From Olympus to OM SYSTEM: Consumer Risk Perceptions in a Brand Rebranding

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Abstract

Title: "From Olympus to OM SYSTEM: Consumer Risk Perceptions in a Brand Rebranding."

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Brands undergo rebranding by changing core elements such as logos, visual identity, and market positioning. This strategic decision can impact brand value and consumer associations, affecting trust levels and risk perception. The literature emphasizes that rebranding increases perceived risk when measures to ensure continuity, transparency, and clear communication are not implemented.

This dissertation examines the Olympus-to-OM SYSTEM transition, analyzing its impact on consumer risk perception, with brand trust as a mediator. It also investigates the moderating roles of rebranding awareness and photography involvement, addressing the literature gap in consumer-centered approaches in niche technology markets.

A quantitative experimental design was implemented, presenting pre- and post-rebranding logos to 122 participants in a random order. Variables were measured using validated scales, and a new scale was developed to assess rebranding knowledge.

Results indicate that rebranding does not directly affect risk perception. Rebranding awareness moderates the effect on brand trust, while involvement moderates both risk perception and brand trust. Brand trust significantly reduces risk but does not fully mediate the relationship.

This dissertation enriches existing rebranding literature with a consumer-centric perspective in a niche market and a new multidimensional scale for rebranding awareness. For managers, it highlights the importance of strategic communication that preserves brand heritage among enthusiasts and less-informed consumers.

Keywords: Rebranding, Rebranding strategies, Risk perception, Brand trust, Photography involvement, Rebranding awareness, OM SYSTEM, Olympus, Technology, Photography.

Sumário

Título: "Da Olympus à OM SYSTEM: Perceção de Risco dos Consumidores num Caso de Rebranding de Marca"

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Uma marca procede a um *rebranding* por meio da alteração de elementos centrais, como logótipos, identidade visual e posicionamento de mercado. Esta decisão estratégica pode impactar o valor da marca e as associações dos consumidores, afetando os níveis de confiança e a percepção de risco. A literatura reforça que o *rebranding* aumenta a perceção de risco se não forem garantidas medidas de continuidade, transparência e comunicação clara.

Esta dissertação avalia o caso da transição da Olympus para OM SYSTEM, analisando o seu impacto na perceção de risco dos consumidores, com a confiança na marca como mediadora. Adicionalmente, examina o papel moderador do conhecimento sobre o *rebranding* e do envolvimento na fotografia, preenchendo uma lacuna na literatura que privilegia perspetivas empresariais em detrimento de abordagens centradas no consumidor.

Implementou-se um desenho experimental quantitativo, no qual logótipos pré- e pós-*rebranding* foram apresentados aleatoriamente a 122 participantes. As variáveis foram medidas por meio de escalas validadas e de uma nova escala, desenvolvida por necessidade, para medir conhecimento sobre o *rebranding*.

Os resultados indicam que o *rebranding* não afeta diretamente a perceção de risco. O conhecimento modera o efeito na confiança, e o envolvimento modera a perceção de risco e a confiança. A confiança reduz significativamente o risco, mas não media totalmente a relação.

Esta dissertação enriquece a literatura sobre *rebranding* com uma perspetiva centrada no consumidor e uma nova escala multidimensional. Para gestores, sublinha a importância da comunicação estratégica que preserva a herança da marca junto de entusiastas e de consumidores menos informados.

Palavras-chave: *Rebranding*, Estratégias de *rebranding*, Preceção de risco, Confiança na marca, Envolvimento na fotografia, Conhecimento sobre *rebranding*, OM SYSTEM, Olympus, Tecnologia, Fotografia.

Acknowledgements

It is with great joy, though also with a bittersweet feeling, that I say goodbye to Católica SBE. This university has seen me grow from my very first year of undergraduate studies to the completion of my Master's degree.

First and foremost, I want to thank my family, especially my dear parents, who provided me with an excellent education at one of the best universities. Thank you for your unconditional support through every semester and every exam. I also want to thank each of my siblings, brothers-and-sisters-in-law, and nephews who always lifted me up during the most challenging moments of these years of study and who are a constant source of strength in my daily life.

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Lastly, and certainly not least, there has always been someone who never let me give up. Following the example of Him and the Holy Family, I found motivation to look up to the sky and understand that my purpose is Him — and that these years of study and this thesis are part of my mission here on Earth, until I reach Him.

Thus, I say goodbye to Católica with a smile on my face, grateful for all that I have lived, all that I have learned, and all the people I take with me.

Disclaimer on Artificial Intelligence Usage

Artificial intelligence tools (Perplexity AI and related sources) were used in a supportive way during the writing of this dissertation. Specifically, AI was used to help with:

- Refining language, grammar correction, and text optimization of long sentences already drafted by the author;
- Drafting and refining formulations;
- Assisting with minor phrasing and translation between Portuguese (Portugal) and English.

Nonetheless, AI use was limited to intellectual content, theoretical framing, research design, and the interpretation of results, and all conclusions are the author's own. Furthermore, AI was not used to generate responses, arguments, or literature, as all papers and articles cited to support this thesis were identified and understood by the author.

To conclude, this disclaimer is made in accordance with academic integrity guidelines requiring transparency about the use of artificial intelligence in college projects.

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1 Introduction

1.1 Background

Rebranding is the strategic process of altering brand elements, such as name, design, or positioning, aiming to deliver new meaning and market relevance (Muzellec & Lambkin, 2006). Over the last five years, 74% of S&P 100 firms have undergone a rebranding to convey a different message and attract broader segments (Mehta, 2025; Rippey, 2021).

In 2020, Olympus announced that its imaging division would be transitioned and acquired by OM Digital Solutions, a new entity of Japan Industrial Partners. By January 1st, 2021, OM Digital Solutions finally took over product development, manufacturing, and global sales, renaming Olympus cameras as OM SYSTEM (Artaius, 2020; Mendoza, 2021; Olympus, 2025). Olympus has been seen as a pioneer in the development of imaging devices, especially as a leading corporation in the photography market. In consumers' perception, Olympus was regarded as a vintage, nostalgic, and well-established brand, trusted by photographers of all levels (Kaninsky, 2023).

Through the rebranding, Olympus retained 5% stake to ensure continuity and transition of technology. The new name, OM SYSTEM, was intended to reflect Olympus's 85-year legacy, highlighting its tradition and the philosophy of constant innovation. With the mission of "always challenge convention," OM SYSTEM aims to continue delivering unique and customer-centric photographic experiences through a comprehensive portfolio of cameras, lenses, audio recorders, and other imaging devices (OM Digital Solutions, 2020; Rutherford, 2021).

This rebranding was triggered by an acquisition, which raised questions, uncertainty, and confusion, but also sparked curiosity (Long et al., 2011; Muzellec & Lambkin, 2006; Soriano, 2022; Strike Visuals, 2023; Stuart & Muzellec, 2004). While this rebranding aimed to renew the brand, for some individuals, it changed their perception of the company: "Olympus was a priceless name" (Soriano, 2022). For others, the change went unnoticed or was met with confusion (Strike Visuals, 2023). Consequently, the shift from Olympus to OM SYSTEM challenged consumer perceptions and raised interest in how established brands manage risk and identity during change. This study examines the impact of rebranding on consumers' risk perceptions in a fast-evolving, technology-driven market, using the Olympus case to explore how uncertainty and limited awareness influence these evaluations.

1.2 Problem Statement

The photographic camera market is currently undergoing major transformations, and Olympus's rebranding to OM SYSTEM represents a significant strategic and identity shift. This change raises questions about how consumers perceive rebranding strategies, especially when a well-established brand with strong heritage is involved (Alan Ranger Photography, 2024).

Existing research reveals a gap, as studies tend to emphasize firms' perspectives over consumers' perspectives, particularly regarding the effects of rebranding (Frisk & Kovacek, 2024). This study addresses this gap by evaluating the Olympus-to-OM SYSTEM case from a consumer-centric perspective, focusing on how rebranding influences risk perception, with brand trust as a mediating variable and rebranding awareness and photography involvement as moderators. The main goal is to answer the following research questions (RQs):

RQ1: How does the Olympus-to-OM SYSTEM rebranding impact consumer risk perception?

RQ2: Does brand trust mediate the relationship between rebranding and risk perception?

RQ3: How does rebranding awareness and photography involvement moderate rebranding's effects on risk perception and brand trust?

1.3 Relevance

Research highlights rebranding as a valuable strategy for repositioning and reaching broader segments. However, evidence on its impact in niche categories such as photography remains limited, as most studies address broader rebranding contexts (Frisk & Kovacek, 2024). This study offers novel insights into consumer risk perception in specialized technology markets.

From an academic perspective, this study examines how well-established brands undergo rebranding and how these influence consumer risk perceptions in an underexplored market, such as photography. It addresses this research gap by advancing measurement approaches (Frisk & Kovacek, 2024; Marques et al., 2020).

For management, it helps understand the different effects rebranding has on consumer perceptions. Consequently, it enhances the development of stronger, more viable rebranding strategies for different consumer profiles, allowing brands to predict perceptions and diminish the chances of rebranding failure (Kunal, 2023; Marques et al., 2020). Understanding the impact of brand trust on mediating the effects of rebranding helps managers anticipate outcomes (Frisk

& Kovacek, 2024). Specifically, the findings assist OM SYSTEM and other brands in evaluating the success of rebranding and guiding their strategy development.

In sum, this dissertation argues that rebranding's effects on perceived risk in a niche technology market are not purely direct but are strongly shaped by brand trust and consumers' awareness and involvement. It shows that brand trust plays a central role in reducing risk perceptions after rebranding and introduces a validated multidimensional scale to measure rebranding awareness in this context.

1.4 Research Methods

The research methods in this dissertation combine a structured literature review with a quantitative survey. The review integrates academic work on rebranding, risk perception, rebranding awareness, photography involvement, and brand trust, which form the basis for the conceptual framework (Section 2.7).

Data were collected through an online survey in Qualtrics, measuring risk perception, brand trust, photography involvement, and a new multidimensional rebranding awareness construct, using established multi-item Likert scales adapted from prior studies (Jacoby & Kaplan, 1972; X. Liang et al., 2018).

Brand rebranding was manipulated as a dummy variable via the Olympus and OM SYSTEM logos. Moderators included photography involvement, measured using a multi-item Likert scale, and a novel rebranding awareness scale (aware vs. unaware). Brand trust was also measured using multi-item Likert scales. The survey targeted diverse consumers (enthusiasts to general), and the data was analyzed in IBM SPSS using the appropriate statistical tests.

1.5 Workplan

This research work plan includes all sections required for the dissertation. Section One introduces the problem statement and research questions. Section Two presents the literature review, framing the research hypothesis and conceptual model to synthesize relationships among variables. Section Three details the methodology. The subsequent section presents the results and the analysis of the hypothesis. The final section concludes with the main findings, limitations, and suggestions to improve future research.

2 Literature Review and Conceptual Framework

2.1 Risk Perception

The concept of risk perception was first introduced by Bauer (1960), who argued that consumers' purchasing decisions involve risk, which can lead to uncertain consequences. Uncertainty has been conceptualized as the overall likelihood of losses arising from poor choices and consequences (Mello & Collins, 2001).

Theories evolved, and simultaneously, the definition of perceived risk. Roselius (1971) identified time, hazard, ego, and money as the basic types of losses that consumers face (Bendixen & Gault, 1995; Roselius, 1971). As a result, Jacoby and Kaplan (1972) developed a multidimensional theory composed of five dimensions. Financial risk refers to the possibility of monetary loss. Functional/performance risk concerns a product that does not perform as expected. Social risk refers to the fear of negative judgment from others. Physical risk concerns harm that can occur when using the product/service. Lastly, Jacoby and Kaplan also added a measure of global (overall) risk (Jacoby & Kaplan, 1972). Lastly, Dowling and Staelin (1994) further highlighted the role of perceived risk in consumer information processing and purchase intention (Dowling & Staelin, 1994; Mitchell, 1999).

This thesis adopts the Jacoby and Kaplan's (1972) multidimensional model of perceived risk. This framework can align with rebranding scenarios and enable dimension-specific analysis (Jacoby & Kaplan, 1972; Liang et al., 2018; Mitchell, 1999).

It is important to note that the significance of each risk dimension varies across product categories, especially by involvement level. Therefore, risk perception plays a significant role in decision-making for both high-involvement and low-involvement products. When acquiring a product from a specialized category, consumers require some cognitive effort. By facing a higher risk, typically, consumers engage in more extensive research, delving deeply into small details about the product, from features to performance, and searching for alternatives. This process allows consumers to mitigate and attenuate perceived risk (Alba & Hutchinson, 1987).

Hence, the impact of perceived risk dimensions varies significantly across product categories. From luxury products and services to technology, consumers' risk perceptions vary among dimensions. When brands understand which risk dimensions dominate each category, they can target risk-reduction strategies (Chaudhuri, 1998).

In the case of technology products, the key dimension is functional/performance risk, as consumers can be worried about product reliability, software problems, device failure, or lack of compatibility (Mitchell et al., 1993). In addition, financial risk is significant due to the high costs and rapid technological changes that characterize tech purchases (Mitchell et al., 1993; Truong et al., 2017).

2.2 Brand Rebranding

Brands that undergo a rebrand deliberately alter core identity elements to reposition in consumers' minds, revitalize interest, and differentiate from competitors (Muzellec & Lambkin, 2006). Unlike common updates, seasonal campaigns, or product extensions, a rebranding targets stakeholder perceptions in response to business shifts or reputational challenges (Kapferer, 2008; Kumar Singh et al., 2013).

As discussed in section 2.1 different risk dimensions dominate across product categories, suggesting that rebranding strategies must be tailored to each market's specific risk profile (Kapferer, 2008; Muzellec & Lambkin, 2006; Stuart & Muzellec, 2004).

Therefore, rebranding can take several forms (Muzellec & Lambkin, 2006). A brand can choose partial rebranding, involving strategic shifts in specific elements, such as logos, colors, and slogans. Organizations can also go for a full rebranding, where there is a complete change in the company’s identity, from name to values and strategy (Krisprimandoyo, 2015). Furthermore, the revolutionary/modernization strategy is one of the most common types of rebranding, in which companies update their brand through two subgroups: brand elements and repositioning. Brand elements include changes to logos, colors, slogans, and more, alongside repositioning in stakeholders' minds (Merrilees & Miller, 2008; Muzellec & Lambkin, 2006; Stuart & Muzellec, 2004).

Further research also refers to several key factors for successful rebranding. Brands should remain truthful to their core identity while simultaneously creating opportunities for growth and strategic renewal. Maintaining brand values, emotional connections, and visuals also helps to mitigate confusion (Frisk & Kovacek, 2024). Successful rebrandings require a well-defined purpose that is well-aligned with market changes, company strategy, and evolving consumer demands and values (Muzellec & Lambkin, 2006). Moreover, it is essential to engage all key stakeholders while maintaining transparency and a cohesive message, as this helps reduce uncertainty and manage expectations (Merrilees & Miller, 2008). Also, a gradual implementation is essential, as it enables consumers to assimilate the change and allows the

brand to adjust, reducing adverse reactions. Finally, managing consumer risk perception by communicating continuity in product quality and values preserves trust, therefore reducing perceived risk (Kannou & Rached, 2025).

Conversely, poorly accomplished rebrandings can trigger negative reactions, especially among loyal customers or those highly involved (Frisk & Kovacek, 2024). Brands need to be aware of potential resistance, as loyal consumers usually respond negatively to brand shifts, especially when hedonic cues are altered. The potential loss of brand recognition, trust, or loyalty also needs to be considered, as it is a possible outcome if the rebrand is misaligned with expectations (Merrilees & Miller, 2008).

2.3 Brand Rebranding and Risk Perception

Brand rebranding can be a strategic move that reshapes consumers' perceptions of a brand, including perceptions of risk. Papers are coherent in highlighting that brand rebranding can elevate consumer risk perception, especially when it involves name changes or shifts in visual identity. This results in the changes in core elements increasing uncertainty about quality consistency, company values, and trust, enhancing adverse reactions (Assali, 2017; L. Liang et al., 2024; Truong et al., 2017).

The literature also highlights that specific changes in elements may be associated with a higher or lower risk. Name changes are characterized as elements that elicit a higher perceived risk among consumers. This happens because it is associated with the loss or downgrade in quality and service (Assali, 2017; Truong et al., 2017). Conversely, changes to logo/visual identity are perceived as less risky by consumers. It mainly affects emotional connection and brand salience. The main reason for this effect is that the logo serves as a brand identifier and, for well-established brands, as a symbol of their heritage (Liang et al., 2024; Schwarz, 2024).

Rebranding affects different types of risk in different ways. People often worry most about whether the product will still work as well as before. At the same time, rebranding can make people feel less connected to the brand, especially if it changes what the brand stands for. Financial concerns can also grow if people are unsure about whether the product is still worth the price. Social risks become more important in markets where the brand’s image and status matter, and rebranding changes those signals (Frisk & Kovacek, 2024; Rahmi et al., 2022).

This study evaluates consumer risk perception by measuring only functional/performance, social, financial, and psychological dimensions. This decision was guided by the understanding

that these are the dimensions most significantly impacted by a rebranding. Furthermore, Olympus is recognized as a high-end, well-established technology brand, as elaborated in section 2.3, which justifies the particular focus on these dimensions of risk perception.

The Olympus rebranding case suggests an increase in risk perceptions due to the changing familiar cues. Thus, rebranding is expected to increase consumer risk perception, particularly comparing pre- and post-rebranding states for legacy brands, which is worded in the following hypothesis:

Hypothesis 1 (H1): Olympus' rebranding positively impacts the level of consumer risk perception.

2.4 Rebranding Awareness

Rebranding awareness refers to consumers' knowledge that a rebranding has occurred. It also encompasses their understanding of how the new identity relates to the previous one and why the change was made. Prior research on corporate rebranding highlights that clearly communicating the link between old and new identities and the strategic motives behind the change facilitates stakeholder adaptation and reduces perceived disruption (Joseph et al., 2021).

