliers. Outliers are considered data that behave differently from most of the collected data (Ghorbani, 2019). The Mahalanobis distance analysis was conducted in SPSS to avoid statistical errors by detecting and removing multivariate outliers. One outlier with a p-value of less than 0.001 was identified among the valid observations for Discover Airlines.

4.1.3 Variable Creation

The variables were edited, re-coded, and transcribed in the variable-creation process. More importantly, new variables were created to classify the individual responses into Discover Airlines and Eurowings Discover. After sorting the responses and organizing them according to the respective stimulus, metric variables for perceived brand image, purchase intention, and customer status were created by calculating the mean of the items regarding each construct. For the brand image variable (BI), the mean of all brand image items was calculated first for Discover Airlines and Eurowings Discover individually, which were then summed into one BI variable. The same was done for the variable for purchase intention with the three items, creating the variable PI. When creating the customer status variable, one variable was created for Lufthansa (LH), taking all answers that stated Lufthansa into account. For Eurowings Discover and Discover Airlines, the responses were summarized into one variable (DEW). Lastly, a dummy variable for the independent variable, the logo, was created, where 1 represented the stimulus of Discover Airlines, and 0 expressed the stimulus of Eurowings Discover.

4.2 Sample Characterization

After the data cleansing, a total of 168 valid responses were obtained. The 167 responses were randomly and equally divided into two groups. In Appendix 2, the sample's characteristics are listed in a table.

Most of the sample is German (75.0 %), followed by American (4.8%) and Portuguese (2.4 %). Overall, 20 different nationalities are represented. The number of men and women participating does not differ significantly, as women comprise 56.5 % of the sample and men 43.5 %. Most participants are between 25 and 34 years old (53.6 %) and hold a higher education (Bachelor's Degree, 47.6 %; Master's Degree, 37.5 %). 32.7% of the sample are students, while 40.5 % are employed. The income of the sample varies largely, as either 20.2 % have a gross monthly income of more than 5,000 € a month or no income (14.9 %). 40.5 % live in a two-person household, while 41.7 % are single or 39.9 % are in a relationship.

Regarding the sample's travel behavior, most respondents (48.2 %) travel 2 to 4 times a year by plane, and 57.7 % fly 2 to 4 times a year to a vacation destination. Moreover, 85.1 % of the sample states they have purchased an airline ticket from Lufthansa, 81.0 % from Ryanair, and 58.3 % from Eurowings.

Furthermore, the characteristics of the two sample groups, divided by the survey randomization and corresponding stimulus exposure, were analyzed and compared. In conclusion, both sub-samples share similar characteristics and attributes and are similarly distributed. Therefore, both samples are homogeneous. Nonetheless, using a non-probabilistic sampling technique in this study, the collected sample does not necessarily assure the complete representation of the total population.

4.3 Measure Reliability

The Cronbach's alpha, often known as Cronbach's alpha coefficient, evaluates the internal consistency and reliability of a scale or group of related items in a survey. It is frequently used to assess how much a set of items consistently measures a single underlying construct or dimension. Despite the utilized constructs being based on previous research and literature, this study confirms the quality of the retrieved dataset with Cronbach's alpha coefficient. The Cronbach's alpha coefficient ranges from 0 to 1, where values closer to 1 suggest a higher internal consistency. The higher the consistency, the higher the correlation of the items within the underlying scale. If Cronbach's alpha is closer to 0, the internal consistency is poor, and the items do not consistently measure the same construct.

Generally, a Cronbach's alpha above 0.7 is accepted for most research purposes, although a higher value of 0.8 or above is desirable (George & Paul Mallery, 2011; van Griethuijsen et al., 2015). A lower Cronbach's alpha coefficient value is sometimes acceptable (George & Paul Mallery, 2011). Nonetheless, values below 0.5 indicate an unacceptable level of reliability (George & Paul Mallery, 2011).

For this study, Cronbach's alpha was measured for the two scales, brand image and purchase intention, which again were separated into the independent variable/stimuli based on the logos of Discover Airlines and Eurowings Discover, after and before the rebranding. The table below shows the calculated values above 0.7, measuring high reliability. Accordingly, no items were deleted from the scales.

Table 5: Reliability Test for Multi-item Scales

Scale	**Number of Items**	**Cronbach's α**
Brand Image Discover Airlines	18	0.878
Brand Image Eurowings Discover	18	0.789
Purchase Intention Discover Airlines	3	0.808
Purchase Intention Eurowings Discover	3	0.736

4.4 Results from Hypothesis Testing

Before testing each hypothesis for its validity, several statistical tests were initially conducted to gain a clear overview of the relationship between the independent predictor variable, which in this study is the logo before and after the rebranding of Discover Airlines, formerly Eurowings Discover, and the outcome, dependent variable, the purchase intention, and the perceived brand image. As given by the conceptual framework derived from the literature review, Simple Linear Regressions and Independent T-tests were performed. Because of the mediation and moderation effects targeted in hypotheses 4, 5, and 6, the PROCESS Macro by Hayes (2018) was run for the analysis, precisely Model 1 and 4. Finally, the entire model was tested by Model 10.

First, a preliminary examination of the assumptions of parametric data was conducted to ensure the feasibility and validity of the utilized statistical test. Since each respondent of the online survey was exposed to only one of the two stimuli, the independence of observations is

provided. Per the presented stimulus, the sample size was $n \geq 30$, allowing the application of the central limit theorem (CLT) that assumes a sufficiently large random sample was drawn.

The normality of the metric variables was tested by performing the Shapiro-Wilk Test. The results show that for all variables, other than for brand image, the p-value (Sig.) is > 0.05, suggesting that the data does not significantly deviate from the normal distribution (see Appendix 3). Nonetheless, the normality of the variables can be assumed when considering the CLT.

Further assumptions for parametric tests, such as homogeneity of variances and normality of residuals for regression, were checked to confirm the normal distribution. The results of Levene's test prove the homogeneity of variances (p-value > 0.05, see Appendix 4). The residuals are linear and independent from each other.

The Simple Linear Regression assumes the linearity of the variables. The null hypothesis of the ANOVA implies no linear relationship and slope in the line. The assumption of linearity is validated for the brand image variable but not for purchase intention PI, as the p-value is above 0.05 (see Appendix 5). The results of the Simple Linear Regression must be interpreted carefully.

The assumption of independent observation is confirmed for the dependent variable purchase intention, as the value of the Durbin-Watson lies between 1.5 and 2.5 (see Appendix 6). The variable of the brand image presents a value outside of this range. Nevertheless, each respondent was exposed to only one stimulus, confirming the observations' independence.

The linear regression enables the analysis of the residual output, more explicitly, the normality of residuals, tested on the observed residuals. The assumption of normality of residuals is often neglected, especially with a larger sample size. Moreover, if the null hypothesis were rejected, the interpretation and further statistical analysis would be based on other assumptions. The results (Appendix 7) map an approximately normal distribution of the dependent variables, brand image, and purchase intention. The residuals are linear and independent from each other. The dependent variable and independent variable were measured on a continuous level.

Furthermore, the tests allow us to conclude the absence of multicollinearity, as Pearson's bivariate correlations between variables are below 0.8. The Variance Inflation Factor (VIF) reinforces this, as all values are below 2 (see Appendix 8).

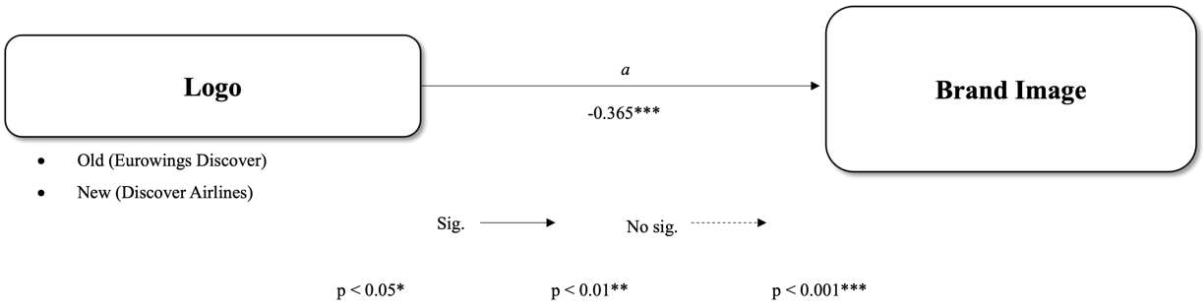
This study applies Simple Linear Regression and Independent Sample T-Test based on normal distribution because of the CLT, the underlying parametric data, and fulfilled assumptions. The significance level was set at $\alpha = 0.05$.

4.4.1 Hypothesis 1 – Impact of the Logo on the Brand Image

H1a: The brand logo impacts the brand image.

The impact of the airline's brand logo on the perceived brand image was investigated by conducting a Simple Linear Regression. The independent predictor variable was the brand logo, and the dependent output variable was the brand image. The direct effect is shown in path *a* in the figure below:

Figure 2: Effect of Brand Logo on Brand Image

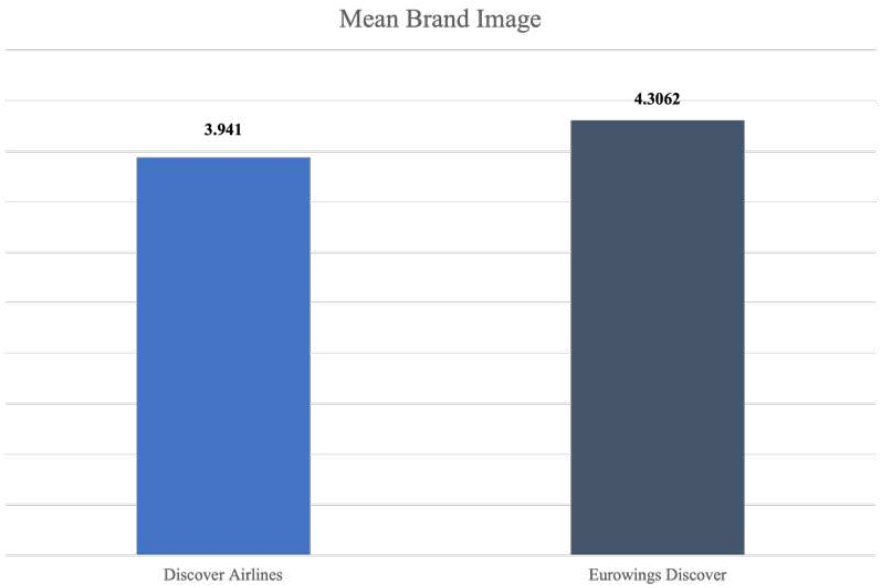


The results show that the model has low explanatory ability (R = 0.290), where the logo explains only 8.4 % of the variance of the perceived brand image (see Appendix 9). Nevertheless, the logo and brand image interaction is statistically significant ($F = 15.162$, $p < 0.001$). The logo significantly contributes to the perceived brand image (Unstandardized B= -0.365, $p < 0.001$). Concludingly, the hypothesis is validated: the logo impacts the brand image.

