



The Impact of Social Media Fan Engagement on Cristiano Ronaldo's Brand Perception

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ABSTRACT

Title: The Impact of Social Media Fan Engagement on Cristiano Ronaldo's Brand Perception

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Social media has transformed athlete branding by enabling direct communication with fans. Cristiano Ronaldo, one of the most followed athletes online, strategically balances sponsored and personal content to engage his audience and shape his brand. However, little research explores the combined effects of content type, fan engagement, and platform on brand perception. This study examines fan engagement as a moderating factor in the relationship between content type (sponsored vs. personal) and brand perception across Facebook and Instagram.

Using a quantitative approach, data was collected via an online survey targeting Ronaldo's fan base. Respondents viewed stimuli representing different content types on both platforms. Findings challenge the assumption that sponsored posts are more effective in brand building, revealing that content type alone does not significantly impact brand perception. Similarly, platform preference (Facebook vs. Instagram) does not moderate this relationship. However, fan engagement plays a key role, showing that highly engaged followers develop a more positive perception of the athlete's brand, regardless of content type.

These findings offer practical and academic insights. Marketers should prioritize engagement-driven strategies over content type selection, using interactive elements to boost fan involvement. Academically, the study contributes to digital athlete branding research by emphasizing engagement's role across platforms. Future research should adopt a long-term approach, include more athletes, and explore emerging platforms like X (formerly Twitter) and TikTok.

Keywords : Athlete branding, fan engagement, social media, Cristiano Ronaldo, brand perception, content type, digital marketing

SUMMARY

Title: O Impacto do Envolvimento nas Redes Sociais dos Fãs na Percepção da Marca do Cristiano Ronaldo

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O crescimento das redes sociais transformou o branding de atletas, permitindo interação direta com seguidores. No entanto, há poucas pesquisas sobre como plataformas, engajamento dos fãs e tipo de conteúdo influenciam a percepção da marca de um atleta. Este estudo investiga o papel do envolvimento dos fãs como moderador na relação entre tipo de conteúdo (patrocinado vs. pessoal) e percepção da marca no Facebook e Instagram.

A pesquisa adotou uma abordagem quantitativa, coletando dados por meio de um questionário online. Os participantes visualizaram diferentes tipos de conteúdo nessas plataformas. Os resultados desafiam a ideia de que publicações patrocinadas criam maior conexão com a marca do que conteúdos pessoais, mostrando que o tipo de postagem, isoladamente, não impacta significativamente a percepção da marca. Da mesma forma, a preferência pela plataforma não influenciou essa relação. No entanto, o envolvimento dos fãs foi um fator crucial, indicando que seguidores altamente engajados desenvolvem uma percepção mais positiva da marca do atleta, independentemente do tipo de conteúdo.

Essas descobertas têm implicações para o mercado e a academia. Estratégias focadas no envolvimento devem ser priorizadas sobre a escolha do tipo de conteúdo, utilizando elementos interativos para aumentar a participação. Academicamente, o estudo contribui para o debate sobre branding digital de atletas, ressaltando a necessidade de pesquisas mais amplas sobre engajamento em diferentes plataformas. Pesquisas futuras devem adotar uma abordagem longitudinal, incluir mais atletas e explorar plataformas emergentes como X (antigo Twitter) e TikTok.

Palavras-chave: Branding de atletas, envolvimento dos fãs, redes sociais, Cristiano Ronaldo, percepção da marca, tipo de conteúdo, marketing digital.

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AI Disclaimer

AI assisted in the rewriting of certain sections to enhance clarity and flow as well as translating the abstract section to the Portuguese language, as English is not my native language. Additionally, it facilitated the identification of crucial points by summarizing interview transcriptions. Furthermore, AI assisted in the refinement of the survey questions to guarantee that they were both plain and consistent with the objectives of the study. The analysis, interpretations, and conclusions were conducted independently.

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Chapter 1: Introduction

The rise of social media has changed the way public figures and fans connect, with athletes becoming some of the most popular people online. Instagram and Facebook enable athletes to publish a combination of personal and sponsored content, resulting in emotional relationships and economic potential. For example, Cristiano Ronaldo, one of the world's most popular players, deliberately blends personal content and sponsored content to preserve authenticity while utilizing his fame for collaborations.

