From Fans to Family: When Athlete Endorsements Turn Brands into "Us"

Moritz Werner

Dissertation written under the supervision of Prof. Paulo Romeiro

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Abstract

Athlete endorsements are being used by brands more and more to establish more authentic and deeper connections with customers. However, a bad endorser-product fit can lead to weaker credibility perception, and it might negatively impact brand relationships. This study investigates how such endorsements foster self-brand connection (SBC) by focusing on the effects of endorser-product congruence and perceived endorser credibility as influencing variables. For the reason that people show differences regarding their interest in sports, the research also focuses on whether sports involvement changes how such endorsements affect customers.

Participants in an exploratory, between-subjects online experiment were exposed to a print advertisement of the same athlete (Anthony Joshua) in a high-congruence (boxing gloves) or low-congruence (padel racket) setting. To guarantee distinct variations in perceived product congruence, stimuli were created and improved throughout a pre-study and a focus group session.

The results show that strong SBC is associated with higher perceived athlete credibility and that high product congruence increases SBC. Involvement in sports did not significantly moderate these relationships in this sample. The high-congruence condition showed a higher perceived level of credibility, indicating that proper contextualisation can raise the credibility cue itself beyond its downstream impact on SBC.

Overall, it becomes clear how important it is for brands to choose credible athletes who go well with the product while presenting them in appropriate contexts to deepen customers' relationships.

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Sumário

As marcas estão a utilizar cada vez mais os endossos de atletas para estabelecer ligações mais autênticas e profundas com os clientes. No entanto, uma má adaptação endossante-produto pode levar a uma perceção de credibilidade mais fraca e pode ter um impacto negativo nas relações com a marca. O presente estudo investiga a forma como tais endossos promovem a ligação self-brand (SBC), centrando-se nos efeitos da congruência endossante-produto e da credibilidade percebida do endossante como variáveis de influência. Dado que as pessoas apresentam diferenças no que respeita ao seu interesse pelo desporto, a investigação também se centra na questão de saber se o envolvimento no desporto altera a forma como tais patrocínios afectam os clientes.

Os participantes numa experiência exploratória em linha, entre sujeitos, foram expostos a um anúncio impresso do mesmo atleta (Anthony Joshua) num contexto de elevada congruência ou de baixa congruência.

Os resultados mostram que uma forte SBC está associada a uma maior perceção da credibilidade do atleta e que uma elevada congruência do produto aumenta a SBC. O envolvimento em desportos não moderou significativamente estas relações nesta amostra. A condição de alta congruência mostrou um nível mais elevado de credibilidade percebida, indicando que a contextualização adequada pode aumentar a própria pista de credibilidade para além do seu impacto a jusante na SBC.

De um modo geral, torna-se clara a importância de as marcas escolherem atletas credíveis que combinem bem com o produto, apresentando-os em contextos adequados para aprofundar as relações com os clientes.

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Autor: Moritz Werner
Palavras-chave: Ligação com a marca própria, Endossos de atletas, Credibilidade do endossante, Congruência do produto

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

1. Grammarly (Basic Version):
    - To elevate the grammatical syntax of this thesis and correct spelling errors

2. Deepl.com (Basic Version):
    - To translate and rewrite German sentences into academic English, and to translate the Abstract into Portuguese

3. ChatGPT (Version 5.0):
    - Title: To create a title for the dissertation that grabs readers' attention.
    - Visuals: To create the visuals used for the experimental condition.
    - Abstract: To transfer the English version into a shorter Portuguese paragraph that does not exceed 250 words
    - Methodology: To structure and write the discussion guideline for the focus group, and to brainstorm which athletes might be suitable for the pre-survey
    - Data Analysis: To finalize the SPSS Syntax with the correct codes for the statistical tests
    - Interpretation: To structure the argumentation and reflection of results

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

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1. Introduction

1.1 Background

In 2023, the athlete endorsements market made a revenue of USD 2,138.4 million. By 2030, it is expected to reach USD 3,131.3 million, with a compound annual growth rate of 5.6% between 2024 and 2030 (BrandEssence, 2024). The growing use of athletes as a strategic marketing tool shows how important it is to understand how consumer-brand relationships work. A significant component of this is Self-Brand Connection (SBC), which refers to the degree to which consumers incorporate brands into their self-concept. This study investigates the influence of endorser-product congruence and endorser credibility on SBC, while also addressing the moderating impact of sports involvement.

Endorser-product congruence, or how well the endorser and the product seem to fit together, has been shown to increase people's trust and improve their attitudes toward the brand (Kamins, 1990; Till & Busler, 2000). Consumers generally prefer endorsements that demonstrate a natural alignment between the promoted product and the celebrity's characteristics, attractiveness, or expertise. This match makes the endorser seem more credible and strengthens the impression that they are an authentic endorser for the brand. If the level of compatibility is low, people might doubt the endorsement's integrity, which leads to weaker brand attachment and potential skepticism toward the message.

The credibility of an endorser, which is based on trustworthiness, expertise, and attractiveness, is a key factor in shaping consumer attitudes (Ohanian, 1990). Spry, Pappu, and Cornwell (2011) have shown that credible endorsers improve brand perception, as consumers are more inclined to trust recommendations from endorsers who are perceived as knowledgeable as well as authentic. Trustworthiness applies to the consumer's perception of the endorser's honesty in terms of their intentions, expertise indicates the endorser's competence in the relevant domain of an endorsed product, and attractiveness may affect initial attention and engagement with the endorsement.

Furthermore, sports involvement, which is the psychological connection and engagement a person has with sports, could influence such effects because highly involved consumers process endorsement messages in a different way (Düsenberg et al., 2016; Shank & Beasley, 1998). People who are truly engaged in sports might be pickier when evaluating endorsers, paying

closer attention to their credibility and how relevant they are to the product. On the other hand, consumers with low involvement may process endorsements in a more peripheral way, using surface-level cues like the endorser's attractiveness instead of judging the endorsement's legitimacy (Petty et al., 1983).

Therefore, the main research question for this study is: *How do endorser-product congruence and endorser credibility affect SBC, and how does involvement in sports moderate these relationships?*

By providing important perspectives on the efficacy of endorsements, this study aims to add meaningful insights into consumer psychology and sports marketing.

1.2 Problem Statement

While considerable research has investigated the effects of celebrity endorsements, a gap still remains in understanding how endorser-product congruence can affect brand attachment. Existing studies concentrate on purchase intentions and attitudes toward brands and products (Kamins, 1990; Kamins & Gupta, 1994; Misra & Beatty, 1990), but only limited attention is given to the topic of how endorsements can build deeper brand relationships. Prior research has predominantly focused on immediate consumer response measurements, including ad recall and purchase intention, while the psychological mechanisms underpinning SBC remain insufficiently explored. To create SBC, a brand must be in line with the consumer's identity (Escalas & Bettman, 2003), which is affected by both the endorser's credibility and how well the endorser and the product appear to fit together.

While previous research has looked into the direct effects of endorsements, the moderating influence of sports involvement remains insufficiently examined. High levels of sports involvement may enhance or diminish the effects of endorser credibility and fit, influencing whether an endorsement succeeds in establishing a lasting consumer-brand relationship (Funk & James, 2001). Looking at how brands spend an enormous amount of money to get celebrities to endorse their products, it's crucial to learn more about the mechanisms behind and the way these systems work.

This study investigates the impact of high versus low endorser credibility and high versus low endorser-product fit on SBC, as well as the influence of sports involvement on these relationships. The two independent variables, endorser credibility and endorser-product fit, will

be tested in order to assess their effects on SBC. Thus, the research questions that are aimed to be answered with this research are:

RQ1: How do endorser-product congruence and endorser credibility influence SBC?

RQ2: Does sports involvement moderate these relationships?

1.3 Relevance

This study is relevant to both academics and practitioners. Academically, it extends the literature on celebrity endorsements by shifting the focus from short-term brand attitude to long-term SBC, which is a construct that goes beyond just liking or purchasing a product or brand by focusing on long-term consumer-brand relationships (Fournier, 1998). Previous studies have centered on consumer attitudes toward brands but have not actually investigated whether an endorser helps people fold a brand into an individual's identity. Bringing work on endorsement effectiveness together with consumer-identity theory, this thesis offers a fuller view of how endorsements contribute to longer-term brand relationships.

From a business angle, firms spend heavily on celebrity endorsements, yet their impact on deeper consumer-brand relationships is still unclear. Prior evidence shows that endorser credibility can strengthen SBC (Dwivedi et al., 2015), but the role of endorser-product fit in that process has been less well mapped. This study addresses that gap by examining credibility and fit side by side and relating each to SBC, giving brand managers clearer guidance on how to select endorsers and craft executions that build lasting attachment - not just short-lived buzz.

However, the effectiveness of such endorsements could depend on how deeply the consumers are involved in sports. Consumers who are highly involved may respond more critically to the endorsement credibility and how well a product fits, while consumers who are not very involved in sports may be more influenced by how popular a celebrity is in general or by the celebrity's appeal. This study aims to provide practical insights for brands that target diverse consumer segments by analyzing the moderating role of sports involvement. The results will be especially useful for sports brands and sponsors as they will help them get the most out of their endorsement deals by choosing endorsers who correspond with consumers' general expectations, as well as how engaged they are.

This study also highlights SBC as a key performance indicator for evaluating the effectiveness of celebrity endorsements. Incorporating this approach by seeing SBC as a measurable result, marketers can improve their endorsement strategies, which ultimately helps them foster stronger psychological bonds between consumers and brands.

Ultimately, a more tailored approach to endorsements can lead to stronger consumer-brand relationships and maximize return on investment.

1.4 Research Methods

This research will use a quantitative experimental design to test the effects of endorser-product congruence and endorser credibility on SBC, with sports involvement as a moderating variable. The study will use two different stimuli in the questionnaire. By finding a polarizing athlete in terms of credibility, this athlete will be used for both a highly credible and a less credible endorser, depending on the respondent's perception. This results in two stimuli in which this endorser promotes two different products with different levels of congruence.

1. High or low endorser credibility, high endorser-product congruence
2. High or low endorser credibility, low endorser-product congruence

Each of these conditions will be analyzed separately to study the effects of credibility and endorser-product congruence on SBC.

A structured online survey will be conducted using Qualtrics. The sample will include a pool of around 200 participants, which consists of individuals with different levels of sports involvement. The collected data will be analyzed using SPSS to test for direct effects and interactions.

1.5 Work Plan

The research will be executed in multiple phases, beginning with an extensive literature review to refine the hypotheses and establish the theoretical framework. Next, data will be collected, ensuring that the experimental manipulation is accurate. This is followed by statistical analysis to test the hypotheses, which leads to a discussion of the results and what they mean in detail. The last step focuses on summarizing the results and drafting the dissertation.

2. Literature Review

To explore the effects of endorser-product congruence and endorser credibility on SBC while also looking at the moderating role of sports involvement, it is necessary to delve deeper into the fundamental meanings and theories of these variables. Prior research has established the relevance of these factors in shaping consumer-brand relationships, providing a strong foundation for further investigation. By reviewing existing literature, hypotheses will be brought up, which will serve as the basis for the next step: conducting empirical research to test these relationships and validate the proposed model.

2.1 Self-Brand Connection

The concept of SBC has gained a lot of attention in consumer behavioral research, since it reflects how consumers integrate and incorporate brands into their self-concept. Brands are no longer perceived as transactional units, but rather as relationship partners, supporting the identity establishment, emotional well-being, and social belonging of an individual (Escalas & Bettman, 2003; Fournier, 1998). In today's highly competitive markets, brands that establish a solid SBC with their consumers benefit from brand loyalty, advocacy, and resistance to negative publicity (Thomson et al., 2005). The theoretical foundations, empirical findings, and managerial implications will all be covered in this section.

2.1.1 Theoretical Foundations

2.1.2 Brand Attachment and Consumer Identity

The establishment of SBC is deeply rooted in theories of consumer identity and brand attachment. Fournier (1998) introduced the consumer brand relationship framework, arguing that brands function as relationship partners, much like interpersonal relationships that are characterized by emotional attachment, intimacy, and commitment. Consumers can develop their SBC when brands align with their actual self-concept (how they see themselves) or their ideal self-concept, which is basically what they aspire to be (Escalas & Bettman, 2003).

The Meaning Transfer Model (McCracken, 1989) further explains this concept by suggesting that brands gain symbolic meanings from cultural as well as social sources, including celebrity endorsements, reference groups, and advertising narratives. These symbolic meanings will be transferred to the consumer, who will then integrate them into their own individual identity.

2.1.3 Reference Groups and Social Identity Theory

According to the Social Identity Theory (Tajfel & Turner, 1979), individuals define themselves based on group memberships. Therefore, brands can act as signals to help consumers express their group belonging, which leads to SBC evolving into one of the key drivers of consumer brand relationships. Escalas and Bettman (2005) found that consumers show stronger SBC with brands associated with in-groups (social groups they identify with), while they actively avoid brands associated with out-groups, trying to prevent identity misalignment. The influence of such reference groups is especially relevant when it comes to lifestyle and luxury brands, where status, taste, and affiliation can easily be highlighted (Carlson & Donavan, 2013).

2.1.4 Celebrity Endorsements and Self-Brand Connection

Endorsements through celebrities or influencers work as an impactful tool to strengthen SBC because they facilitate the transfer of symbolic meanings from the celebrity to the brand (McCracken, 1989). Consumers who admire the endorser's lifestyle, share their values, or look up to their accomplishments tend to build a meaningful connection to an endorser-supported brand (Dwivedi et al., 2015). This effect is especially strong in athlete endorsements, where fans of sports figures feel a stronger brand connection because they more intensely admire and identify with the athlete (Carlson & Donavan, 2013).