H1b: The rebranded Discover Airlines logo has an inferior brand image compared to the Eurowings Discover logo.

An Independent Sample T-test was conducted within each group to compare the impact of both independent variables and stimuli on the brand image of the logo of Discover Airlines and Eurowings Discover. The results can be found in Appendix 10.

Figure 3: Comparison of Means – Brand Image



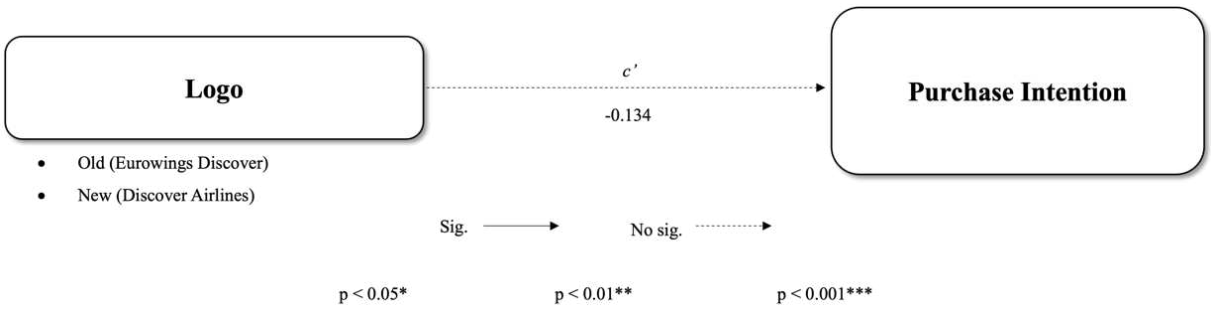
When comparing the means, the mean of the perceived brand image of Discover Airlines (3.941) is smaller than that of Eurowings Discover (4.3062). Therefore, the perceived brand image of Eurowings Discover is more positive. The null hypothesis states no significant difference between the sample mean and the hypothesized population mean of 1. The hypothesis is rejected since the test is significant ($p < 0.001$). There is a considerable difference between the means ($t = 3.894$). Overall, the hypothesis is validated: The rebranded Discover Airlines logo has an inferior brand image compared to the Eurowings Discover logo.

4.4.2 Hypothesis 2 – The Impact of the Brand Logo on the Purchase Intention

H2a: The brand logo has an impact on the purchase intention.

A Simple Linear Regression was conducted again to explore the impact of the brand logo on the purchase intention. The brand logo remained a predictor, while in this model, the outcome variable was the purchase intention. The direct effect is shown in the path *c'* in the figure below:

Figure 4: Effect of Brand Logo on Purchase Intention



The results show that the model has very low explanatory ability (R = 0.068) (see Appendix 11). The brand logo explains 0.5 % of the purchase intention variance, meaning 99.5 % of the variance cannot be explained. The interaction between the logo and purchase intention is statistically insignificant (F = 0.764, p > 0.05), suggesting that adding the predictor variable does not significantly improve the model's fit. The brand logo insignificantly contributes to the purchase intention (Unstandardized B = -0.134, p > 0.05). In conclusion, the hypothesis is rejected: the brand logo does not impact purchase intention.

H2b: The rebranded Discover Airlines Logo has an inferior purchase intention compared to the Eurowings Discover Logo.

An Independent Sample T-test was conducted within the logo as a grouping variable to compare the impact of the independent variables and stimuli on purchase intention. The results can be found in Appendix 12.

Figure 5: Comparison of Means – Purchase Intention

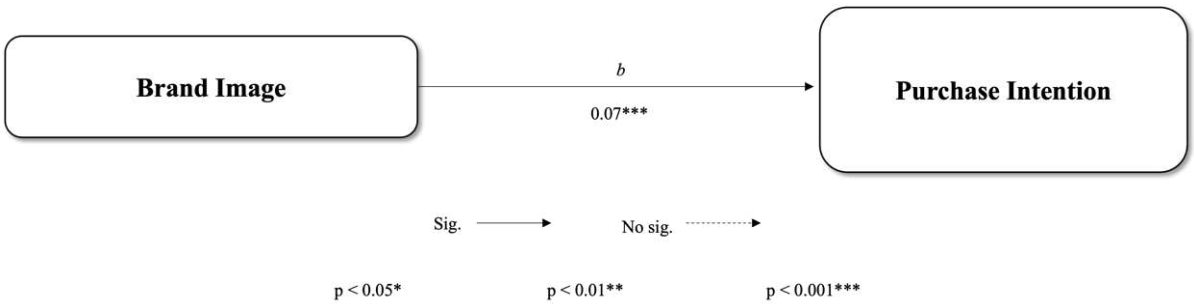
When comparing the means, the mean of Discover Airlines' purchase intention (3.6214) is slightly less than that of Eurowings Discover (3.7558). Therefore, the purchase intention of Eurowings Discover is more optimistic, even if not significantly. The null hypothesis states no significant difference between the groups. The hypothesis is validated since the test is insignificant ($p > 0.05$). There is a difference between the means as t equals 0.874. Hence, the hypothesis is rejected: The rebranded Discover Airlines logo does not have a different purchase intention compared to the Eurowings Discover logo.

4.4.3 Hypothesis 3 – The Impact of Brand Image on Purchase Intention

H3: The brand image impacts the purchase intention.

A further topic of this study is to investigate the impact of the brand logo on the purchase intention. In the conducted Simple Linear Regression, the outcome variable is set to the purchase intention, and the predictor variable is the brand image. The direct effect is shown in the path *b* in the figure below:

Figure 6: Effect of Brand Image on Purchase Intention



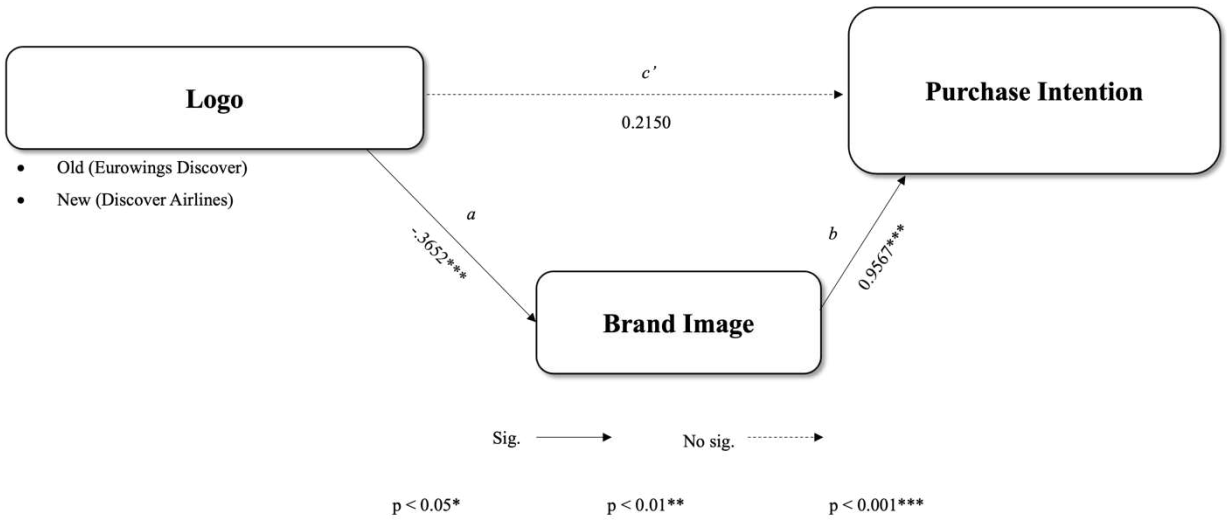
In this model, the perceived brand image of Discover Airlines explains 32.9 % of the variance of the purchase intention, where the model quality is considered acceptable (R = 0.577) (see Appendix 13). The interaction between the brand image and purchase intention is statistically significant (F = 82.302, p < 0.001). Therefore, there is a genuine effect where the brand image considerably contributes to the purchase intention (Unstandardized B = 0.07, p < 0.001). The hypothesis is validated: the perceived brand image impacts the purchase intention.

4.4.4 Hypothesis 4 – Mediator Effect of Brand Image on Purchase Intention

H4: The brand image mediates the relationship between the brand logo and the purchase intention.

Next to the statistical tests, this study uses Model 4 of the Process Macro by Hayes in SPSS to understand whether the perceived brand image is a mediator in the relationship between the brand logo and the purchase intention. The relationship between the brand logo and perceived brand image is described as path *a*, while the relationship between the brand image and purchase intention is defined as path *b*. Path c' shows the direct effect of the brand logo on the purchase intention. *C* describes the total effect. Conversely, the indirect effect describes the impact of the brand logo through the perceived brand image on the purchase intention, as depicted in Figure 7 below. The results of Process Model 4 can be found in Appendix 14.

Figure 7: Effect of Brand Logo on Purchase Intention



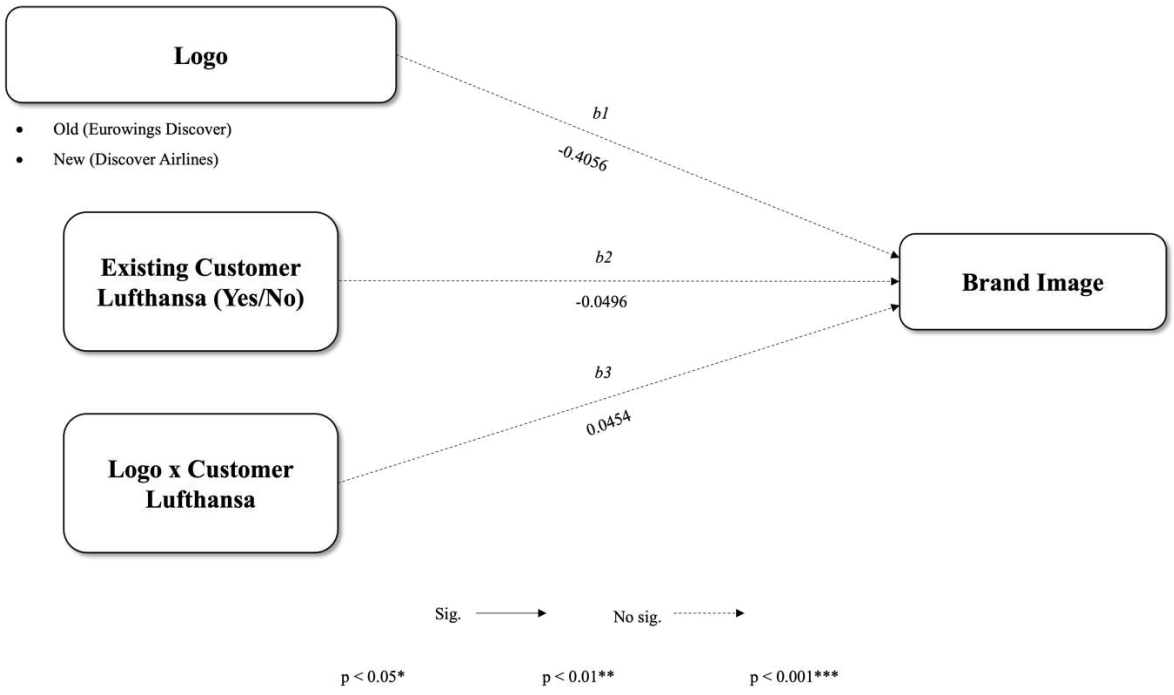
The results show different outcomes of the relationships between the Discover Airlines variables. The relationship between the independent variable logo and the mediator brand image is significant, with $p < 0.05$. The results show that the immediate effect is significant when analyzing the relationship between brand image and the direct variable purchase intention. In contrast, the logo's direct effect on the purchase intention is insignificant. Moreover, the total impact of the logo on the purchase intention, when taking the direct paths and the indirect pathway through the mediator into account, is also significant. Most meaningfully, the bootstrapping confidence interval (BootLLCI = -0.5460; BootULCI = -0.1695) indicates that the perceived brand image is a significant mediator. The interval does not cross the value 0. The perceived brand image, therefore, fully mediates the relationship between the logo and the purchase intention, which validates hypothesis 4.