In this dissertation, rebranding awareness is operationalized as a multidimensional construct encompassing brand awareness, awareness of the rebranding event, and understanding of its reasons. Given the limited prior research on this variable, this study will develop a new measurement. The first dimension reflects the consumers' ability to identify the brand and connect it with prior experiences, which is foundational for maintaining continuity and transparency post-rebranding (Rossiter, 2014). The second dimension captures whether consumers know that a change has occurred, allowing them to understand the context and reducing confusion or feelings of surprise (Frisk & Kovacek, 2024; Stuart & Muzellec, 2004). The third dimension (rationale understanding) promotes transparency and reinforces consumer trust in the brand's strategic direction (Frisk & Kovacek, 2024; Rahmi et al., 2022; Stuart & Muzellec, 2004). Therefore, this approach aligns with recent research that emphasizes measuring not only whether consumers recognize the brand but also whether they are informed about the rebrand(Frisk & Kovacek, 2024; Stuart & Muzellec, 2004).

2.4.1 Rebranding Awareness as a Moderator

Beyond being a measured construct, rebranding awareness may also play a critical role in shaping consumer perceptions of rebranding strategies by acting as a key moderator.

Consumers who are aware of the rebranding tend to experience lower uncertainty and skepticism as transparent communication reduces confusion and supports continuity perceptions (Frisk & Kovacek, 2024; Stuart & Muzellec, 2004). This facilitation helps retain customers and minimizes perceived risk as they are better informed about the reasons and goals behind the change (Rahmi et al., 2022). On the contrary, those unaware of the rebranding often experience surprise and confusion, leading to a higher perceived risk and potentially diminished trust (Muzellec & Lambkin, 2006; Rahmi et al., 2022).

Finally, the level of rebranding awareness acts as a moderator between rebranding, risk perception, and brand trust, intensifying or mitigating their effects depending on how much and how well consumers understand the changes and trust the brand. This moderating role of awareness is especially crucial for legacy brands whose rebranding signals major identity shifts. Hence, this study hypothesizes that:

Hypothesis 2a (H2a): The level of consumer awareness of Olympus rebranding (aware vs unaware) moderates the relationship between the rebranding and consumer risk perception.

Hypothesis 2b (H2b): The level of consumer awareness of Olympus rebranding (aware vs unaware) moderates the relationship between the rebranding and the level of brand trust.

2.5 Photography Involvement

Consumer involvement is defined as the level of personal relevance, interest, and engagement someone has with a specific product category. Laurent and Kapferer (1985) introduced the Consumer Involvement Profile (CIP) framework, composed of five dimensions: importance, risk probability, risk consequence, subjective interest, and sign value. CIP recognizes that both personal characteristics and specific product features shape consumers' perceived relevance of an object. Therefore, products and categories can be classified into low- or high-involvement and special-interest/enthusiast products (those expressing hobbies and aligning with hedonic product categories) (Laurent & Kapferer, 1985).

Photography cameras represent high-involvement products due to their complexity, cost, and personal relevance, making consumer involvement critical for studying rebranding effects in technology categories (Gu et al., 2012; Laurent & Kapferer, 1985). Although the CIP is well-established, its application to technology products, particularly photography, remains underexplored. No prior studies apply CIP to these niches, where high emotional/symbolic stakes amplify rebranding sensitivity (Gu et al., 2012).

Within this high-involvement category, consumers vary across CIP's five dimensions, measured continuously here. Importance reflects personal interest and identification with photography, hence, high scores indicate strong engagement. Risk probability reflects the perceived likelihood of a poor photography purchase choice, while risk consequence (importance) reflects the perceived severity of its outcomes. High scores indicate that consumers see mistakes as carrying real consequences. Subjective interest reflects the hedonic pleasure consumers derive from photography, driving motivation and excitement. Sign value captures its symbolic/self-expressive role as an identity marker and social signal (Gu et al., 2012; Laurent & Kapferer, 1985).

In this study, involvement is measured as a continuous construct that reflects varying degrees across its dimensions, consistent with the CIP framework of Laurent & Kapferer. Furthermore, to aid interpretation, the construct will be treated as a scale variable, thereby improving understanding of the effect.

2.5.1 Photography Involvement as a Moderator

In photography, consumer involvement varies notably. High-involvement consumers exhibit higher CIP scores, paying closer attention to functional attributes and symbolic brand meanings, making them more sensitive to branding changes. Literature indicates that they critically evaluate threats to brand heritage, values, or performance during rebranding. Thus, aligned rebranding reinforces strong brand trust, while misaligned changes risk eroding it and increasing perceived risk (Foxall & Pallister, 1998; Laurent & Kapferer, 1985; Zaichkowsky, 1985).

Conversely, consumers with lower scores on CIP dimensions exhibit casual, situational engagement with photography. Their low involvement translates to softer emotional responses to rebranding, with lower sensitivity to changes in brand symbolism or identity unless functional performance is affected. These consumers typically exhibit lower/neutral brand trust and lower/neutral perceived risk associated with rebranding (Foxall & Pallister, 1998; Laurent & Kapferer, 1985; Zaichkowsky, 1985).

Based on this multidimensional construct, existing literature demonstrates that involvement can moderate consumer perceptions. Moreover, focusing on this study, high involvement amplifies sensitivity to branding changes. It increases perceived risk, even among consumers with greater brand trust, because these individuals pay close attention to whether it aligns with their expectations. Conversely, low involvement tends to mitigate the perceived impact of rebranding

decisions, as consumers in this segment have less emotional investment and lower trust in the brand, relying more on situational factors instead (Chalil & Dharmmesta, 2015; Laurent & Kapferer, 1985; Rahmi et al., 2022; Zaichkowsky, 1985). Therefore, this dissertation hypothesizes that:

Hypothesis 3a (H3a): The level of consumer photography involvement (high vs low involvement) moderates the relationship between Olympus brand rebranding and consumer risk perception.

Hypothesis 3b (H3b): The level of consumer photography involvement (high vs low involvement) moderates the relationship between Olympus brand rebranding and the level of brand trust.

2.6 Brand Trust

Morgan and Hunt (1994) defined trust as "a degree of confidence in an exchange partner's reliability and integrity," resulting from factors such as competence, honesty, and fairness. This concept encompasses cognitive and affective dimensions, meaning that consumers rely on the brand's competencies and are emotionally connected to it, thereby triggering confidence in both the brand and the consumer. Brand trust is essential for maintaining long-term relationships between the brand and the consumer (Bergström & Zuazu, n.d.; Delgado-Ballester, 2003; Morgan & Hunt, 1994; Roest & De Graaf, 2023).

In 2001, Chaudhuri and Holbrook characterized brand trust as the consumer's willingness to rely on a brand's ability to fulfil its proposed function and meet consumer expectations reliably and honestly. They measured brand trust as a four-item index, finding support for a one-dimensional brand trust measurement (Chaudhuri & Holbrook, 2001; Delgado-Ballester, 2003; Roest & De Graaf, 2023).

However, Delgado-Ballester in 2003 argued that the latest theory has ignored the "motivational aspects" of brand trust. Consequently, this finding led to a new definition that added *fiability* and *intentionality* as dimensions. *Fiability* aligns with consumers' belief in the brand and its ability to deliver on its value promise. *Intentionality* concerns the consumer's belief in the brand to pursue their interests when problems and risks arise during product consumption. Hence, brand trust was defined as "the confident expectations of the brand's reliability and intentions in situations entailing risk to the consumer" (Delgado-Ballester, 2003; Roest & De Graaf, 2023). Consequently, this definition and conceptual model of brand trust were adopted for this

thesis. The *fiability* and *intentionality* dimensions align with scenarios that consumers face regarding risks and uncertainty.

2.6.1 Brand Trust as a Mediator

In the context of brand rebranding, brand trust acts as a mediator, mediating the impact of strategic changes on consumer risk perception. This is because, when brand trust is high, consumers see rebranding more positively, as uncertainty and perceived risk are lower. They trust the brand's ability to maintain quality, stability, and its values. In contrast, consumers who show lower levels of brand trust usually perceive significant risks associated with rebranding, particularly among highly involved consumers who are more sensitive to shifts in brand heritage and identity (Chaudhuri & Holbrook, 2001; Delgado-Ballester, 2003).

Studies defend that brand trust reduces perceived risk, supporting brand acceptance during strategic changes. Hence, brand trust mediates the effects of rebranding on consumer risk perception (Bergström & Zuazu, n.d.; Kabadayi & Koçak Alan, 2012). By positioning brand trust as a mediator, these hypotheses highlight its critical role in shaping consumer perceptions of rebranding and supporting the transition to a new brand identity within a competitive market.

Hypothesis 4 (H4): Olympus' rebranding negatively impacts the level of brand trust.

Hypothesis 5 (H5): Brand trust impacts the level of risk perception.

Hypothesis 6 (H6): Brand Trust mediates the relationship between Olympus rebranding and consumer risk perception.

2.7 Conceptual Model

Figure 1 presents the conceptual framework, which facilitates summarizing and relating the independent variable (brand rebranding) to the dependent variable (risk perception). This dissertation explores the impact of the Olympus-to-OM SYSTEM rebranding on risk perception. Brand trust is presented as a mediator to explain this relationship. This thesis examines two moderators, rebranding awareness and photography involvement, in relation to rebranding's effects on consumer risk perception and brand trust.

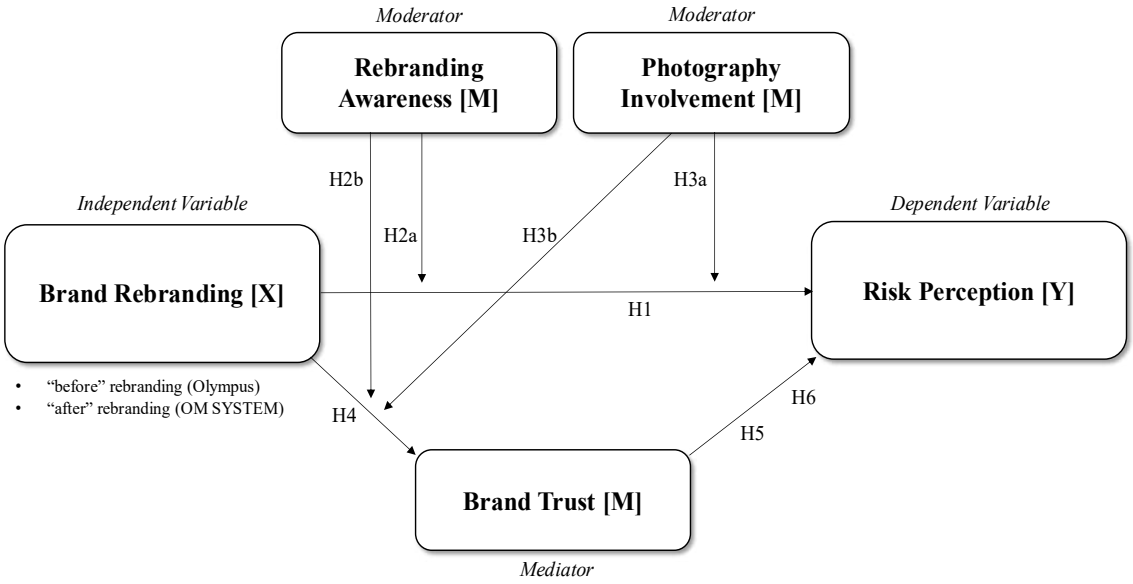

Figure 1: Conceptual Framework.

3 Methodology

This chapter outlines the methodologies used to address the research problem and questions. It details hypothesis testing and the development of research stimuli.

3.1 Research Approach

This dissertation employs a quantitative, cross-sectional research design to examine how Olympus' rebranding to OM SYSTEM impacts consumer risk perception. Having brand trust as a mediator and the levels of awareness and involvement in photography as moderators help evaluate these relationships and effects. Overall, the study follows a post-positivist worldview (Creswell, 2009).

Following deductive logic, an initial understanding of the research problem and insights were gathered through an extensive literature review. This aided in selecting the appropriate variables to measure the research problem, understanding their theoretical relationships, and framing the conceptual framework and hypothesis. Furthermore, data was captured at a single point in time, linking to a cross-sectional design (Kothari, 2004; Malhotra et al., 2017)

As defined by Creswell (2009), researchers can use qualitative, mixed, or quantitative approaches. This research used a quantitative approach to obtain data, aiming to test and evaluate hypotheses and to examine relationships among variables to form a statistical conclusion (Creswell, 2009).

3.2 Data Collection

This dissertation's primary data collection used a quantitative survey administered at a single point in time, following a cross-sectional design.

3.2.1 Data Type and Collection Method

This study adopts a quantitative research design, relying exclusively on data collected through an online survey to measure key variables and test the proposed hypotheses. The survey was developed in Qualtrics.com and then analyzed using SPSS (Statistical Package for the Social Sciences). The survey was conducted to support the research's validity and to obtain measurable data. Therefore, this questionnaire was designed to measure the key constructs of the dissertation, encompassing risk perception, brand trust, awareness, and involvement, using validated scales from existing literature.

Conducting an online survey offers low-cost, efficient data collection while maintaining a potentially high participant rate. However, it can trigger coverage bias, potentially resulting in non-representative answers. Nonetheless, online surveys can be less personal than other methods (Sue & Ritter, 2007).

3.2.2 Quantitative Data Collection and Analysis

The structured online survey served as the sole data collection method, enabling the testing of research hypotheses and the collection of generalizable insights (Malhotra et al., 2017). Participants answered questions designed to measure their perceptions of the stimulus and to provide relevant demographic information. The standardized survey format helped reduce potential biases and enhance response consistency (Kothari, 2004). The collected data were analysed to examine relationships among variables.

3.2.3 Sampling

For the quantitative data collection, participants were selected using a structured convenience sampling strategy that included personal contacts, LinkedIn connections, and Instagram. To ensure the sample's relevance, participants were screened based on their photography habits and camera-purchase behaviour, thereby reducing sampling frame error and aligning the population with the research's objectives (Malhotra et al., 2017). Respondents were informed of the study's purpose and the measures implemented to protect their personal data. All data were anonymized to ensure compliance with data protection guidelines (Sekaran & Bougie, 2016).

3.3 Variables' Measurement

3.3.1 Consumer Risk Perception

This thesis adopts the theoretical framework of Jacoby & Kaplan (1972), a multidimensional framework that provides a comprehensive understanding of how consumers assess risk and the potential outcomes associated with purchasing rebranded technology products (Jacoby & Kaplan, 1972).

A multi-item measurement scale was adapted from the "Perceived Risk Facets" scale by Featherman & Pavlou (2003). This measurement is widely supported and cited because it demonstrates reliability and validity in technology studies. In addition, papers highlight the necessity of using multi-item, multidimensional scales to accurately capture perceived risk through scale adaptation from related contexts, thereby ensuring consistency and validity

(Bertea, 2010; Featherman & Pavlou, 2003). Therefore, the scale was adjusted to reflect Olympus's transition to the OM SYSTEM rebrand.

Survey participants were asked to rate their agreement with statements representing functional/performance, social, financial, and psychological risk dimensions using a 7-point Likert scale. The adoption and adaptation of these measurement approaches are supported by the proven reliability of the scales supported by Featherman & Pavlou's (2003) study. The scale's Cronbach's alpha for the functional/performance dimension is 0.80, for the social facet is 0.81, for the financial one is 0.86, and for the psychological dimension is 0.89 (Bertea, 2010; Featherman & Pavlou, 2003).

3.3.2 Rebranding Awareness (Moderator)

Given the limited prior research and the absence of a standardized measurement scale for rebranding awareness, this study develops a new multidimensional construct to comprehensively capture this variable. The construct measures rebranding awareness by encompassing three dimensions: (1) branding awareness, (2) awareness of the rebranding event itself, and (3) awareness of the reasons behind the rebranding.

Items were generated based on a literature review of brand awareness, rebranding processes, and communication effects, aiming to cover each dimension of the proposed construct (Blazquez et al., 2019; Frisk & Kovacek, 2024; Kalaitzandonakes et al., 2023; Rossiter, 2014).

The first dimension was adapted from the branding awareness questions used by Rossiter (2014) in his interviews, which were modified in this research to fit a survey format. The awareness of the rebranding event itself (second dimension) was first created through questions about recognition of a name change. That way, it identifies whether consumers are even aware that the brand identity has shifted. Rossiter (2014) highlights the ability to recognize a brand (or its transformation) when prompted by auditory or visual cues (Rossiter, 2014). Finally, the third dimension (7-point Likert scale) included questions about reasons for rebranding, addressing the understanding of strategic motivations. Using a Likert scale enables nuanced measurement across multiple dimensions, drawing on best practices in scale development.

The new construct was included at both the beginning and the end of the survey. In the beginning, questions about branding awareness; in the end, questions about the rebranding and the reasons for rebranding.

Following data collection, reliability and validity were assessed using internal consistency statistics (Cronbach's alpha) and factor analysis (FA) to confirm the construct's dimensional structure, adapted from scale development practices (Barbosa et al., n.d.; Sirois et al., 2019). No separate pre-testing or expert panel validation was conducted, mainly due to time constraints. In addition, the theoretical basis and direct implementation in the main sample supported the study's adequacy for its purpose.

After validating the awareness scale through FA, respondents were classified into high- and low-awareness groups based on their composite scores, allowing awareness to be used as a dummy moderator.

This new rebranding awareness scale aims to provide a stronger measurement tool to operationalize a moderator in studying consumers' responses to the Olympus-to-OM SYSTEM transition. The scale's multidimensionality enables a more profound understanding of rebranding awareness, as reflected in the literature review.

3.3.3 Photography Involvement (Moderator)

CIP was used to measure involvement, and it was interpreted as a scale variable, with higher scores indicating greater involvement on the defined dimensions, providing deeper insight into how involvement moderates responses to branding changes.

The Laurent & Kapferer CIP was measured using a 7-point Likert scale, and Cronbach's alphas were 0.80 for importance, 0.90 for sign, 0.88 for pleasure, 0.82 for risk importance, and 0.72 for risk probability. Hence, indicating high internal consistency and validating the use of the CIP in diverse product contexts, including technology and photography (Laurent & Kapferer, 1985).

3.3.4 Brand Trust (Mediator)

To measure brand trust, this research uses the validated scale developed by Delgado-Ballester (2003), which has been widely applied across product categories. The definition aligns with the two-dimensional perspective widely adopted in brand trust research: *fiability* and *intentionality*.

This scale comprises multiple statements that capture both dimensions of trust. The items were adapted for the OM SYSTEM rebranding to ensure relevance to high-involvement, technology-driven products. The scale's high internal consistency, with the *fiability* scale having an alpha of 0.81, and the *intentionality* scale's alpha of 0.83, ensures reliability and supports quantitative analysis (Delgado-Ballester, 2003; Roest & De Graaf, 2023). The scale was formerly a 5-point

Likert scale. However, to ensure that the data analysis was statistically strong, the scale was adapted to a 7-point Likert scale*.