2.1.5 Self-Brand Connection and Consumer Behavior

Consumers who show a strong SBC show behaviors that contribute positively to long-term brand equity. Several studies show that a strong SBC leads to higher brand engagement and also to greater reluctance to switch to competitor offerings, thus increasing brand loyalty (Escalas & Bettman, 2005; Fournier, 1998). In addition, SBC supports brand advocacy because consumers who strongly identify with a brand are more likely to promote it through word of mouth and engagement on social media platforms (Thomson et al., 2005). Furthermore, a robust SBC is important to mitigate the impact of negative brand incidents. Indulgent consumers are often the result of an emotional connection to the brand, which makes them more resilient to negative publicity because they would rather try to protect their established relationship (Li et al., 2022).

2.1.6 Measuring Self-Brand Connection

A widely used scale to measure SBC was developed by Escalas (1996). It helps examine and understand how a brand is integrated into the self-concept of a consumer. The scale includes several statements such as:

- "This brand reflects who I am."
- "I feel personally connected to this brand."
- "This brand helps me express myself to others."

After the significance of SBC and its theoretical foundations were highlighted, it is now crucial to explore how different factors can influence the strength of this mechanism within the context of athlete endorsements. Endorsements can successfully transfer the symbolic meaning of a celebrity to a brand, but their effect on SBC can surely vary among consumers and in different situations or changing environments. The strength of the connection consumers make with a brand can be influenced by numerous aspects, such as the credibility of the endorser, the match between the endorser and the advertised product, and the consumer's level of engagement in a particular category. To better understand their individual relevance, these potential variables are examined in more detail in the following sections.

2.2 Endorser-Product Congruence

The perceived fit between an endorser’s characteristics and the product that is being endorsed makes up the concept of endorser-product congruence. It is grounded in the schema congruity theory and the match-up hypothesis. Both propose that endorsements are more effective when consumers are able to perceive a logical and meaningful connection between the endorser and the product (Kamins, 1990; Lynch, 1994). The transfer of meaning from the endorser to the product plays a critical role in influencing consumer perceptions (McCracken, 1989) and should also be mentioned. Congruence can arise from functional attributes, for example, an athlete endorsing a sports drink, or from symbolic links, such as a luxury brand endorsed by a high-status celebrity.

2.2.1 Theoretical Foundations

In the match-up hypothesis (Kamins, 1990), it is highlighted that the effectiveness of endorsements depends on the alignment between an endorser’s image and the product’s

attributes. Till and Busler (2000) found that expertise-based congruence has a stronger impact on brand attitude than physical attractiveness alone and examined expertise as a match-up factor. Other research on athlete endorsements shows that sports celebrity-product congruence enhances brand credibility and purchase intention (Kim & Na, 2007). Moreover, studies on congruence in advertising contexts indicate that the effectiveness of transferring positive attributes to the brand can be increased when an endorser is placed in a relevant setting, which could, for example, be a tennis player on the court. Additionally, multiple studies have found that congruence enhances advertising effectiveness by increasing consumer engagement, recall, and favorable brand perceptions (Martin, 1996; Spry et al., 2011).

2.2.2 Endorser-Product Congruence Impact on Self-Brand Connection

Several studies widely explored the relationship between endorser-product congruence and brand-related outcomes. It was demonstrated that different factors like brand attitude, credibility, and purchase intention can be enhanced when a strong match between an endorser and a product exists (Fleck et al., 2012; Till & Busler, 2000). This positive effect is attributed to the perception that an endorser who naturally aligns with a product brings authenticity and expertise. In that case, consumer trust and engagement with the brand are strengthened.

Additionally, the interaction between endorsement strength and celebrity-product match was examined, and it was found that a strong match between the endorser and the product improves attitudes toward the ad and brand, particularly in sports-related products (Lee & Park, 2014). While this suggests that congruence in endorsement enhances the way consumers perceive a brand, it is clear that the chance of them developing a personal connection to it can be increased.

The meaning transfer model (McCracken, 1989) suggests that endorsers carry symbolic meanings that can be transferred to the brand. The associations, which appear when the endorser is perceived as a strong fit for the product, may become part of the consumer's self-concept, reinforcing a sense of SBC. Research on brand authenticity also indicates that when an endorser's image aligns with the product, it fosters trust and long-term consumer relationships (Gwinner & Eaton, 1999).

In contrast, cognitive dissonance can be created by low congruence, making consumers sceptical about the endorsement and reducing its effectiveness (Lynch, 1994). In cases where endorsers lack credibility for the product category, the consumer's overall connection to the

brand is weakened because consumer perceptions of the brand are negatively affected (Till & Busler, 2000). Studies on multiple endorsements have also shown that when endorsers promote products across various categories without a clear fit, it can lead to diluted brand associations and lessen SBC (Tripp et al., 1994).

Based on the reviewed literature, the following hypothesis is proposed:

H1: High endorser-product congruence positively impacts SBC.

Since previous findings emphasize congruence as a key determinant of endorsement effectiveness, this hypothesis is perfectly aligned. When congruence is high, consumers are more likely to experience emotional resonance with the endorsed brand, reinforcing their brand loyalty and purchase intentions. Future empirical testing will be essential in establishing the direct impact of this relationship within the conceptual model of this study.

2.3 Endorser Credibility

2.3.1 Theoretical Foundations

Endorser credibility refers to the extent to which an endorser is perceived as trustworthy, knowledgeable, and convincing when delivering a brand message. The Source Credibility Model forms the basis for this concept, which suggests that a highly credible source enhances persuasion and consumer acceptance (Ohanian, 1990). According to Ohanian's framework, credibility consists of three key dimensions. These are expertise, trustworthiness, and attractiveness. While expertise refers to the consumer's perception of knowledge or experience the endorser has regarding the endorsed product, the belief that the endorser is honest and reliable is captured by the endorser's trustworthiness. Attractiveness reflects the physical appeal of the endorser, which can enhance message reception.

Many studies have underpinned the importance of endorser credibility in influencing consumer attitudes and behaviors. Ohanian (1990) developed a widely used scale for measuring endorser credibility and demonstrated that expertise and trustworthiness are particularly strong predictors of effective endorsements. Spry, Pappu, and Cornwell (2011) additionally found that credible celebrity endorsers significantly enhance brand credibility and consumer-based brand equity. Similarly, Kim & Na (2007) showed that, particularly in the context of sports endorsements, endorser credibility has the power to affect advertising effectiveness and

purchase intentions positively. Research by La Ferle & Choi (2005) in South Korea highlighted that endorser credibility plays a central role in determining consumer responses across different cultural contexts, reinforcing its global relevance.

2.3.2 Endorser Credibility Impact on Self-Brand Connection

The relationship between endorser credibility and SBC has been examined in various studies, with findings suggesting that credible endorsers enhance consumer identification with a brand. Dwivedi et al. (2015) explicitly tested the direct effect of endorser credibility on SBC and found a positive and significant impact. Their study, conducted with Indian consumers, demonstrated that endorser credibility enhances SBC by fostering trust and perceived authenticity. Although this research confirms the direct effect, cultural differences may influence the strength of this relationship, warranting further examination in different settings.

Additionally, Dwivedi et al. (2015) suggest that other factors, such as category involvement, may act as influencing mechanisms in shaping the relationship between endorser credibility and SBC. They propose that future research should explore how consumer involvement with the product category might moderate this effect, providing a more nuanced understanding of the psychological processes driving SBC.

Furthermore, athlete endorsements have proven to be particularly effective when the endorser is perceived as credible. Lee & Koo (2015) demonstrated that athlete credibility strengthens brand attachment, leading to greater consumer involvement with the endorsed brand. Similarly, research on advertising appeals suggests that credibility enhances emotional resonance, reinforcing SBC. Conversely, a lack of credibility can weaken brand identification and diminish the effectiveness of an endorsement campaign.

Based on the reviewed literature, the following hypothesis is proposed:

H2: Higher perceived endorser credibility positively impacts SBC.

This hypothesis builds on previous research that has demonstrated how credible endorsers can enhance meaningful outcomes, like consumer attachment or brand authenticity. Although Dwivedi et al. (2015) already provide empirical support for this effect, it is crucial to explore new insights that can be offered by testing it in a different cultural context. The aim is to examine the generalizability of the role of endorser credibility in building SBC. Therefore, this

study also considers category involvement as a potential moderating factor, as it was suggested by Dwivedi et al. (2015), in order to understand the mechanisms behind this relationship more deeply.

2.4 Involvement in Sports

Sports involvement is a multidimensional construct, including cognitive, affective, and behavioral aspects. The degree of personal relevance, interest, and emotional attachment an individual has toward sports explains what it refers to (Funk & James, 2001; Zaichkowsky, 1985). While cognitive involvement relates to a person's knowledge and rational engagement with sports, affective involvement captures emotional attachment and enthusiasm toward sporting activities. Actions such as attending events, purchasing merchandise, or engaging with sports-related content are included in behavioral involvement. With this distinction, it is highlighted that sports involvement is more about identifying with the sport on a consumer or fan level, rather than just self-participation in sports.

2.4.1 Theoretical Foundations

The influence of sports involvement on consumer behavior in marketing and sponsorship contexts has been demonstrated by past research. Pham (1992), for example, found that individuals with high involvement in sports show stronger brand recall and recognition in sponsorship settings, while Shank and Beasley (1998) identified that sports involvement is linked to greater media consumption, attendance at sporting events, and emotional engagement with athlete endorsers.

Ko et al. (2008) examined the impact of sports involvement on sponsor awareness and corporate image, demonstrating that consumers exhibit greater brand loyalty and stronger purchase intentions when they have a higher level of sports involvement. By exploring how product involvement interacts with endorsement strength, Lee and Park (2014) showed that consumers with high sports involvement respond more favorably to strong endorsements. In addition to that, a framework for understanding the gradual strengthening of an individual's connection to sports, moving from awareness to attraction, attachment, and ultimately allegiance, is provided by the Psychological Continuum Model (PCM) (Funk & James, 2001).

2.4.2 Involvement in Sports as a Moderating Variable

Sports involvement has been shown to moderate the effects of endorser-product congruence and endorser credibility on consumer responses.

We first look into endorser-product congruence: Studies have indicated that a stronger fit between an athlete and the endorsed product can be perceived by consumers who have higher levels of sports involvement, thereby enhancing brand credibility and attachment (Koo & Lee, 2019). The Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1983) further supports this finding as it suggests that highly involved consumers can process persuasive messages more deeply, which ultimately leads them to build a stronger connection to the brand.

For endorser credibility, Düsenberg et al. (2016) found that higher sports involvement strengthens the positive effect of sports celebrity credibility on purchase intention. Therefore, it is suggested that consumers who are deeply involved in sports are more likely to put trust in brands and form stronger connections when credible sports figures endorse them.

Additionally, Ko et al. (2008) demonstrated that consumer involvement in soccer increased sponsor awareness and improved corporate image, also reinforcing the idea that higher sports involvement fosters greater trust and identification with endorsed brands.

Conversely, low sports involvement may result in peripheral processing of endorsements. This is another crucial aspect to highlight, as it results in consumers relying more on attractiveness and likability rather than perceived expertise or congruence (Petty et al., 1983). This means that sports involvement must be considered for determining whether endorser-product fit and endorser credibility affect SBC through central or peripheral processing.

Based on the reviewed literature, the following hypothesis is proposed:

H3: Sports involvement moderates the relationship between endorser-product congruence, endorser credibility, and SBC, such that higher sports involvement strengthens these relationships.

This hypothesis is similar to previous research suggesting that high sports involvement fosters deeper brand attachment and strengthens the effects of endorsement strategies.

The literature review demonstrates that endorser-product congruence and endorser credibility can play a crucial role in shaping SBC, with sports involvement influencing the strength of these effects. While prior research supports these relationships, they remain mostly theoretical within this review. The next step is to test these hypotheses to determine their validity empirically. This research will provide deeper insights into the mechanisms driving SBC, enabling practical implications for endorsement strategies and brand management.

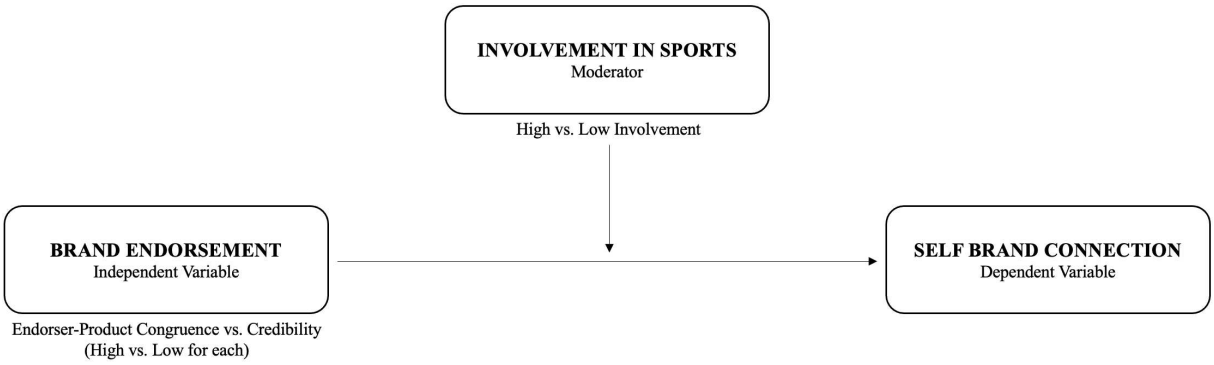

Figure 1: *Conceptual Framework*

3. Methodology

3.1 Research Approach

The methodology is deductive, starting with theoretical ideas drawn from the literature on involvement in sports, SBC, and celebrity endorsement. This is followed by the development of hypotheses and their empirical testing.

Using sports involvement as a moderating variable, the study uses a quantitative, experimental design to investigate the effects of endorser-product congruence and endorser credibility on SBC. Descriptive research is used to evaluate consumer perceptions; hypothesis-testing research is used to investigate the relationships between variables; and causal research is used to determine whether the effects of endorser-product congruence and credibility differ depending on the degree of sports involvement.