4.4.5 Hypothesis 5 – Moderation Effect of Lufthansa's Customer Status on Brand Image and Purchase Intention

H5a: The customer status (customer vs. noncustomer) of Lufthansa moderates the relationship between the brand logo and brand image.

This study further analyses the relationship between the brand logo and brand image by exploring whether customer status moderates the relationship. PROCESS Model 1 was conducted. The relationship between the logo and brand image is described by path *b1*, while path *b2* describes the relationship between the customer status and the brand image. Path *b3* describes the interaction term (Logo x LH, see Figure 8). Appendix 15 displays the results.

Figure 8: Effect of Brand Logo on Brand Image moderated by Lufthansa's Customer Status

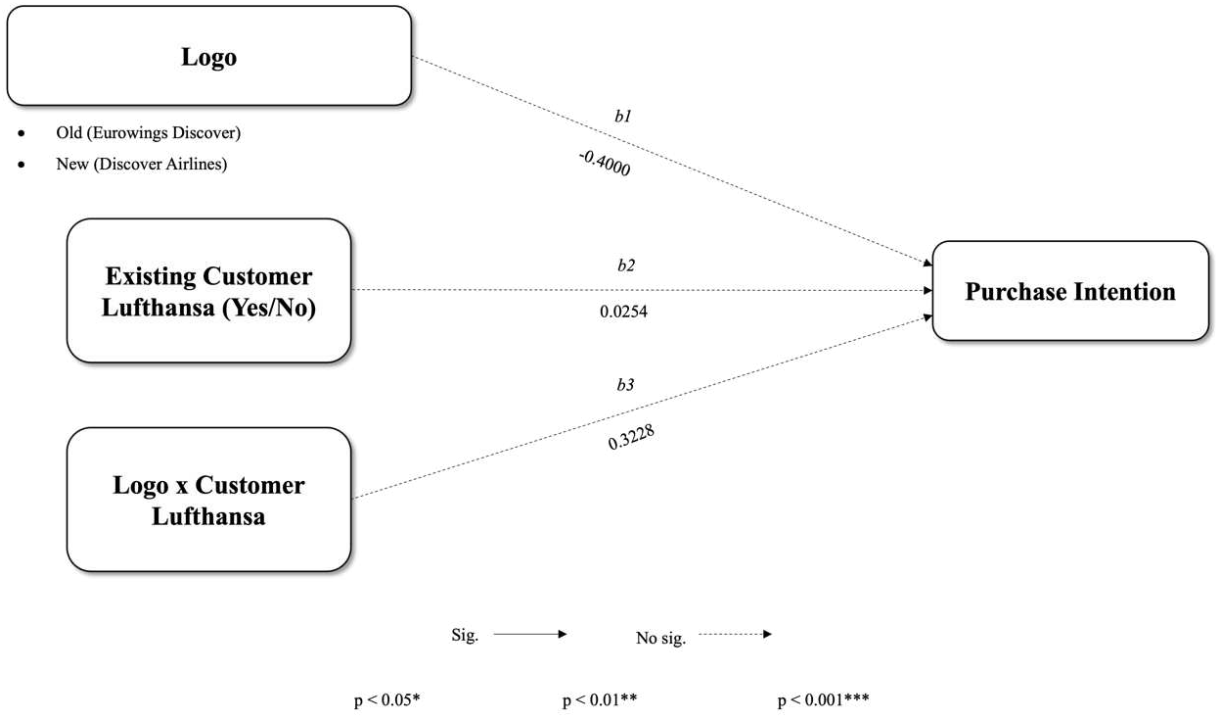


The results show that the overall model is significant ($p < 0.05$) but explains only 8.5 % of the variation in the brand image. All direct effects are insignificant ($p > 0.05$). Precisely, the interaction term (Logo x LH) is insignificant (B =0.0454, $p > 0.05$). Therefore, Lufthansa's customer status is not a significant moderator. Moreover, the bootstrapping confidence interval (LLCI = -0.4920; ULCI = 0.5828) crosses the value 0, which implies that the customer status does not function as a moderator in the relationship between the logo and brand image. Concludingly, hypothesis 5a is rejected.

H5b: The customer status (customer vs. noncustomer) of Lufthansa moderates the relationship between the brand logo and purchase intention.

To further understand the relationship between the brand logo and purchase intention, PROCESS Model 1 was again applied to explore the moderating effect of the customer status on the relationship. The relationship between the logo and purchase intention is described by path *b1*, while path *b2* describes the relationship between the customer status and purchase intention. Lastly, path *b3* describes the interaction term (Logo x LH, see Figure 9). Appendix 16 displays the results.

Figure 9: Effect of Brand Logo on Purchase Intention moderated by Lufthansa's Customer Status



The results show that the overall model is insignificant ($p > 0.05$) and only explains 1.3 % of the variation in the purchase intention. These results show that the relationship between the brand logo and purchase intention has an insignificant direct effect ($p > 0.05$). The other direct effects are insignificant as well. Precisely, the interaction term (Logo x LH) is insignificant ($B = 0.3228$, $p > 0.05$). Therefore, Lufthansa's customer status is not a significant moderator. Moreover, the bootstrapping confidence interval (LLCI = -0.5546; ULCI = 1.2002) crosses the value 0, which implies that the customer status does not function as a moderator in the relationship between the logo and purchase intention. Concludingly, hypothesis 5b is rejected.

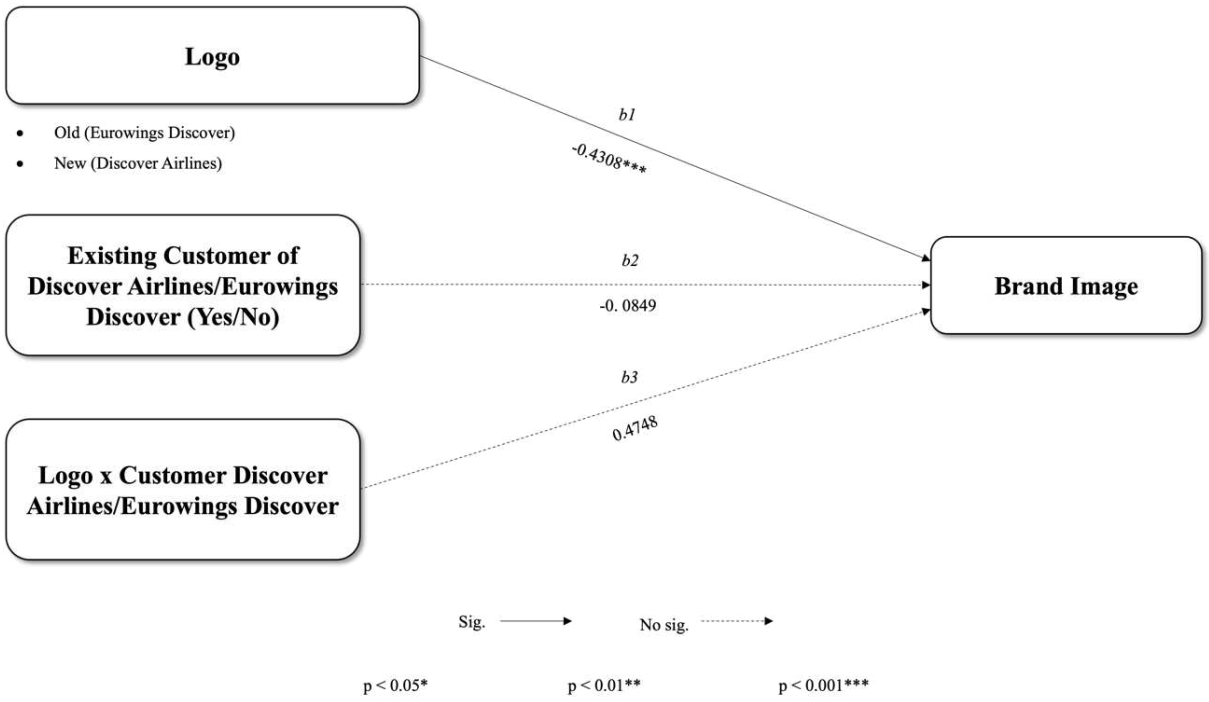
4.4.6 Hypothesis 6 – Moderation Effect of Discover Airlines'/Eurowings Discover's Customer Status on Brand Image and Purchase Intention

H6a: The customer status (customer vs. noncustomer) of Discover Airlines/Eurowings Discover moderates the relationship between the brand logo and brand image.

To continue exploring the relationship between the brand logo and brand image, PROCESS Model 1 was again applied to examine the moderating effect of the customer status of Discover Airlines, formerly Eurowings Discover, on the relationship. The relationship between the logo and brand image is described by path *b1*, while path *b2* describes the relationship between the

customer status of Discover Airlines/Eurowings Discover and its brand image. Lastly, path *b3* describes the interaction term (Logo x DEW, see Figure 10). Appendix 17 displays the results.