The final operationalized model is the following:

Framework	Measure	Items	Scale	Reference	Cronbach's α[1]
IV	Brand Rebranding	Stimuli	na	na	na
Moderator	Rebranding Awareness	20	Recall, recognition, 7-point Likert	Own adaptation & Rossiter, 2014.	To be reported
Moderator	Photography Involvement	13	7-point Likert Scale	Laurent & Kapferer (1985)	> 0.80
Mediator	Brand Trust	13	7-point Likert Scale *	Delgado-Ballester (2003)	> 0.80
DV	Risk Perception	13	7-point Likert Scale	Featherman & Pavlou (2003)	> 0.78

Table 1: Operational Model.

3.4 Stimulus Identification

As part of the Olympus-to-OM SYSTEM rebranding, multiple elements were changed, including the name, resulting in a new logo and visual identity. Literature emphasizes the importance of name, logo, and identity changes in affecting consumer risk perception. Hence, the stimuli comprises images of the Olympus and OM SYSTEM logos, targeting the previously described aspects.

The stimuli are formulated using authentic images of the original Olympus logo and the OM SYSTEM logo, which differ in colour, shape, and brand name. It was chosen as the stimulus before and after the rebranding. This allows examination of consumer responses when multiple elements are changed simultaneously, thereby capturing the impact of the actual rebranding experienced by consumers. Table 2 provides an overview of the stimuli used:

[1] Cronbach's alpha of the full scale (all dimensions), as presented in the summary table. Individual dimension alphas are reported in the main text for the constructs used in the model.

Brand	Brand Logo
Olympus (before rebranding)	(Olympus Corporation, 2008)
OM SYSTEM (after rebranding)	(PR Newswire, n.d.)

Table 2: Summary of Stimuli.

3.5 Questionnaire design

The online survey employed a simple between-subjects design, enabling the evaluation of the effects of the Olympus-to-OM SYSTEM rebranding on consumer perceptions and awareness. Respondents were randomly assigned to a single stimulus to prevent carryover effects and reduce demand characteristics (Charness et al., 2012). This method directly assessed each participant's perceptions of a single brand presentation, ensuring responses aligned with the specific rebranding manipulation.

The questionnaire combined the funnel approach and block design, starting with broad, non-sensitive questions and grouping related sections and measurements for modular sequencing and randomization (Malhotra et al., 2017). The survey began with two screening questions. Participants who indicated neither prior camera purchase nor intention to purchase one within the next five years (answered “no” to both questions) were excluded from the study. All other respondents proceeded with the survey. This ensured that only respondents who were better suited to the study would continue to answer the survey. Afterwards, the blocks of photography involvement and branding awareness were randomized to minimize order effects. Within each stimulus block, brand trust and perceived risk were not randomized. Specifically, the brand trust scale was presented first, followed by the manipulation checks, and then the perceived risk scale, which had more items. This fixed ordering allowed the manipulation checks to be placed after the brand trust scale but before the longer risk perception section, minimizing potential recall issues while still reducing recency bias. Placing the manipulation checks in the middle of the survey achieves this balance, as it ensures participants have reviewed some relevant content without allowing the checks themselves to distort responses to the primary dependent measures. After the main measurement blocks, participants completed items regarding rebranding awareness, perceived motivations for the rebranding, and, finally, demographic questions. This

sequence was chosen to maintain respondent focus and data quality throughout the survey (Creswell, 2009; Malhotra et al., 2017; Sekaran & Bougie, 2016).

Moreover, a larger sample size was collected to ensure at least 35 valid responses per condition. Table 9 (See Appendix A: Main Study Questionnaire) provides a detailed overview of the survey logic, including randomization.

3.6 Data Analysis

The quantitative data were collected via Qualtrics and analysed in IBM SPSS Statistics 30.0. After data cleaning, only respondents who passed screening and manipulation checks and completed the survey were retained. Descriptive statistics were computed to characterise the sample.

To test the hypotheses, independent samples t-tests examined group differences, and linear regression assessed relationships among brand rebranding, risk perception, and brand trust. Mediation, moderation, and the full model were analysed using Hayes' PROCESS macro (Models 4, 1, and 10), after verifying statistical assumptions. Cronbach's alpha assessed the reliability of all multi-item scales, and the rebranding manipulation (Olympus vs OM SYSTEM) was entered as a dummy variable. All tests used a 5% significance level.

Hypothesis	**Statistical Test**
H1: Olympus' rebranding positively impacts the level of consumer risk perception.	Independent Sample T-test
H2a: The level of consumer awareness of Olympus rebranding (aware vs unaware) moderates the relationship between the rebranding and consumer risk perception. **H2b:** The level of consumer awareness of Olympus rebranding (aware vs unaware) moderates the relationship between the rebranding and the level of brand trust. **H3a:** The level of consumer photography involvement (high vs low involvement) moderates the relationship between Olympus brand rebranding and consumer risk perception. **H3b:** The level of consumer photography involvement (high vs low involvement) moderates the relationship between Olympus brand rebranding and the level of brand trust.	Hayes Process Macro Model 1 (Moderation analysis)

H4: Olympus' rebranding negatively impacts the level of brand trust.	Independent Sample T-test
H5: Brand trust impacts the levels of risk perception.	Simple Linear Regression
H6: Brand Trust mediates the relationship between Olympus rebranding and consumer risk perception.	Hayes Process Macro Model 4 (Mediation analysis)
Full Model: Combined moderated mediation model with risk perception as outcome, brand rebranding as predictor, brand trust as mediator, and awareness of rebranding and photography involvement as moderator.	Hayes Process Macro Model 10

Table 3: Statistical Tests used for Hypothesis and model analysis.

The moderation mediation model used to identify the statistical effects of the full model is shown below:

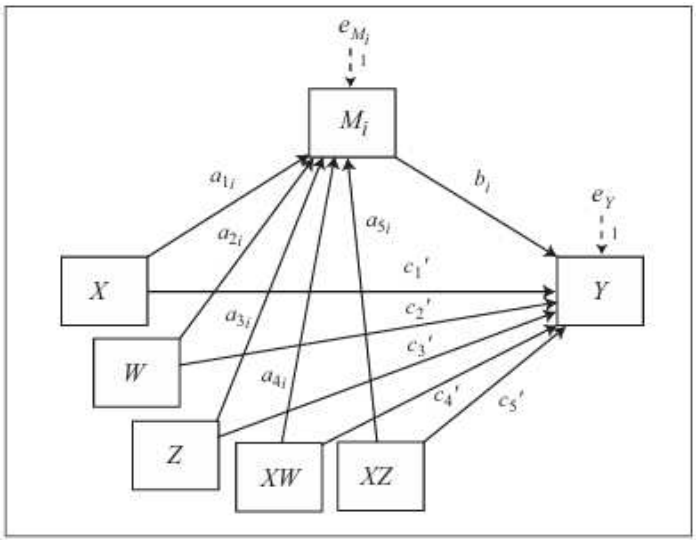

Figure 2: Statistical model: Hayes' PROCESS Model 10.

4 Results

This section begins with data preparation, then proceeds to sample characterization and evaluation of measurement reliability. Finally, hypothesis testing and results.

4.1 Data Preparation

Several steps were taken during data preparation to ensure a robust dataset for analysis. System-generated variables from Qualtrics were removed to ensure participant anonymity and to preserve the relevant information. Variable names and value labels were revised to ensure clarity.

4.1.1 Data Cleaning

A total of 372 responses were collected between November 20th and December 3rd, 2025. Twenty-one responses (5.6%) were removed due to duplicate IP addresses, aiming to maintain the independence of observations. Thirty-five responses (9.4%) were excluded due to system-missing values. At the beginning of the survey, two initial screening questions were asked, and 74 participants (19.9%) were excluded because they had not purchased a photographic camera in the last 5 years and did not intend to purchase one within the next 5 years. Furthermore, 78 respondents (31.0%) had a completion rate below 100%, and therefore, their answers were also removed. Overall, 164 valid responses were retained before conducting manipulation checks.

4.1.2 Manipulation Checks

Two manipulation checks were placed for each stimulus to ensure that participants perceived the independent variable before and after the rebranding as intended.

Regarding the manipulation fiability and effectiveness, 77,4% identified the condition (78,4% the Olympus; 76.3% the OM SYSTEM), without any significant group differences ($\chi^2(1, N = 164) = 0.100$, $p = 0.750$; see Table 10 and Table 11 in Appendix B: Statistical Output). To ensure data quality and reduce issues due to inattention or misunderstanding, the design flow excluded participants who did not correctly identify the stimulus. Therefore, a total of 127 valid responses were retained before outlier analysis.

4.1.3 Outlier Identification and Analysis

To rigorously detect multivariate outliers, composite scores for risk perception, brand trust, photography involvement, and reasons for rebranding were used to calculate the Mahalanobis distances. Cases with a Mahalanobis distance exceeding the chi-square critical value ($\chi^2 \approx$

18.470, $p < 0.001$, df = 4) were characterized as potential outliers. In total, five cases met this criterion and were removed from subsequent analyses, resulting in a final valid sample of N = 122 for this model.

Table 4 presents the number of valid responses per stimulus viable for the remaining analysis.

	Frequency	Percent	Valid Percent	Cumulative Percentage
Olympus	65	53.3	53.3	53.3
OM SYSTEM	57	46.7	46.7	100.0
Total	122	100.0	100.0	

Table 4: Valid responses per Stimulus.

4.2 Measurement Overview

This section assesses the reliability of the measurement scales using internal consistency testing.

4.2.1 Brand Rebranding

Brand rebranding was coded as a binary dummy variable, with Olympus coded as 0 and OM SYSTEM as 1.

4.2.2 Risk Perception

Risk perception was measured using a 7-point Likert scale adapted from Featherman and Pavlou (2003), composed of four dimensions with a total of 13 items. This scale yielded a Cronbach's alpha coefficient of α = 0.94 (see Table 12), indicating an acceptable reliability. All corrected item-total correlations were above 0.53, and no improvement was observed through item deletion (see Table 13). Hence, all items were retained in the final scale.

4.2.3 Rebranding Awareness

Rebranding awareness was coded as a binary dummy variable through a combination of conditions regarding rebranding awareness questions.

Within each dimension, items were combined using a disjunctive rule (or), whereas across dimensions, a conjunctive rule (and) was applied. Specifically, branding awareness was coded as 1 when respondents demonstrated either aided awareness of Olympus and OM SYSTEM or unaided recall of at least one of these brands. Factual rebranding awareness was coded as 1 when respondents answered at least one of the three objective questions (Q22-Q24) about the name change correctly. Q25 was excluded due to a logical inconsistency. Respondents who

incorrectly affirmed OM SYSTEM had changed names (Q24=Yes) were prompted to Q25, creating measurement error in which unaware respondents could score "aware" by chance (Carmines & Zeller, 1979). This approach follows standard practices for excluding problematic responses (DeVellis, 2017; Spector, 1992).

Then, the reasons for rebranding the dimension scale were evaluated. It was measured using a 7-point Likert scale adapted from the original. Participants rated their agreement with 7 items, which yielded a Cronbach's alpha of 0.91 (see Table 14). All corrected item-total correlations were above 0.69, and no improvement was observed through item deletion (see Table 15). Hence, all items were retained in the final scale.

To address this new construct, a FA was conducted to examine the scale's dimensional structure and support its construct validity. This procedure is recommended in scale development to determine whether items reflect a single latent construct or multiple underlying dimensions. It also assesses how strongly each item contributes to the factor solution. Given that the items were designed to cover imprecise perceptions of the Olympus-to-OM SYSTEM rebranding (awareness of the change/perceived continuity/legacy), a FA using Principal Axis Factoring (PAF) was the appropriate method (Boateng et al., 2018; Sirois et al., 2019).

PAF was used as it focuses on common variance attributable to the underlying latent construct rather than total variance. The eigenvalue (>1) and scree plot criteria both indicated a single dominant factor, so interpretation was based on a one-factor solution. The factorability of the correlation matrix is indicated by a very high KMO value of 0.91, and a significant Bartlett's test of sphericity ($\chi^2(21) = 566.100$, $p < 0.001$) (see Table 16). These statistics indicate strong correlations among the items and support the use of factor analysis.

Therefore, the analysis confirms the use of one factor with an eigenvalue of 4.80, explaining 68.6% of the total variance, and 63.5% of common variance after one extraction (see Table 17). The scree plot showed an apparent elbow after the first factor, supporting a unidimensional solution (see Figure 10). All items loaded strongly on this factor, with factor loadings ranging from 0.72 to 0.84 (see Table 18) and extracted communalities ranging from 0.51 to 0.71 (see Table 19), indicating that each item shared substantial variance with the latent construct. Consequently, this justifies the computation of a composite mean score for use in subsequent analyses and, consequently, the definition of the two groups of aware and unaware of the rebranding (Boateng et al., 2018).

Therefore, awareness of the reasons for rebranding was coded as high when participants scored above the sample median on the Likert scale (see Table 20) and as low when their scores were below the median. This approach is commonly used in survey research to create interpretable groups while relying on an objective distribution-based criterion (splitting continuous-scale scores at the sample median) (DeCoster et al., 2011; Iacobucci et al., 2015).

Lastly, only respondents who met all three-dimensional criteria were coded as 1 (high rebranding awareness). Otherwise, the variable was coded as 0, indicating low or non-existent knowledge and awareness of Olympus rebranding.

4.2.4 Photography Involvement

Photography involvement was measured using a 7-point Likert scale adapted from Laurent & Kapferer (1985). Participants rated their agreement with five dimensions, an overall of 13 items, which yielded a Cronbach's alpha coefficient of $\alpha = 0.84$ (see Table 21), indicating acceptable reliability (George & Mallery, 2019). The item-total statistics indicated that two items from the risk subdimension could be removed, resulting in only a modest increase in Cronbach's alpha. Although these items were weaker, the overall reliability was good, and the gain from deleting them would be minimal. In addition, no improvement was observed through item deletion (see Table 22). Hence, all 13 items were retained in the final scale.

4.2.5 Brand Trust

Brand trust was measured using a 7-item Likert scale adapted from Delgado-Ballester (2003), with two dimensions and a total of 13 items. The Cronbach's alpha was $\alpha = 0.91$ (see Table 23), indicating excellent internal consistency (Telenti et al., 2024; George & Mallery, 2019). Regarding the item-total correlation, two negatively worded items (which were reverse-coded) showed very low corrected item–total correlations, and deleting them would produce only a modest increase in Cronbach's alpha (see Table 24). As it was already referred to, this suggests that the gain from removing them would be minimal. Furthermore, no improvement was observed with item deletion, justifying retaining all 13 items in the final scale.

4.2.6 Measurement Summary

The models' key variables are presented in the summary table below:

Variable	Description	Values	Measure
Brand Rebranding	Stimulus condition indicating which brand the participant evaluated.	0= Olympus 1= OM SYSTEM	nominal
Risk Perception	The dependent variable measures the mean perceived risk across multiple items.	1 to 7	scale
Rebranding awareness	Predictor dummy variable indicating awareness of the Olympus–OM SYSTEM rebranding.	0= Unaware 1= Aware	Nominal
Photography Involvement	The dependent variable measures the mean photography involvement across multiple items.	1 to 7	scale
Brand Trust	Dependent variable measuring the mean brand trust score across multiple items	1 to 7	scale

Table 5: Model variables.

The descriptive statistics for the main variables are as follows:

Variable	Type	Min	Max	Mean	St. Deviation	Cronbach α
Brand Rebranding	IV	0.00	1.00	0.47	0.50	na
Rebranding Awareness	Moderator	0.00	1.00	0.35	0.48	0.91[2]
Photography Involvement	Moderator	2.46	7.00	4.85	0.87	0.84
Brand Trust	Mediator	1.46	7.00	4.45	0.96	0.91
Risk Perception	DV	1.00	7.00	3.64	1.26	0.94

Table 6: Descriptive statistics and reliability of the constructs.

4.3 Sample Characterization

After data preparation, a total sample of N = 122 participants was obtained, and Table 25 synthesizes the following characterization. The gender distribution does not differ notably, as males comprised 50.0% and women 46.7% of the sample. Regarding the sample's age, the

[2] Alpha of the third dimension.

majority were young adults (18–24), representing 34.4%, followed by participants aged between 25–34, representing 17.2%. Participants aged between 35–44, 45–54, and 55–64 years were also well represented, accounting for 15.6%, 12.3%, and 13.1% of the overall sample, respectively. Furthermore, most of the participants were Portuguese (60.7%), followed by Italian (4.1%). Overall, 30 different nationalities are represented. In terms of education, 37.7% held a master's degree, followed by 36.1% holding a bachelor's degree, and 15.6% holding a high school diploma. Moreover, the sample's income varied considerably, with the two most represented groups earning between €1,000 and €1,999 (19.7%) and those earning less than €1,000 (18.0%).

When asked about the screening questions, 71.3% reported having bought a photographic camera in the last 5 years, and 79.5% intend to buy one in the next 5 years.

Lastly, the characteristics of the sample, divided by the survey randomization and corresponding stimulus exposure, were analyzed and compared. In conclusion, both stimulus groups remained well-balanced after data cleaning, indicating that the randomization worked as intended.

4.4 Hypothesis Testing

This section presents the statistical analyses conducted to test the hypotheses and their assumptions, using the statistical methods previously stated in Section 3.6

4.4.1 Multicollinearity Assessment

Before testing the hypothesis, diagnostics were conducted to assess multicollinearity and interdependence among the variables. To ensure acceptable multicollinearity, all predictors were addressed against established thresholds for the variance inflation factor (VIF), eigenvalues, and condition index (CI) (VIF < 2.5, Eigenvalue > 0.01, CI < 30.0). All VIF values were below the pre-established threshold, with the highest at 1.411 (see *Table **26**: Variance Inflation Factor (VIF) and Tolerance Values for Predictors.*Table 26), indicating minimal multicollinearity (Hair et al., 2019). Regarding CI, all values were below 30, with the highest at 18.118 (Belsley et al., 1980), suggesting no serious multicollinearity concerns. Finally, the eigenvalues range from 3.959 to 0.012, all of which were above the acceptable threshold (see Table 27). Therefore, these results suggest that multicollinearity does not compromise the stability or interpretability of the regression coefficients.