A cross-sectional approach is employed, as an online survey is used to gather data at a single point in time. Participants in the study are randomized to one of two conditions with a between-subjects experimental design:

1. Endorser promoting a product with high endorser-product congruence
2. Endorser promoting a product with low endorser-product congruence

While the product varies to manipulate congruence, the same athlete endorser appears in both stimuli to make allowances for individual differences. In order to facilitate post hoc grouping into high versus low perceived credibility levels for analysis, respondents additionally evaluate the endorser's credibility. Robust statistical comparison and evaluation of the interaction effects among congruence, credibility, and involvement in sports are made possible by this design.

3.2 Data Collection

3.2.1 Data Type

The study relies exclusively on primary data, collected through an online structured questionnaire. No secondary data is used in the analysis or modeling. Data collection will take place in two phases:

Preliminary Phase: A pre-survey and a focus group are used to develop and validate the experimental stimuli as well as a qualification question. The pre-survey explores the athletes'

level of credibility, aiming to identify a polarizing athlete, while the focus group helps define high and low congruence pairings.

Main Phase: A quantitative online survey distributed via Qualtrics is used. Participants are exposed to one of the experimental conditions and answer questions about SBC, their perception of the athlete's credibility, sports involvement, and demographics.

3.2.2 Collection Method

A two-phase approach is used to ensure internal validity and improve the quality of the manipulations:

The pre-survey, conducted with Qualtrics, uses Ohanian's (1990) scale to assess endorser credibility across three dimensions: trustworthiness, expertise, and attractiveness. Based on the responses, in terms of credibility, one of the most polarizing out of twenty athletes is selected for use in the final stimuli. Also, the pre-survey was used to determine which brand would be used in the main survey, aiming to find an existing well-known brand for which respondents have an average SBC.

The focus group examines different consumer perceptions of athlete-product fit. Participants debate and assess how different sports-related products with a consistent athlete endorser are perceived to be congruent or not. The products chosen for the high- and low-congruence conditions in the primary stimuli are guided by these discussions. A manipulation check question for the main survey is also crafted in the focus group to ensure it is clear, unbiased, and accurately measures perceived endorser-product fit.

The main survey will also be conducted via Qualtrics. Participants will be randomly assigned to one of the two experimental conditions. After viewing their assigned stimulus, participants complete a questionnaire measuring the key constructs.

3.2.3 Sampling Strategy

A convenience sampling method will be used to recruit participants via online panels that allow automated random assignment to experimental conditions. The target sample size is 150 to ensure that at least 60 participants pass the screening question and manipulation check to end up with a reasonable amount of valid responses in both groups to test the hypothesis.

3.2.4 Ethical Considerations

Participation is anonymous and entirely voluntary. A consent form, which explains the study's objectives and respondents' rights, will be presented to them. There will not be any collection of personal information, and in accordance with ethical research standards, the data will be stored and used only for academic purposes.

3.3 Variable Measurement

Each construct measured via questionnaire is operationalized using validated scales from prior academic research.

3.3.1 Self-Brand Connection

Adapted from Escalas (1996), this 7-item scale captures the degree to which a consumer identifies with a brand:

- Brand X reflects who I am.
- I can identify with Brand X.
- I feel a personal connection to Brand X.
- I use Brand X to communicate who I am to other people.
- I think Brand X helps me become the type of person I want to be.
- I consider Brand X to be me.
- Brand X suits me well.

Responses are collected on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree). The scale has a reported reliability of $\alpha = 0.90$.

3.3.2 Credibility

A 15-item, three-component scale created by Ohanian (1990) that assesses perceived expertise, trustworthiness, and attractiveness is used to evaluate the athlete's credibility. Five items are used to measure each dimension, asking respondents to rate the athlete on a 7-point Likert scale (1 = Strongly Disagree, 7 = Strongly Agree). The items are the following:

Expertise:

- Expert
- Experienced
- Knowledgeable
- Qualified
- Skilled

Trustworthiness:

- Dependable
- Honest
- Reliable
- Sincere
- Trustworthy

Attractiveness:

- Attractive
- Classy
- Beautiful
- Elegant
- Sexy

With a coefficient $\alpha = 0.8$ or greater for each subscale, the scale's reported reliability is high.

3.3.3 Sports Involvement

Sports involvement is measured using the 8-item Sports Involvement Inventory developed by Shank and Beasley (1998). The question prompt is:

"To me, sports are..."

Participants rate the following bipolar items on a 7-point semantic differential scale:

1. Boring - Exciting
2. Uninteresting - Interesting
3. Worthless - Valuable
4. Unappealing - Appealing
5. Useless - Useful
6. Not Needed - Needed
7. Irrelevant - Relevant
8. Unimportant - Important

Higher scores indicate stronger psychological involvement in sports. The scale has demonstrated excellent reliability ($\alpha = 0.93$).

Framework	Measure	# of Items	Scale	Reference	Cronbach α
IV 1	Endorser-Product Congruence	Stimuli	na	na	na
IV 2	Endorser Credibility	15	7-point Likert scale	Ohanian (1990)	>0.8
Moderator	Involvement in Sports	8	7-point Likert scale	Shank and Beasley (1998)	0.93
DV	Self-Brand Connection	7	7-point Likert scale	Escalas (1996)	0.9

Table 1: *Operational Model*

3.4 Stimuli Design

3.4.1 Creating and Validating the Stimuli

To ensure variation in perceived credibility, this study includes a polarizing athlete whose credibility is likely to be viewed differently by respondents. Additionally, static advertisement stimuli are used to manipulate endorser-product congruence. Everyone who participates sees an ad featuring a well-known athlete endorsing a product from the brand's category. Each participant only sees one of two ad versions, which show either high or low athlete-product congruence, in order to maintain independent observations.

Step 1 - Pre-Survey (Credibility and brand choice): 62 participants rated 20 potential endorsers using Ohanian's (1990) 15-item credibility scale, assessing trustworthiness, expertise, and attractiveness. Based on maximum and minimum scores, as well as the standard deviation, a polarizing athlete was chosen to endorse the product in the study. The data showed that Anthony Joshua, a boxer from the UK, is indeed perceived quite differently among the respondents in terms of credibility (maximum credibility score: 6; minimum credibility score: 2.07; standard deviation: 1.18) and is therefore chosen as the athlete for the study. Furthermore, to find a sports brand which respondents already have a mid-level SBC to compared to other sports brands, a question was asked in which the respondents had to rank nine well known sports brands based on the statement "*I feel a personal connection to Brand X".* Results have shown that Puma, with an average ranking of 4.65, is a suitable match for the purpose of this study and was chosen as the brand to be used in the advertising stimuli for the main survey.

Step 2 - Focus Group (Congruence and manipulation check question): With Anthony Joshua serving as the constant endorser, the focus group, which included six individuals from various backgrounds who were all familiar with the athlete, was used to identify products that would work well in the high- and low-congruence conditions of the experiment. A variety of sporting goods that might potentially be sold by a sports brand were shown to the participants. Through open conversation, they assessed how well each product was thought to fit Anthony Joshua's public persona, taking into account elements like authenticity, relevance to his sport, and general brand alignment. There was general agreement that Puma boxing gloves were a high-congruence product because they were directly related to his boxing career, while a Puma padel racket was a low-congruence product because it was used in a totally different sport.

The group also discussed possible wording for a manipulation check question to be used in the main survey before choosing the product. This led to the final phrase: "This product is a good fit for Anthony Joshua to endorse" with a Yes/ No response. In order to ensure that the question could be used in the main survey to validate the effectiveness of the stimulus, it was purposefully created to be neutral, clear, and only focused on perceived fit. A more detailed summary of the conducted focus group can be found in Appendix 2.

3.4.2 Final Stimuli

The final stimuli are static ads from the brand Puma featuring the selected endorser Anthony Joshua promoting the products: boxing gloves for participant group 1 (high congruence) and a

padel racket for participant group 2 (low congruence). Ad layout, colors, positions of the athlete, and the logos remain constant across conditions, varying only in the manipulated element. This consistency ensures that observed effects can be attributed to the independent variables.

Two experimental conditions were created.

Group 1: *High Product Congruence*

Group 2: *Low Product Congruence*

Figure 2: *Stimuli Presented to the Different Groups of Respondents*

3.5 Questionnaire Design

The questionnaire functioned as a systematic tool for gathering data, aiming for accurate responses from every participant. To enable precise and trustworthy data collection, it was designed to be clear, simple, unbiased, and closely related to the research's objectives.

A block design structure was used, grouping related questions to improve comprehension and maintain a logical flow. The survey began with a welcome and consent statement, outlining the purpose of the study, participant rights, and data confidentiality. This was followed by a screening question to determine whether participants were familiar with Anthony Joshua, ensuring the stimulus would be meaningful to respondents.

Participants were randomized at two levels. First, they were assigned to one of the two congruence conditions (high vs. low). Second, they either answered the sports involvement questions before seeing the advertisement or after seeing the advertisement. This sequencing variation was implemented to reduce potential order effects and ensure that responses to the sports involvement scale were not influenced by exposure to the stimulus, while also allowing for the possibility that prior reflection on sports involvement could influence perceptions of the ad.

Immediately after the stimulus, participants completed the manipulation check measuring perceived endorser-product congruence, followed by the endorser credibility scale. After that, the SBC scale assessed the degree to which respondents identified with the endorsed brand. Finally, the questionnaire concluded with demographic questions covering age, gender, country of origin, and brand familiarity.

The placement of the manipulation check directly after stimulus exposure ensured that perceptions of congruence were captured while the advertisement was fresh in memory, thereby reducing recall bias. The overall design and sequencing were intended to maximize engagement, reduce respondent burden, and ensure high-quality data for hypothesis testing.

Introduction		
Screening Question (1 Question)		
Randomizer 1: Evenly present 2 Elements		
	Randomizer 2: Evenly present 1 Element only	
		Stimuli 1: High Product Congruence (Manipulation Check and 3 Questions about Credibility Perception)
		Stimuli 2: Low Product Congruence (Manipulation Check and 3 Questions about Credibility Perception)
	Sports Involvement (1 Question)	
Self-Brand Connection (1 Question)		
Demographics and Brand Familiarity (4 Questions)		

Figure 3: *Survey Flow*

3.6 Data Analysis

To ensure reliable and valid results, the data analysis plan was made to closely match the research objectives, hypotheses, and methodological framework. Testing the direct effects of endorser-product congruence and endorser credibility on SBC, as well as the moderating effect of sports involvement on these relationships, were the goals of the statistical procedures.

Data will be processed and analyzed using IBM SPSS Statistics version 30. Descriptive statistics will be calculated for all variables, and preliminary checks will be performed for data quality, missing values, and normality assumptions. Reliability analyses (Cronbach's alpha) will be applied to multi-item scales to assess internal consistency.

Hypotheses	**Statistical Test**
H1*: High Endorser-Product Congruence positively impacts Self-Brand Connection.*	*Independent Sample T-Test*
H2*: Higher perceived Endorser Credibility positively impacts Self-Brand Connection.*	*Independent Sample T-Test*
H3*: Sports Involvement moderates the Relationships between Endorser-Product Congruence, Endorser Credibility, and Self-brand Connection, such that higher Sports Involvement strengthens these Relationships.*	*2 factor ANOVA (2x2)*

Table 2: *Statistical Tests*

4. Data Analysis

4.1 Data Preparation

4.1.1 Missing Data

As already outlined, the aim was to receive at least 60 valid survey responses to ensure an adequate sample size for hypothesis testing. From the initial 170 responses, no missing data were found. This was caused not only by the use of forced-response settings in Qualtrics but also due to a short average response time of less than three minutes and a straightforward survey design.

4.1.2 Screening Question

To make sure respondents knew who the endorser was, a screening question was added: "Have you heard of Anthony Joshua?". This was meant to make sure the stimulus had a relevant meaning for the participants. 31 respondents in the low-congruence group and 29 in the high-congruence group failed this screening; these cases were not included in the analysis.

4.1.3 Manipulation Check

The survey included a direct manipulation check to see if respondents considered the endorser and product to be congruent to the desired degree. Respondents answered the statement “The product is a good fit for Anthony Joshua to endorse” with a binary Yes/No response. To pass the manipulation check, the respondents had to answer "Yes" in the high-congruence condition and "No" in the low-congruence condition. While 15 respondents in the low-congruence group failed and were not included in the analysis, all respondents in the high-congruence group passed.

Additionally, testing for the effectiveness of the manipulation, differences between the two groups were confirmed by an independent samples t-test that revealed a statistically significant difference in SBC, the study’s dependent variable, across the two conditions (see Appendix 4 for detailed results).

4.1.4 Outliers Analysis

The Mahalanobis distance with a significance threshold of p <.001 was used to evaluate multivariate outliers. A single case was removed from the dataset after exceeding the critical value (MAH > 20).

This led to a final data set of 94 responses for the analysis.

	Group 1: High Product Congruence	**Group 2: Low Product Congruence**	**Total**
Initial Observations	86	84	170
Failed Screening Question	29	31	60
Repeated IPs	0	0	0
Unfinished Surveys	0	0	0
Failed Manipulations	0	15	15
Outliers	0	1	1
Final Observations	**57**	**37**	**94**

Table 3: *Dataset Observations Cleaning*

4.2 Measurement Creation and Reliability

4.2.1 Group Membership High or Low Product Congruence

Dummy coded variable: Group_HighvsLowProductCongruence_D

Depending on the stimuli, which were randomly assigned to the participants, a dummy grouping variable was coded with 1 representing the high product congruence group and 0 representing the low product congruence group.