Figure 10: Effect of Brand Logo on Brand Image moderated by Discover Airlines'/Eurowings Discover's Customer Status



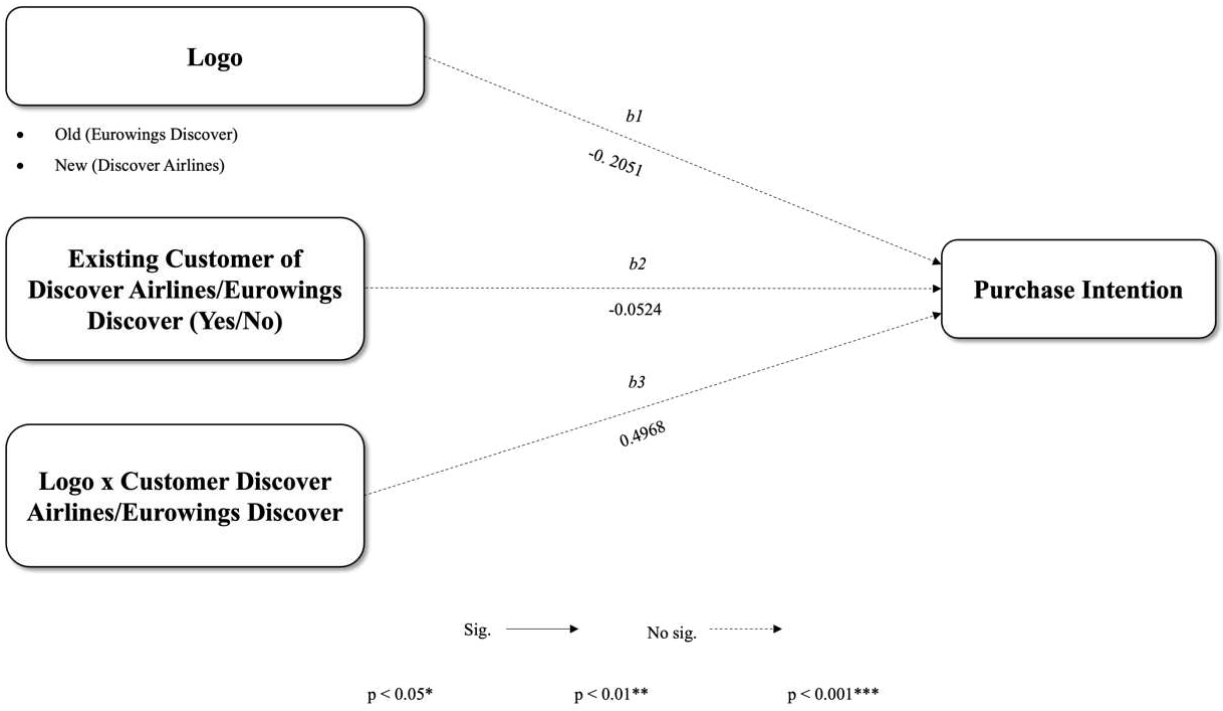
The results show that the overall model is significant ($p < 0.05$), explaining at least 10.9 % of the variation in the perceived brand image. These results show that the relationship between the brand logo and brand image has a significant direct effect ($p < 0.001$). The other direct effects remain insignificant. Most notably, in this model, the interaction term (Logo x DEW) is insignificant ($B = 0.4748$, $p > 0.05$). Therefore, the customer status of Discover Airlines/Eurowings Discover is not a significant moderator. Moreover, the bootstrapping confidence interval (LLCI = -0.1015; ULCI = 1.0512) crosses the value 0, which implies that the customer status does not function as a moderator in the relationship between the logo and brand image. Concludingly, hypothesis 6a is rejected.

H6b: The customer status (customer vs. noncustomer) of Discover Airlines/Eurowings Discover moderates the relationship between the brand logo and purchase intention.

Finally, to investigate the relationship between the brand logo and purchase intention further, PROCESS Model 1 was again applied to explore the moderating effect of the customer status on the relationship. As in the previous hypothesis, the moderating effect of the customer status

of Discover Airlines, formerly Eurowings Discover, was analyzed. The relationship between the logo and purchase intention is described by path *b1*, while path *b2* describes the relationship between customer status and purchase intention. Path *b3* describes the interaction term (Logo x DEW, see Figure 11). Appendix 18 displays the results.

Figure 11: Effect of Brand Logo on Purchase Intention moderated by Discover Airlines'/Eurowings Discover's Customer Status



The results show that the overall model is insignificant ($p > 0.05$) while only explaining 1.7 % of the variation in the purchase intention. All direct effects are insignificant ($p > 0.05$). The interaction term (Logo x DEW) is insignificant ($B = 0.4968$, $p > 0.05$). Therefore, the customer status of Discover Airlines/Eurowings Discover is not a significant moderator. Moreover, the bootstrapping confidence interval (LLCI = -0.4549; ULCI = 1.4485) crosses the value 0, which implies that the customer status does not function as a moderator in the relationship between the logo and purchase intention. Concludingly, hypothesis 6b is rejected.

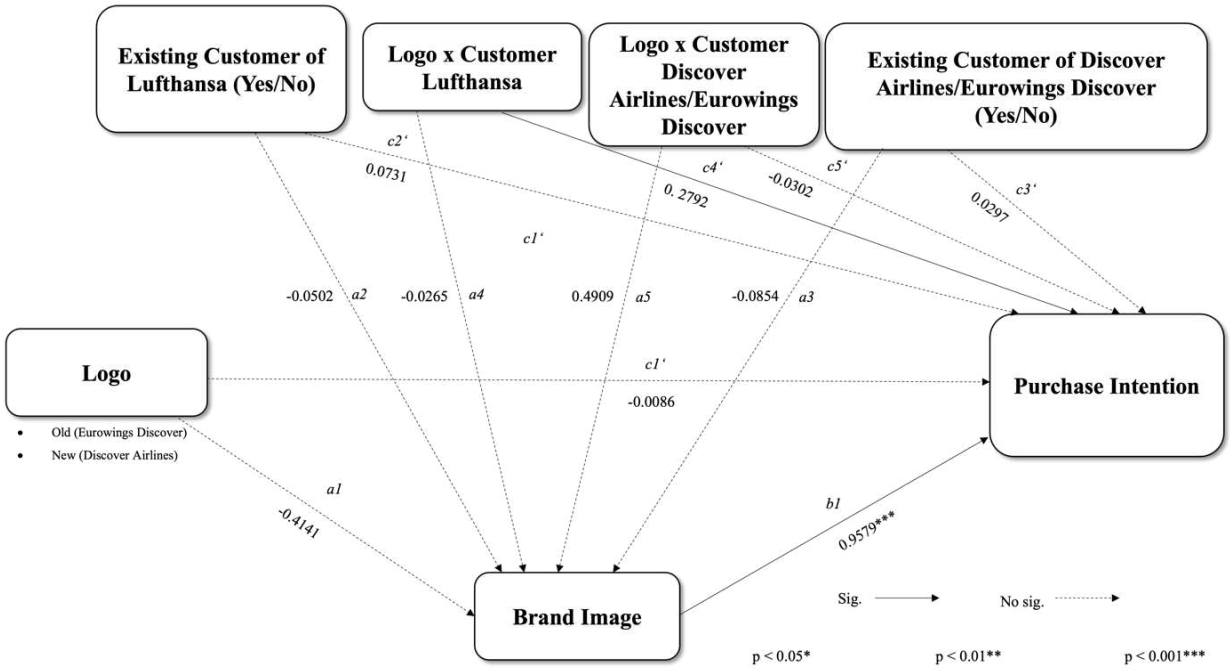
4.5 Results from Full Model Analysis

Ultimately, this research tested its full model with a final PROCESS Macro analysis in SPSS. The model is Model 10, as defined by Hayes (2018), combining all models previously explored (see Figure 12). The results of the complete model analysis can be found in Appendix 19.

Overall, the model is significant ($p < 0.05$). However, the relationships between the brand logo and the dependent and mediating variable have an insignificant direct effect ($p > 0.05$). Brand image as a mediator significantly impacts the purchase intention ($p < 0.05$).

The interaction variables Logo x LH and Logo x DEW do not show any significance ($p > 0.05$). All the bootstrap confidence intervals cross 0. Therefore, the customer status of Lufthansa and Discover Airlines/Eurowings Discover as a moderator does not partially moderate the relationship between the brand logo and perceived brand image, and the logo and the purchase intention, as tested before.

Figure 12: Full Model



4.6 Hypothesis Testing Overview

Table 6: Overview of Hypothesis Testing

Hypothesis	Outcome Individual Tests	Outcome Full Model
H1a: The brand logo impacts the brand image.	Validated	Not validated
H1b: The rebranded Discover Airlines logo has an inferior brand image compared to the Eurowings Discover logo.	Validated	

H2a: The brand logo has an impact on the purchase intention.	Not validated	Not validated
H2b: The rebranded Discover Airlines Logo has an inferior purchase intention compared to the Eurowings Discover Logo.	Not validated	
H3: The brand image impacts the purchase intention.	Validated	Validated
H4: The brand image mediates the relationship between the brand logo and the purchase intention.	Validated	Validated
H5a: The customer status (customer vs. noncustomer) of Lufthansa moderates the relationship between the brand logo and brand image.	Not validated	Not validated
H5b: The customer status (customer vs. noncustomer) of Lufthansa moderates the relationship between the brand logo and purchase intention.	Not validated	Not validated
H6a: The customer status (customer vs. noncustomer) of Discover Airlines/Eurowings Discover moderates the relationship between the brand logo and brand image.	Not validated	Not validated
H6b: The customer status (customer vs. noncustomer) of Discover Airlines/Eurowings Discover moderates the	Not validated	Not validated

relationship between the brand logo and purchase intention.		

CHAPTER 5: CONCLUSIONS AND LIMITATIONS

The final chapter of this thesis summarizes the main findings, concluding the collected data and the conducted literature review. Further, it offers managerial and academic implications, acknowledges limitations, and suggests potential areas of future research.

5.1 Main Findings & Conclusions

RQ 1: How does the rebranding of Eurowings Discover to Discover Airlines by logo change impact the perceived brand image?

Logo changes through rebranding can modify brand knowledge, thus modifying the perceived brand image and associations, bringing forth positive or negative perceptions of the consumer (D. A. Aaker, 2009). Often, a logo change negatively impacts the perceived brand image (D. A. Aaker & Joachimsthaler, 2012; Keller & Lehmann, 2006; Roy & Sarkar, 2015). This study found that the logo significantly impacted the brand image. When comparing the means of the perceived brand image between Eurowings Discover and Discover Airlines, Eurowings Discover had a higher perceived brand image, which supports the arguments for logo redesign negatively impacting brand image. However, considering multiple variables, the full model analysis results show no significant interaction between the logo and the brand image, contradicting previous research.

RQ 2: How does the rebranding by logo change impact the consumer purchase intention?

This research investigated how rebranding through logo change impacted the purchase intention. As presented in Chapter 4, the purchase intention is statistically indifferent when comparing Discover Airlines with Discover Airlines as Eurowings Discover before the rebranding. In this case, the logo did not directly impact the consumers' purchase intention, allowing us to derive that rebranding does not directly affect the company's performance, as concluded from the literature review. Interestingly, and as highlighted in the literature review, brand image plays a significant role when exploring how logo change influences purchase intention. The study found that brand image positively impacts purchase intention. Brand image as a mediator fully explains the relationship between the logo and purchase intention. Therefore, the results provide evidence that consumers' feelings towards a brand, thus the perceived brand image, impact purchase intention, which aligns with the reviewed literature.