4.4.2 Results of the Hypothesis Testing

The significance level $\alpha = 0.05$ was applied, in line with social science standards (American Psychological Association, 2020). The survey design ensured independence of observations, as each participant was exposed to only one stimulus. Table 7 presents an overview of the tested hypotheses, the corresponding null hypotheses (H_0), and the statistical methods used:

Type	Hypothesis	Statistical Test	Null Hypothesis
Group difference	H1	Independent samples t-test	μ Olympus = μ OM SYSTEM
Moderation (Interaction)	H2a	PROCESS Model 1	β interaction = 0
Moderation (interaction)	H2b	PROCESS Model 1	β interaction = 0
Moderation (interaction)	H3a	PROCESS Model 1	β interaction = 0
Moderation (interaction)	H3b	PROCESS Model 1	β interaction = 0
Group difference	H4	Independent samples t-test	μ Olympus = μ OM SYSTEM
Direct effect	H5	Simple Linear Regression	β brand trust = 0
Mediation (indirect effect)	H6	PROCESS Model 4	$a \times b = 0$

Table 7: Null hypotheses and statistical tests used.

4.4.2.1 Impact of the Rebranding on Risk Perception

H1: Olympus' rebranding positively affects consumers' perceived risk.

To evaluate the impact of Olympus' rebranding on consumers' risk perception, an independent samples t-test was conducted. The assumptions of this method were evaluated. The Shapiro-Wilk test indicated normality to Olympus ($p = 0.315$), although indicating non-normality in OM SYSTEM ($p = 0.022$) (see Table 28). Despite that, the large sample size (n > 30 per group) justified the application of the central limit theorem (CLT).

After conducting the test, Levene's test did not confirm the homogeneity of variances (p = 0.039; see Table 29). Therefore, the analysis relied on the "equal variances not assumed" results, which indicated no statistically significant difference in perceived risk between the two rebranding conditions (p = 0.218). Hence, H_0 could not be rejected, and H1 was not supported.

4.4.2.2 Moderator Effect of Rebranding

H2a: The level of consumer awareness of Olympus rebranding (aware vs unaware) moderates the relationship between the rebranding and consumer risk perception.

This research examines the relationship between brand rebranding and consumer risk perception, and whether rebranding awareness moderates this relationship. PROCESS Model 1 was conducted to test the hypothesis, and its assumptions were evaluated. Regarding the residual normality and homoscedasticity, the model was replicated using standard linear regression with the same predictors and interaction terms. A Shapiro-Wilk test revealed non-normality (p = 0.021; see Table 30). Therefore, the CLT supports the robustness of the results, given the large sample size. Visually, the plot of the residual scatter (Figure 11) showed no apparent patterns or funnel-shaped distribution, suggesting that the assumption of homoscedasticity was met.

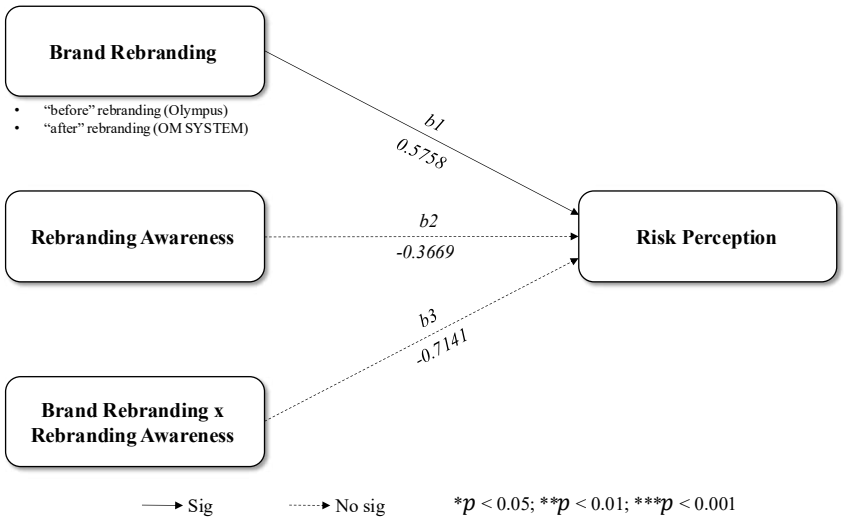

Figure 3: Effect of Brand Rebranding on Risk Perception moderated by Rebranding Awareness.

The overall moderation model is significant, F(3, 118) = 4.263, p = 0.007, which explains 9.8% of the variance in perceived risk (R^2 = 0.098; Table 31). Brand rebranding had a significant positive effect on risk perception (B = 0.576, p = 0.028). Although the interaction between rebranding and awareness was not significant (B = –0.714, p = 0.161; F(1, 118) = 1.988, p =

0.161), showing that the effect of rebranding on perceived risk depends on the rebranding awareness. Therefore, rebranding awareness does not moderate the relationship between Olympus rebranding and consumer risk perception. Hence, H_0 is accepted, while hypothesis H2a is rejected.

H2b: The level of consumer awareness of Olympus rebranding (aware vs unaware) moderates the relationship between the rebranding and the level of brand trust.

This thesis also examines the relationship between brand rebranding and brand trust, and whether rebranding awareness moderates it. Once again, PROCESS Model 1 was conducted. However, before conducting the test, the assumptions were evaluated. A Shapiro-Wilk test revealed non-normality ($p < 0.001$; see Table 32). The CLT supports the robustness of the results, given the large sample size. The homoscedasticity assumption was met as the plot of the residuals (Figure 12) showed no apparent patterns or funnel-shaped distribution.

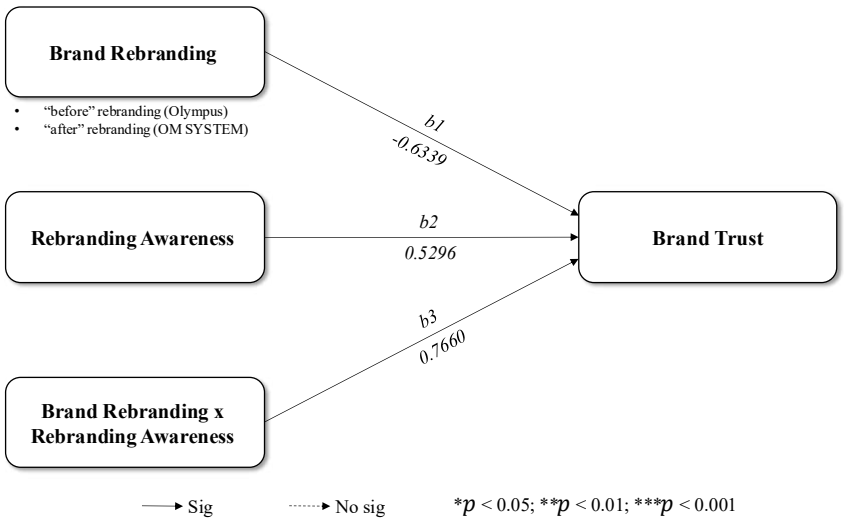

Figure 4: Effect of Brand Rebranding on Brand Trust moderated by Rebranding Awareness.

The overall moderation model is significant, $F(3, 118) = 12.598$, $p < 0.001$, which explains 24.26% of the variance in brand trust ($R^2 = 0.2426$; Table 33). Brand rebranding had a significant negative effect on brand trust ($B = –0.634$, $p = 0.001$). In addition, rebranding awareness had a significant and positive effect on brand trust ($B = 0.530$, $p = 0.046$). Also, the interaction between rebranding and awareness was significant and positive ($B = 0.766$, $p = 0.033$; $F(1, 118) = 4.680$, $p = 0.033$), showing that the effect of rebranding on brand trust depends on the rebranding awareness.

Moreover, among unaware consumers, exposure to OM SYSTEM rather than Olympus significantly decreases brand trust ($B = –0.634$, $p = 0.001$), whereas among aware consumers,

this effect is small and non-significant (B = 0.132, p = 0.665). This pattern suggests that rebranding awareness moderates the relationship between Olympus' rebranding and brand trust, such that the rebranding reduces brand trust only among consumers who are unaware of it. Therefore, the H_0 is rejected, and hypothesis H2b is supported.

4.4.2.3 Moderator Effect of Photography Involvement

H3a: The level of consumer photography involvement (high vs low involvement) moderates the relationship between Olympus brand rebranding and consumer risk perception.

The study examines the relationship between brand rebranding and risk perception, exploring whether photography involvement moderates this relationship. Again, PROCESS Model 1 was conducted. Prior to the test analysis, the assumptions were evaluated. A Shapiro-Wilk test revealed normality (p = 0.776; see Table 34). The homoscedasticity assumption was met as the plot of the residuals (Figure 13) showed no apparent patterns or funnel-shaped distribution.

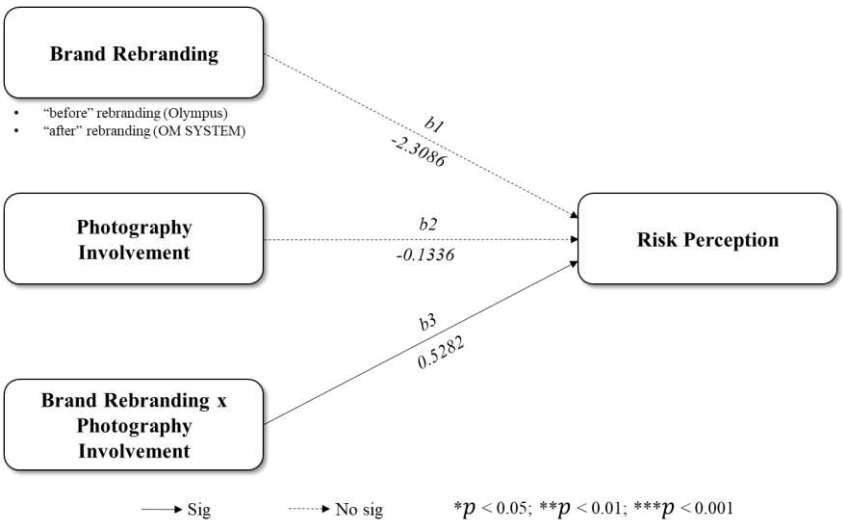

Figure 5: Effect of Brand Rebranding on Risk Perception moderated by Photography Involvement.

The overall moderation model is not statistically significant, F(3, 118) = 2.276, p = 0.083, which explains 23.39% of the variance in brand trust (R^2 = 0.234; Table 35). Brand rebranding had a negative but non-significant main effect on risk perception (B = –2.309, p = 0.075), and photography involvement did not have a significant main effect (B = –0.134, p = 0.470). However, the interaction between rebranding and photography involvement was significant and positive (B = 0.528, p = 0.044; F(1, 118) = 4.133, p = 0.044), indicating that photography involvement moderates the relationship between rebranding and risk perception.

Furthermore, at low involvement (Photo_in = 4.00), rebranding had no significant effect on perceived risk (B = –0.196, p = 0.540). At average involvement (Photo_in = 4.85), the effect of exposure to OM SYSTEM versus Olympus was still not significant (B = 0.251, p = 0.270). At high involvement (Photo_in = 5.62), however, OM SYSTEM (coded 1) significantly increased perceived risk relative to Olympus (coded 0; B = 0.658, p = 0.030).

This pattern suggests that photography involvement moderates the relationship between Olympus' rebranding and consumer risk perception, such that the rebranding increases perceived risk mainly among consumers with high photography involvement. Accordingly, H_0 of no interaction is rejected, and H3a is supported.

H3b: The level of consumer photography involvement (high vs low involvement) moderates the relationship between Olympus brand rebranding and the level of brand trust.

The relationship between brand rebranding and brand trust is examined to determine whether photography involvement moderates it. Therefore, PROCESS Model 1 was conducted. Regarding the assumptions, a Shapiro-Wilk test revealed non-normality (p < 0.001; see Table 36). Hence, using the CLT supports the robustness of the results, given the large sample size. The homoscedasticity assumption was met as the plot of the residuals (Figure 14) showed no apparent patterns or funnel-shaped distribution.

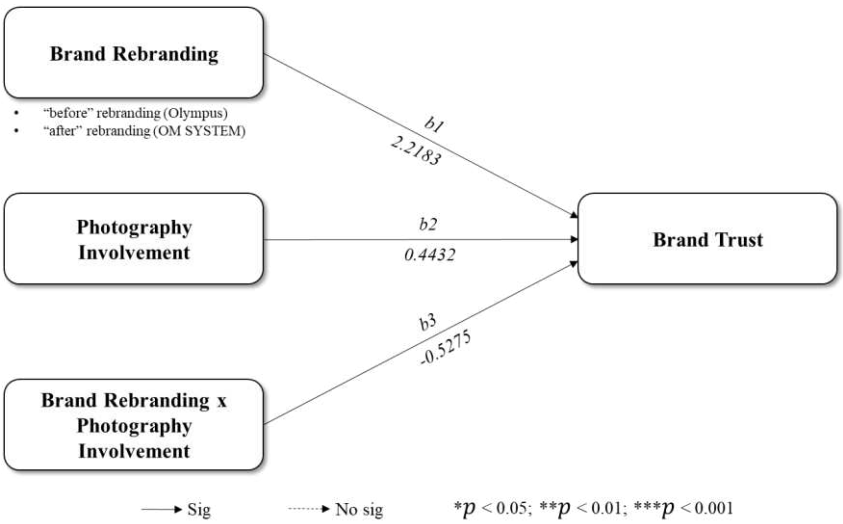

Figure 6: Effect of Brand Rebranding on Brand Trust moderated by Photography Involvement.

The overall moderation model is significant, F(3, 118) = 4.771, p = 0.004, which explains 32.89% of the variance in brand trust (R^2 = 0.3289; Table 37). Brand rebranding had a significant effect on brand trust (B = 2.218, p = 0.021), while photography involvement

positively predicts trust (B = 0.443, p = 0.002). In addition, the interaction between rebranding and photography involvement is significant and negative (B = –0.524, p = 0.007; F(1, 118) = 7.508, p = 0.007), indicating that photography involvement moderates the rebranding-trust relationship.

Moreover, at low involvement (Photo_in = 4.00), rebranding has no significant effect on trust (B = 0.108, p = 0.647). At mean involvement (4.85), OM SYSTEM exposure significantly reduces trust relative to Olympus (B = –0.338, p = 0.046), and this negative effect strengthens at high involvement (5.62; B = –0.744, p = 0.001).

This pattern shows that photography involvement moderates the relationship between Olympus rebranding and brand trust, such that the rebranding reduces trust primarily among photography lovers (higher Photo_in). Therefore, H_0 is rejected, and H3a is supported.

4.4.2.4 Impact of the Rebranding on Brand Trust

H4: Olympus' rebranding negatively impacts the level of brand trust.

To evaluate the impact of Olympus' rebranding on brand trust, an independent samples t-test was conducted. The assumptions of this method were evaluated. The Shapiro-Wilk test indicated normality to Olympus (p = 0.145; Table 38), although indicating non-normality in OM SYSTEM (p < 0.001). Despite that, the large sample size (n > 30 per group) justified the application of the CLT.

Furthermore, due to the assumption of homogeneity of variances being violated (Levene's test: p = 0.043; see Table 39), the 'equal variances not assumed' results were used. These results indicated no statistically significant difference in brand trust between the Olympus and OM SYSTEM rebranding conditions (p = 0.086). Hence, H_0 cannot be rejected, and H4 is not supported.

4.4.2.5 Impact of the Brand Trust on Risk Perception

H5: Brand trust impacts the levels of risk perception.

To test H5, a simple linear regression analysis was conducted in which brand trust was used to predict risk perception.

$$Risk\ Perception_i = \beta_0 + \beta_1 \cdot Brand\ Trust_i + \epsilon$$

Where, $i = 1, \dots, N$ and N=122.

Before conducting the linear regression, the assumptions were evaluated. The Durbin-Watson is very close to 2, suggesting no problematic autocorrelation in the residuals (Durbin-Watson = 2.033; Table 42), and the Shapiro-Wilk test indicated non-normality ($p < 0.001$; Table 40). Despite that, the large sample size (n > 30 per group) justified the application of the CLT. Moreover, the scatterplot of standardized residuals against standardized predicted values shows a relatively random cloud of points without a precise funnel shape or curvature, indicating an approximately linear relationship and roughly constant variance of the residuals across the range of predicted values (Figure 15). Although the results show slight violations, simple linear regression can be used, warranting a cautious interpretation. The direct effect is shown in path b in the figure below:

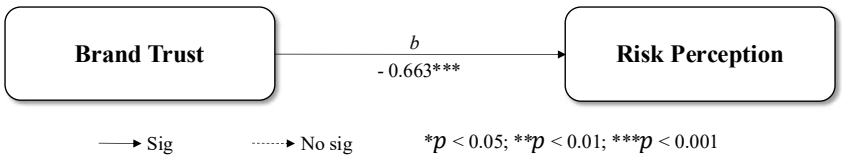

Figure 7: Effect of Brand Trust on Risk Perception.

The regression model was statistically significant, $F(1, 120) = 94.262$, $p < 0.001$ (Table 42), indicating a strong positive association between brand trust and risk perception ($R = 0.663$). This test indicates that brand trust explains 44.0% of the variance in risk perceptions ($R^2 = 0.44$). The unstandardized regression coefficient $\beta = -0.869$ ($p < 0.001$), indicating that, on average, a one-unit increase in brand trust is associated with a 0.869-point decrease in perceived risk. The standardized coefficient was $\beta = -0.663$ (Table 41), indicating a strong negative relationship between brand trust and perceived risk in standard deviation units. Therefore, H5 was confirmed, and the null hypothesis H_0 of no effect was rejected.

4.4.2.6 Mediator Effect of Brand Trust

H6: Brand Trust mediates the relationship between Olympus rebranding and consumer risk perception.

Lastly, a mediating relationship was analysed by conducting the Hayes PROCESS Model 4 test. Regarding the evaluation of assumptions, the residuals deviated from normality (Shapiro-Wilk $p = 0.001$; see Table 43), but the large sample size indicates robustness, and the residual plots showed homoscedasticity (Figure 16).