Fan engagement, defined by acts such as liking, commenting, and sharing, is critical in expanding an athlete's reach and boosting their brand perception. However, the type of content published, and the platform used have a significant impact on engagement levels and perceptions of the brand. Instagram's visual nature may make personal content more relatable, but Facebook's larger audience may prefer sponsored posts. Despite the relevance of these interactions, little study has been conducted to determine how these elements combine to shape fans' impressions of athlete brands. This study intends to fill that gap by contributing to the emerging subject of athlete branding in the digital age.

1.1 Problem statement:

Athletes are more than simply competitors; they are powerful personal brands with worldwide reach. Social media sites like Instagram and Facebook allow players like Cristiano Ronaldo to interact directly with followers by sharing personal experiences and promoting sponsored content. While this opens new avenues for branding, it also raises concerns about how these interactions influence fans' engagement with the athlete's brand.

Current research has focused mostly on athlete branding and fan engagement in isolation, with little emphasis on the impact of content type (personal vs. sponsored) and social media platforms (Instagram vs. Facebook) on brand perception. Furthermore, the role of fan engagement as a moderating component is understudied. This gap emphasizes the necessity for a comprehensive approach that investigates how content type and platform-specific dynamics influence fan engagement and, ultimately, brand perception.

Research questions:

This study is to investigate how fan engagement, social media platforms, and content type interact to define Cristiano Ronaldo's brand perception. Developed to fulfill the main goals of this research were the following study questions:

- **RQ1: How do different social media platforms (such as Instagram and Facebook) affect Cristiano Ronaldo's brand perception among his global fanbase?**
- **RQ2: What role does the type of content (personal posts vs. sponsored posts) play in shaping fan engagement and brand perception across different social media platforms?**

1.2 Relevance of research:

1. Academic:

Platforms including Facebook, Instagram Reels, and YouTube Shorts are altering fan engagement to support short-form and viral material. Said platforms promote popular content and influence fan interactions by means of algorithms, therefore guiding what material fans view and interact with. This change is desperately needed for a new, dynamic approach of participation since conventional models like COBRA find it difficult to represent these new forms of interaction. This research helps to solve these issues and customize methods of engagement for current social media environments.

2. Managerial:

Effective brand management depends on knowing which platforms provide the most favorable interaction and help Ronaldo's brand perception to be improved. This study can help athletes and their marketing teams customize their social media approach to certain platforms, therefore guaranteeing that they concentrate on the channels that provide the best results in terms of engagement and brand perception.

Chapter 2: Literature Review and Conceptual Framework:

This chapter offers a comprehensive review of the fundamental theories and concepts that serve as the foundation of this research. It starts with an examination of the concept of athlete branding, which is then followed by an examination of its fundamental components and the influence of content type on brand perception and audience engagement. This chapter then explores the impact of social media platforms on these relationships, emphasizing the platform-specific dynamics. Lastly, the conceptual framework is introduced, which outlines the study's hypotheses and illustrates the interactions between content type, social media platforms, fan engagement, and brand perception.

2.1 Athlete Branding:

Athlete branding is an integral concept in sports marketing. However, there is no commonly acknowledged definition of it. Scholars have provided us with distinct perspectives. (Shank & Lyberger, 2014) defined a sports brand as a different mix of components, such as a name or symbol, used to distinguish a product or individual athlete in the market. Following this logic, athletes can be viewed as brands because of their distinct personal identifiers such as name, appearance, and personality. (Thomson, 2006) broadens this perspective by defining a human brand as any well-known person who is the subject of marketing communications. In this spirit, (Keller, 2003) highlights that a brand must reach a particular level of awareness, reputation, and importance to be recognized in the marketplace. Till (2001) argued that athletes may only be considered brands if they have made enough revenue through endorsements. Collectively, these perspectives argue that an athlete brand symbolizes an athlete's public identity, as defined by their name, look, or other distinctive characteristics, and has symbolic value in the marketplace (Arai et al., 2014a).