When applying the full model that includes the customer status as a mediator, the brand image loses its mediating effect between the rebranded logo and the purchase intention. In the more profound model, the brand image exclusively explains the consumer's purchase intention.

RQ 3: How does the impact vary for customers of Lufthansa Group and Discover Airlines, formerly Eurowings Discover, versus noncustomers?

Lastly, this thesis explored whether customer status moderated the interactions between the rebranded logo, the perceived brand image, and the purchase intention. According to research, customer status should have an impact as more committed consumers perceive logo change more negatively than noncustomers by sensing a weakened brand attitude and image (Walsh et al. 2010). Scholars have stated that changing a brand's logo when rebranding can significantly affect existing customers and their purchasing intentions because their perception of the brand and its image and equity is disrupted, creating an information asymmetry (Girard, 2013; Roy & Sarkar, 2015). This study cannot confirm the past findings since the customer status showed an insignificant interaction as a moderator with neither the brand image nor the purchase intention. The full model analysis supports this. The customer status does not act as a mediator by applying all defined variables and modeling potential relationships. Thus, the impact on the customer does not vary for Lufthansa or Discover Airlines customers.

5.2 Managerial Implications

Rebranding is a powerful marketing strategy that can determine a brand's and company's overall success. Focusing this study on the current rebranding case of Discover Airlines aims to provide airline managers with an understanding of the effects of this strategic decision on the brand's performance, measured by purchase intention and brand image. The logo change is a significant measure, as it is the visual signature of a brand and enables airline brands to communicate their value and identity cross-linguistically. Generally, managers need to be aware of the impact of rebranding and logo change, the various strategies, forms of execution, and the financial and time expenditure to successfully communicate the launch of the new brand.

When considering the findings of this research, the exact dimension of the impact of the logo change remains uncertain. Nonetheless, some of the results suggest vital managerial insights for the complete execution of the rebranding of Discover Airlines. For one, the logo change impacted the perceived brand image when the interaction between the two components is

observed exclusively. The comparison between the old logo of Eurowings Discover and the new logo of Discover Airlines reveals that the logo before rebranding triggered a more positive perceived brand image with consumers. However, this occurrence may be related to the use of the umbrella brand Eurowings, where it is not clear whether respondents' brand associations of Eurowings (short-haul airline of Lufthansa) and Eurowings Discover merged, leading to an overall higher, more positive brand image. In this context, Discover Airlines potentially evokes fewer associations, which seems to also contribute to a positive brand image.

When narrowing down the analysis solely on the interaction between the brand logo, the brand image, and the purchase intention, statistical evidence proves that brand image, which is impacted by the brand logo, positively influences the consumers' purchase intention. The brand image has a full mediating effect.

In conclusion, Discover Airlines managers should not underestimate the impact of rebranding and logo change on its brand image, increasing consumers' purchase intention. Therefore, they should focus their marketing efforts on forming strong, positive brand associations that revolve around the new logo and branding, creating a powerful brand image, which poses a fundamental building block for the airline brand's overall brand equity. While the distinction between customers and noncustomers does not play a significant role, a comprehensive marketing campaign to draw attention to the rebranding with the new logo and other brand elements can help shape the brand's image within the Lufthansa corporation. As part of this, a clear differentiation to the short-haul airline Eurowings takes place, and unique and proper brand associations are shaped for the vacation airline. The promoted brand associations, created by the new logo, brand element, capturing visuals, and value statement of being a quality leisure airline within the Lufthansa corporation, will shape the brand image, which can positively affect the purchase intention.

5.3 Academic Implications

This study and its result contribute to a further understanding of rebranding, precisely by logo redesign, and its impact on consumers' perceived brand image and purchase intentions. Including the customers' status by differentiating consumers with stronger, existing brand associations from consumers with weak, limited brand associations helped gain a further understanding of rebranding and its effects. Most previous research has chosen a more theoretical approach to rebranding, utilizing existing theories regarding brand equity, brand image, and rebranding. Moreover, there are limited academic works on rebranding in

connection with brand equity theories, brand image, and the impact on consumers' purchase intention. Therefore, this dissertation provides a practical approach to rebranding by analyzing the most current practical case of Discover Airlines. It attempts to compare the brand before and after the rebranding approach, which has been barely recognized in the academic world. Additionally, this research contributes to the literature on rebranding as it connects it with the customer-based brand equity doctrine and explores its effectiveness measured by consumers' purchase intention and perceived brand image in one cohesive model.

5.3 Limitations and Further Research

This research was conducted for a Master's thesis dissertation. Therefore, there are various limitations, such as financial and time constraints.

Convenience sampling was used to collect a sample of respondents for the online survey. Unfortunately, this sampling does not ensure the representation of the entire population, which is why the results of this study must be interpreted carefully by taking the sample's characteristics into account. Future research regarding the rebranding of Discover Airlines and its impacts should consider a large, more demographically representative sample, improving the generalization and reliability of the results. Moreover, to measure the affectability of the rebranding measures, the sample size could represent the defined target group, which was unknown in this case.

This study directed its research efforts towards rebranding through logo redesign, as in the case of Discover Airlines, the logo change embracing the new name posed the most significant and crucial rebranded element. The results struggle to identify the full impact of the logo redesign, which is why future research is advised to take other rebranding efforts, for example, color change, into account to understand the entire effect of rebranding. Instead of focusing on the impact of the logo redesign on the perceived brand imagery, future research could explore further consumer-based brand equity pyramid components to evaluate Discover Airlines' brand performance.

When reflecting on the applied model, it does not fully explain the interaction between logo redesign, purchase intention, brand image, and customer status. It does not show any significance. Only the relationship between brand image and purchase intention is explained. Thus, this study leaves room for further statistical research.

Lastly, rebranding is not the only influential factor when forming brand associations that create the perceived brand image and impact purchase intention. Other external factors like pricing, advertising, customer relationship management, and past experiences play a vital role next to the brand itself in the formation of the brand image and purchase intention. Nonetheless, the research design could not cover the exhaustive spectrum of potential factors when analyzing Discover Airlines' rebranding strategy, leaving the potential for further exploration.

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APPENDICES

Appendix 1: Main Study – Online Survey

Survey Flow

Show Block: Introduction

Show Block: Control Questions (2 Questions)

Show Block: Consumer Behavior Plane Travel (2 Questions)

Randomizer: 1 – Evenly Present Elements

> Show Block: Randomization Block: Discover Airlines (rebranded) (3 Questions)
>
> Show Block: Randomization Block: Eurowings Discover (before rebranding) (3Questions)

Show Block: Customer Status (1 Question)

Show Block: Manipulation Check (1 Question)

Show Block: Demographics (8 Questions)

End of Survey

Block 1 – Introduction

Dear participant,

Thank you in advance for your time and participation in this survey. This research is being done under a Master's Thesis in Management with Specialization in Strategic Marketing, by Católica Lisbon School of Business and Economics. The data collected will be treated anonymously and only used for research purposes. This survey will not take you more than 5 minutes to complete. It is important to answer all questions as honestly as possible, after reading each question carefully. If you are not sure about your answer, please choose the one closest to your initial assessment. There are no right or wrong answers. Finally, if you have any questions or interest in knowing the final results of this study, please contact:

s-cschwarz@ucp.pt

Thank you very much,

Carmen Eva Schwarz

Liebe/Lieber Teilnehmerin/Teilnehmer,

vielen Dank im Voraus für Ihre Zeit und Ihre Teilnahme an dieser Umfrage. Diese Untersuchung wird im Rahmen einer Masterarbeit in Management mit Spezialisierung auf strategisches Marketing an der Católica Lisbon School of Business and Economics durchgeführt. Die erhobenen Daten werden anonym behandelt und nur zu Forschungszwecken verwendet. Das Ausfüllen dieser Umfrage wird nicht mehr als 5 Minuten in Anspruch nehmen. Es ist wichtig, dass Sie alle Fragen so ehrlich wie möglich beantworten, nachdem Sie jede Frage sorgfältig gelesen haben. Wenn Sie sich bei Ihrer Antwort nicht sicher sind, wählen Sie bitte die Antwort, die Ihrer ersten Einschätzung am nächsten kommt. Es gibt keine richtigen oder falschen Antworten. Wenn Sie Fragen haben oder an den Endergebnissen dieser Studie interessiert sind, wenden Sie sich bitte an:

s-cschwarz@ucp.pt

Herzlichen Dank

Carmen Eva Schwarz

Block 2 – Control Questions

Q1: Control Question 1

Are you 18 years old or older?

Sind Sie 18 Jahre alt oder älter?

o Yes / *Ja*

o No/ *Nein*

If the participant answers "No", he or she skips to the end of the survey.

Q2: Control Question 2

Have you purchased an airline ticket in the last two years?

Haben Sie in den letzten zwei Jahren ein Flugticket gekauft?

o Yes / *Ja*

o No / *Nein*

If the participant answers "No", he or she skips to the end of the survey.

Block 3 – Consumer Behavior Plane Travel

Q3: Travel Behavior Question 1

How often do you travel by plane per year?

Wie oft reisen Sie mit dem Flugzeug im Jahr?

o Less than twice per year / *Weniger als 2 mal pro Jahr*

o 2-4 times per year / *2- bis 4-mal pro Jahr*

o 5-8 times per year / *5- bis 8-mal pro Jahr*

o More than 8 times per year / *Mehr als 8-mal pro Jahr*

Q4: Travel Behavior Question 2

How often do you travel by plane to a vacation destination per year?

Wie oft reisen Sie mit dem Flugzeug an ein Urlaubsziel im Jahr?

o o Less than twice per year / *Weniger als 2 mal pro Jahr*

o 2-4 times per year / *2- bis 4-mal pro Jahr*

o 5-8 times per year / *5- bis 8-mal pro Jahr*

o More than 8 times per year / *Mehr als 8-mal pro Jahr*

Block 4 – Randomization and Presentation of Two Stimuli: Brand Logo Discover Airlines (after rebranding) or Brand Logo Eurowings Discover (before rebranding)

Q5: Imagine you are planning your next vacation and are searching for flights. While you are looking for flights, you come across the following airline and brand logo (presented below). After carefully analyzing this logo, please answer the following questions.

Q5: Stellen Sie sich vor, Sie planen Ihren nächsten Urlaub und sind auf der Suche nach Flügen. Während Sie nach Flügen suchen, stoßen Sie auf die folgende Fluggesellschaft und das Logo der Marke (siehe unten). Nachdem Sie dieses Logo sorgfältig analysiert haben, beantworten Sie bitte die folgenden Fragen.