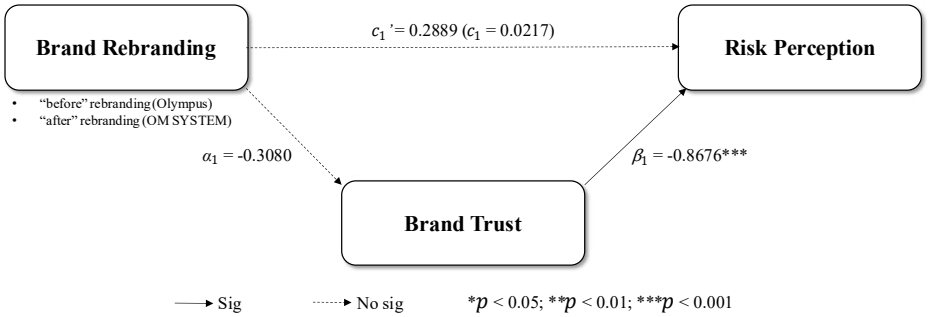

Figure 8: Effect of Brand Rebranding on Risk Perception mediated by Brand Trust.

The total effect (b = 0.289, p = 0.207), the direct effect (b = 0.022, p = 0.901), and the indirect effect were non-significant. Although brand rebranding was linked to a non-significant decrease in trust (b = –0.380, p = 0.077), brand trust significantly predicted risk perception (b = –0.876, p < 0.001; see Table 44). Furthermore, the bootstrapping confidence interval (BootLLCI = –0.216; BootULCI = 0.617) indicates that brand trust is not a significant mediator, as the interval includes 0. Therefore, brand trust did not mediate the relationship between brand rebranding and risk perception. H_0 could not be rejected, and H6 was not supported.

4.4.2.7 Full Model Testing

Lastly, this study tested a moderated mediation analysis by evaluating the full conceptual model with Hayes PROCESS Model 10 in SPSS. Hence, the full model combines all relationships previously examined and is now tested.

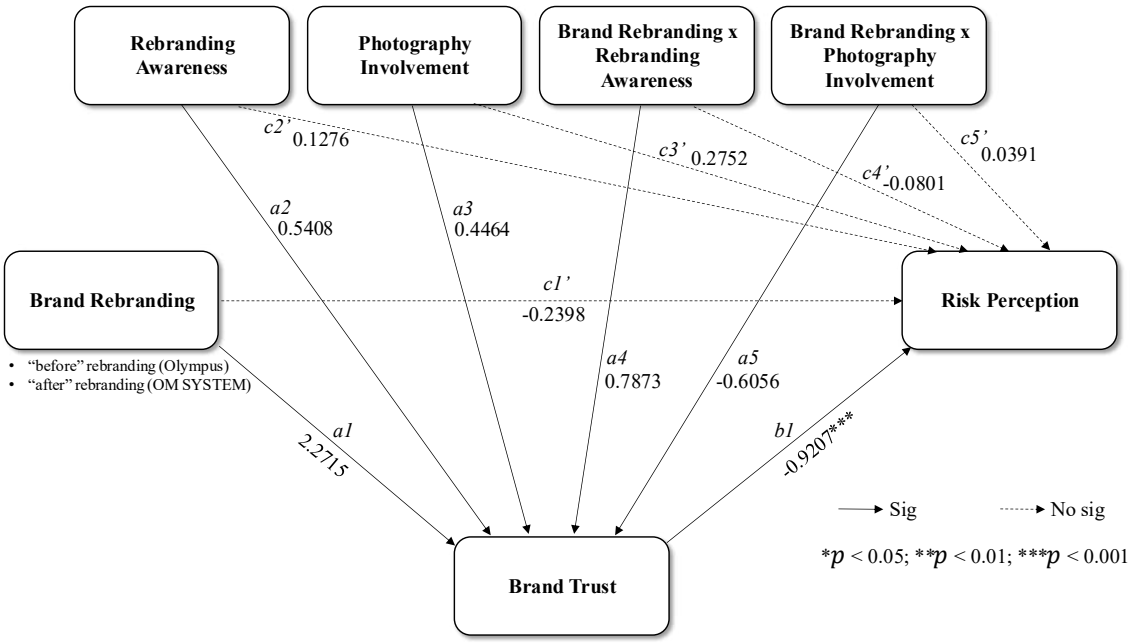

Figure 9: Full Model.

The process model with Risk as the outcome variable was significant, explaining 48.12% of the variance in risk perception ($F(6, 115) = 17.780$, $p < 0.001$, $R^2 = 0.4812$) (see Table 45).

The analysis showed that brand rebranding significantly affects brand trust (B = 2.272, p = 0.007). Rebranding awareness also has a positive and significant effect on brand trust (B = 0.541, p = 0.031), as does photography involvement (B = 0.446, p = 0.0003). In addition, the interactions between brand rebranding and rebranding awareness (B = 0.787, p = 0.021) and between brand rebranding and photography involvement (B = –0.606, p = 0.001) are significant, indicating that the effect of rebranding on brand trust depends on both moderators.

Furthermore, brand rebranding has a negative but non-significant effect on risk perception (B = –0.240, p = 0.810). The main effects of rebranding awareness (B = 0.128, p = 0.665) and photography involvement (B = 0.275, p = 0.063) on risk perception are positive but not statistically significant at the 5% level. However, brand trust has a significant, negative effect on risk perception (B = –0.921, p < 0.001), indicating that higher brand trust is associated with lower perceived risk.

Across all combinations of rebranding awareness and photography involvement, the conditional direct effect of brand rebranding on risk perception was not statistically significant, as all CIs for the direct effect included zero.

Regarding the conditional indirect effects of rebranding on risk through brand trust, for unaware consumers (aware_vf = 0) with medium and high levels of photography involvement, the indirect effects are positive and significant (B = 0.611, CI [0.208, 1.042], and B = 1.040, CI [0.390, 1.665], respectively). For aware consumers (aware_vf = 1) with low photography involvement, the indirect effect is negative but not statistically significant, as the confidence interval includes zero (B = –0.586, CI [–1.173, 0.022]). Moreover, the indices of moderated mediation are statistically significant for both moderators (Indexaware_vf = -0.725, CI [–1.275, –0.191]; IndexPhoto_in = 0.558, CI [0.047, 1.027]), showing that the indirect effect of rebranding on risk through brand trust varies systematically with rebranding awareness and photography involvement.

To conclude, the full model does not present evidence of a statistically significant direct effect of brand rebranding on risk perception. However, rebranding influences risk perception indirectly through brand trust, and this indirect effect varies with rebranding awareness and photography involvement.

The hypothesis testing results and full model implications are summarized below:

H	Test used	H Result	Full Model Result
1	Independent samples t-test	Rejected	**Rejected**
2a	PROCESS Model 1	Rejected	**Rejected**
2b	PROCESS Model 1	Supported	**Supported**
3a	PROCESS Model 1	Supported	**Rejected**
3b	PROCESS Model 1	Supported	**Supported**
4	Independent samples t-test	Rejected	**Rejected**
5	Linear Regression	Supported	**Supported**
6	PROCESS Model 4	Rejected	**Supported**

Table 8: Overview of Hypothesis Testing.

4.5 Further Analysis

To further illustrate how consumer characteristics shape responses to the rebranding, additional analyses were conducted comparing mean levels of brand trust and risk perception across subgroups defined by rebranding awareness. The analysis compared consumers who were aware of the Olympus-to-OM SYSTEM rebranding with those who were not. Through an independent samples t-test, the results highlighted that unaware consumers reported substantially higher perceived risk ($M_{unaware}$= 3.82) than aware consumers (M_{aware} = 3.13; t(20) = 2.74, p = 0.007) and lower brand trust ($M_{unaware}$ = 4.22, M_{aware} = 5.10; t(112.63) = –6.66, p < 0.001, verified in the 'equal variances not assumed') (see Table 46 and Table 47).

Therefore, this showed that consumers who are aware of the rebranding generally report lower perceived risk and higher brand trust than those who are unaware, reinforcing the central role of rebranding awareness in shaping consumer responses.

Additionally, the mean levels of perceived risk and brand trust were compared across subgroups defined by photography involvement (low vs. high, using a median split (see Table 48). Through independent samples t-tests, the results indicated no significant difference in perceived risk between low- and high-involvement consumers (M_{low}= 3.61 vs. M_{high}= 3.66; t(107.34) = –0.22, p = 0.83, verified in the 'equal variances not assumed'), but high-involvement

consumers reported significantly higher brand trust (M_{low}= 4.19 vs. M_{high}= 4.72; t(120) = –3.12, p = 0.002) than low-involvement consumers (see Table 49 and Table 50). Therefore, this suggests that photography involvement is associated with higher brand trust, even though it does not substantially differentiate overall risk perceptions.

5 Conclusion and Limitations

This research examined how Olympus' rebranding influences consumers' risk perception and under which conditions this effect occurs. This final chapter synthesizes the main findings, highlights managerial and academic contributions, and outlines key limitations and avenues for future research.

5.1 Main Findings

The findings show that Olympus' rebranding did not directly increase consumers' risk perception, which was unexpected. The results also show that brand trust is central to lowering perceived risk, while rebranding awareness and photography involvement shape how consumers respond to the change. Overall, rebranding does not necessarily increase perceived risk for technology brands.

RQ1: How does the Olympus-to-OM SYSTEM rebranding impact consumer risk perception?

A key finding from this study is that Olympus' rebranding does not affect consumers' perceived risk. This is a challenge for the literature on this topic, which states that changes in a brand's core elements (name and visual identity) can elevate perceived risk (Assali, 2017; Muzellec & Lambkin, 2006; Truong et al., 2017).

In this study, the direct effect of Olympus rebranding on risk perception was not statistically significant. Even the full model showed a non-significant negative trend, suggesting that OM SYSTEM exposure was associated with a slightly lower risk perception than Olympus, contrary to expectations. These null effects suggest that OM SYSTEM's emphasis on continuity in quality, heritage, and visual identity may have prevented.

The rebranding featured a well-defined purpose aligned with market changes, company strategy, and evolving consumer values. OM SYSTEM involved key stakeholders, ensured transparency, and delivered a cohesive message. Additionally, the gradual implementation (with Olympus maintaining support during the transition) helped manage consumer expectations (Assali, 2017; Frisk & Kovacek, 2024; Kannou & Rached, 2025).

Notably, prior research has primarily examined the operational aspects of rebranding but has not fully explored the accompanying communication strategies directed at stakeholders. OM SYSTEM during the rebranding ensured a global press release emphasizing 85-year Olympus heritage, integrated India campaigns (digital/PR/creators), and gradual logo transitions, which

mitigated uncertainty through transparency and continuity messaging (Campaign India Team, 2025; Kannou & Rached, 2025; Kausas Creative, 2025; Muzellec & Lambkin, 2006; OM Digital Solutions, 2021; Truong et al., 2017).

Overall, this null result reflects OM SYSTEM's strategic communication of continuity in product quality and values, which preserved brand trust during the transition, thereby exerting no statistically significant effect on perceived risk.

RQ2: Does brand trust mediate the relationship between rebranding and risk perception?

Previous research suggests that brand trust helps consumers deal with uncertainty by lowering perceived risk when brands change. Morgan and Hunt, Chaudhuri and Holbrook, and Delgado-Ballester argue that trusted brands are perceived as more reliable and predictable, making consumers accept new offerings or identity changes (Delgado-Ballester, 2003; Morgan & Hunt, 1994; Chaudhuri & Holbrook, 2001).

However, a key finding in this study is that brand trust did not operate as a simple mediator between rebranding and risk perception. In the basic mediation model, the total, direct, and indirect effects of the Olympus-to-OM SYSTEM rebranding on risk were all non-significant. In the full model, brand trust remains the strongest predictor of risk, with higher trust associated with lower perceived risk. In addition, indirect effects are observed only for specific consumer profiles, especially among those who are unaware of the rebranding and highly involved in photography. This means that trust mediates the effect of brand rebranding on risk only under certain conditions, rather than mediating across all consumers.

These findings extend existing work on brand trust as a risk mitigator in legacy tech rebrands by showing that rebranding awareness helps preserve trust and keep perceived risk lower among less-involved consumers (Commer et al., 2024; Monfort et al., 2025). At the same time, highly involved photography enthusiasts remain more sceptical about the transition from Olympus to OM SYSTEM. This highlights the importance of targeted, strategic communication in maintaining trust continuity during the rebranding of heritage technology brands such as Olympus.

RQ3: How does rebranding awareness and photography involvement moderate rebranding's effects on risk perception and brand trust?

An important finding of this research is the dual impact of Olympus's rebranding on consumers' risk perception and trust, moderated by consumer characteristics, including both rebranding awareness and photography involvement.

Regarding rebranding awareness, the literature highlights its role as a key moderator shaping consumer responses to brand changes. Consumers who are aware of the rebranding experience lower uncertainty because transparent communication reduces confusion and reinforces brand continuity (Frisk & Kovacek, 2024; Rahmi et al., 2022; Stuart & Muzellec, 2004). Conversely, unaware consumers experience surprise and skepticism, which elevate perceived risk and erode trust (Rahmi et al., 2022). The results of hypothesis testing partially support these theoretical assumptions: rebranding awareness significantly moderated the impact of rebranding on brand trust, but not on risk perception directly. Unaware consumers reported a higher risk and lower trust when exposed to OM SYSTEM than aware consumers, who showed more neutral responses. Although awareness did not significantly moderate the relationship between rebranding and risk, the descriptive patterns and the significant effects on trust suggest that OM SYSTEM's communication efforts (global press coverage and localized campaigns) helped many aware respondents feel more reassured, positioning awareness as a strategic mitigator in heritage-brand rebrandings.

Furthermore, according to Laurent and Kapferer's (1985) CIP theory, high-involvement consumers respond more sensitively to brand changes due to their emotional investment in the brand's identity and attributes. In contrast, low-involvement consumers rely more on situational cues and display less intense reactions (Foxall & Pallister, 1998; Zaichkowsky, 1985). This study is consistent with these insights, showing a significant interaction effect in which high involvement amplifies risk and diminishes trust, whereas low involvement produces neutral effects.

A novel contribution of this thesis is the application of CIP theory to the context of technological rebranding. Photography enthusiasts scrutinize the Olympus-to-OM SYSTEM transition more closely because of their strong emotional attachment to cameras as symbols of identity and performance. The findings extend previous research, which linked involvement to satisfaction and loyalty, by demonstrating its relevance in the rebranding process. This provides valuable insight for high-tech legacy brands such as Olympus, where enthusiasts closely monitor heritage alignment, whereas less-involved consumers show little concern for brand identity nuances (Chalil & Dharmmesta, 2015; Gu et al., 2012).

In sum, the findings suggest that OM SYSTEM's strategic communication mitigated the direct risk of rebranding, buffered moderation for aware consumers, and enabled conditional trust paths, emphasizing transparency as critical for legacy tech rebrands.

5.2 Theoretical Implications

The results challenge the assumption that name and visual identity changes inherently increase risk perception, suggesting that factors such as communication and gradual implementation may neutralize these effects in heritage-tech contexts (Assali, 2017; Frisk & Kovacek, 2024).

Furthermore, the study's results revealed conditional mediation through brand trust. These findings refine Delgado-Ballester's (2003) brand trust mediation framework by demonstrating that trust operates contingently on consumer awareness and photography involvement, as evidenced by PROCESS Model 10's significant moderated mediation values.

Moreover, Laurent & Kapferer's CIP theory predicts that high involvement amplifies sensitivity to brand change. This application remains rare in tech/photography contexts. This thesis confirms the theory, and it also expands it to technology brands, advocating that involvement amplifies negative reactions among enthusiasts, a relatively unexplored application in photography/tech literature.

Lastly, a novel contribution of this study is the development and validation of a new Rebranding Awareness construct, developed for this thesis. The scale comprises three dimensions: (1) aided recognition of both brands (Olympus/OM System), (2) factual knowledge of the rebranding, and (3) perception of reasons for the rebranding. This construct was developed to capture patterns of awareness during the rebranding of heritage technology brands.

Unlike existing constructs such as brand knowledge, brand familiarity, or brand awareness, the Rebranding Awareness scale captures a more specific type of awareness. Brand knowledge refers to the structure of brand-related information stored in memory, focusing on associations linked to the brand’s image and attributes (Keller, 1993). Brand familiarity reflects the accumulated direct and indirect experience with a brand over time, such as usage, exposure to communications, and word-of-mouth (Campbell & Keller, 2003). Brand awareness measures the extent to which consumers can recognize and recall a brand based on its name or other identity elements (Aaker, 1996). In contrast, Rebranding Awareness assesses whether consumers understand that a rebranding occurred, can connect the old and new identities, and recognize the strategic rationale behind the change.

Exploratory FA confirms robust unifactoriality, validating it as a single measure to moderate responses to heritage-tech rebrandings. This construct extends prior literature (Rossiter, 2014; Frisk & Kovácek, 2024; Stuart & Muzellec, 2004), which emphasizes basic change awareness, by showing that understanding reasons and continuity can mitigate risk and protect trust among aware vs. unaware consumers. It offers a replicable tool for future rebranding research.

5.3 Managerial Implications

Olympus' rebranding was a major strategic decision. This study provides OM SYSTEM managers with a clearer understanding of the effects of this decision on consumer perceptions, as measured by brand trust and risk perception. Changes to core brand elements are particularly critical here, as several familiar cues were altered simultaneously. Managers must therefore consider the impact of rebranding on consumer segments when launching new brand identities.

The findings highlight several managerial insights for OM SYSTEM and other tech and photography brands seeking evidence-based rebranding strategies. First, managers should reduce the proportion of consumers unaware of the rebranding through targeted global and local campaigns that emphasize heritage and continuity. Results indicate that unaware consumers perceive substantially greater risk and lower brand trust when exposed to the new OM SYSTEM branding. Additionally, brands should design specific strategies for highly involved consumers, offering extra reassurance via detailed product information, clear continuity in specifications and performance, and heritage-based testimonials.

In conclusion, OM SYSTEM managers should not underestimate the conditional impact of rebranding on risk perception via brand trust. Marketing efforts should focus on building strong, positive associations around the new identity and on creating comprehensive awareness of the rebrand, as these are fundamental to sustaining and reinforcing brand trust. In the Olympus case, overall risk perception was not significantly affected, suggesting that the communication and transition measures implemented by OM SYSTEM helped neutralize potential increases in perceived risk and may serve as a valuable example for other organizations planning a rebrand.

5.4 Limitations and Further Research

While this research provides valuable insights into the impact of rebranding on risk perception, it has several limitations and offers avenues for future research.