Athlete branding is influenced by a variety of things that assist in raising visibility and connecting with fans. Media coverage has a tremendous impact on athlete popularity, allowing them to obtain visibility and recognition across multiple platforms (Athlete Brand Construction, 2016). Word-of-mouth contact from peers or fans also aids in the dissemination of information about athletes across cultures and regions, hence increasing brand recognition (Hasaan et al., 2016). Impression management, in which athletes actively form and maintain their public image, is another primordial component in achieving today's celebrity status (Hasaan et al., 2016).

2.2 Athlete Brand Components:

According to Hasaan et al. (2016), both on-field and off-field characteristics influence an athlete's brand. Famous athletes like Cristiano Ronaldo gain celebrity through their sports accomplishments, which act as the backbone of their brand. However, off-field aspects such as social presence, lifestyle, and personality are also crucial in forming a connection with fans. For instance, Ronaldo's family life, hobbies, and sponsorships make him more personable and attainable to a global audience, thereby enhancing his brand's past athletics. This two-dimensional approach—joining sports success with a well-crafted personal image—assists athletes in attracting both local and global audience engagement and turns them into valuable public personalities (Hasaan et al., 2016).

2.3 Content type:

The type of content that is shared on social media platforms has an influence on how fans connect with athletes. According to Thomson (2006), stronger bonds are built with fans when athletes share personal and authentic content that aligns with their image. These personal posts portray the athletes as relatable and close, which in turn fosters a sense of connection and trust. On the other hand, sponsored posts weaken that credibility if the content is somewhat always promotional and isn't accompanied by personal posts in between. Sustaining fan trust and enhancing brand perception is done through a good balance and mix of personal and sponsored posts, according to Jin & Phua (2014). Researching celebrity tweets permitted them to find out that fans enjoy a good mix of both types of content rather than just one, which has made them experience more connection to the celebrity without disparaging the brand's authenticity.

In terms of athlete branding, content type refers to the nature and format of content shared by athletes on social media platforms. This material can be divided into two categories: personal content (posts about an athlete's personal life, family, and non-professional moments) and sponsored content (promotional posts or branded adverts). The sort of content published has a huge impact on how an athlete's brand is regarded by their audience since it affects trust, relatability, and authenticity.

Personal content is essential for creating an authentic connection between athletes and their followers. According to (Thomson, 2006), sportsmen who provide personal, behind-the-scenes peeks into their lives are viewed as more relevant and approachable, resulting in better ties with fans. This personal connection helps to foster trust and loyalty, both of which are important aspects of brand perception. Similarly, (Jin & Phua, 2014) contend that athletes who engage in

self-disclosure on social media develop a "human brand" that strengthens their emotional connection with fans.

Athlete branding depends critically on sponsored posts since they help to increase brand awareness, endorsement partnerships, and financial benefits. Still, their efficacy relies on how the audience views them. Evans et al. (2017) discovered that followers of an influencer's sponsored material greatly view the brand being promoted depending on their trustworthiness and authenticity. Sponsored material that fits the athlete's personal brand and beliefs will help to build followers' respect and confidence.

Still, misuse or misalignment of sponsored postings using the athlete's image could compromise their legitimacy, hence lowering engagement. De Jans et al. (2018) claim that viewers often react unfavorably to an abundance of promotional material that feels impersonal or overly commercial since it lessens the athlete's supposed sincerity. It has been demonstrated that a balanced approach—where sponsored material is matched by personal, real posts—sustains fan confidence and involvement, therefore guaranteeing the brand remains credible and relevant.

To retain strong, authentic brand perceptions, athletes must balance personal and paid content. Athletes who grasp this balance can effectively engage fans while maintaining the trust and loyalty that fuels their brand's success.

2.4 Brand Perception:

Brand perception is how a consumer understands or views the whole brand—that of an athlete's public persona. The athlete's demeanor looks, and the kind of content posted on social media all help to build this impression. Arai et al. (2014b) define brand perception as encompassing several elements, including trust, admiration, loyalty, and emotional connection, which, taken together, affect the power of an athlete's brand in the market.