Block 4.1 – Perceived Brand Image

Q6: Perceived Brand Image

Please indicate your level of agreement with the following statements respecting the brand image.

Bitte geben Sie an, inwieweit Sie den folgenden Aussagen über das Markenimage zustimmen.

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
X is trustworthy. (1)	○	○	○	○	○	○	○
X offers high quality. (2)	○	○	○	○	○	○	○
X is a white-shoe firm (= most prestigious, well-established business) (3)	○	○	○	○	○	○	○
X is expensive. (4)	○	○	○	○	○	○	○
X is reasonably priced. (5)	○	○	○	○	○	○	○
X requests surcharge. (6)	○	○	○	○	○	○	○
X offers good service. (7)	○	○	○	○	○	○	○
X offers free appetizers. (8)	○	○	○	○	○	○	○
X cabin crew. (9)	○	○	○	○	○	○	○

X is comfortable. (10)	○	○	○	○	○	○	○
X has on-time departures. (11)	○	○	○	○	○	○	○
X has a successful campaign. (12)	○	○	○	○	○	○	○
X has appealing advertisement. (13)	○	○	○	○	○	○	○
X has a high status. (14)	○	○	○	○	○	○	○
X has an extensive flight network. (15)	○	○	○	○	○	○	○
X is a German airline. (16)	○	○	○	○	○	○	○
X radiates a sense of nationalism. (17)	○	○	○	○	○	○	○
X is a subsidiary of Lufthansa. (18)	○	○	○	○	○	○	○

	Stimme überhaupt nicht zu (1)	*Stimme nicht zu (2)*	*Stimme eher nicht zu (3)*	*Stimme weder zu noch nicht zu (4)*	*Stimme eher zu (5)*	*Stimme zu (6)*	*Stimme voll und ganz zu (7)*
X ist vertrauenswürdig. (1)	○	○	○	○	○	○	○
X bietet hohe Qualität. (2)	○	○	○	○	○	○	○
X ist ein White-Shoe-Unternehmen (= renommiertes, gut eingeführtes Unternehmen). (3)	○	○	○	○	○	○	○
X ist teuer. (4)	○	○	○	○	○	○	○
X ist preisgünstig. (5)	○	○	○	○	○	○	○
X verlangt einen Aufpreis für Zusatzleistungen. (6)	○	○	○	○	○	○	○
X bietet einen guten Service. (7)	○	○	○	○	○	○	○
X bietet kostenlose Häppchen an. (8)	○	○	○	○	○	○	○

X hat ein gutes Kabinenpersonal. (9)	○	○	○	○	○	○	○
X ist komfortabel. (10)	○	○	○	○	○	○	○
X hat eine hohe Abflugpünktlichkeit. (11)	○	○	○	○	○	○	○
X hat eine erfolgreiche Kampagne. (12)	○	○	○	○	○	○	○
X hat eine ansprechende Werbung. (13)	○	○	○	○	○	○	○
X hat einen hohen Status. (14)	○	○	○	○	○	○	○
X verfügt über ein umfangreiches Flugnetz. (15)	○	○	○	○	○	○	○
X ist eine deutsche Fluggesellschaft. (16)	○	○	○	○	○	○	○
X strahlt ein Gefühl von Nationalbewusstsein aus. (17)	○	○	○	○	○	○	○
X ist eine Tochtergesellschaft der Lufthansa. (18)	○	○	○	○	○	○	○

Block 4.2 – Purchase Intention

Q7: Purchase Intention

Please indicate your level of agreement with the following statements respecting the purchase intention.

Bitte geben Sie an, inwieweit Sie den folgenden Aussagen über Ihre Kaufabsicht zustimmen.

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
If I need to travel by airplane again, I prefer X to other airlines. (1)	○	○	○	○	○	○	○
I have enough reasons for preferring X to other airlines. (2)	○	○	○	○	○	○	○
In general, I believe	○	○	○	○	○	○	○

that using X is a good decision. (3)							

	Stimme überhaupt nicht zu (1)	Stimme nicht zu (2)	Stimme eher nicht zu (3)	Stimme weder zu noch nicht zu (4)	Stimme eher zu (5)	Stimme zu (6)	Stimme voll und ganz zu (7)
Wenn ich wieder mit dem Flugzeug reise, ziehe ich X anderen Fluggesellschaften vor. (1)	○	○	○	○	○	○	○
Ich habe ausreichende Gründe, warum ich X gegenüber anderen Fluggesellschaften bevorzuge. (2)	○	○	○	○	○	○	○
Grundsätzlich glaube ich, dass die Nutzung von X eine gute Entscheidung ist. (3)	○	○	○	○	○	○	○

Block 5 – Customer Status

Q8: Customer Status

Have you ever purchased an airline ticket from the following airline brands? Please select all the airline brands you have purchased a ticket from (multiple answers possible).

Haben Sie jemals ein Flugticket bei einer der folgenden Fluggesellschaften gekauft? Bitte wählen Sie alle Fluggesellschaften aus, bei denen Sie ein Flugticket gekauft haben (Mehrfachauswahl möglich).

- ☐ Lufthansa
- ☐ Eurowings
- ☐ Eurowings Discover
- ☐ Discover Airlines
- ☐ Ryanair
- ☐ TUIfly
- ☐ WIZZ Air
- ☐ SunExpress
- ☐ KLM - Royal Dutch Airlines
- ☐ Condor Flugdienst
- ☐ SAS Scandinavian Airlines
- ☐ easyJet

Block 6 – Manipulation Check

Q9: Manipulation Check Question

What is the brand of the airline presented in the beginning of this survey? Please select the one that applies.

Welches ist die Marke der zu Beginn dieser Umfrage vorgestellten Fluggesellschaft? Bitte wählen Sie die zutreffende aus.

o Eurowings Discover

o Discover Airlines

o Neither, please indicate/ *Wenn weder noch, bitte angeben:*_____

Block 7 – Demographics

Q10: Gender

What gender do you identify as?

Als welches Geschlecht identifizieren Sie sich?

o Male / *Männlich*

o Female / *Weiblich*

o Non-binary / third gender / *Non binär*

o Prefer not to say / *Keine Angabe*

Q11: Age

How old are you?

Wie alt sind Sie?

o 18-24 years old / *18-24 Jahre alt*

o 25-34 years old / *25-34 Jahre alt*

o 35-44 years old / *35-44 Jahre alt*

o 45-54 years old / *45-54 Jahre alt*

o 55-64 years old / *55-64 Jahre alt*

o 65-74 years old / *65-74 Jahre alt*

o 75 years old or older / *75 Jahre alt oder älter*

Q12: Nationality

Please indicate your nationality:

Bitte geben Sie Ihre Nationalität an:

o German / *Deutsch*

o Portuguese / *Deutsch*

o Other, please indicate / *Sonstiges, bitte angeben:*_____

Q13: Education

What is the highest degree or level of education you have completed?

Welches ist der höchste Abschluss, den Sie erworben haben?

o Middle/High School / *Berufsreife/Mittlere Reife/Fachabitur/Allgemeine Hochschulreife*

o Bachelor Degree / *Bachelor-Abschluss*

o Master Degree / *Master-Abschluss*

o Doctoral Degree / *Doktor-Abschluss/Promotion*

o Other, please indicate/ *Sonstiges, bitte angeben*:_____

Q14: Martial Status

What is your marital status?

Was ist Ihr Familienstand?

o Single / *Ledig*

o In a relationship / *In einer Beziehung*

o Married / *Verheiratet*

o Divorced / *Geschieden*

o Widowed / *Verwitwet*

Q15: Household

How many people, including yourself, live in your household?

Wie viele Personen, einschließlich Ihrer selbst, leben in Ihrem Haushalt?

o 1

o 2

o 3

o 4

o 5

o 6

o 7

o 8 or more / *8 oder mehr*

Q16: Occupation

Please select your occupation:

Bitte wählen Sie Ihren Beruf:

o Student / *Student/in*

o Working Student / *Werkstudent/in*

o Employed / *Angestellte/r*

o Self-Employed / *Selbstständig*

o Unemployed / *Arbeitslos*

o Retired / *Im Ruhestand*

o Other, please indicate/ *Sonstiges, bitte angeben*:_____

Q17: Gross monthly income

What is your gross monthly income?

Wie hoch ist Ihr monatliches Bruttoeinkommen?

o No income / *Kein Einkommen*

o Less than 500€ / *Weniger als 500€*

o 500-999€ / *500-999€*

o 1,000-1,499€ / *1.000-1.499€*

o 1,500-1,999€ / *1.500-1.999€*

o 2,000-2,999€ / *2.000-2.999€*

o 3,000-3,999€ / *3.000-3.999€*

o 4,000-4,999€ / *4.000-4.999€*

o 5,000€ or more / *5.000€ oder mehr*

o Prefer not to say. / *Keine Angabe*

Block 8: End of Survey

We thank you for your time spent taking this survey. Your response has been recorded.

Wir danken Ihnen, dass Sie sich die Zeit genommen haben, an dieser Umfrage teilzunehmen. Ihre Antwort wurde aufgezeichnet.

Appendix 2: Main Survey – Sample Characteristics (n = 167)
Demographics and Travel Behavior

Variable		**Discover Airlines logo**	**Eurowings Discover logo**	**Total**
Responses	Total #	81	86	167
Amount of Plane Travel per Year	< 2	23.2 %	10.5 %	16.7 %
	2-4	45.1 %	51.2 %	48.2 %
	5-8	23.2 %	20.9 %	22.0 %

	> 8	8.5 %	17.4 %	13.1 %
Amount of Plane Travel to Vacation Destination per Year	< 2	35.4 %	25.6 %	30.4 %
	2-4	53.7 %	61.6 %	57.7 %
	5-8	9.8 %	10.5 %	10.1 %
	> 8	1.2 %	2.3 %	1.8 %
Purchased Airline Ticket from Airline Brand	Lufthansa	81.7 %	88.4 %	85.1 %
	Eurowings	56.1 %	60.5 %	58.3 %
	Eurowings Discover	14.6 %	8.1 %	11.3 %
	Discover Airlines	3.7 %	1.2 %	2.4 %
	Ryanair	79.3 %	82.6 %	81.0 %
	TUIfly	25.6 %	29.1 %	27.4 %
	WIZZ Air	18.3 %	34.9 %	26.8 %
	SunExpress	14.6 %	9.3 %	11.9 %
	KLM	32.9 %	46.5 %	39.9 %
	Condor	48.8 %	43.0 %	45.8 %
	SAS	15.9 %	20.9 %	18.5 %
	easyJet	39.0 %	55.8 %	47.6 %
Gender	Male	39.0 %	47.7 %	43.5 %
	Female	61.0 %	52.3 %	56.5 %
	Non-binary/third gender	-	-	-
	Prefer not to say	-	-	-
Age	18-24	28.0 %	33.7 %	31.0 %
	25-34	53.7 %	53.5 %	53.6 %
	35-44	1.2 %	1.2 %	1.2 %
	45-54	6.1 %	3.5 %	4.8 %
	55-64	7.3 %	7.0 %	7.1 %
	65-74	3.7 %	1.2 %	2.4 %
	≥ 75	-	-	-
Nationality	German	75.6 %	74.4 %	75.0 %
	Portuguese	1.2 %	3.5 %	2.4 %
	Other	23.2 %	22.1 %	22.6 %
Education	Middle/High School	12.2 %	10.5 %	11.3 %