Regarding the sample, time and financial constraints led to the use of convenience sampling, resulting in a limited sample size and an overrepresentation of young, educated Western

individuals. This restricts the generalizability of the results. In addition, self-administered online surveys are vulnerable to respondent biases such as social desirability, courtesy bias, and 'yea-saying', which can push responses towards more positive evaluations of brands and innovations (Machado, 2024). This may have slightly underestimated perceived risk and overestimated brand trust in the rebranding scenarios. Moreover, the study relied on a single cross-sectional online survey, which limits the depth of understanding regarding the mechanisms underlying risk and trust evaluations. While this approach quantifies relationships among constructs, it does not fully capture the reasoning and context behind the rebranding evaluations, potentially missing key nuances. Furthermore, the stimulus used to represent the rebranding was limited, presenting only the logo and name change, rather than the whole communication campaign (OM SYSTEM's 85-year heritage press releases or gradual logo transitions). This may have underestimated potential mitigation effects and hindered the identification of the actual impact on risk perception.

Although the moderated mediation model explains a meaningful percentage of variance, it leaves room to explore other factors that may influence it. It could be by using other influencing factors, such as brand attachment, loyalty, price sensitivity, and broader market dynamics. Future studies could examine how external factors, such as pricing strategies, advertising exposure, and purchase intention, interact with rebranding outcomes. Alternatively, it could be by using different rebranding stimuli that combine logo and name changes with full communication campaigns (videos, press releases, social media content). This would allow comparison of the isolated effect of visual identity changes with the combined effect of identity and communication. Expanding the research to include comparisons with other brands would also strengthen the external validity of the findings and allow for a clearer understanding of brand-specific versus generalizable effects.

Furthermore, it could adopt a mixed-methods design, combining surveys with in-depth interviews with photography enthusiasts/experts to explore in more detail the opinions and drivers behind changes in perceived risk and brand trust following Olympus' rebranding.

Finally, replicating the newly developed Rebranding Awareness Scale in different brand contexts could help confirm its cross-brand validity and the relevance of its dimensions (recognition, knowledge, and reasons) in shaping enthusiast responses. Future research could apply and extend this construct across various settings, including heritage-based technology brands that undergo name and identity transitions while maintaining product continuity.

Moreover, experimental designs could explore how rebranding communication strategies influence each awareness dimension and, consequently, perceived risk and brand trust. By integrating consumer, brand, and market perspectives, future studies can provide a more holistic understanding of how rebranding awareness operates as a psychological mechanism in consumer risk evaluation.

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Appendix

Appendix A: Main Study Questionnaire

A.1 Questionnaire Design Logic Flow

Introduction (1 question)	
Screening Questions (2 Questions)	
	Q0.1 Purchase Camera
	Q0.2 Purchase Camera Intention
	If "no" to both → End of Survey
Randomizer: Evenly present 2 elements	
	Photography Involvement (4 questions)
	Branding Awareness (15 questions)
Randomizer: Evenly present 1 element only	
	Group: 01 Olympus (4 questions)
	Brand Trust
	Manipulation Check (1 question)
	Group: 02 OM SYSTEM (4 questions)
	Brand Trust
	Manipulation Checks (1 question)
Risk Perception (4 questions)	
Rebranding Awareness (5 questions)	
Demographics (5 questions)	
End of Survey	

Table 9: Logical Survey Flow

A.2 Online Survey Questionnaire

Block 1: Introduction

Dear Participant,

Thank you for taking the time to participate in this survey. This research is part of a Master's Thesis in Management, specializing in Strategic Marketing, at Católica Lisbon School of Business and Economics.

All data collected will be treated anonymously and used exclusively for research purposes. The survey will take approximately 7 minutes to complete. Please answer all questions as honestly

and carefully as possible. If you are unsure about a question, select the option that best reflects your initial assessment. There are no right or wrong answers.

If you have any questions or would like to receive the results of this study, please contact: s-ifbaptista@ucp.pt.
Thank you for your time and contribution.

Block 2: Screening Questions

Q 01. Have you purchased a photographic camera in the last five years?

• No • Yes

Q 02 Do you intend to purchase a photographic camera in the next five years?

• No • Yes

Block 3: Photography Involvement

Q03: Please indicate your level of agreement with the following statements about your involvement in photography. Use the scale provided: 1 = Strongly Disagree to 7 = Strongly Agree.

- Photography equipment is very important to me.
- Cameras and photography products play a central role in my life.
- Choosing photography products is a critical decision for me.

Q04: Please indicate your level of agreement with the following statements about your involvement in photography. Use the scale provided: 1 = Strongly Disagree to 7 = Strongly Agree.

- I think there is a high chance of making a wrong choice when buying photography equipment.
- Buying a camera involves risk because I may make a poor decision.
- If I make a wrong choice when purchasing photography products, it could have serious consequences.
- Mistakes in choosing photography equipment would have a significant effect on me.

Q05: Please indicate your level of agreement with the following statements about your involvement in photography. Use the scale provided: 1 = Strongly Disagree to 7 = Strongly Agree.

- I enjoy spending time looking at and learning about photography products.
- Photography gives me pleasure and excitement.
- I am highly motivated to engage in photography-related activities.

Q06: Please indicate your level of agreement with the following statements about your involvement in photography. Use the scale provided: 1 = Strongly Disagree to 7 = Strongly Agree.

- Photography brands say a lot about who I am.
- Owning certain photography brands helps me express myself.
- Photography products provide social status or identity.

Block 4: Branding Awareness

Q07: Please list three photography camera brands you currently know, especially those known for producing digital and/or mirrorless cameras.

• Brand 1 (fill in the blank) • Brand 2 (fill in the blank) • Brand 3 (fill in the blank)

Q08: From the list below, which camera brands are you familiar with or recognize? (select all that apply)

• Sony • Canon • OM SYSTEM • Nikon • Olympus • Fujifilm • Other (fill in)

Q09: From the list below, which of these brands have you seen before in the context of digital and/or mirrorless cameras? (select all that apply)

• Sony • Canon • OM SYSTEM • Nikon • Olympus • Fujifilm • Other (fill in)

Q10: Have you seen this brand symbol before? (Sony)

• Yes • No • Not Sure

Q11: Have you seen this brand symbol before? (Canon)

• Yes • No • Not Sure

Q12: Have you seen this brand symbol before? (OM SYSTEM)

• Yes • No • Not Sure

Q13: Have you seen this brand symbol before? (Nikon)

• Yes • No • Not Sure

Q14: Have you seen this brand symbol before? (Olympus)

• Yes • No • Not Sure

Q15: Have you seen this brand symbol before? (Fujifilm)

• Yes • No • Not Sure

Block 5: Olympus

Brand Trust

Imagine you are planning to buy a camera for photography. While browsing, you come across the following brand. After carefully analyzing the features presented in the image below, please answer the following questions.

Q16: Please indicate your level of agreement with the following statements regarding the brand shown. Use the response scale provided: 1 = Strongly Disagree to 7 = Strongly Agree.

- With this camera brand, I obtain what I look for in a photographic camera.
- This camera brand meets my expectations.
- I feel confident in this camera brand.
- This camera brand always keeps its promises.
- This camera brand never disappoints me.
- This camera brand provides consistently good quality products.
- This camera brand is inconsistent in meeting my needs.

Q17: Please indicate your level of agreement with the following statements regarding the brand shown. Use the response scale provided: 1 = Strongly Disagree to 7 = Strongly Agree.

- This camera brand would be honest and sincere in addressing my concerns.
- This camera brand would make any effort to satisfy me.
- I could rely on this camera brand to solve the problem.
- This camera brand would be interested in my satisfaction.
- This camera brand would compensate me in some way for the problem with the photographic camera.
- This camera brand would not be willing to solve any problem I might have with a camera.

Q18: What is the brand of the photography shown to you for answering the previous questions?

• Sony • Canon • OM SYSTEM • Nikon • Olympus • Fujifilm • Other (fill in)

Block 6: OM SYSTEM

Brand Trust: The same questions as block 5.

Block 7: Risk Perception

Q19: Please indicate your level of agreement with the following statements regarding the brand shown. Use the response scale provided: 1 = Strongly Disagree to 7 = Strongly Agree.

- I am concerned this camera might not perform well and could create problems in my photographs.
- I believe this camera technology may not be reliable.
- I feel there is a risk that this cameras will not work properly.
- I am concerned about the quality of this camera performance.

Q19: Please indicate your level of agreement with the following statements regarding the brand shown. Use the response scale provided: 1 = Strongly Disagree to 7 = Strongly Agree.

- I feel this camera may not fit well with my self-image or self-concept.
- Using this camera might cause me psychological discomfort because it does not fit with how I see myself

Q20: Please indicate your level of agreement with the following statements regarding the brand shown. Use the response scale provided: 1 = Strongly Disagree to 7 = Strongly Agree.

- I am concerned that using this camera may negatively affect how others perceive me as a photographer.
- Using this camera could lead my friends or peers to think less of me.
- Using this camera might negatively affect my social standing in photography communities.
- I worry that using this camera could cause my friends and relatives to think less highly of me.

Q21: Please indicate your level of agreement with the following statements regarding the brand shown. Use the response scale provided: 1 = Strongly Disagree to 7 = Strongly Agree.

- I am concerned about losing money by investing this camera.
- Purchasing this camera could be a financially risky decision.
- I worry that this camera might not deliver good value for money.

Block 8: Rebranding Awareness

Q22: Has Olympus changed its name in the past 5 years?

• Yes • No

Q23: What is the new name of the brand formerly known as Olympus?

• Sony • Canon • OM SYSTEM • Nikon • Olympus • Fujifilm • Other (fill in)

Q24: Has OM SYSTEM changed its name in the past 5 years?

• Yes • No

Q25: What is the old name of the brand now known as OM SYSTEM?

• Sony • Canon • OM SYSTEM • Nikon • Olympus • Fujifilm • Other (fill in)

Q26: Please indicate your level of agreement with the following statements regarding your level of awareness. Use the response scale provided: 1 = Strongly Disagree to 7 = Strongly Agree.

- Before today, I was aware that the brand had undergone a rebranding.
- OM SYSTEM upholds the same values of craftsmanship that Olympus stood for.
- I feel a strong emotional link between Olympus and OM SYSTEM as one brand.
- The transition from Olympus to OM SYSTEM respects and preserves the brand's history.
- OM SYSTEM carries forward the legacy of pioneering camera technology established by Olympus.
- The new OM SYSTEM products maintain the spirit of the classic Olympus cameras.
- OM SYSTEM continues Olympus's tradition of innovation.

Q27: How do you describe yourself?

• Male • Female • Non-binary / Third gender • Prefer to self-describe (Fill in) • Prefer not to say

Q28: How old are you?

• Under 18 • 18-24 • 25-34 • 35-44 • 45-54 • 55-64 • 65-74 • 75-84 • 85 or older

Q29: In which country are you originally from? (Dropdown list)

Q30: What is your level of education?

• High School • Bachelor's degree • Master's degree • Doctorate • Other (Fill in)

Q31: What is your monthly gross salary?

• Less than €1,000 • €1,000 – €1,999 • €2,000 – €2,999 • €3,000 – €3,999 • €4,000 – €4,999

• €5,000 – €5,999 • €6,000 – €6,999 • €7,000 – €7,999 • €8,000 – €8,999 • €9,000 – €9,999

• €10,000 or more Prefer not to say

Block 9: End of Survey

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

Appendix B: Statistical Output

Stimulus_id * correct_recall Crosstabulation

			correct_recall		
			,00	1,00	Total
Stimulus_id	Olympus	Count	19	69	88
		% within Stimulus_id	21,6%	78,4%	100,0%
		% within correct_recall	51,4%	54,3%	53,7%
	OM System	Count	18	58	76
		% within Stimulus_id	23,7%	76,3%	100,0%
		% within correct_recall	48,6%	45,7%	46,3%
Total		Count	37	127	164
		% within Stimulus_id	22,6%	77,4%	100,0%
		% within correct_recall	100,0%	100,0%	100,0%

Table 10: Crosstabulation of Experimental Condition and aggregated response of the Manipulation Control.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	,102[a]	1	,749		
Continuity Correction[b]	,018	1	,895		
Likelihood Ratio	,102	1	,749		
Fisher's Exact Test				,852	,446
Linear-by-Linear Association	,102	1	,750		
N of Valid Cases	164				

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 17,15.

b. Computed only for a 2x2 table

Table 11: Chi-square Test of Independence for Manipulation Check Responses for the Independent Variable.

Reliability Statistics

Cronbach's Alpha	N of Items
,937	13

Table 12: Reliability Statistics Risk Perception items.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I am concerned this camera might not perform well and could create problems in my photographs.	43,15	232,375	,747	,931
I believe this camera technology may not be reliable.	43,54	230,895	,729	,932
I feel there is a risk that this cameras will not work properly.	43,43	232,131	,733	,932
I am concerned about the quality of this camera performance.	42,94	237,526	,528	,938
I feel this camera may not fit well with my self-image or self-concept.	43,79	228,566	,748	,931
Using this camera might cause me psychological discomfort because it does not fit with how I see myself.	44,20	224,209	,804	,929
I am concerned that using this camera may negatively affect how others perceive me as a photographer.	43,70	227,383	,786	,930
Using this camera could lead my friends or peers to think less of me.	44,20	225,553	,729	,931
Using this camera might negatively affect my social standing in photography communities.	44,07	223,755	,782	,930
I worry that using this camera could cause my friends and relatives to think less highly of me.	44,16	229,885	,638	,935
I am concerned about losing money by investing this camera.	43,23	230,806	,636	,935
Purchasing this camera could be a financially risky decision.	43,45	228,531	,656	,934
I worry that this camera might not deliver good value for money.	43,29	228,487	,704	,932

Table 13: Item-Total Statistics risk perception items.

Reliability Statistics

Cronbach's Alpha	N of Items
,912	7

Table 14: Reliability Statistics Reasons for rebranding items.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Before today, I was aware that the brand had undergone a rebranding.	26,39	49,513	,686	,917
OM SYSTEM upholds the same values of craftsmanship that Olympus stoo	26,06	58,055	,788	,895
I feel a strong emotional link between Olympus and OM SYSTEM as one	26,29	53,810	,790	,892
The transition from Olympus to OM SYSTEM respects and preserves the brand's history.	26,19	59,014	,714	,901
OM SYSTEM carries forward the legacy of pioneering camera technology established by Olympus.	26,20	58,726	,719	,901
The new OM SYSTEM products maintain the spirit of the classic Olympus cameras.	26,06	58,716	,789	,895
OM SYSTEM continues Olympus's tradition of innovation.	25,76	56,282	,804	,892

Table 15: Item-Total Statistics Reasons for Rebranding items.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,911
Bartlett's Test of Sphericity	Approx. Chi-Square	566,104
	df	21
	Sig.	<,001

Table 16: KMO and Bartlett's Test for the new construct, Rebranding Awareness.

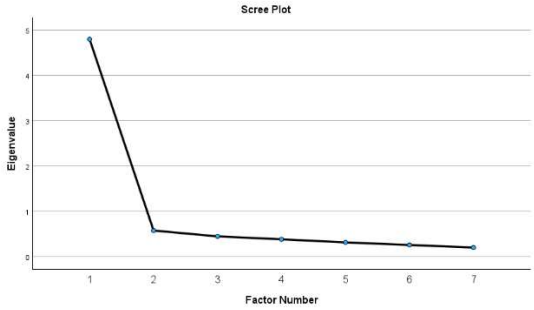

Figure 10: Scree Plot from the Factor Analysis.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4,801	68,586	68,586	4,443	63,476	63,476
2	,579	8,277	76,862			
3	,451	6,440	83,303			
4	,386	5,513	88,816			
5	,318	4,540	93,356			
6	,261	3,725	97,080			
7	,204	2,920	100,000			

Extraction Method: Principal Axis Factoring.

Table 17: Total Variance Explained from the factor analysis.

Factor Matrix[a]

	Factor 1
OM SYSTEM continues Olympus's tradition of innovation.	,844
The new OM SYSTEM products maintain the spirit of the classic Olympus cameras.	,835
OM SYSTEM upholds the same values of craftsmanship that Olympus stoo	,833
I feel a strong emotional link between Olympus and OM SYSTEM as one	,829
The transition from Olympus to OM SYSTEM respects and preserves the brand's history.	,759
OM SYSTEM carries forward the legacy of pioneering camera technology established by Olympus.	,753
Before today, I was aware that the brand had undergone a rebranding.	,715

Extraction Method: Principal Axis Factoring.

a. 1 factors extracted. 4 iterations required.

Table 18: Factor Matrix of the factor analysis of the new construct, Rebranding Awareness.

Communalities

	Initial	Extraction
Before today, I was aware that the brand had undergone a rebranding.	,519	,511
OM SYSTEM upholds the same values of craftsmanship that Olympus stoo	,644	,694
I feel a strong emotional link between Olympus and OM SYSTEM as one	,645	,687
The transition from Olympus to OM SYSTEM respects and preserves the brand's history.	,582	,576
OM SYSTEM carries forward the legacy of pioneering camera technology established by Olympus.	,542	,567
The new OM SYSTEM products maintain the spirit of the classic Olympus cameras.	,679	,697
OM SYSTEM continues Olympus's tradition of innovation.	,689	,713

Extraction Method: Principal Axis Factoring.

Table 19: Communalities from the factor analysis of the new construct, Rebranding Awareness.

Statistics

reasons_for_rebranding

N	Valid	122
	Missing	0
Mean		4,3560
Median		4,2857
Std. Deviation		1,24150
Minimum		1,00
Maximum		7,00
Percentiles	25	3,5714
	50	4,2857
	75	5,2857

Table 20: Median Value of Reasons for rebranding scale.