4.2.2 Athlete Credibility

Scale variable: CredibilityScore

Dummy coded variable: DummyCredibility_HighorLow

Credibility was measured using a 15-item, three-component scale created by Ohanian (1990). Participants rated their agreement on a 7-point scale (1 = Strongly Disagree, 7 = Strongly Agree) with statements assessing expertise, trustworthiness, and attractiveness.

An overall credibility score (CredibilityScore) was calculated by averaging the items. Cronbach's alpha was used to evaluate internal consistency reliability (α =.928), which showed excellent reliability. Since removing any of the items did not increase alpha, all 15 items were kept.

This study aims to compare the effects of high versus low credibility on SBC. Therefore, it was necessary to create a dummy variable to compare the two conditions. Since the respondents were asked to rate the athlete's credibility after the stimulus was presented, it is important to look into these results for the two groups independently from each other to avoid biased and misleading interpretations. The reason is that the perceived credibility might differ because of the combination of the athlete and the endorsed product that was shown. This resulted in different means regarding the credibility score for the two groups. In the high product congruence group, the mean was 5.5228, while in the low product congruence group, the mean was 4.5261. Respondents with scores higher or lower than the respective mean were classified as perceiving either high or low athlete credibility. The resulting dummy variable DummyCredibility_HighorLow was coded as follows: 1 = High perceived credibility (> 5.5228 for the high product congruence group; > 4.5261 for the low product congruence group); 0 = Low perceived credibility (≤ 5.5228 for the high product congruence group; ≤ 4.5261 for the low product congruence group).

4.2.3 Sports Involvement

Scale variable: SportsInvolvementScore

Dummy coded variable: SportsInvolvementScore_D

Using eight items from Shank and Beasley (1998), which were evaluated on a seven-point semantic differential scale (1 = Strongly Disagree, 7 = Strongly Agree), sports involvement was assessed. The items showed excellent internal consistency (Cronbach's α =.919) and were averaged to create an overall sports involvement score (SportsInvolvementScore). Reliability was not increased by item deletion and all eight items were kept.

Given the use of sports involvement as a moderator, the continuous scale, again, was classified using the mean split method. The sample mean was 5.8710. Respondents with scores > 5.8710 were classified as highly involved participants, and those participants with scores ≤ 5.8710 were

classified as low involved. The resulting dummy variable SportsInvolvementScore_D was coded as follows: 1 = High sports involvement; 0 = Low sports involvement.

4.2.4 Self-Brand Connection

Scale variable: SelfBrandConnectionScore

A seven-item scale that was adapted from Escalas (1996) was used to measure the dependent variable SBC. Participants were asked to rate the items on a Likert agreement scale that went from 1 (strongly disagree) to 7 (strongly agree). The average of the seven items is the final SelfBrandConnectionScore. The scale demonstrated excellent internal consistency, with a Cronbach's alpha of 0.958.

Variable	Description	Values	Measure
Group_HighvsLow-ProductCongruence_D	Categorical predictor variable representing product congruence type	1 = High product congruence 0 = Low product congruence	Nominal
DummyCredibility_ HighorLow	Corrected categorical predictor variable representing perceived athlete credibility	1 = High credibility 0 = Low credibility	Nominal
SportsInvolvement-Score_D	Categorical predictor variable representing involvement in sports	1 = High sports involvement 0 = Low sports involvement	Nominal
SelfBrandConnection-Score	Predictor variable representing self brand connection	1 to 7	Scale

Table 4: *Model Variables*

4.3 Descriptive Analysis

4.3.1 Sample Characteristics

Following data cleaning, outlier removal, and exclusions based on manipulation and screening checks, the final sample consisted of N = 94 respondents. The demographic profile of the participants, broken down by the two experimental conditions (high vs. low endorser-product congruence), is shown in Table 5. Because there were more unsuccessful manipulation checks in the group with low endorser-product congruence, the number of respondents in the final data set was not evenly distributed.

		High Endorser-Product Congruence	Low Endorser-Product Congruence	Total
Respondents	**Total #**	**57 (60.6 %)**	**37 (39.4 %)**	**94**
Gender	Male	68.4 %	51.4 %	61.7 %
	Female	31.6 %	45.9 %	37.2 %
	Prefer not to say	0 %	2.7 %	1.1 %
Year of birth	1996 and later	38.6 %	45.9 %	41.5 %
	1986 - 1995	15.8 %	24.3 %	19.1 %
	1976 - 1985	17.5 %	10.8 %	14.9 %
	1975 and before	28.1 %	18.9 %	24.5%
Country of origin	United Kingdom	57.9 %	56.8 %	57.4 %
	Germany	15.8 %	21.6 %	18.1 %
	Poland	3.5 %	13.5 %	7.4 %
	Other	22.8 %	8.1 %	17.1 %

Table 5: *Characteristics of Respondents*

4.3.2 Distribution of Key Variables

Table 6 presents descriptive statistics for the main constructs used in the analysis: Athlete Credibility (Independent Variable), Involvement in Sports (Moderator), and SBC (Dependent Variable).

Variable	Type	N	Min	Max	Mean	Std. Deviation	Cronbach Alpha
Athlete Credibility	IV	94	3.00	7.00	5.1305	0.92969	0.928
Involvement in Sports	Moderator	94	1.75	7.00	5.8710	0.99469	0.919
Self-Brand Connection	DV	94	1.00	6.43	3.4529	1.38895	0.958

Table 6: *Descriptive Statistics for Main Variables*

4.4 Hypothesis Testing

Multicollinearity diagnostics were conducted to assess potential interdependence among predictors and to preserve the stability of the regression model (Appendix 4: Multicollinearity Diagnostic). The evaluation included the condition index, eigenvalues, and Variance Inflation Factors (VIF). Thresholds of VIF below 2.5, eigenvalues above 0.01, and a condition index below 30.0 in accordance with established cutoffs were employed. The table below provides a summary of the diagnostic findings.

Variable/ Moderator	VIF	Eigenvalue	Condition Index
Product Congruence	1.009	0.489	2.490
Athlete Credibility	1.089	0.322	3.068
Sports Involvement	1.085	0.158	4.382

Table 7: *Collinearity Statistics*

H1: High endorser-product congruence positively impacts SBC.

An independent-samples t-test was used to compare the high (1) and low (0) congruence groups to test H1 - high endorser-product congruence increases SBC. The following assumptions were fulfilled: Levene's test supported homogeneity of variances, F = 0.291, p =.591; boxplots

showed no extreme outliers; Shapiro-Wilk tests were non-significant for both groups (low: W =.961, p =.215; high: W =.962, p =.070); and observations were independent by design. Compared to the low-congruence group (n = 37; M = 3.04, SD = 1.33), the high-congruence group (n = 57) reported a higher SBC (n = 57; M = 3.72, SD = 1.37); t(92) = 2.364, two-tailed p =.020, mean difference = 0.677, 95% CI [0.108, 1.245]. Hedges' g = 0.50 and Cohen's d = 0.50, 95% CI [0.08, 0.92] indicated a medium effect. Thus, Hypothesis 1 is supported. The null hypothesis, according to which endorser-product congruence has no effect on SBC, was rejected.

H2: Higher perceived endorser credibility positively impacts SBC.

First, checked and verified was that the two congruence groups had different evaluations of the athlete's credibility because credibility was assessed after ad exposure and varied throughout the product-congruence manipulation: Welch's t(58.173) = 5.504, p < .001 (Levene's F = 10.279, p = .002), with higher perceived credibility in the high-congruence group (n = 57, M = 5.52, SD = 0.66) than in the low-congruence group (n = 37, M = 4.53, SD = 0.96); mean difference = 0.997.

Therefore, to test H2 directly, two independent-samples *t*-tests within each congruence condition were conducted, comparing respondents who perceived the athlete as highly credible (1) versus less credible (0):

- High-congruence condition (n = 57). High credibility (n = 28, M = 4.301, SD = 1.243) > low credibility (n = 29, M = 3.158, SD = 1.271); Levene's F = 0.338, p = .563 ⇒ equal variances assumed; t(55) = 3.433, two-tailed p = .001; mean difference = 1.143; 95% CI [0.476, 1.811]; Cohen's d = 0.91.
- Low-congruence condition (n = 37). High credibility (n = 21, M = 3.388, SD = 1.302) > low credibility (n = 16, M = 2.589, SD = 1.262); Levene's F = 0.081, p = .778 ⇒ equal variances assumed; t(35) = 1.872, two-tailed p = .070 (directional one-tailed p = .035); mean difference = 0.798; 95% CI [−0.067, 1.664]; Cohen's d = 0.62.

Participants in both conditions reported a stronger sense of SBC when they thought the athlete was highly credible. Using a one-tailed criterion, the effect is statistically significant in the high-congruence condition and, in accordance with the directional hypothesis, also significant in the

low-congruence condition. As a result, hypothesis 2 is supported. The null hypothesis, that SBC is unaffected by perceived endorser credibility was rejected.

H3: Sports involvement moderates the relationship between endorser-product congruence, endorser credibility, and SBC, such that higher sports involvement strengthens these relationships.

A 2×2 between-subjects ANOVA showed significant main effects of product congruence, $F(1, 90) = 4.952$, $p = .029$, and sports involvement, $F(1, 90) = 12.937$, $p < .001$. The interaction was not significant, $F(1, 90) = 2.387$, $p = .126$. The model accounted for $R^2 = .217$ (adj. .191) of the variance. Descriptives suggested a stronger congruence effect among highly involved participants (means: low involvement 2.75 → 2.93 when moving from low to high congruence; high involvement 3.29 → 4.29), but this trend did not reach significance.

B (subset: High product congruence): Credibility (IV) × Sports involvement (moderator) on SBC.

Within the high-congruence condition (n = 57), a 2×2 ANOVA indicated significant main effects of perceived credibility, $F(1, 53) = 5.130$, $p = .028$, and sports involvement, $F(1, 53) = 8.281$, $p = .006$. The interaction was not significant, $F(1, 53) = 1.005$, $p = .321$. Means pointed to a weaker credibility effect at higher involvement (high credibility - low credibility: 0.66 at high involvement vs. 1.36 at low involvement), but again, the interaction was not significant.

C (subset: Low product congruence): Credibility (IV) × Sports involvement (moderator) on SBC.

Within the low-congruence condition (n = 37), neither the main effect of credibility, $F(1, 33) = 3.019$, $p = .092$, nor sports involvement, $F(1, 33) = 1.143$, $p = .293$, reached significance at the five percent level. The interaction was not significant, $F(1, 33) = 0.327$, $p = .572$. Cell means suggested a slightly stronger credibility effect at higher involvement ($\Delta \approx 0.7$ vs. 0.2 at low involvement), but the pattern was not statistically reliable.

Thus, while the simple comparison indicates higher SBC at higher perceived credibility within the low-congruence condition, this effect does not remain statistically reliable once sports involvement and the Credibility×Involvement term are included in the model.

Across all models, the data provide no statistically significant evidence that sports involvement moderates the effects of product congruence or perceived credibility on SBC. Any apparent simple-mean differences should be treated as directional and interpreted with caution.

Hayes' PROCESS macro Model 1 (moderation) was used to revise the hypotheses and to visualize the paths to supplement the t-tests and ANOVAs. This specification interprets effects as conditional slopes and treats moderators and predictors as continuous, mean-centered variables (i.e., no mean splits). The pattern remains the same: product-endorser congruence and perceived credibility are positively related to SBC, sports involvement does not reliably moderate these relationships, and any interaction trends do not reach significance. However, some p-values differ slightly from the earlier tests due to the different coding and estimation. The outcomes are presented in the following:

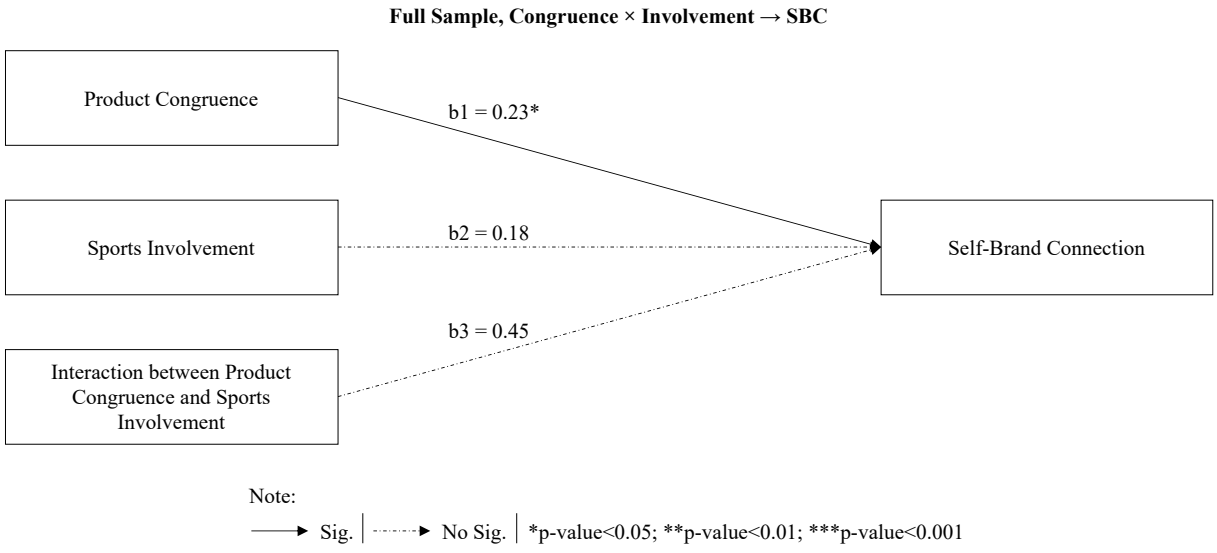

Figure 4: *Visualization of Moderation Congruence × Involvement*

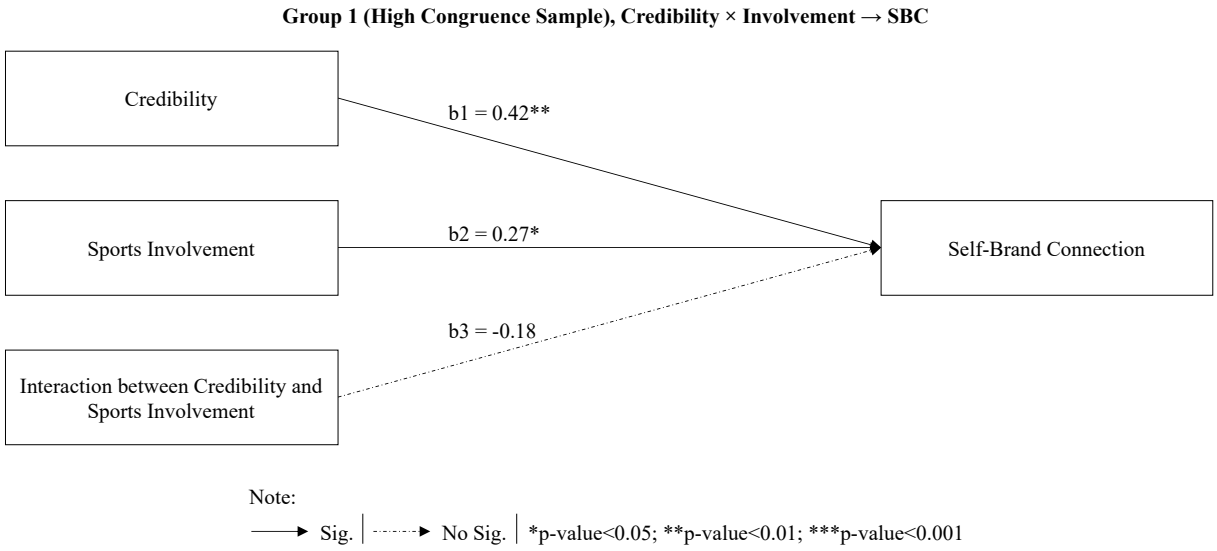

Figure 5: *Visualization of Moderation Credibility × Involvement (High Congruence)*

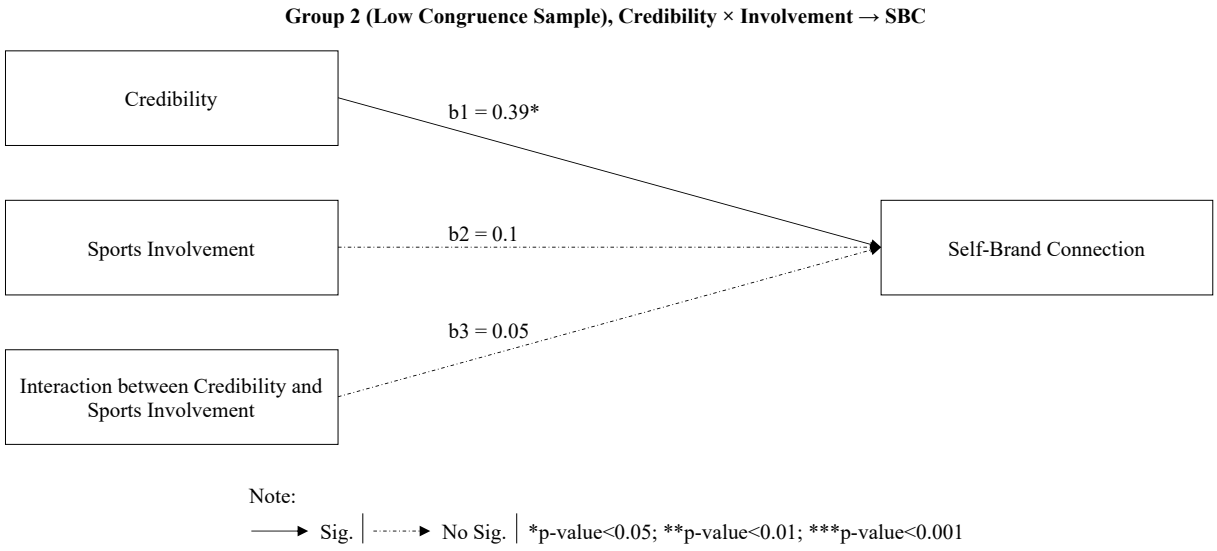

Figure 6: *Visualization of Moderation Credibility × Involvement (Low Congruence)*

5. Key Findings and Discussion

This study investigated the effect of endorser-product congruence and perceived endorser credibility on SBC, as well as whether involvement in sports moderates these relationships. The final analytic sample, which included N = 94 respondents after data preparation and exclusions based on screening and manipulation checks, was unevenly distributed across conditions because the low-congruence group had more manipulation-check failures (high congruence n = 57; low congruence n = 37). In this sample, the scales showed excellent internal consistency (SBC α =.958; Sports Involvement α =.919; Credibility α =.928). In order to record perceptions while the advertisement was fresh in memory, the questionnaire flow positioned the congruence manipulation and manipulation check right before the credibility scale, minimizing recall bias.

An empirical summary shows the following.

First, SBC was increased by endorser-product congruence: the high-congruence group reported higher SBC than the low-congruence group with a medium standardised difference (Cohen's d = 0.50).

Second, there was a positive correlation between SBC and perceived endorser credibility. Respondents with high credibility perceptions of the athlete reported higher SBC than those with low credibility perceptions in the high-congruence condition. The difference trended in the same direction under the low-congruence condition.

Third, in 2×2 ANOVAs, involvement in sports did not significantly moderate the effects of credibility or congruence on SBC; all interaction terms were non-significant.

An additional, but theoretically significant finding is that for the high-congruence stimulus, respondents rated Anthony Joshua as more credible, seeing him wearing boxing gloves (high fit) compared to the other participant group, which saw him holding a padel racket. This pattern aligns with the literature, which contends that contextualising the endorser improves perceived appropriateness and credibility of the endorsement while strengthening meaning transfer. In other words, contextual fit not only improves results like SBC but also strengthens the credibility cue, making it a more convincing factor in consumers' evaluations.

5.1 Interpretation of the Results

The match-up hypothesis and schema congruity are supported by the congruence effect on SBC, which states that consumers process information more easily, believe the endorsement to be authentic, and more easily integrate related meanings into their identities when endorser attributes and product category cohere. Compared to the low-fit pairing (padel racket), the high-fit pairing (boxing gloves) offered a more cohesive symbolic bridge, enabling the type of identity alignment that SBC was able to record. Fit also builds trust and deeper brand relationships, according to the review's discussion of authenticity and meaning transfer (McCracken, 1989).

The relationship between credibility and SBC is in line with the Source Credibility Model, as well as earlier research demonstrating that credible endorsers increase brand attachment and equity. The idea that fit and credibility are complementary pathways to relationship outcomes - fit provides authentic meaning, while credibility provides persuasive legitimacy - is supported by the fact that credibility was especially powerful in the high-fit context. Credible athlete endorsers have been shown to increase brand attachment and consumer identification in several studies; the current findings apply that reasoning to SBC in a sports-brand context.

The nulls for moderation (no significant interactions with involvement in sports) are useful. Although the ELM would predict stronger effects among highly involved consumers, the combination of cue diagnosticity and sufficiency can compress differences across involvement levels. When endorser-product fit is clear and the athlete is perceived as credible, these cues are both highly diagnostic and easy to use. Low-involved consumers can rely on them heuristically, whereas high-involved consumers may integrate the same cues via central processing - yet both routes converge on similar SBC when the cues are strong enough, muting the interaction at the outcome stage.

Because SBC is an identity-centered outcome, identity alignment can dominate general processing motivation. When the endorser and product communicate a coherent identity signal, self-congruence and group identification can drive meaning transfer to the brand regardless of how involved a consumer is with sports in the abstract. In this sense, a clear identity fit can override variance in general sports involvement, yielding comparable levels of SBC at both low and high involvement.

Additionally, the interaction terms in this sample were small and imprecise. The following factors possibly also played a role: after splitting N = 94 into two different groups, statistical power for interactions was reduced; using mean-split to dichotomise continuous involvement reduces variance and decreases sensitivity to interaction effects; and the involvement construct was general sports involvement rather than endorser- or category-specific involvement, which may be the more proximal moderator for such endorsement. As a result, the data point to a main-effects narrative: SBC is affected by congruence and credibility at all levels of involvement, but the difference in strengthening by involvement seems to be minimal in this case.

Furthermore, a review of demographic covariates revealed no consistent effects or differences. Key demographics did not exhibit any significant imbalances across the conditions. The size, sign, and significance of the focal coefficients remained the same when demographics were added as controls to the models along with perceived credibility, product congruence, and involvement in sports. None of these factors was found to be a significant predictor of SBC. Additionally, there were no significant exploratory interactions between the focal predictors and demographics. The overall pattern indicates that the reported relationships are not artefacts of demographic composition, even though the study lacks the power to detect very small demographic influences.

Another noteworthy implication is drawn from the credibility difference observed across congruence conditions. The high-fit context appears to increase perceived credibility because credibility was assessed after exposure, supporting the idea that appropriate settings help positive attributes spread. Despite the fact that mediation was not examined in this study, this implies that a portion of the congruence to the SBC pathway may be indirect via credibility. Nevertheless, the observation strengthens the theoretical framework: fit influences the meaning of the message as well as the messenger's perceived authority, both of which promote SBC.

5.2 Implications

The findings support the literature review on relevant settings in endorsements by extending match-up logic from attitudinal outcomes to a relationship-level outcome (SBC) and showing that contextual relevance can enhance the credibility cue itself. The lack of moderation by general sports involvement draws attention to a boundary condition: the theoretically tighter moderator may be domain-specific involvement (e.g., boxing fandom, endorser affinity).

Managers should, in practice, give preference to credible endorsers who are appropriate for the product category and appear in settings that are relevant to the context. Since it seems to increase perceived credibility and SBC at the same time, creative execution should highlight the fit (e.g., equipment, environment, narrative). Here, targeting by endorser fandom or category relevance might be more effective than segmenting by general sports involvement, which seems less actionable.

5.3 Strengths, Limitations, and Robustness

The experimental between-subjects design, which supports causal inference for the congruence effect, is a key strength. It includes random assignment and a clear manipulation check. For multi-item scales in this sample, the measurement quality is strong. In order to minimise memory noise, the questionnaire sequencing recorded credibility and congruence perceptions right after exposure.

The conclusions are contextualised by limitations. In addition to cell-splits for subgroup tests, the final sample (N = 94) was unbalanced between conditions, which limits power, particularly for detecting interactions. For continuous variables (credibility, involvement), mean-splits were used, which likely attenuated effects and concealed possible interactions. The study's generalisability across athletes, categories, and dynamic formats is unknown because it only used one endorser (Anthony Joshua) and one brand (Puma) with static stimuli. The credibility of the SBC relationship within each condition is best interpreted as associational rather than strictly causal because credibility was measured after treatment, and the high-fit context likely influenced credibility judgments. Last but not least, the forced responses and short average completion time eliminated missingness, though they might have promoted some satisficing.

In addition to suggesting that future work may model credibility and involvement as continuous predictors with interaction terms and larger, more balanced samples, these cautions might explain why main effects appear while moderation does not.

Another limitation applies to the assessment of credibility. The Ohanian 15-item composite confuses its theoretically separate sub-dimensions (expertise, trustworthiness, and attractiveness), making it difficult to determine which facet is largely responsible for the observed effects. The underlying mechanism is also unclear in the absence of dimension-specific analyses.

Furthermore, the study used a convenience online panel, which is a non-probability sample, which limits the generalisability of the population. To increase external validity, future research should report facet-level credibility effects and recruit from carefully stratified or probability-based panels with post-stratification weights.

5.4 Conclusion and Future Research

This thesis investigated the relationship between SBC and endorser-product congruence and perceived endorser credibility, as well as whether involvement in sports moderates these relationships. The evidence demonstrates a consistent main-effects pattern across an experimental design with randomly assigned high- vs. low-congruence stimuli (final N = 94): stronger SBC is linked to both higher congruence and higher perceived credibility, while moderation by general sports involvement is not supported in this context. The fact that perceived credibility was higher in the high-congruence condition (Anthony Joshua wearing boxing gloves) is an ancillary but theoretically significant finding. This suggests that contextual relevance can increase the credibility cue in addition to its downstream effects on SBC. Overall, by linking fit and credibility to a relationship-level outcome, as well as highlighting how context can influence the credibility signal consumers use when forming brand connections, these results have a great impact on endorsement theory.

The results move match-up and schema-congruity arguments from attitudinal endpoints in the direction of consumer identity-centric outcomes. Customers seem more inclined to incorporate the brand into their self-concept when the endorser's setting and product are cohesive. Importantly, the contextualized, high-fit implementation appears to elevate perceived credibility itself, a nuance that literature expects in relevant settings. The data also support the source credibility view that expertise and trustworthiness enhance the legitimacy of the message. Lastly, the lack of moderation by general sports involvement suggests a boundary condition: in order to influence or also increase these moderating relationships, involvement may need to be domain-specific (e.g., endorser fandom or category involvement).

The practical implications are simple: choose credible endorsers who fit the product and position them in appropriate settings that highlight the congruence (equipment, environment, narrative). Such actions have the potential to strengthen the influence on SBC and increase perceived credibility at the same time, both of which are beneficial for long-term equity. By

segmenting by endorser affinity or category relevance, where effects may be stronger and more consistent, targeting by the general term "sports involvement" seems less actionable.