	Bachelor's Degree	52.4 %	43.0 %	47.6 %
	Master's Degree	34.1 %	40.7 %	37.5 %
	Doctoral Degree	-	1.2 %	0.6 %
	Other	1.2 %	4.7 %	3.0 %
Marital Status	Single	34.1 %	48.8 %	41.7 %
	In a relationship	42.7 %	37.2 %	39.9 %
	Married	20.7 %	14.0 %	17.3 %
	Divorced	2.4 %	-	1.2 %
	Widowed	-	-	-
Household	1	24.4 %	18.6 %	21.4 %
	2	42.7 %	38.4 %	40.5 %
	3	13.4 %	20.9 %	17.3 %
	4	12.2 %	14.0 %	13.1 %
	5	3.7 %	3.5 %	3.6 %
	6	1.2 %	1.2 %	1.2 %
	7	-	2.3 %	1.2 %
	8+	2.4 %	1.2 %	1.8 %
Occupation	Student	25.6 %	39.5 %	32.7 %
	Working Student	12.2 %	8.1 %	10.1 %
	Employed	41.5 %	39.5 %	40.5 %
	Self-Employed	13.4 %	7.0 %	10.1 %
	Unemployed	1.2 %	1.2 %	1.2 %
	Retired	4.9 %	2.3 %	3.6 %
	Other	1.2 %	2.3 %	1.8 %
Income	No income	14.6 %	15.1 %	14.9 %
	< 500€	6.1 %	4.7 %	5.4 %
	500-999€	4.9 %	10.5 %	7.7 %
	1,000-1,499€	12.2 %	9.3 %	10.7 %
	1,500-1,999€	3.7 %	11.6 %	7.7 %
	2,000-2,999€	7.3 %	9.3 %	8.3 %
	3,000-3,999€	11.0 %	9.3 %	10.1 %
	4,000-4,999€	9.8 %	5.8 %	7.7 %
	≥ 5,000€	23.2 %	17.4 %	20.2 %

	Prefer not to say	7.3 %	7.0 %	7.1 %

Appendix 3 – Test of Normality

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Logo	,348	167	<,001	,636	167	<,001
BI	,104	167	<,001	,986	167	,091
PI	,120	167	<,001	,982	167	,033
LH	,515	167	<,001	,417	167	<,001
DEW	,524	167	<,001	,378	167	<,001

a. Lilliefors Significance Correction

Appendix 4 – Test of Homogeneity of Variances

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
BI	Based on Mean	,127	1	165	,722
	Based on Median	,125	1	165	,724
	Based on Median and with adjusted df	,125	1	159,247	,724
	Based on trimmed mean	,105	1	165	,747
PI	Based on Mean	,019	1	165	,889
	Based on Median	,020	1	165	,889
	Based on Median and with adjusted df	,020	1	151,487	,889
	Based on trimmed mean	,028	1	165	,866

Appendix 5 – Assumption of Linearity

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,563	1	5,563	15,162	<,001[b]
	Residual	60,538	165	,367		
	Total	66,100	166			

a. Dependent Variable: BI

b. Predictors: (Constant), Logo

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,754	1	,754	,764	,383[b]
	Residual	162,706	165	,986		
	Total	163,460	166			

a. Dependent Variable: PI

b. Predictors: (Constant), Logo

Appendix 6 – Assumption of Independent Observations

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,290[a]	,084	,079	,60572	,084	15,162	1	165	<,001	,407

a. Predictors: (Constant), Logo

b. Dependent Variable: BI

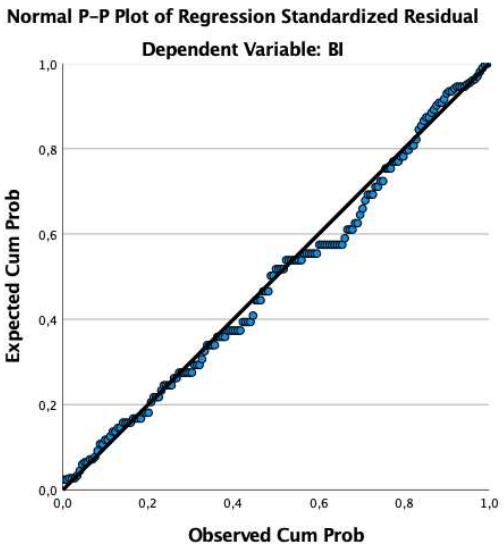
Model Summary[b]

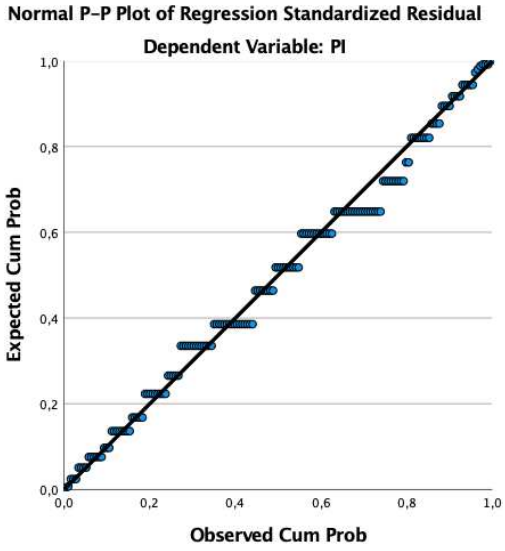
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,068[a]	,005	-,001	,99302	,005	,764	1	165	,383	1,522

a. Predictors: (Constant), Logo

b. Dependent Variable: PI

Appendix 7 – Normal Distribution





Appendix 8 – Multicollinearity

Correlations

		BI	PI	Logo
BI	Pearson Correlation	1	,577**	-,290**
	Sig. (2-tailed)		<,001	<,001
	N	167	167	167
PI	Pearson Correlation	,577**	1	-,068
	Sig. (2-tailed)	<,001		,383
	N	167	167	167
Logo	Pearson Correlation	-,290**	-,068	1
	Sig. (2-tailed)	<,001	,383	
	N	167	167	167

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

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4,306	,065		65,928	<,001					
	Logo	-,365	,094	-,290	-3,894	<,001	-,290	-,290	-,290	1,000	1,000

a. Dependent Variable: BI

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3,756	,107		35,075	<,001					
	Logo	-,134	,154	-,068	-,874	,383	-,068	-,068	-,068	1,000	1,000

a. Dependent Variable: PI

Appendix 9 – Main Study H1a

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,290[a]	,084	,079	,60572	,084	15,162	1	165	<,001	,407

a. Predictors: (Constant), Logo

b. Dependent Variable: BI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,563	1	5,563	15,162	<,001[b]
	Residual	60,538	165	,367		
	Total	66,100	166			

a. Dependent Variable: BI

b. Predictors: (Constant), Logo

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	4,306	,065		65,928	<,001					
	Logo	-,365	,094	-,290	-3,894	<,001	-,290	-,290	-,290	1,000	1,000

a. Dependent Variable: BI

Appendix 10 – Main Study H1b

Group Statistics

	Logo	N	Mean	Std. Deviation	Std. Error Mean
BI	,00	86	4,3062	,58984	,06360
	1,00	81	3,9410	,62214	,06913

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p			Lower	Upper
BI	Equal variances assumed	,127	,722	3,894	165	<,001	<,001	,36519	,09379	,18001	,55036
	Equal variances not assumed			3,888	162,904	<,001	<,001	,36519	,09394	,17970	,55068

Independent Samples Effect Sizes

		Standardizer[a]	Point Estimate	95% Confidence Interval	
				Lower	Upper
BI	Cohen's d	,60572	,603	,292	,912
	Hedges' correction	,60849	,600	,290	,908
	Glass's delta	,62214	,587	,269	,902

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 group.

Appendix 11 – Main Study H2a

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	,068[a]	,005	-,001	,99302	,005	,764	1	165	,383	1,522

a. Predictors: (Constant), Logo

b. Dependent Variable: PI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,754	1	,754	,764	,383[b]
	Residual	162,706	165	,986		
	Total	163,460	166			

a. Dependent Variable: PI

b. Predictors: (Constant), Logo

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3,756	,107		35,075	<,001					
	Logo	-,134	,154	-,068	-,874	,383	-,068	-,068	-,068	1,000	1,000

a. Dependent Variable: PI

Appendix 12 – Main Study H2b

Group Statistics

	Logo	N	Mean	Std. Deviation	Std. Error Mean
PI	,00	86	3,7558	,92521	,09977
	1,00	81	3,6214	1,06034	,11782

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p			Lower	Upper
PI	Equal variances assumed	,019	,889	,874	165	,192	,383	,13441	,15375	-,16916	,43799
	Equal variances not assumed			,871	158,947	,193	,385	,13441	,15438	-,17049	,43932

Independent Samples Effect Sizes

		Standardizer[a]	Point Estimate	95% Confidence Interval Lower	Upper
PI	Cohen's d	,99302	,135	-,169	,439
	Hedges' correction	,99757	,135	-,168	,437
	Glass's delta	1,06034	,127	-,178	,430

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 group.