The consistency and authenticity of the athlete's material greatly shape the brand impression. Athletes who keep a real and open internet presence are more likely to inspire their supporters with a strong, positive impression. For instance, personal material highlighting the athlete's life away from sports humanizes them and enhances their emotional connection with their fans. The success of a brand depends on this since fans are more inclined to emotionally invest in athletes they believe to be real (Arai et al., 2014b).

Keller (2003) goes on to say that brand perception comprises cognitive (awareness, knowledge) and emotional (trust, loyalty) elements, which, taken together, provide an audience's whole image of the brand.

A dynamic concept affected by the athlete's content and public persona is brand perception in athlete branding. Those who effectively control their image—especially by means of the appropriate balance of personal and professional content can build a strong, favorable impression that improves brand value and fan loyalty.

2.5 Effect of Content Type on Brand Perception:

The effect of content type on brand perception is significant as it influences how fans interpret and trust the athlete's brand.

Personal content typically strengthens brand perception by humanizing the athlete, which leads to stronger trust and loyalty among fans. Kim & Ko (2012) highlight that personal content helps athletes appear more relatable, thereby enhancing fans' emotional investment. In contrast, Lee & Watkins (2016) found that audiences may view excessive sponsored content with skepticism, especially if it feels incongruent with the athlete's established image. However, a balanced mix of personal and promotional posts has been found to positively affect brand perception, as it maintains authenticity while allowing for sponsorships.

Thus, the type of content shared by athletes directly impacts brand perception, with personal content generally enhancing trust, while overuse of sponsored content may potentially undermine credibility.

Based on the influence of content type on brand perception, the following hypotheses are proposed:

H1: Content type positively impacts Brand Perception.

H1a: Sponsored content has a lower impact on Brand Perception than personal content.

2.6 Fan Engagement:

Fan engagement is a type of customer engagement that focuses on non-transactional, extra-role behavior. Fans use social media in a variety of ways, from passive to active participation (Annamalai et al., 2021). The Consumers Online Brand-Related Actions (COBRA) framework divides fan actions into three categories: consumption, contribution, and creation. Consumption is simply watching shared content without actively engaging in direct contact; participation includes behaviors such as liking, sharing, and commenting on existing posts; and

production includes user-generated activities such as publishing reviews, images, or hashtags (Vale & Fernandes, 2018). Creation represents more active participation, as fans create their own content (Dolan et al., 2016).

This framework proposes a comprehensive overview of how fans interact with sports businesses online, from passive watchers to active content creators. However, we notice that this framework classifies engagement into broad categories but does not clarify the degree of engagement. Passive consumption (just seeing content), for instance, is regarded similarly to other modes of involvement, with no distinction made between different categories of viewers, in turn not addressing factors such as emotional attachment, loyalty, or long-term engagement, for example, which results in an oversimplified understanding of the term fan engagement. The COBRA framework primarily focuses on actions such as liking, sharing, and commenting, which, in turn, miss out on the psychological and emotional aspects of fan engagement. Brodie et al. (2013) argued that true engagement must consider fans' cognitive and emotional connections to a club or athlete, even if they aren't actively contributing. Fans may not always express themselves openly on social media, yet they might still feel strongly committed and connected.

Moreover, fan engagement on social media has changed since COBRA was first introduced. TikTok and Instagram Reels, which are newer platforms of engagement, prioritize short, viral content that does not go hand in hand with COBRA's conventional categories of engagement. The framework may find it difficult to distinguish these new types of contact from more traditional actions like commenting or posting.

2.7 Effect of Fan Engagement on Brand Perception:

Brand Perception is shaped in part by fan engagement since more engaged fans usually show a closer relationship between the athlete's brand and themselves.

Engagement happens on cognitive (attention, understanding), emotional (attachment, empathy), and behavioral (likes, comments, shares) levels. True involvement, according to Brodie et al. (2013), combines these components and implies that fans' psychological ties to an athlete might improve their brand impression. Moreover, Vale & Fernandes (2018) discovered that when fans participate actively, they usually view the brand more favorably and connect the athlete with loyalty and respect.

Higher degrees of engagement show not only popularity but also a meaningful relationship, which eventually helps to build brand perception.

Considering the moderating effect of fan engagement on the relationship between content type and brand perception, the following hypothesis is proposed:

H2: Fan Engagement moderates the relationship between Content-Type and Brand Perception.