For future research, several extensions would improve mechanisms and generalisability. First, go beyond a single execution: change up the media formats (video, live-action), brands/ categories, and endorsers (sports, genders, public images) to see if contextual richness enhances the fit to credibility to the SBC pathway. Second, use domain-specific involvement as the moderator. This might be more proximal than general sports involvement, such as boxing identification or endorser fandom. Third, test process models that treat credibility as mediators of the fit to the SBC relationship, protecting against endogeneity by instrumenting context or measuring credibility before and after. Fourth, use stratified or probability-based samples to enhance external validity, and one might think about investigating long-term follow-ups that connect SBC to behavioural outcomes like, for example, advocacy or choice.

In conclusion, this thesis demonstrates that consumers can perceive a brand as an integral part of themselves when the match is correct and a credible messenger is used in a relevant context. The pattern indicates that richer contexts and more proximal identities are promising levers for future work, even though general involvement in sports did not shape these links in this instance. Brands can strengthen the SBC that supports long-lasting customer relationships by incorporating fit, credibility, and context into theory and execution.

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Appendices

Appendix 1: Pre-Survey - Athlete Credibility

Start of Block: Introduction

Welcome! In this short survey, you'll be shown five well-known athletes. For each, you'll be asked to rate how you perceive them across several characteristics. The survey will take about 4 minutes. Your responses are anonymous and will be used only for academic research.

Page Break

You will now be shown one athlete at a time. Please rate the person based on your personal perception—even if you don't know much about them.

End of Block: Introduction

Start of Block: Athlete Credibility Evaluation

(Same for each of the following athletes)

- Roger Federer
- Mike Tyson
- Zlatan Ibrahimović
- Conor McGregor
- Novak Djokovic
- Kylian Mbappé
- Jake Paul
- Anthony Joshua
- Neymar Jr.
- Usain Bolt
- Tiger Woods
- Rory McIlroy
- Nick Kyrgios
- Max Verstappen
- Lewis Hamilton
- Paul Pogba
- Noah Lyles
- Lance Armstrong
- Tadej Pogačar
- Jonas Vingegaard

Q1 Trustworthiness
“I believe this person is...”

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Trustworthy (1)	○	○	○	○	○	○	○
Honest (2)	○	○	○	○	○	○	○
Reliable (3)	○	○	○	○	○	○	○
Sincere (4)	○	○	○	○	○	○	○
Dependable (5)	○	○	○	○	○	○	○

Page Break

Q2 Expertise
“I believe this person is...”

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Expert (1)	○	○	○	○	○	○	○
Experienced (2)	○	○	○	○	○	○	○
Knowledgeable (3)	○	○	○	○	○	○	○
Qualified (4)	○	○	○	○	○	○	○
Skilled (5)	○	○	○	○	○	○	○

Page Break

Q3 Attractiveness
“I believe this person is...”

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Attractive (1)	○	○	○	○	○	○	○
Classy (2)	○	○	○	○	○	○	○
Elegant (3)	○	○	○	○	○	○	○
Sexy (4)	○	○	○	○	○	○	○
Beautiful (5)	○	○	○	○	○	○	○

End of Block

Start of Block: Brand Connections

Q4 Please rank the following brands according to the following statement
"I feel a personal connection to Brand X"

_____ Nike (1)
_____ Adidas (2)
_____ Under Armour (3)
_____ Puma (4)
_____ Asics (5)
_____ New Balance (6)
_____ Lululemon (7)
_____ Reebok (8)
_____ Fila (9)

End of Block: Brand Connections

Start of Block: Demographics

Q5 What is your gender?

- ○ Prefer not to say (1)
- ○ Non-binary / third gender (2)
- ○ Female (3)
- ○ Male (4)

Q6 When were you born?

- ○ 1996 and later (1)
- ○ 1986 - 1995 (2)
- ○ 1976 - 1985 (3)
- ○ 1975 and before (4)

Q7 Which country are you from?

▼ Afghanistan (1) ... Zimbabwe (1357)

End of Block: Demographics

End of Survey

Appendix 2: Focus Group Summary

(Manipulation Check Question and Athlete Product Pairings)

Background: Before conducting the focus group, a moderated brainstorming session was held to develop a clear, neutral manipulation check question. The goal was to create a question that would be easy for respondents to understand and unbiased in phrasing, so it could be used both in the focus group to help select suitable stimulus products and later in the main survey as a manipulation check.
Discussion About the Question Wording:

Moderator: "We need to figure out the best way to ask people whether they think a product is a good fit for Anthony Joshua, without leading them or making it sound biased."

Participant responses:

- "We shouldn't say something like 'Do you think he's the perfect ambassador?'—that's too suggestive."
- "It should be neutral and easy to understand."
- "Maybe just a clear statement they can agree or disagree with."
- "Something like 'This product is suitable for Anthony Joshua to advertise'?"
- "Or even simpler: 'This product is a good fit for Anthony Joshua to endorse.'"
- "We need to make sure it's about *fit*, not about whether they like the product."
- "Agreed. It should measure perceived match, not general appeal."

Consensus: A single, direct, and neutral statement.

Final Chosen Wording: *"This product is a good fit for Anthony Joshua to endorse."*

Discussion about Athlete-Product Pairings

Moderator opening: "We want to select products that Anthony Joshua could advertise in a commercial. One product should fit him perfectly, one should be as unsuitable as possible. Both must realistically come from a sports brand."

Discussion round - initial suggestions, participants brainstorm:

- Protein powder
- Energy drink
- Boxing gloves
- Weightlifting belt
- Compression shirt
- Yoga mat
- Swimming shorts
- Padel racket
- Lifestyle sneakers

Moderator asks: „What goes perfectly with Anthony Joshua?"

Answers:

- “Boxing gloves - that's his core business.”
- “Protein powder too, but less obvious because anyone can take it.”
- “Energy drink sounds generic - boxing gloves are more specific.”
- “Weightlifting belt would be good, but a bit niche.”
- “Compression shirt - okay.”

Result:

Boxing gloves = high congruence clear favorite.

Moderator asks: “And what would be really inappropriate but credible in the sports brand portfolio?”

Answers:

- “A Yoga mat doesn't suit a boxer at all.”
- “Padel racket is in a completely different sport, it’s a different lifestyle.”
- “Running shorts - inappropriate, but that could also be fitness for men.”
- “Swimming shorts, but well, he could also wear them on vacation.”
- - “Lifestyle sneakers, but I guess that’s too general.”

Consensus:

- Yoga mat or padel racket as low-fit favorites.
- Yoga mat has very feminine connotations, could trigger stereotypes.
- Padel racket more modern, more neutral, but clearly different in terms of sport.
- Sports brand can realistically produce both.

Vote / agreement:

- Majority chooses padel racket:
    - Sporty, but completely different context.
    - Anthony Joshua does not look like a padel player.
    - No martial arts image.
    - Same brand could produce it.

Final selected pair
High Congruence: Boxing gloves

- Authentic, credible, extremely fitting to Anthony Joshua.
- Directly linked to his career, expertise, brand image.
- Strong symbolic value (martial arts, strength, discipline).

Low Congruence: Padel racket

- Same sports brand could make it.
- Completely different sport, social/leisure-oriented character.
- No connection to boxing or Joshua's image.
- Neutral enough without using stereotypes.

Appendix 3: Main-Survey - Self-Brand Connection

Start of Block: Introduction

Thank you for participating in this survey, which is part of my Master's Thesis at Católica Lisbon School of Business and Economics. My research focuses on advertising and brand perception. Note that the image displayed in this survey is purely fictional and has been edited using AI for research purposes. Any brand names, logos, or athlete partnerships shown are hypothetical and should not be interpreted as real sponsorships or official affiliations. You'll see a short advertisement and then answer some questions. There are no right or wrong answers—please respond based on your honest impressions. The survey will take approximately 4 minutes to complete. All responses are completely anonymous and confidential. The data collected will be used solely for academic purposes and will be presented only in aggregated form, ensuring that individual responses cannot be identified. If you have any questions, please feel free to reach out to me at s-mgwerner@ucp.pt. By proceeding, you acknowledge and agree to participate in this study.

End of Block: Introduction

Start of Block: Screening Questions

Q1 Have you heard of Anthony Joshua, the athlete shown below?

- ○ Yes (1)
- ○ No (2)

End of Block: Screening Questions

Start of Block: High Congruence

Imagine PUMA has launched a new pair of Boxing Gloves and chose Anthony Joshua to be their athlete to endorse the product. Please have a look at this ad. Take your time, there is no rush. Whenever you are ready, you can proceed to the next section.

Page Break

Q2 Please answer the following statement with yes or no: The product is a good fit for Anthony Joshua to endorse.

- ○ Yes (1)
- ○ No (2)

Page Break

Q3 “I believe this person is...”

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Trustworthy (1)	○	○	○	○	○	○	○
Honest (2)	○	○	○	○	○	○	○
Reliable (3)	○	○	○	○	○	○	○
Sincere (4)	○	○	○	○	○	○	○
Dependable (5)	○	○	○	○	○	○	○

Page Break

Q4 “I believe this person is...”

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Expert (1)	○	○	○	○	○	○	○
Experienced (2)	○	○	○	○	○	○	○
Knowledgeable (3)	○	○	○	○	○	○	○
Qualified (4)	○	○	○	○	○	○	○
Skilled (5)	○	○	○	○	○	○	○

Page Break

Q5 “I believe this person is...”

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Attractive (1)	○	○	○	○	○	○	○
Classy (2)	○	○	○	○	○	○	○
Elegant (3)	○	○	○	○	○	○	○
Sexy (4)	○	○	○	○	○	○	○
Beautiful (5)	○	○	○	○	○	○	○

End of Block: High Congruence

Start of Block: Low Congruence

Imagine PUMA has launched a new Padel Racket and chose Anthony Joshua to be their athlete to endorse the product. Please have a look at this ad. Take your time, there is no rush. Whenever you are ready, you can proceed to the next section.

Page Break

Q2 Please answer the following statement with yes or no: The product is a good fit for Anthony Joshua to endorse.

- ○ Yes (1)
- ○ No (2)

Page Break

Q3 “I believe this person is...”

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Trustworthy (1)	○	○	○	○	○	○	○
Honest (2)	○	○	○	○	○	○	○
Reliable (3)	○	○	○	○	○	○	○
Sincere (4)	○	○	○	○	○	○	○
Dependable (5)	○	○	○	○	○	○	○

Page Break

Q4 “I believe this person is...”

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Expert (1)	○	○	○	○	○	○	○
Experienced (2)	○	○	○	○	○	○	○
Knowledgeable (3)	○	○	○	○	○	○	○
Qualified (4)	○	○	○	○	○	○	○
Skilled (5)	○	○	○	○	○	○	○

Page Break

Q5 “I believe this person is...”

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
Attractive (1)	○	○	○	○	○	○	○
Classy (2)	○	○	○	○	○	○	○
Elegant (3)	○	○	○	○	○	○	○
Sexy (4)	○	○	○	○	○	○	○
Beautiful (5)	○	○	○	○	○	○	○

End of Block: Low Congruence

Start of Block: Sports Involvement

Q6 Please rate the following statements using the 7-point semantic differential format below.
"To me, sports are..."

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Boring	○	○	○	○	○	○	○	Exciting
Uninteresting – Interesting	○	○	○	○	○	○	○	Interesting
Worthless – Valuable	○	○	○	○	○	○	○	Valuable
Unappealing – Appealing	○	○	○	○	○	○	○	Appealing
Useless – Useful	○	○	○	○	○	○	○	Useful
Not Needed – Needed	○	○	○	○	○	○	○	Needed
Irrelevant – Relevant	○	○	○	○	○	○	○	Relevant
Unimportant – Important	○	○	○	○	○	○	○	Important

End of Block: Sports Involvement

Start of Block: Self-Brand Connection

Q7 Please rate the following statements based on what you have seen in the ad before (1 = Strongly Disagree, 7 = Strongly Agree).

	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
PUMA reflects who I am (1)	○	○	○	○	○	○	○
I can identify with PUMA (2)	○	○	○	○	○	○	○
I feel a personal connection to PUMA (3)	○	○	○	○	○	○	○
I use (or could use) PUMA to communicate who I am to other people (4)	○	○	○	○	○	○	○
I think PUMA helps me become the type of person I want to be (5)	○	○	○	○	○	○	○
I consider PUMA to be “me” (6)	○	○	○	○	○	○	○
PUMA suits me well (7)	○	○	○	○	○	○	○

End of Block: Self-Brand Connection

Start of Block: Demographics

Q8 When were you born?

- ○ 1996 and later (1)
- ○ 1986 - 1995 (2)
- ○ 1976 - 1985 (3)
- ○ 1975 and before (4)

Page Break

Q9 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary / third gender (3)
- ○ Prefer not to say (4)

Page Break

Q10 Which country are you from?

▼ Afghanistan (1) ... Zimbabwe (1357)

Page Break

Q11 How familiar are you with the brand (PUMA) that was shown in the ad earlier?