Reliability Statistics

Cronbach's Alpha	N of Items
,842	13

Table 21: Reliability Statistics Reasons for photography involvement items.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Photography equipment is very important to me.	57,73	115,389	,527	,831
Cameras and photography products play a central role in my life.	58,11	110,499	,559	,827
Choosing photography products is a critical decision for me.	58,34	108,542	,544	,828
think there is a high chance of making a wrong choice when buying photography equipment.	58,09	124,512	,101	,854
Buying a camera involves risk because I may make a poor decision.	58,12	118,952	,229	,850
If I make a wrong choice when purchasing photography products, it could have serious consequences.	58,55	110,068	,513	,830
Mistakes in choosing photography equipment would have a significant effect on me.	58,54	108,399	,561	,826
I enjoy spending time looking at and learning about photography products.	58,16	109,885	,598	,825
Photography gives me pleasure and excitement.	57,62	115,757	,458	,834
I am highly motivated to engage in photography-related activities.	58,01	110,950	,597	,825
Photography brands say a lot about who I am.	58,92	104,489	,611	,822
Owning certain photography brands helps me express myself.	58,83	103,135	,654	,819
Photography products provide social status or identity.	58,55	108,316	,495	,832

Table 22: Item-Total Statistics Photography Involvement items.

Reliability Statistics

Cronbach's Alpha	N of Items
,906	13

Table 23: Reliability Statistics Reasons for brand trust items.

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
With this camera brand, I obtain what I look for in a photographic camera.	53,1721	129,102	,802	,891
This camera brand meets my expectations.	53,2377	128,331	,833	,890
I feel confident in this camera brand.	53,2951	125,995	,794	,891
This camera brand always keeps its promises.	53,3852	128,073	,830	,890
This camera brand never disappoints me.	53,3607	128,877	,771	,892
This camera brand provides consistently good quality products.	53,2131	129,359	,786	,892
This camera brand is inconsistent in meeting my needs.	53,7049	152,077	,022	,928
This camera brand would be honest and sincere in addressing my concerns.	53,2705	128,959	,835	,890
This camera brand would make any effort to satisfy me.	53,4098	130,393	,782	,892
I could rely on this camera brand to solve the problem.	53,3852	129,660	,759	,893
This camera brand would be interested in my satisfaction.	53,4426	132,761	,702	,896
This camera brand would compensate me in some way for the problem with the photographic camera.	53,5164	134,004	,662	,897
This camera brand would not be willing to solve any problem I might have with a camera.	53,8361	161,494	-,215	,932

Table 24: Item-Total Statistics brand trust items.

B.1 Sample Characterization

Variable		**Olympus**	**OM SYSTEM**	**Total**
Respondents	**# Total**	65	57	122
Gender	Male	30.3%	19.7%	50.0%
	Female	22.1%	24.6%	46.7%
	Non-binary/third gender	-	-	-
	Prefer to self-describe	0.8%	-	0.8%
	Prefer not to say	-	2.5%	2.5%
Age	Under 18	1.6%	-	1.6%
	18-24	15.6%	19.9%	34.4%

	25-34	9.8%	7.4%	17.2%
	35-44	11.5%	4.1%	15.6%
	45-54	1.9%	7.4%	12.3%
	55-64	7.4%	5.7%	13.1%
	65-74	1.6%	3.3%	4.9%
	75-85	-	-	-
	85 or older	0.8	-	0.8%
Nationality	Portugal	32.8%	27.9%	60.7%
	Austria	0.8%	1.6%	2.5%
	Belgium	-	2.5%	2.5%
	France	2.5%	-	2.5%
	Italy	2.5%	1.6%	4.1%
	Malaysia	0.8%	1.6%	2.5%
	Other	13.9%	11.5%	25.3%
Level of Education	High school	9.0%	6.6%	15.6%
	Bachelor's degree	17.2%	18.9%	36.1%
	Master's degree	22.1%	15.6%	37.7%
	Doctorate	1.6%	1.6%	3.3%
	Other	3.3%	4.1%	7.4%
Monthly Income	Less than €1,000	10.7%	7.4%	18.0%
	€1,000 – €1,999	12.3%	7.4%	19.7%
	€2,000 – €2,999	5.7%	6.6%	12.3%
	€3,000 – €3,999	2.5%	5.7%	8.2%
	€4,000 – €4,999	5.7%	2.5%	8.2%

	€5,000 – €5,999	1.6%	0.8%	2.5%
	€6,000 – €6,999	0.8%	2.5%	3.3%
	€7,000 – €7,999	1.6%	2.5%	4.1%
	€8,000 – €8,999	0.8%	3.3%	4.1%
	€9,000 – €9,999	0.8%	0.8%	1.6%
	€10,000 or more	3.3%	0.8%	4.1%
	Prefer not to say	7.4%	6.6%	13.9%
Q1: Have you purchased a photographic camera in the last five years?	No	13.1%	15.6%	28.7%
	Yes	40.2%	31.1%	71.3%
Q2: Do you intend to purchase a photographic camera in the next five years?	No	11.5%	9.0%	20.5%
	Yes	41.8%	37.7%	79.5%

Table 25: Demographics and Photographic Camera Purchasing Intent.

B.2 Hypothesis Testing

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	6,107	,613		9,958	<,001		
	Photography_involvement	,299	,098	,208	3,055	,003	,956	1,047
	Brand_trust	-,864	,103	-,660	-8,357	<,001	,709	1,411
	Stimulus_id	-,025	,174	-,010	-,145	,885	,915	1,093
	rebranding_awareness_final	-,184	,204	-,070	-,899	,371	,727	1,375

a. Dependent Variable: Risk_Preception

Table 26: Variance Inflation Factor (VIF) and Tolerance Values for Predictors.

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions				
				(Constant)	Photography_involvement	Brand_trust	Stimulus_id	rebranding_awareness_final
1	1	3,959	1,000	,00	,00	,00	,02	,02
	2	,555	2,670	,00	,00	,00	,17	,64
	3	,447	2,976	,00	,00	,01	,70	,10
	4	,027	12,073	,00	,52	,59	,08	,11
	5	,012	18,118	,99	,47	,40	,02	,13

a. Dependent Variable: Risk_Preception

Table 27: Collinearity Diagnostics: Eigenvalues, Condition Indices, and Variance Proportions

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Stimulus_id	Statistic	df	Sig.	Statistic	df	Sig.
Risk_Preception	Olympus	,086	65	,200*	,978	65	,315
	OM System	,107	57	,161	,951	57	,022

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 28: Tests of Normality H1.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
						Significance				95% Confidence Interval of the Difference
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Risk_Preception	Equal variances assumed	4,377	,039	-1,268	120	,104	,207	-,28888	,22778	-,73988	,16211
	Equal variances not assumed			-1,240	98,350	,109	,218	-,28888	,23304	-,75132	,17356

Table 29: Independent samples t-test and Levene's Test H1.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	,082	122	,042	,975	122	,021

a. Lilliefors Significance Correction

Table 30: Tests of Normality H2a.

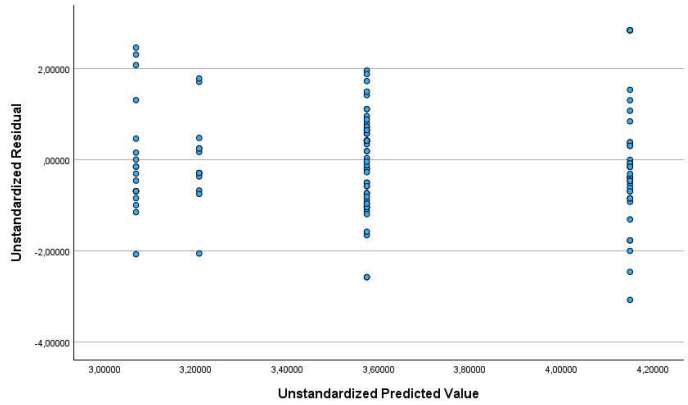

Figure 11: Scatterplot Unstandardized Residuals H2a.

```
Run MATRIX procedure:
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output.      More      information      about      PROCESS      at
processmacro.org/faq.html.
This beta release has not been completely tested. Use at your
own risk.
***************** PROCESS Procedure for SPSS Version 5.0 ****
          Written by Andrew F. Hayes, Ph.D.      www.afhayes.com
    Documentation      available      in      Hayes      (2022).
www.guilford.com/p/hayes3
**************************************************************
  Model: 1
      Y: Risk
```

```
      X: Stimulus
      W: aware_vf
Sample
Size:  122
Variable descriptive statistics
           Risk   Stimulus   aware_vf
Mean     3,6356      ,4672      ,2623
SD       1,2584      ,5010      ,4417
Min      1,0000      ,0000      ,0000
Max      7,0000     1,0000     1,0000

Variable intercorrelations (Pearson r)
              Risk   Stimulus   aware_vf
Risk         1,0000      ,1150     -,2429
Stimulus      ,1150     1,0000      ,1512
aware_vf     -,2429      ,1512     1,0000
************************************************************
OUTCOME VARIABLE:
 Risk
Model Summary
 R     R-sq      MSE         F         df1         df2           p
,3127 ,0978    1,4651     4,2625     3,0000   118,0000    ,0068
Model
           coeff    se     t           p      LLCI      ULCI
constant  3,5740   ,167  21,2920     ,0000    3,2416    3,9064
Stimulus   ,5758   ,2583  2,2291     ,0277     ,0643    1,0874
aware_vf  -,3669   ,3753  -,9774     ,3304   -1,1101     ,3764
Int_1     -,7141   ,5065 -1,4099     ,1612   -1,7171     ,2889

Product terms key:
 Int_1    :        Stimulus x        aware_vf

Test(s) of highest order unconditional interaction(s):
       R2-chng           F        df1        df2           p
X*W      ,0152     1,9878     1,0000   118,0000      ,1612

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

Table 31: Hayes Process Model 1, Moderation H2a.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	,117	122	<,001	,950	122	<,001

a. Lilliefors Significance Correction

Table 32: Tests of Normality H2b.

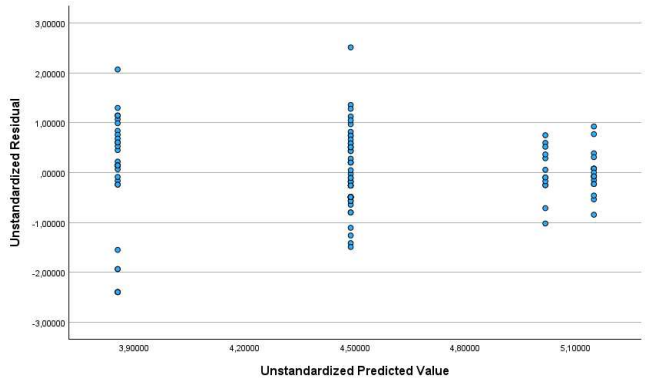

Figure 12: Scatterplot Unstandardized Residuals H2b.

```
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output.     More     information     about     PROCESS     at
processmacro.org/faq.html.
This beta release has not been completely tested. Use at your
own risk.
***************** PROCESS Procedure for SPSS Version 5.0 *****
          Written by Andrew F. Hayes, Ph.D.      www.afhayes.com
    Documentation     available     in     Hayes     (2022).
www.guilford.com/p/hayes3
**************************************************************
  Model: 1
      Y: B_trust
      X: Stimulus
      W: aware_vf
Sample
Size:  122
Variable descriptive statistics
        B_trust   Stimulus   aware_vf
Mean     4,4502      ,4672      ,2623
SD        ,9601      ,5010      ,4417
Min      1,4615      ,0000      ,0000
Max      7,0000     1,0000     1,0000
Variable intercorrelations (Pearson r)
            B_trust   Stimulus   aware_vf
B_trust      1,0000     -,1607      ,4028
Stimulus     -,1607     1,0000      ,1512
aware_vf      ,4028      ,1512     1,0000
**************************************************************
OUTCOME VARIABLE:
 B_trust


Model Summary
```

```
R      R-sq       MSE         F          df1         df2           p
,4925 ,2426     ,7159    12,5983     3,0000     118,0000     ,0000

Model
           coeff    se         t           p       LLCI       ULCI
constant 4,4882   ,1173 38,2510      ,0000     4,2558     4,7205
Stimulus -,6339   ,1806 -3,5105      ,0006     -,9915     -,2763
aware_vf  ,5296   ,2624  2,0185      ,0458      ,0100     1,0491
Int_1     ,7660   ,3541  2,1634      ,0325      ,0648     1,4671

Product terms key:
 Int_1    :        Stimulus x        aware_vf

Test(s) of highest order unconditional interaction(s):
       R2-chng          F         df1         df2           p
X*W      ,0300     4,6802     1,0000   118,0000      ,0325
----------
    Focal predict: Stimulus (X)
          Mod var: aware_vf (W)

Conditional effects of the focal predictor at values of the
moderator(s):
aware_vf   Effect    se      t           p       LLCI       ULCI
,0000    -,6339   ,1806 -3,5105      ,0006     -,9915     -,2763
1,0000     ,1320   ,3045  ,4336      ,6654      -,4710      ,735

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

Table 33: Hayes Process Model 1, Moderation H2b.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	,048	122	,200*	,993	122	,766

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 34: Tests of Normality H3a.

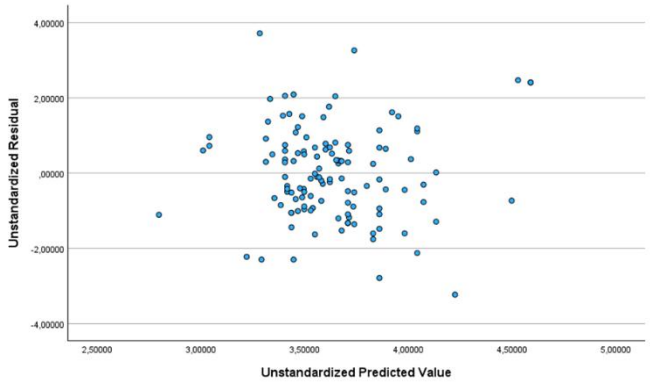

Figure 13: Scatterplot Unstandardized Residuals H3a.

```
Run MATRIX procedure:
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for tidier
output.     More     information     about     PROCESS     at
processmacro.org/faq.html.
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own risk.
***************** PROCESS Procedure for SPSS Version 5.0 ******

          Written by Andrew F. Hayes, Ph.D.      www.afhayes.com
    Documentation     available     in     Hayes     (2022).
www.guilford.com/p/hayes3
**************************************************************
  Model: 1
      Y: Risk
      X: Stimulus
      W: Photo_in
Sample
Size:  122
Variable descriptive statistics
           Risk   Stimulus   Photo_in
Mean     3,6356      ,4672     4,8562
SD       1,2584      ,5010      ,8740
Min      1,0000      ,0000     2,4615
Max      7,0000     1,0000     7,0000
Variable intercorrelations (Pearson r)
               Risk   Stimulus   Photo_in
Risk         1,0000      ,1150      ,1052
Stimulus      ,1150     1,0000      ,1256
Photo_in      ,1052      ,1256     1,0000
**************************************************************
OUTCOME VARIABLE:
 Risk
Model Summary
R       R-sq     MSE      F        df1        df2          p
,2339   ,0547  1,5351  2,2762     3,0000   118,0000      ,0833
Model
          coeff    se       t        p        LLCI       ULCI
constant 4,1357 ,8904   4,6449      ,0000    2,3726     5,8989
Stimulus-2,3086 1,2834 -1,7987      ,0746   -4,8501      ,2330
Photo_in -,1336 ,1845   -,7242      ,4704    -,4989      ,2317
Int_1    ,5282  ,2598   2,0331      ,0443     ,0137     1,0427

Product terms key:
 Int_1    :        Stimulus x        Photo_in

Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
```

```
X*W      ,0331     4,1335     1,0000   118,0000      ,0443
----------
    Focal predict: Stimulus (X)
          Mod var: Photo_in (W)

Conditional effects of the focal predictor at values of the
moderator(s):
Photo_in  Effect  se         t        p       LLCI       ULCI
4,0000  -,1958   ,3187   -,6143    ,5402     -,8269      ,4353
4,8462   ,2512   ,2267   1,1081    ,2701     -,1977      ,7000
5,6154   ,6575   ,2994   2,1962    ,0300      ,0646     1,2503

Data for visualizing the conditional effect of the focal
predictor:
Paste text below into a SPSS syntax window and execute to produce
plot.
DATA LIST FREE/
   Stimulus   Photo_in   Risk       .
BEGIN DATA.
      ,0000     4,0000     3,6013
     1,0000     4,0000     3,4055
      ,0000     4,8462     3,4883
     1,0000     4,8462     3,7394
      ,0000     5,6154     3,3855
     1,0000     5,6154     4,0429
END DATA.
GRAPH/SCATTERPLOT=
 Photo_in WITH     Risk     BY       Stimulus.
************************ ANALYSIS NOTES AND ERRORS ************
Level of confidence for all confidence intervals in output:
  95,0000
W values in conditional tables are the 16th, 50th, and 84th
percentiles.
------ END MATRIX -----
```

Table 35: Hayes Process Model 1, Moderation H3a.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	,108	122	,001	,926	122	<,001

a. Lilliefors Significance Correction

Table 36: Tests of Normality H3b.