2.8 Social Media Platforms:

Various social media platforms (such as Facebook and Instagram) present different settings that influence fan engagement and brand perception.

Athletes would find Instagram a perfect venue to present both personal and branded content since it is well-known for stressful visual materials. According to Smith & Sanderson (2015), Instagram helps athletes create a visually appealing, lifestyle-oriented brand that can help fans relate more to the athlete's life.

Athletes may submit richer tales and in-depth updates on Facebook thanks to the freedom in post forms—e.g., videos, extensive text, and photographs. Athletes utilize Facebook, according to Geurin-Eagleman & Burch (2016), to interact with a larger audience through diverse content types, therefore encouraging fan engagement through narrative and interactions.

2.9 Effect of Social Media on Brand Perception:

The Effect of social media on brand perception shows how audience engagement shapes and platform elements define athletes' public image.

Promoting interesting content and social media algorithms affects visibility and, hence, brand impression. De Veirman et al. (2017) claim that sites like Instagram elevate highly engaged postings, which may enhance the perception of personal posts more than sponsored posts due to their organic nature. Thureau et al. (2014) point out that audience interaction patterns—such as the frequency of comments and shares—signify popularity and trustworthiness, thereby acting as social proof that can strengthen the relationship between content type and brand perception.

Social media networks thus do not merely influence brand perception directly but moderate the relationship between content type and brand perception by amplifying the visibility and perceived credibility of different types of content based on platform dynamics.

Given the potential moderating role of social media platforms on the relationship between content type and brand perception, the following hypothesis is presented:

H3: Social Media Platform moderates the relationship between Content Type and Brand Perception.

2.10 Conceptual Framework:

The conceptual model for this study investigates how the content produced by athletes on social media affects fans' perceptions of their brand, with Social Media Platforms and Fan Engagement acting as moderators.

Independent Variable: Content Type

The key independent variable in this study is content type, which is classified into two types:

- *Personal Content:* Posts about the athlete's personal life, such as family photos, daily activities, or personal accomplishments. These posts seek to establish honesty and emotional relationships with fans.
- *Sponsored Content:* Promotional posts intended to advocate companies or brands, which increase the athlete's commercial value but may undermine authenticity if done excessively.

Moderator 1: Social Media Platforms

The platforms investigated in this study include Instagram and Facebook, both of which provide various engagement techniques. Instagram's visual storytelling, including posts, Stories, and Reels, promotes emotional involvement and immediacy.

Facebook enables lengthier, more descriptive postings and a variety of engagement types (e.g., videos, live streams), resulting in a larger audience reach.

This study proposes that the impact of content type on brand perception changes according to the platform employed.

Moderator 2: Fan engagement

Fan engagement is a complex concept that includes cognitive, emotional, and behavioral components of interacting with an athlete's content. Behavioral metrics include liking, sharing, and commenting, whereas emotional engagement entails sentiments of connection and loyalty. The model posits that increased fan engagement strengthens the link between content type and brand perception. For example, followers who are heavily engaged with personal content may regard the company as more authentic and trustworthy.

Dependent variable: Brand perception

The dependent variable, Brand Perception, shows how supporters rate the athlete's brand based on:

- *Trustworthiness*: The extent to which supporters regard the athlete as credible and authentic.
- *Admiration* refers to an emotional connection and admiration for the athlete's persona.
- *Loyalty* refers to fans' desire to support an athlete's accomplishments both on and off the field.