- ○ Not familiar at all (1)
- ○ Slightly familiar (2)
- ○ Somewhat familiar (3)
- ○ Moderately familiar (4)
- ○ Quite familiar (5)
- ○ Very familiar (6)
- ○ Extremely familiar (7)

End of Block: Demographics

End of Survey

Appendix 4: SPSS Outputs

Descriptive Statistics - Sample Characteristics

Statistics

Group_HighvsLowProductCongruence_D

N	Valid	94
	Missing	0

Group_HighvsLowProductCongruence_D

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.00	37	39.4	39.4	39.4
	1.00	57	60.6	60.6	100.0
	Total	94	100.0	100.0	

Age * Group_HighvsLowProductCongruence_D Crosstabulation

			Group_HighvsLowProductCongruence_D		
			.00	1.00	Total
Age	1996 and later	Count	17	22	39
		% within Age	43.6%	56.4%	100.0%
		% within Group_HighvsLowProductCongruence_D	45.9%	38.6%	41.5%
		% of Total	18.1%	23.4%	41.5%
	1986 - 1995	Count	9	9	18
		% within Age	50.0%	50.0%	100.0%
		% within Group_HighvsLowProductCongruence_D	24.3%	15.8%	19.1%
		% of Total	9.6%	9.6%	19.1%
	1976 - 1985	Count	4	10	14
		% within Age	28.6%	71.4%	100.0%
		% within Group_HighvsLowProductCongruence_D	10.8%	17.5%	14.9%
		% of Total	4.3%	10.6%	14.9%
	1975 and before	Count	7	16	23
		% within Age	30.4%	69.6%	100.0%
		% within Group_HighvsLowProductCongruence_D	18.9%	28.1%	24.5%
		% of Total	7.4%	17.0%	24.5%
Total		Count	37	57	94
		% within Age	39.4%	60.6%	100.0%
		% within Group_HighvsLowProductCongruence_D	100.0%	100.0%	100.0%
		% of Total	39.4%	60.6%	100.0%

Gender * Group_HighvsLowProductCongruence_D Crosstabulation

			Group_HighvsLowProductCongruence_D		
			.00	1.00	Total
Gender	Male	Count	19	39	58
		% within Gender	32.8%	67.2%	100.0%
		% within Group_HighvsLowProductCongruence_D	51.4%	68.4%	61.7%
		% of Total	20.2%	41.5%	61.7%
	Female	Count	17	18	35
		% within Gender	48.6%	51.4%	100.0%
		% within Group_HighvsLowProductCongruence_D	45.9%	31.6%	37.2%
		% of Total	18.1%	19.1%	37.2%
	Prefer not to say	Count	1	0	1
		% within Gender	100.0%	0.0%	100.0%
		% within Group_HighvsLowProductCongruence_D	2.7%	0.0%	1.1%
		% of Total	1.1%	0.0%	1.1%
Total		Count	37	57	94
		% within Gender	39.4%	60.6%	100.0%
		% within Group_HighvsLowProductCongruence_D	100.0%	100.0%	100.0%
		% of Total	39.4%	60.6%	100.0%

Country

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	France	2	2.1	2.1	2.1
	Germany	17	18.1	18.1	20.2
	Greece	2	2.1	2.1	22.3
	Italy	3	3.2	3.2	25.5
	Lithuania	1	1.1	1.1	26.6
	Netherlands	2	2.1	2.1	28.7
	Nigeria	3	3.2	3.2	31.9
	Poland	7	7.4	7.4	39.4
	Portugal	1	1.1	1.1	40.4
	Spain	2	2.1	2.1	42.6
	United Kingdom of Great Britain and Northern Ireland	54	57.4	57.4	100.0
	Total	94	100.0	100.0	

Descriptive Statistics for Main Variables

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
CredibilityScore	94	3.00	7.00	5.1305	.92969
Valid N (listwise)	94				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
SportsInvolvementScore	94	1.75	7.00	5.8710	.99469
Valid N (listwise)	94				

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
SBCScore1to7	94	1.00	6.43	3.4529	1.38895
Valid N (listwise)	94				

Scale Reliability Testing

Case Processing Summary

		N	%
Cases	Valid	94	100.0
	Excluded[a]	0	.0
	Total	94	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.928	15

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CredibilityQ1	71.8617	174.077	.669	.923
CredibilityQ2	71.8511	170.214	.738	.921
CredibilityQ3	71.6915	174.732	.638	.924
CredibilityQ4	71.9787	172.000	.704	.922
CredibilityQ5	71.9362	174.964	.579	.925
CredibilityQ6	71.3936	162.628	.749	.920
CredibilityQ7	71.0957	169.249	.696	.922
CredibilityQ8	71.5957	166.695	.770	.920
CredibilityQ9	71.4043	167.061	.688	.922
CredibilityQ10	71.0319	172.031	.671	.923
CredibilityQ11	71.8936	173.903	.546	.926
CredibilityQ12	72.2766	170.912	.622	.924
CredibilityQ13	72.5532	169.970	.590	.925
CredibilityQ14	72.4787	168.145	.557	.927
CredibilityQ15	72.3617	167.588	.682	.922

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	94	100.0
	Excluded[a]	0	.0
	Total	94	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.919	8

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SportsInv1	41.10	47.937	.723	.909
SportsInv2	41.20	45.883	.809	.902
SportsInv3	40.98	51.462	.738	.909
SportsInv4	41.22	47.079	.795	.903
SportsInv5	41.06	51.867	.655	.914
SportsInv6	40.95	52.481	.600	.918
SportsInv7	41.09	47.885	.762	.906
SportsInv8	41.18	47.741	.778	.904

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	94	100.0
	Excluded[a]	0	.0
	Total	94	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.958	7

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SelfBrandCon1	20.47	71.563	.845	.952
SelfBrandCon2	20.33	70.417	.850	.951
SelfBrandCon3	20.88	69.782	.883	.949
SelfBrandCon4	20.81	68.630	.843	.952
SelfBrandCon5	21.00	70.086	.879	.949
SelfBrandCon6	21.27	70.412	.838	.952
SelfBrandCon7	20.27	68.670	.844	.952

Multicollinearity Assessment

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	2.155	.264		8.172	<.001		
	Group_HighvsLowProduct Congruence_D	.705	.256	.249	2.755	.007	.991	1.009
	DummyCredibility_Highor Low	.783	.260	.283	3.010	.003	.918	1.089
	SportsInvolvementScore_D	.821	.261	.295	3.140	.002	.922	1.085

a. Dependent Variable: SelfBrandConnectionScore

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	Group_HighvsLowProductCongruence_D	DummyCredibility_HighorLow	SportsInvolvementScore_D
1	1	3.031	1.000	.02	.03	.03	.03
	2	.489	2.490	.01	.42	.34	.06
	3	.322	3.068	.00	.04	.44	.80
	4	.158	4.382	.97	.51	.18	.11

a. Dependent Variable: SelfBrandConnectionScore

Hypothesis Testing

Hypothesis 1 - The Effect of Congruence on SBC

Independent Sample t-test:

Group Statistics

	Group_HighvsLowProduct Congruence_D	N	Mean	Std. Deviation	Std. Error Mean
SelfBrandConnectionScore	1.00	57	3.7193	1.37289	.18184
	.00	37	3.0425	1.32902	.21849

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
						Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
		F	Sig.	t	df	One-Sided p	Two-Sided p			Lower / Upper
SelfBrandConnectionScore	Equal variances assumed	.291	.591	2.364	92	.010	.020	.67683	.28625	.10830 / 1.24535
	Equal variances not assumed			2.381	78.831	.010	.020	.67683	.28426	.11100 / 1.24265

Independent Samples Effect Sizes

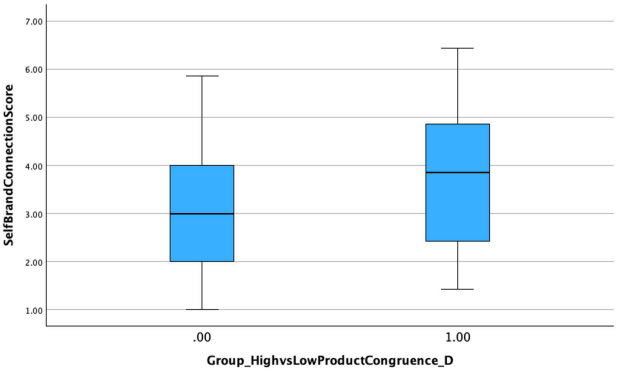
		Standardizer[a]	Point Estimate	95% Confidence Interval	
				Lower	Upper
SelfBrandConnectionScore	Cohen's d	1.35589	.499	.078	.918
	Hedges' correction	1.36707	.495	.077	.910
	Glass's delta	1.32902	.509	.076	.936

Tests of Normality

	Group_HighvsLowProductCongruence_D	Kolmogorov-Smirnov[a] Statistic	df	Sig.	Shapiro-Wilk Statistic	df	Sig.
SelfBrandConnectionScore	.00	.137	37	.075	.961	37	.215
	1.00	.101	57	.200*	.962	57	.070

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

a. Lilliefors Significance Correction



Comparison of Credibility Rating in both Groups

Independent Sample t-test

Group Statistics

	NEW_ValidResponses_GroupMembership_HighvsLow	N	Mean	Std. Deviation	Std. Error Mean
Credibility_Score1to7_ValidResp	1.00	57	5.5228	.66485	.08806
	.00	37	4.5261	.96235	.15821

Independent Samples Test

		Levene's Test for Equality of Variances F	Sig.	t-test for Equality of Mea t	df	Significance One-Sided p	Two-Sided p	Mean Difference
Credibility_Score1to7_ValidResp	Equal variances assumed	10.279	.002	5.941	92	<.001	<.001	.99668
	Equal variances not assumed			5.504	58.173	<.001	<.001	.99668

Hypothesis 2 - The Effect of Credibility on SBC in High Product-Congruence Exposure

Independent Sample t-test:

Group Statistics

	CredibilityScore_HighCongruenceGroup_D	N	Mean	Std. Deviation	Std. Error Mean
SelfBrandConnectionScore	1.00	28	4.3010	1.24257	.23482
	.00	29	3.1576	1.27109	.23603

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
SelfBrandConnectionScore	Equal variances assumed	.338	.563	3.433	55	<.001	.001	1.14338	.33308	.47587	1.81090
	Equal variances not assumed			3.434	54.991	<.001	.001	1.14338	.33295	.47614	1.81063

Independent Samples Effect Sizes

		Standardizer[a]	Point Estimate	95% Confidence Interval Lower	Upper
SelfBrandConnectionScore	Cohen's d	1.25717	.909	.359	1.452
	Hedges' correction	1.27464	.897	.355	1.432
	Glass's delta	1.27109	.900	.323	1.463

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

Hypothesis 2 - The Effect of Credibility on SBC in Low Product-Congruence Exposure

Independent Sample t-test:

Group Statistics

	CredibilityScore_LowCongruenceGroup_D	N	Mean	Std. Deviation	Std. Error Mean
SelfBrandConnectionScore	1.00	21	3.3878	1.30239	.28420
	.00	16	2.5893	1.26155	.31539

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
SelfBrandConnectionScore	Equal variances assumed	.081	.778	1.872	35	.035	.070	.79847	.42643	-.06723	1.66417
	Equal variances not assumed			1.881	32.954	.034	.069	.79847	.42455	-.06532	1.66226

Independent Samples Effect Sizes

		Standardizer[a]	Point Estimate	95% Confidence Interval Lower	Upper
SelfBrandConnectionScore	Cohen's d	1.28504	.621	-.049	1.284
	Hedges' correction	1.31342	.608	-.048	1.256
	Glass's delta	1.26155	.633	-.064	1.312

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

Hypothesis 3 - The moderating Effect of Sports Involvement

2x2 ANOVA: Testing for Moderation (Congruence x Sports Involvement)

Univariate Analysis of Variance

Between-Subjects Factors

		N
Group_HighvsLowProduct Congruence_D	.00	37
	1.00	57
SportsInvolvementScore_D	.00	41
	1.00	53

Descriptive Statistics

Dependent Variable: SelfBrandConnectionScore

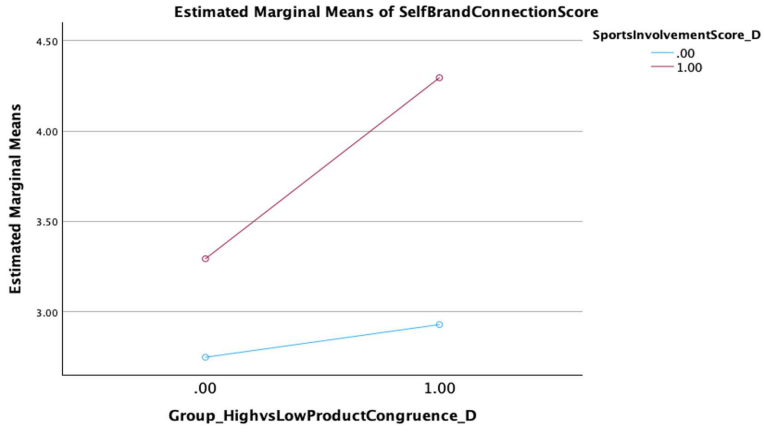
Group_HighvsLowProduct Congruence_D	SportsInvolvementScore_D	Mean	Std. Deviation	N
.00	.00	2.7479	1.33203	17
	1.00	3.2929	1.30723	20
	Total	3.0425	1.32902	37
1.00	.00	2.9286	1.07236	24
	1.00	4.2944	1.28915	33
	Total	3.7193	1.37289	57
Total	.00	2.8537	1.17434	41
	1.00	3.9164	1.37379	53
	Total	3.4529	1.38895	94

Tests of Between-Subjects Effects

Dependent Variable: SelfBrandConnectionScore

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	38.926[a]	3	12.975	8.312	<.001
Intercept	973.077	1	973.077	623.379	<.001
Group_HighvsLowProduct Congruence_D	7.730	1	7.730	4.952	.029
SportsInvolvementScore_D	20.194	1	20.194	12.937	<.001
Group_HighvsLowProduct Congruence_D * SportsInvolvementScore_D	3.727	1	3.727	2.387	.126
Error	140.488	90	1.561		
Total	1300.122	94			
Corrected Total	179.414	93			

a. R Squared = .217 (Adjusted R Squared = .191)



2x2 ANOVA Testing for Moderation (Credibility x Sports Involvement)

(High Congruence Exposure)

Between-Subjects Factors

		N
CredibilityScore_HighCongruenceGroup_D	.00	29
	1.00	28
SportsInvolvementScore_D	.00	24
	1.00	33

Descriptive Statistics

Dependent Variable: SelfBrandConnectionScore

CredibilityScore_HighCongruenceGroup_D	SportsInvolvementScore_D	Mean	Std. Deviation	N
.00	.00	2.6429	.80701	18
	1.00	4.0000	1.46942	11
	Total	3.1576	1.27109	29
1.00	.00	3.7857	1.37840	6
	1.00	4.4416	1.19840	22
	Total	4.3010	1.24257	28
Total	.00	2.9286	1.07236	24
	1.00	4.2944	1.28915	33
	Total	3.7193	1.37289	57