Appendix 13 – Main Study H3

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics: R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	,577[a]	,333	,329	,81300	,333	82,302	1	165	<,001	1,993

a. Predictors: (Constant), BI
b. Dependent Variable: PI

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54,399	1	54,399	82,302	<,001[b]
	Residual	109,060	165	,661		
	Total	163,460	166			

a. Dependent Variable: PI
b. Predictors: (Constant), BI

Coefficients[a]

Model		Unstandardized Coefficients: B	Std. Error	Standardized Coefficients: Beta	t	Sig.	Correlations: Zero-order	Partial	Part	Collinearity Statistics: Tolerance	VIF
1	(Constant)	-,055	,418		-,132	,895					
	BI	,907	,100	,577	9,072	<,001	,577	,577	,577	1,000	1,000

a. Dependent Variable: PI

Appendix 14 – Main Study H4

```
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  : 4
    Y  : PI
    X  : Logo
    M  : BI

Sample
Size:  167

**************************************************************************
```

OUTCOME VARIABLE:

BI

Model Summary

R	R-sq	MSE	F	df1	df2	p
,2901	,0842	,3669	15,1620	1,0000	165,0000	,0001

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,3062	,0653	65,9285	,0000	4,1772	4,4352
Logo	-,3652	,0938	-3,8938	,0001	-,5504	-,1800

Standardized coefficients

	coeff
Logo	-,5787

****

OUTCOME VARIABLE:

PI

Model Summary

R	R-sq	MSE	F	df1	df2	p
,5862	,3436	,6542	42,9238	2,0000	164,0000	,0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	-,3640	,4561	-,7982	,4259	-1,2646	,5365
Logo	,2150	,1309	1,6427	,1024	-,0434	,4734
BI	,9567	,1040	9,2030	,0000	,7515	1,1620

Standardized coefficients

	coeff
Logo	,2166
BI	,6084

********** TOTAL EFFECT MODEL **********

OUTCOME VARIABLE:

PI

Model Summary

R	R-sq	MSE	F	df1	df2	p
,0679	,0046	,9861	,7643	1,0000	165,0000	,3833

Model

	coeff	se	t	p	LLCI	ULCI
constant	3,7558	,1071	35,0746	,0000	3,5444	3,9672
Logo	-,1344	,1538	-,8742	,3833	-,4380	,1692

Standardized coefficients

	coeff
Logo	-,1355

```
************** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y **************
Total effect of X on Y
     Effect         se          t          p       LLCI       ULCI       c_ps
     -,1344      ,1538     -,8742      ,3833     -,4380      ,1692     -,1355
Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI      c'_ps
      ,2150      ,1309     1,6427      ,1024     -,0434      ,4734      ,2166
Indirect effect(s) of X on Y:
       Effect     BootSE   BootLLCI   BootULCI
BI     -,3494      ,0967     -,5460     -,1695
Partially standardized indirect effect(s) of X on Y:
       Effect     BootSE   BootLLCI   BootULCI
BI     -,3521      ,0978     -,5493     -,1707
*********************** ANALYSIS NOTES AND ERRORS ************************
Level of confidence for all confidence intervals in output:
  95,0000
Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000
NOTE: Standardized coefficients for dichotomous or multicategorical X are in
      partially standardized form.
------ END MATRIX -----
```

Appendix 15 – Main Study H5a

```
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  : BI
    X  : Logo
    W  : LH
Sample
Size:  167
**************************************************************************
OUTCOME VARIABLE:
 BI
Model Summary
          R       R-sq        MSE          F        df1        df2          p
```

```
      ,2907      ,0845      ,3713     5,0142     3,0000   163,0000      ,0024
Model
              coeff         se          t          p       LLCI       ULCI
constant     4,3500      ,1927    22,5761      ,0000     3,9695     4,7305
Logo         -,4056      ,2523    -1,6076      ,1099     -,9037      ,0926
LH           -,0496      ,2050     -,2418      ,8092     -,4543      ,3552
Int_1         ,0454      ,2722      ,1669      ,8677     -,4920      ,5828
Product terms key:
 Int_1    :        Logo     x        LH
Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      ,0002      ,0278     1,0000   163,0000      ,8677
************************ ANALYSIS NOTES AND ERRORS ************************
Level of confidence for all confidence intervals in output:
  95,0000
NOTE: Standardized coefficients are not available for models with moderators.
------ END MATRIX -----
```

Appendix 16 – Main Study H5b

```
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  : PI
    X  : Logo
    W  : LH
Sample
Size:  167
**************************************************************************
OUTCOME VARIABLE:
 PI
Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,1151      ,0132      ,9895      ,7289     3,0000   163,0000      ,5361
Model
              coeff         se          t          p       LLCI       ULCI
constant     3,7333      ,3146    11,8680      ,0000     3,1122     4,3545
Logo         -,4000      ,4119     -,9712      ,3329    -1,2133      ,4133
```

```
LH            ,0254      ,3346      ,0760      ,9395     -,6353      ,6862
Int_1         ,3228      ,4443      ,7265      ,4686     -,5546     1,2002
Product terms key:
 Int_1    :        Logo     x        LH
Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      ,0032      ,5279     1,0000   163,0000      ,4686
************************ ANALYSIS NOTES AND ERRORS ************************
Level of confidence for all confidence intervals in output:
  95,0000
NOTE: Standardized coefficients are not available for models with moderators.
------ END MATRIX -----
```

Appendix 17 – Main Study H6a

```
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  : BI
    X  : Logo
    W  : DEW
Sample
Size:  167
**************************************************************************
OUTCOME VARIABLE:
 BI
Model Summary
       R          R-sq      MSE          F        df1        df2          p
      ,3293      ,1085      ,3615     6,6098     3,0000   163,0000    ,0003
Model
              coeff         se          t          p       LLCI       ULCI
constant     4,3141      ,0681    63,3663      ,0000     4,1797     4,4485
Logo         -,4308      ,0994    -4,3357      ,0000     -,6271     -,2346
DEW          -,0849      ,2232     -,3805      ,7041     -,5257      ,3558
Int_1         ,4748      ,2919     1,6268      ,1057     -,1015     1,0512
Product terms key:
 Int_1    :        Logo     x        DEW
Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
```

```
X*W      ,0145     2,6464     1,0000   163,0000      ,1057
************************ ANALYSIS NOTES AND ERRORS ************************
Level of confidence for all confidence intervals in output:
  95,0000
NOTE: Standardized coefficients are not available for models with moderators.
------ END MATRIX -----
```

Appendix 18 – Main Study H6b

```
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  : PI
    X  : Logo
    W  : DEW
Sample
Size:  167
**************************************************************************
OUTCOME VARIABLE:
 PI
Model Summary
        R       R-sq        MSE          F        df1        df2          p
      ,1307      ,0171      ,9857      ,9444     3,0000   163,0000    ,4206
Model
              coeff         se          t          p       LLCI       ULCI
constant     3,7607      ,1124    33,4537      ,0000     3,5387     3,9827
Logo         -,2051      ,1641    -1,2502      ,2130     -,5291      ,1189
DEW          -,0524      ,3686     -,1420      ,8872     -,7801      ,6754
Int_1         ,4968      ,4819     1,0308      ,3042     -,4549     1,4485
Product terms key:
 Int_1    :        Logo     x        DEW
Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      ,0064     1,0626     1,0000   163,0000      ,3042

************************ ANALYSIS NOTES AND ERRORS ************************
Level of confidence for all confidence intervals in output:
  95,0000
```

NOTE: Standardized coefficients are not available for models with moderators.
------ END MATRIX -----

Appendix 19 – Main Study Full Model

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 : 10
Y : PI
X : Logo
M : BI
W : LH
Z : DEW

Sample
Size: 167

****

OUTCOME VARIABLE:
BI

Model Summary

R	R-sq	MSE	F	df1	df2	p
,3313	,1098	,3655	3,9713	5,0000	161,0000	,0020

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,3585	,1925	22,6430	,0000	3,9784	4,7387
Logo	-,4141	,2513	-1,6477	,1014	-,9104	,0822
LH	-,0502	,2034	-,2470	,8052	-,4519	,3514
Int_1	-,0265	,2722	-,0975	,9225	-,5641	,5111
DEW	-,0854	,2244	-,3806	,7040	-,5287	,3578
Int_2	,4909	,2958	1,6597	,0989	-,0932	1,0750

Product terms key:
Int_1 : Logo x LH
Int_2 : Logo x DEW

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p

```
X*W          ,0001      ,0095     1,0000   161,0000      ,9225
X*Z          ,0152     2,7547     1,0000   161,0000      ,0989
BOTH(X)      ,0152     1,3778     2,0000   161,0000      ,2551
----------
    Focal predict: Logo     (X)
          Mod var: LH       (W)
          Mod var: DEW      (Z)
Conditional effects of the focal predictor at values of the moderator(s):
         LH        DEW     Effect         se          t          p       LLCI
ULCI
      ,0000      ,0000     -,4141      ,2513    -1,6477      ,1014     -,9104
,0822
      ,0000     1,0000      ,0768      ,3749      ,2048      ,8380     -,6636
,8172
     1,0000      ,0000     -,4406      ,1090    -4,0424      ,0001     -,6559
-,2254
     1,0000     1,0000      ,0503      ,2771      ,1814      ,8563     -,4970
,5975
**************************************************************************
OUTCOME VARIABLE:
 PI
Model Summary
        R       R-sq        MSE          F        df1        df2          p
      ,5939      ,3527      ,6613    14,5311     6,0000   160,0000     ,0000
Model
              coeff         se          t          p       LLCI       ULCI
constant     -,4364      ,5296     -,8239      ,4112    -1,4824      ,6096
Logo         -,0086      ,3409     -,0251      ,9800     -,6818      ,6646
BI            ,9579      ,1060     9,0357      ,0000      ,7485     1,1672
LH            ,0731      ,2736      ,2673      ,7896     -,4672      ,6135
Int_1         ,2792      ,3662      ,7624      ,4470     -,4440     1,0024
DEW           ,0297      ,3020      ,0984      ,9218     -,5668      ,6262
Int_2        -,0302      ,4012     -,0753      ,9401     -,8226      ,7622
Product terms key:
 Int_1    :        Logo     x        LH
 Int_2    :        Logo     x        DEW
Test(s) of highest order unconditional interaction(s):
          R2-chng          F        df1        df2          p
X*W          ,0024      ,5812     1,0000   160,0000      ,4470
X*Z          ,0000      ,0057     1,0000   160,0000      ,9401
BOTH(X)      ,0024      ,2907     2,0000   160,0000      ,7481
```

```
****************** DIRECT AND INDIRECT EFFECTS OF X ON Y *****************
Conditional direct effects of X on Y
     LH        DEW     Effect         se          t          p       LLCI       ULCI
      ,0000     ,0000    -,0086     ,3409    -,0251     ,9800    -,6818     ,6646
      ,0000    1,0000    -,0388     ,5044    -,0769     ,9388   -1,0349     ,9573
     1,0000     ,0000     ,2706     ,1539    1,7586     ,0806    -,0333     ,5745
     1,0000    1,0000     ,2404     ,3728     ,6449     ,5199    -,4958     ,9766
Conditional indirect effects of X on Y:
INDIRECT EFFECT:
 Logo        ->    BI          ->    PI
         LH        DEW     Effect     BootSE   BootLLCI   BootULCI
      ,0000      ,0000     -,3967      ,3082    -1,0285      ,1818
      ,0000     1,0000      ,0736      ,4130     -,7106      ,9003
     1,0000      ,0000     -,4221      ,1143     -,6567     -,2109
     1,0000     1,0000      ,0481      ,2600     -,4769      ,5495
      Indices of partial moderated mediation:
         Index     BootSE   BootLLCI   BootULCI
LH      -,0254      ,3141     -,6175      ,6144
DEW      ,4702      ,2889     -,0970     1,0409
********************** ANALYSIS NOTES AND ERRORS ************************
Level of confidence for all confidence intervals in output:
  95,0000
Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000
NOTE: Standardized coefficients are not available for models with moderators.
NOTE: Due to estimation problems, some bootstrap samples had to be replaced.
      The number of times this happened was:
        5
------ END MATRIX -----
```