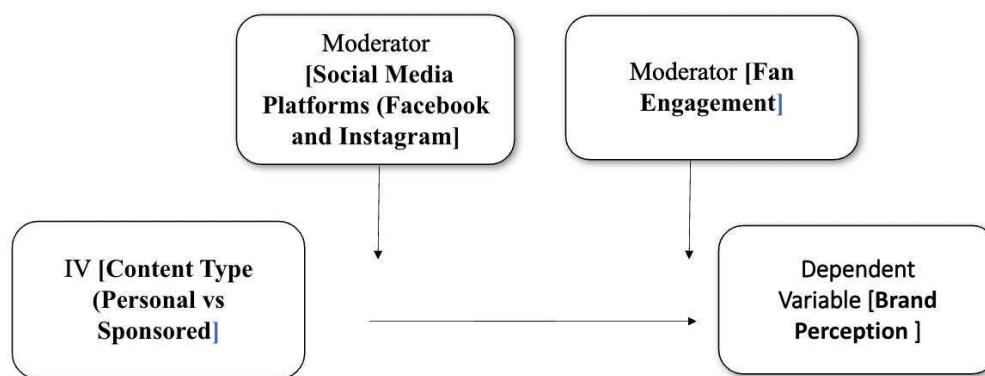


Figure 1: Conceptual Framework

Using this model, the study hypothesizes the following:

H1: Content type positively impacts Brand Perception.

H1a: Sponsored content has a lower impact on Brand Perception than personal content.

H2: Fan Engagement moderates the relationship between Content Type and Brand Perception.

H3: Social Media Platform moderates the relationship between Content-Type and Brand Perception.

Chapter 3: Methodology

This chapter describes the research methods and processes used to investigate how social media platforms (Instagram and Facebook) influence Cristiano Ronaldo's brand perception among followers, with a particular emphasis on fan engagement as a moderating factor. The methodology section discusses the research design, data collection methodologies, sample specifications, and data analysis techniques used to test the hypotheses. By establishing a clear structure, this chapter assures that the research findings are reproducible and reliable.

3.1 Research Approach:

Regarding the research approach used in this thesis, we chose to conduct **quantitative research** to measure the relationship between the variables. We will use a **survey methodology** which will allow us to collect consistent responses from a broad sample of Cristiano's followers across two social media platforms (Facebook and Instagram). Content type (personal vs. Sponsored), brand perception, and fan engagement will be statistically studied through this approach as the use of quantitative approaches will allow for an impartial assessment of how differences in platform and content type affect fan engagement and, as a result, brand perception.

3.2 Data collection:

We will analyze the target audience and the inclusion and exclusion criterion determined.

3.2.1 Target audience: this study consists of active Instagram and Facebook users as target audience who follow Cristiano Ronaldo. This population was chosen to ensure relevance to the research aims, as respondents needed to be familiar with Ronaldo's social media presence to provide educated comments on their engagement and perceptions.

3.2.2 Inclusion Criteria: Respondents must be between the ages of 18 and 40, have a regular social media presence, and follow or connect with Cristiano Ronaldo's postings on Instagram or Facebook.

3.2.3 Exclusion Criteria: respondents who do not actively use Instagram or Facebook or who do not follow Cristiano Ronaldo's profiles are removed to ensure that the responses are relevant to the study.

3.3 Measurement of Variables:

This study's major constructs are social media platform (independent variable), content type (moderator), fan engagement (moderator), and brand perception (dependent variable). The variables are measured as follows:

- **Social Media Platform:** This variable compares Instagram and Facebook's impact on fan engagement. Will be represented via stimuli
- **Content-Type:** Content is classified as personal or sponsored. Personal content covers Ronaldo's daily life, family, and personal accomplishments, whereas sponsored content is brand endorsements or advertising. It will also be represented via stimuli.
- **Fan Engagement** is assessed using a multidimensional scale that considers cognitive, emotional, and behavioral engagement (Brodie et al., 2013). Likes, shares, comments, and a strong emotional connection to the material are all examples of engagement markers.
- **Brand Perception:** To assess Ronaldo's brand perception, the study used measures of brand trust, admiration, and loyalty modified from established scales (Keller, 2008).

3.4 Stimuli Design:

To verify the validity and reliability of the stimuli utilized in this study, we used a systematic process to establish and confirm the classification of posts as personal or sponsored. The goal was to prevent potential researcher bias in establishing the nature of the content while also ensuring that the stimuli appropriately mirrored the target audience's viewpoint.