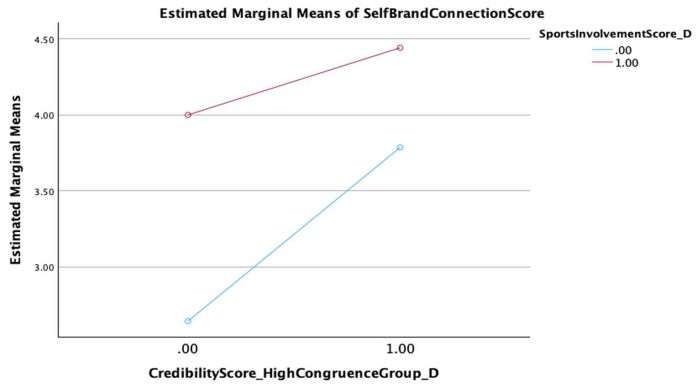
Tests of Between-Subjects Effects

Dependent Variable: SelfBrandConnectionScore

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	33.227[a]	3	11.076	8.116	<.001	.315
Intercept	616.647	1	616.647	451.894	<.001	.895
CredibilityScore_HighCongruenceGroup_D	7.001	1	7.001	5.130	.028	.088
SportsInvolvementScore_D	11.300	1	11.300	8.281	.006	.135
CredibilityScore_HighCongruenceGroup_D * SportsInvolvementScore_D	1.372	1	1.372	1.005	.321	.019
Error	72.323	53	1.365			
Total	894.041	57				
Corrected Total	105.550	56				

a. R Squared = .315 (Adjusted R Squared = .276)

Profile Plots



2x2 ANOVA Testing for Moderation (Credibility x Sports Involvement)

(Low Congruence Exposure)

Between-Subjects Factors

		N
CredibilityScore_LowCongruenceGroup_D	.00	16
	1.00	21
SportsInvolvementScore_D	.00	17
	1.00	20

Descriptive Statistics

Dependent Variable: SelfBrandConnectionScore

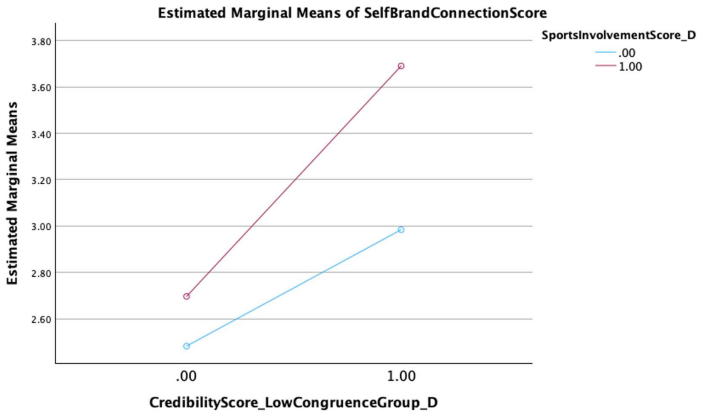
CredibilityScore_LowCongruenceGroup_D	SportsInvolvementScore_D	Mean	Std. Deviation	N
.00	.00	2.4821	1.51559	8
	1.00	2.6964	1.04264	8
	Total	2.5893	1.26155	16
1.00	.00	2.9841	1.18547	9
	1.00	3.6905	1.35229	12
	Total	3.3878	1.30239	21
Total	.00	2.7479	1.33203	17
	1.00	3.2929	1.30723	20
	Total	3.0425	1.32902	37

Tests of Between-Subjects Effects

Dependent Variable: SelfBrandConnectionScore

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	8.539[a]	3	2.846	1.706	.185	.134
Intercept	316.120	1	316.120	189.510	<.001	.852
CredibilityScore_LowCongruenceGroup_D	5.036	1	5.036	3.019	.092	.084
SportsInvolvementScore_D	1.907	1	1.907	1.143	.293	.033
CredibilityScore_LowCongruenceGroup_D * SportsInvolvementScore_D	.545	1	.545	.327	.572	.010
Error	55.047	33	1.668			
Total	406.082	37				
Corrected Total	63.586	36				

a. R Squared = .134 (Adjusted R Squared = .056)



Hayes' PROCESS macro: Model 1 - Moderator Analysis

Congruence x Sports Involvement

```
  Model: 1
      Y: SBCCon
      X: CongHL
      W: SICont

Sample
Size:  94

Variable descriptive statistics
         SBCCon     CongHL     SICont
Mean     3.4529      .6064     5.8710
SD       1.3889      .4912      .9947
Min      1.0000      .0000     1.7500
Max      6.4286     1.0000     7.0000

Variable intercorrelations (Pearson r)
           SBCCon     CongHL     SICont
SBCCon     1.0000      .2393      .3756
CongHL      .2393     1.0000      .0380
SICont      .3756      .0380     1.0000

**************************************************************************

OUTCOME VARIABLE:
 SBCCon

Model Summary
         R       R-sq        MSE          F        df1        df2          p
      .4655      .2167     1.5616     8.2980     3.0000    90.0000      .0001

Model
             coeff         se          t          p       LLCI       ULCI
constant    3.0540      .2057    14.8497      .0000     2.6454     3.4625
CongHL       .6443      .2640     2.4401      .0166      .1197     1.1688
SICont       .2461      .2045     1.2033      .2320     -.1602      .6525
Int_1        .4487      .2654     1.6903      .0944     -.0787      .9760
Product terms key:
 Int_1    :        CongHL    x        SICont

Test(s) of highest order unconditional interaction(s):
       R2-chng           F        df1        df2          p
X*W      .0249     2.8570     1.0000    90.0000      .0944
----------
    Focal predict: CongHL   (X)
          Mod var: SICont   (W)

Conditional effects of the focal predictor at values of the moderator(s):

     SICont     Effect         se          t          p       LLCI       ULCI
     -.8460      .2647      .3440      .7696      .4436     -.4186      .9481
      .1290      .7022      .2668     2.6320      .0100      .1722     1.2322
     1.0040     1.0947      .3780     2.8958      .0047      .3437     1.8458

Moderator value(s) defining Johnson-Neyman significance region(s):
      Value    % below    % above
     -.2380    37.2340    62.7660
```

```
Conditional effect of focal predictor at values of the moderator:
     SICont     Effect         se          t          p       LLCI       ULCI
    -4.1210    -1.2047     1.1213    -1.0743      .2855    -3.4324     1.0230
    -3.8585    -1.0869     1.0537    -1.0315      .3051    -3.1803     1.0065
    -3.5960     -.9691      .9864     -.9825      .3285    -2.9288      .9906
    -3.3335     -.8513      .9195     -.9259      .3570    -2.6780      .9754
    -3.0710     -.7336      .8530     -.8600      .3921    -2.4281      .9610
    -2.8085     -.6158      .7870     -.7824      .4360    -2.1793      .9477
    -2.5460     -.4980      .7217     -.6900      .4920    -1.9319      .9359
    -2.2835     -.3802      .6574     -.5784      .5644    -1.6863      .9258
    -2.0210     -.2625      .5942     -.4417      .6598    -1.4430      .9181
    -1.7585     -.1447      .5327     -.2716      .7865    -1.2030      .9136
    -1.4960     -.0269      .4735     -.0569      .9548     -.9675      .9137
    -1.2335      .0909      .4174      .2176      .8282     -.7384      .9201
     -.9710      .2086      .3661      .5698      .5702     -.5187      .9360
     -.7085      .3264      .3218     1.0143      .3131     -.3129      .9657
     -.4460      .4442      .2877     1.5439      .1261     -.1274     1.0157
     -.2380      .5375      .2705     1.9867      .0500      .0000     1.0750
     -.1835      .5619      .2678     2.0987      .0386      .0300     1.0939
      .0790      .6797      .2652     2.5631      .0120      .1529     1.2066
      .3415      .7975      .2805     2.8432      .0055      .2402     1.3547
      .6040      .9153      .3110     2.9428      .0041      .2974     1.5332
      .8665     1.0330      .3528     2.9278      .0043      .3321     1.7340
     1.1290     1.1508      .4025     2.8594      .0053      .3513     1.9504

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/
   CongHL     SICont     SBCCon     se         LLCI       ULCI       .
BEGIN DATA.
      .0000     -.8460     2.8457      .2626     2.3241     3.3673
     1.0000     -.8460     3.1105      .2222     2.6690     3.5519
      .0000      .1290     3.0857      .2086     2.6714     3.5000
     1.0000      .1290     3.7879      .1664     3.4574     4.1184
      .0000     1.0040     3.3011      .2973     2.7104     3.8917
     1.0000     1.0040     4.3958      .2335     3.9319     4.8597
END DATA.
GRAPH/SCATTERPLOT=
 SICont   WITH     SBCCon   BY       CongHL   .

************************ 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.
```

Hayes' PROCESS macro: Model 1 - Moderator Analysis

Credibility x Sports Involvement (High Congruence Exposure)

```
  Model: 1
      Y: SBCScore
      X: CredConH
      W: SpInCon

Sample
Size:  57

Variable descriptive statistics
       SBCScore   CredConH    SpInCon
Mean     3.7193     5.5228     5.9013
SD       1.3729      .6649      .9870
Min      1.4286     3.6667     2.2500
Max      6.4286     7.0000     7.0000

Variable intercorrelations (Pearson r)
           SBCScore   CredConH    SpInCon
SBCScore     1.0000      .5482      .4995
CredConH      .5482     1.0000      .4574
SpInCon       .4995      .4574     1.0000

**************************************************************************

OUTCOME VARIABLE:
 SBCScore

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .6200      .3844     1.2261    11.0294     3.0000    53.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     3.7727      .1657    22.7641      .0000     3.4403     4.1051
CredConH      .8746      .2567     3.4065      .0013      .3596     1.3895
SpInCon       .3806      .1876     2.0288      .0475      .0043      .7569
Int_1        -.1811      .2617     -.6918      .4921     -.7061      .3439
```

```
Product terms key:
 Int_1    :        CredConH x        SpInCon

Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      .0056      .4787     1.0000    53.0000      .4921
----------
    Focal predict: CredConH (X)
          Mod var: SpInCon  (W)

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

DATA LIST FREE/
   CredConH   SpInCon    SBCScore   se         LLCI       ULCI       .
BEGIN DATA.
     -.6649     -.9870     2.6968      .2328     2.2298     3.1637
      .0000     -.9870     3.3970      .2726     2.8503     3.9437
      .6649     -.9870     4.0973      .4876     3.1192     5.0754
     -.6649      .0000     3.1912      .2252     2.7395     3.6430
      .0000      .0000     3.7727      .1657     3.4403     4.1051
      .6649      .0000     4.3541      .2500     3.8528     4.8555
     -.6649      .9870     3.6857      .3450     2.9938     4.3777
      .0000      .9870     4.1484      .2218     3.7034     4.5933
      .6649      .9870     4.6110      .2656     4.0783     5.1437
END DATA.
GRAPH/SCATTERPLOT=
 CredConH WITH     SBCScore BY       SpInCon  .

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

Level of confidence for all confidence intervals in output:
  95.0000

NOTE: The following variables were mean centered prior to analysis:
          SpInCon  CredConH
```

Hayes' PROCESS macro: Model 1 - Moderator Analysis

Credibility x Sports Involvement (Low Congruence Exposure)

```
  Model: 1
      Y: SBCScore
      X: CredConL
      W: SpInCon

Sample
Size:  37

Variable descriptive statistics
       SBCScore   CredConL    SpInCon
Mean     3.0425     4.5261     5.8243
SD       1.3290      .9624     1.0183
Min      1.0000     3.0000     1.7500
Max      5.8571     6.0667     7.0000

Variable intercorrelations (Pearson r)
           SBCScore   CredConL    SpInCon
SBCScore     1.0000      .4110      .1886
CredConL      .4110     1.0000      .2684
SpInCon       .1886      .2684     1.0000

**************************************************************************

OUTCOME VARIABLE:
 SBCScore

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .4204      .1767     1.5863     2.3613     3.0000    33.0000      .0892

Model
             coeff         se          t          p       LLCI       ULCI
constant    3.0308      .2139    14.1694      .0000     2.5956     3.4660
CredConL     .5409      .2274     2.3787      .0233      .0783     1.0035
SpInCon      .1366      .2465      .5541      .5833     -.3650      .6382
Int_1        .0455      .2096      .2171      .8295     -.3810      .4720
```

```
Product terms key:
 Int_1    :        CredConL x        SpInCon

Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      .0012      .0471     1.0000    33.0000      .8295
----------
    Focal predict: CredConL (X)
          Mod var: SpInCon  (W)

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

DATA LIST FREE/
   CredConL   SpInCon    SBCScore   se         LLCI       ULCI       .
BEGIN DATA.
     -.9624    -1.0183     2.4158      .3353     1.7337     3.0979
      .0000    -1.0183     2.8917      .3495     2.1807     3.6028
      .9624    -1.0183     3.3677      .5438     2.2613     4.4740
     -.9624      .0000     2.5103      .3095     1.8807     3.1399
      .0000      .0000     3.0308      .2139     2.5956     3.4660
      .9624      .0000     3.5514      .3025     2.9359     4.1668
     -.9624     1.0183     2.6048      .4326     1.7246     3.4850
      .0000     1.0183     3.1699      .3089     2.5415     3.7983
      .9624     1.0183     3.7350      .4474     2.8248     4.6453
END DATA.
GRAPH/SCATTERPLOT=
 CredConL WITH     SBCScore BY       SpInCon  .

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

Level of confidence for all confidence intervals in output:
  95.0000

NOTE: The following variables were mean centered prior to analysis:
          SpInCon  CredConL
```