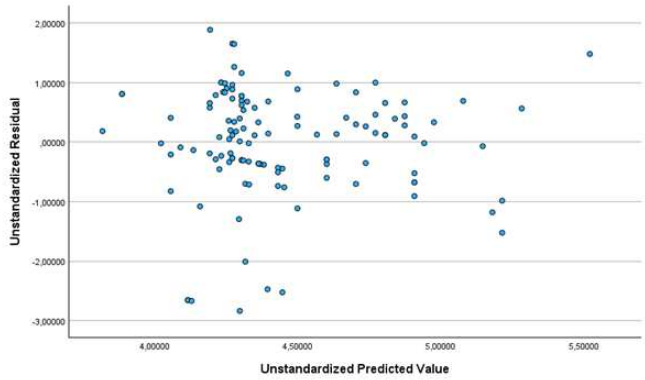

Figure 14: Scatterplot Unstandardized Residuals H3b.

```
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for tidier
output.     More     information     about     PROCESS     at
processmacro.org/faq.html.
This beta release has not been completely tested. Use at your
own risk.
***************** PROCESS Procedure for SPSS Version 5.0 ****
          Written by Andrew F. Hayes, Ph.D.      www.afhayes.com
    Documentation     available     in     Hayes     (2022).
www.guilford.com/p/hayes3
**************************************************************
  Model: 1
      Y: B_trust
      X: Stimulus
      W: Photo_in
Sample
Size:  122
Variable descriptive statistics
        B_trust   Stimulus   Photo_in
Mean     4,4502      ,4672     4,8562
SD        ,9601      ,5010      ,8740
Min      1,4615      ,0000     2,4615
Max      7,0000     1,0000     7,0000
Variable intercorrelations (Pearson r)
            B_trust   Stimulus   Photo_in
B_trust      1,0000     -,1607      ,1386
Stimulus     -,1607     1,0000      ,1256
Photo_in      ,1386      ,1256     1,0000
**************************************************************
OUTCOME VARIABLE:
 B_trust
Model Summary
R        R-sq      MSE    F         df1         df2          p
,3289    ,1082   ,8429  4,7717    3,0000   118,0000      ,0036
```

```
Model
         coeff     se      t         p         LLCI       ULCI
constant 2,4871   ,6598  3,7695    ,0003     1,1805     3,7937
Stimulus 2,2183   ,9511  2,3324    ,0214      ,3349     4,1016
Photo_in  ,4432   ,1367  3,2421    ,0015      ,1725      ,7139
Int_1     -,5275  ,1925 -2,7401    ,0071     -,9088     -,1463

Product terms key:
 Int_1    :        Stimulus x        Photo_in
Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      ,0567     7,5082     1,0000   118,0000      ,0071
----------
    Focal predict: Stimulus (X)
          Mod var: Photo_in (W)

Conditional effects of the focal predictor at values of the
moderator(s):
Photo_in  Effect    se     t         p       LLCI         ULCI
4,0000   ,1082  ,2362    ,4580     ,6478     -,3595      ,5758
4,8462  -,3382  ,1680   -2,0135    ,0463     -,6708     -,0056
5,6154  -,7440  ,2218   -3,3538    ,0011    -1,1833     -,3047

Data for visualizing the conditional effect of the focal
predictor:
Paste text below into a SPSS syntax window and execute to produce
plot.
DATA LIST FREE/
   Stimulus   Photo_in   B_trust    .
BEGIN DATA.
      ,0000     4,0000     4,2600
     1,0000     4,0000     4,3681
      ,0000     4,8462     4,6350
     1,0000     4,8462     4,2968
      ,0000     5,6154     4,9759
     1,0000     5,6154     4,2319
END DATA.
GRAPH/SCATTERPLOT=
 Photo_in WITH     B_trust  BY       Stimulus .
************************ ANALYSIS NOTES AND ERRORS ***********
Level of confidence for all confidence intervals in output:
  95,0000
W values in conditional tables are the 16th, 50th, and 84th
percentiles.
------ END MATRIX -----
```

Table 37: Hayes Process Model 1, Moderation H3b.

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Stimulus_id	Statistic	df	Sig.	Statistic	df	Sig.
Brand_trust	Olympus	,110	65	,050	,972	65	,145
	OM System	,190	57	<,001	,862	57	<,001

a. Lilliefors Significance Correction

Table 38: Tests of Normality H4.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Brand_trust	Equal variances assumed	4,191	,043	1,784	120	,039	,077	,30798	,17267	-,03389	,64986
	Equal variances not assumed			1,737	94,403	,043	,086	,30798	,17729	-,04401	,65998

Table 39: Independent samples t-test and Levene's Test H4.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Risk_Preception	,066	122	,200*	,969	122	,007
Brand_trust	,147	122	<,001	,913	122	<,001

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table 40: Tests of Normality H5.

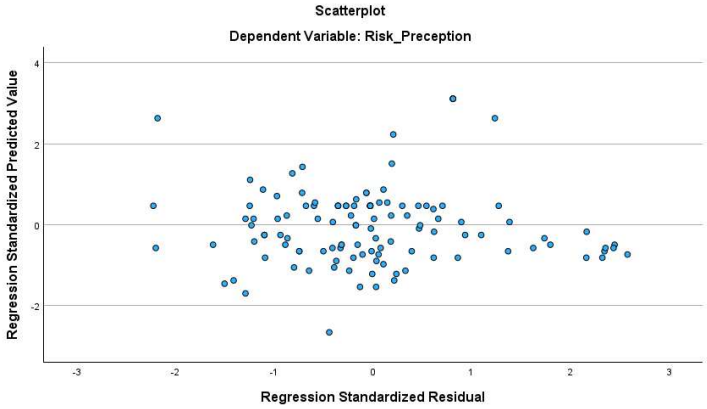

Figure 15: Scatterplot Unstandardized Residuals H5.

Coefficients[a]

		Unstandardized Coefficients		Standardized Coefficients			95,0% Confidence Interval for B	
Model		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound
1	(Constant)	7,504	,408		18,412	<,001	6,697	8,311
	Brand_trust	-,869	,090	-,663	-9,709	<,001	-1,047	-,692

a. Dependent Variable: Risk_Preception

Table 41: Unstandardized and Standardized Coefficients for H5.

Model Summary[b]

					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	,663[a]	,440	,435	,94568	,440	94,262	1	120	<,001	2,033

a. Predictors: (Constant), Brand_trust

b. Dependent Variable: Risk_Preception

Table 42: Model Summary for H5.

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	,108	122	,001	,959	122	,001

a. Lilliefors Significance Correction

Table 43: Test of Normality H6.

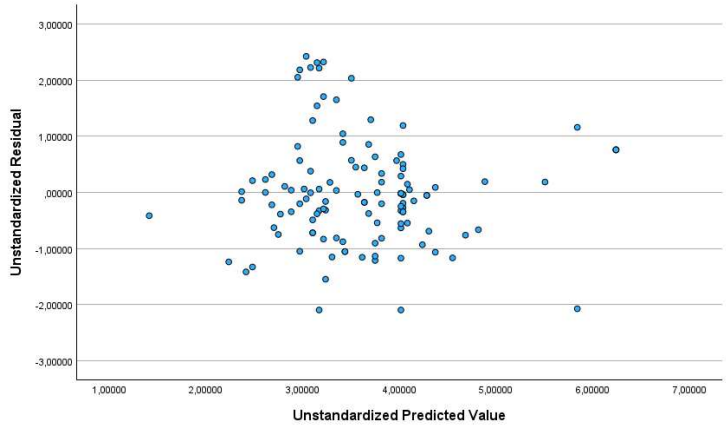

Figure 16: Scatterplot Unstandardized Residuals H6.

```
Run MATRIX procedure:
Copyright 2013-2025 by Andrew F. Hayes. ALL RIGHTS RESERVED.
This version of PROCESS requires SPSS version 26 or later
Workshop schedule available at haskayne.ucalgary.ca/CCRAM
In SPSS 29 and later, change default output font to Courier New
for tidier
output.     More     information     about     PROCESS     at
processmacro.org/faq.html.
This beta release has not been completely tested. Use at your
own risk.
***************** PROCESS Procedure for SPSS Version 5.0 ****
          Written by Andrew F. Hayes, Ph.D.      www.afhayes.com
    Documentation     available     in     Hayes     (2022).
www.guilford.com/p/hayes3
**************************************************************
  Model: 4
      Y: Risk
      X: Stimulus
      M: B_trust
Sample
Size:  122

Variable descriptive statistics
           Risk    Stimulus     B_trust
Mean     3,6356      ,4672      4,4502
SD       1,2584      ,5010       ,9601
Min      1,0000      ,0000      1,4615
Max      7,0000     1,0000      7,0000

Variable intercorrelations (Pearson r)
              Risk    Stimulus     B_trust
```

```
Risk         1,0000      ,1150     -,6633
Stimulus      ,1150     1,0000     -,1607
B_trust      -,6633     -,1607     1,0000
************************************************************
OUTCOME VARIABLE:
 B_trust
Model Summary
 R     R-sq       MSE          F       df1       df2          p
,1607   ,0258    ,9054   3,1814    1,0000  120,0000      ,0770

Model
         coeff      se       t        p       LLCI        ULCI
constant 4,5941   ,1180   38,9245   ,0000    4,3604     4,8278
Stimulus -,3080   ,1727   -1,7836   ,0770    -,6499      ,0339
************************************************************
OUTCOME VARIABLE:
 Risk

Model Summary
R      R-sq       MSE          F       df1       df2          p
,6633   ,4400    ,9017  46,7522    2,0000  119,0000      ,0000

Model
         coeff      se      t        p        LLCI        ULCI
constant 7,4862   ,4348  17,2187    ,0000    6,6254     8,3471
Stimulus  ,0217   ,1746    ,1242    ,9013    -,3240      ,367
B_trust  -,8676   ,0911  -9,5233    ,0000   -1,0479     -,6872
************************** TOTAL EFFECT MODEL ****************
OUTCOME VARIABLE:
 Risk
Model Summary
 R     R-sq       MSE          F       df1       df2          p
,1150  ,0132   1,5757    1,6084    1,0000  120,0000      ,2072
Model
         coeff      se       t         p       LLCI       ULCI
constant 3,5006   ,1557  22,4833    ,0000    3,1923     3,8089
Stimulus  ,2889   ,2278   1,2682    ,2072    -,1621      ,7399
************** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y *
Total effect of X on Y
Effect         se          t          p       LLCI       ULCI
  ,2889      ,2278     1,2682      ,2072     -,1621      ,7399

Direct effect of X on Y
 Effect         se          t          p       LLCI       ULCI
  ,0217      ,1746      ,1242      ,9013     -,3240      ,3674

Indirect effect(s) of X on Y:
           Effect     BootSE   BootLLCI   BootULCI
B_trust      ,2672      ,1612     -,0216      ,6171
********************** 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
------ END MATRIX -----
```

Table 44: Hayes Process Model 4, Mediation H6.

```
Run MATRIX procedure:
Copyright 2013-2025 by Andrew F. Hayes. ALL RIGHTS RESERVED.
This version of PROCESS requires SPSS version 26 or later
Workshop schedule available at haskayne.ucalgary.ca/CCRAM
In SPSS 29 and later, change default output font to Courier New
for tidier
output.     More     information     about     PROCESS     at
processmacro.org/faq.html.
This beta release has not been completely tested. Use at your
own risk.
************ PROCESS Procedure for SPSS Version 5.0 **********
          Written by Andrew F. Hayes, Ph.D.      www.afhayes.com
    Documentation     available     in     Hayes     (2022).
www.guilford.com/p/hayes3
**************************************************************
  Model: 10
      Y: Risk
      X: Stimulus
      M: B_trust
      W: aware_vf
      Z: Photo_in
Sample
Size:  122
Variable descriptive statistics
           Risk   Stimulus    B_trust   aware_vf   Photo_in
Mean     3,6356      ,4672     4,4502      ,2623     4,8562
SD       1,2584      ,5010      ,9601      ,4417      ,8740
Min      1,0000      ,0000     1,4615      ,0000     2,4615
Max      7,0000     1,0000     7,0000     1,0000     7,0000

Variable intercorrelations (Pearson r)
              Risk   Stimulus    B_trust   aware_vf   Photo_in
Risk        1,0000      ,1150     -,6633     -,2429      ,1052
Stimulus     ,1150     1,0000     -,1607      ,1512      ,1256
B_trust     -,6633     -,1607     1,0000      ,4028      ,1386
aware_vf    -,2429      ,1512      ,4028     1,0000      ,0688
Photo_in     ,1052      ,1256      ,1386      ,0688     1,0000
**************************************************************
OUTCOME VARIABLE:
 B_trust
Model Summary
 R      R-sq       MSE         F      df1       df2          p
,5775     ,3335     ,6409   11,6068   5,0000  116,0000   ,0000
Model
           coeff     se      t        p      LLCI         ULCI
```

```
constant   2,3640   ,5781  4,0895   ,0001    1,2191     3,5090
Stimulus   2,2715   ,8313  2,7325   ,0073     ,6250     3,9179
aware_vf    ,5408   ,2483  2,1784   ,0314     ,0491     1,0325
Int_1       ,7873   ,3359  2,3440   ,0208     ,1220     1,4526
Photo_in    ,4464   ,1192  3,7442   ,0003     ,2102      ,682
Int_2      -,6056   ,1684 -3,5973   ,0005    -,9391     -,2722

Product terms key:
 Int_1    :        Stimulus x        aware_vf
 Int_2    :        Stimulus x        Photo_in

Test(s) of highest order unconditional interaction(s):
          R2-chng          F        df1        df2          p
X*W         ,0316     5,4942     1,0000   116,0000      ,0208
X*Z         ,0744    12,9406     1,0000   116,0000      ,0005
BOTH(X)     ,1018     8,8576     2,0000   116,0000      ,0003
----------
    Focal predict: Stimulus (X)
          Mod var: aware_vf (W)
          Mod var: Photo_in (Z)

Conditional effects of the focal predictor at values of the
moderator(s):
aware_vf Photo_in  Effect   se        t     p     LLCI   ULCI
,0000    4,0000   -,1511   ,2212   -,6828 ,4961 -,5892   ,2871
,0000    4,8462   -,6635   ,1713  -3,8732 ,0002 -1,0028 -,3242
,0000    5,6154  -1,1294   ,2162  -5,2234 ,0000 -1,5576 -,7011
1,0000    4,0000   ,6362   ,3287   1,9354 ,0554 -,0149  1,2874
1,0000    4,8462   ,1238   ,2902    ,4266 ,6705 -,4509   ,6980
1,0000    5,6154   -,3421  ,3126  -1,0945 ,2760 -,9612   ,2770
**************************************************************
OUTCOME VARIABLE:
 Risk
Model Summary
R     R-sq      MSE         F         df1         df2          p
,6937 ,4812    ,8644  17,7796     6,0000   115,0000      ,0000

Model
           coeff      se       t         p      LLCI      ULCI
constant  6,3964   ,7181  8,9072     ,0000    4,9740    7,8189
Stimulus  -,2398   ,9960  -,2407     ,8102   -2,2127    1,7331
B_trust   -,9207   ,1078 -8,5379    ,0000    -1,1342   -,7071
aware_vf   ,1276   ,2942   ,4338     ,6652    -,4550     ,7103
Int_1     -,0801   ,3992  -,2007     ,8413    -,8709     ,7107
Photo_in   ,2752   ,1466  1,8774     ,0630    -,0152     ,5655
Int_2      ,0391   ,2061   ,1897     ,8499    -,3692     ,4474

Product terms key:
 Int_1    :        Stimulus x        aware_vf
 Int_2    :        Stimulus x        Photo_in
```

```
Test(s) of highest order unconditional interaction(s):
          R2-chng          F        df1        df2          p
X*W         ,0002      ,0403     1,0000   115,0000      ,8413
X*Z         ,0002      ,0360     1,0000   115,0000      ,8499
BOTH(X)     ,0003      ,0344     2,0000   115,0000      ,9662
*************** DIRECT AND INDIRECT EFFECTS OF X ON Y *******
Conditional direct effects of X on Y
aware_vf  Photo_in  Effect     se      t     p  LLCI      ULCI
,0000    4,0000    -,0833   ,2575   -,3237 ,7467 -,5933  ,4266
,0000    4,8462    -,0502   ,2114   -,2377 ,8126 -,4690  ,3685
,0000    5,6154    -,0202   ,2791   -,0723 ,9425 -,5730  ,5326
1,0000   4,0000    -,1634   ,3879   -,4214 ,6743 -,9318  ,6049
1,0000   4,8462    -,1304   ,3372   -,3865 ,6998 -,7984  ,5376
1,0000   5,6154    -,1003   ,3649   -,2748 ,7840 -,8230  ,6225

Conditional indirect effects of X on Y:
INDIRECT EFFECT:
 Stimulus    ->    B_trust     ->    Risk
aware_vf  Photo_in     Effect     BootSE   BootLLCI   BootULCI
,0000      4,0000      ,1391      ,2481     -,3630      ,6309
,0000      4,8462      ,6109      ,2101      ,2075     1,0420
,0000      5,6154     1,0398      ,3225      ,3897     1,6646
1,0000     4,0000     -,5858      ,2991    -1,1734      ,0222
1,0000     4,8462     -,1140      ,1648     -,4498      ,2051
1,0000     5,6154      ,3149      ,2151     -,1001      ,7529
      Indices of partial moderated mediation:
               Index     BootSE   BootLLCI   BootULCI
aware_vf      -,7248      ,2777    -1,2748     -,1910
Photo_in       ,5576      ,2469      ,0471     1,0274
***************** 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
Z values in conditional tables are the 16th, 50th, and 84th
percentiles.
------ END MATRIX -----
```

Table 45: Hayes Process Model 10, full model.

B.3 Further Analysis

Group Statistics

	aware_vf	N	Mean	Std. Deviation	Std. Error Mean
Risk	,00	90	3,8171	1,25752	,13255
	1,00	32	3,1250	1,12982	,19973
B_trust	,00	90	4,2205	,98922	,10427
	1,00	32	5,0962	,45235	,07996

Table 46: Independent samples t-test descriptives (mean) for further analysis.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Risk	Equal variances assumed	,163	,688	2,743	120	,004	,007	,69209	,25229	,19257	1,19162
	Equal variances not assumed			2,887	60,252	,003	,005	,69209	,23971	,21264	1,17154
B_trust	Equal variances assumed	7,590	,007	-4,821	120	<,001	<,001	-,87564	,18161	-1,23522	-,51606
	Equal variances not assumed			-6,664	112,628	<,001	<,001	-,87564	,13140	-1,13599	-,61530

Table 47: Independent samples t-test for further analysis.

Descriptives

			Statistic	Std. Error
Photo_in	Mean		4,8562	,07913
	95% Confidence Interval for Mean	Lower Bound	4,6996	
		Upper Bound	5,0129	
	5% Trimmed Mean		4,8542	
	Median		4,8462	
	Variance		,764	
	Std. Deviation		,87404	
	Minimum		2,46	
	Maximum		7,00	
	Range		4,54	
	Interquartile Range		1,08	
	Skewness		-,090	,219
	Kurtosis		,352	,435

Table 48: Descriptives for photography involvement variable.

Group Statistics

	Phootography_involvement_level	N	Mean	Std. Deviation	Std. Error Mean
Risk	,00	62	3,6104	1,05065	,13343
	1,00	60	3,6615	1,45091	,18731
B_trust	,00	62	4,1923	,84377	,10716
	1,00	60	4,7167	1,00610	,12989

Table 49: Independent samples t-test descriptives (mean) for further analysis.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Risk	Equal variances assumed	6,543	,012	-,223	120	,412	,824	-,05112	,22880	-,50412	,40188
	Equal variances not assumed			-,222	107,338	,412	,825	-,05112	,22998	-,50701	,40477
B_trust	Equal variances assumed	,884	,349	-3,123	120	,001	,002	-,52436	,16790	-,85679	-,19193
	Equal variances not assumed			-3,114	115,083	,001	,002	-,52436	,16839	-,85790	-,19082

Table 50: Independent samples t-test for further analysis.