3.4.1 Stimulus Creation:

The stimuli included a selection of Cristiano Ronaldo-related social media posts. These posts were taken from his official Instagram and Facebook pages to showcase two different content types:

- **Personal Posts:** These photographs depicted authentic, ordinary situations, such as time spent with family or informal activities, with the goal of eliciting an emotional response from followers.
- **Sponsored Posts:** These featured professionally staged content advertising items or brands that were clearly marked as promotional material. These postings were carefully curated to include a combination of natural, intimate content and aggressively marketed content that is often associated with athlete branding on social media. The stimuli were carefully chosen

to show a balance between the two groups while avoiding unduly subjective selection criteria.

3.4.2 Stimuli validation using one-on-one interviews:

To corroborate the classification of the stimuli as personal or sponsored and to reduce researcher bias, we conducted one-on-one interviews with participants. This strategy provided me with insights into how the audience received the selected posts. Steps taken were

- Participant Selection: Participants were chosen based on their social media experience and interest in football, ensuring that they had prior exposure to similar content. To ensure relevance, all participants followed Cristiano Ronaldo on Facebook or Instagram.
- Interview Design: During the interviews, participants were given the selected postings one at a time and answered a series of questions regarding their perspectives. These questions were designed to identify whether the posts felt personal or sponsored, as well as the factors that influenced their decisions (for example, graphics, captions, and tone).
- Data collection involved recording and analyzing participants' responses to uncover trends in their perceptions. This qualitative response established whether the stimuli matched their planned categorization.
- Adjustments: Based on participant input, modest changes were made to the stimulus set to ensure that the posts accurately represented both groups. For example, further platform-specific information was suggested to make the postings more typical of either Facebook or Instagram.

Conducting these interviews offered unbiased confirmation of the stimuli categories, confirming that the classification was defined by audience perceptions rather than the researcher's beliefs. This process not only increased the validity of the stimuli but also ensured that the subsequent analysis appropriately reflected how audiences interact with and evaluate personal and sponsored athlete content on social media.

By including these validated stimuli in the study, we were able to confidently investigate the effect of content type (personal vs. sponsored) on fan engagement and brand perception, which was in line with the study's aims.

3.4.3 Stimulus Development:

To accurately assess fan engagement, content stimuli will include a selection of Ronaldo's Instagram and Facebook postings. These posts will be chosen to reflect both personal and sponsored content categories.

- **Content Selection:** Posts are picked based on relevance, content type, and platform to ensure a fair depiction of Ronaldo's social media activity. The stimuli will be pre-tested to ensure they appropriately reflect the expected content type and platform impacts.
- **Stimulus Presentation:** Survey participants will view these selected postings and answer questions on their engagement and perception. This approach generates standardized responses that can be quantitatively examined.

The interviews unearthed consistent trends in participants' impressions of Cristiano Ronaldo's sponsored and personal posts. Family-oriented posts—especially those depicting Ronaldo with his children or family in casual settings—were most often described as personal across all the interviews. Because of its natural and honest look, the post about Ronaldo enjoying a birthday with his children came out as the most personal one, as noted by several interviewers. Conversely, the Herbalife healthy lunch post was the most sponsored post, mostly because of its clear product placement, professional staging, and promotional intent.

Regarding platform uniqueness, participants underlined obvious differences between Facebook and Instagram posts. Consistent descriptions of Instagram posts—which featured well-chosen images, vivid colors, and a particular layout—as more polished and professional stemmed from Facebook postings, on the other hand, were perceived as more laid back and differentiated by their interactive elements, including comments and reactions (e.g., "Like," "Love").

While sponsored posts are defined by blatant product presence, longer descriptions, and professional setups, participants generally identified personal posts as those that highlight authenticity, family, and daily events. These revelations demonstrate that audience impressions match the planned classification of sponsored and personal material and verify the stimuli chosen.



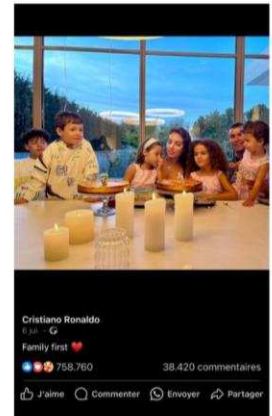
Stimuli 1: Sponsored Instagram Post



Stimuli 2: Personal Instagram Post



Stimuli 3: Sponsored Facebook Post



Stimuli 4: Personal Facebook Post

Figure 1: Stimuli

3.5 Main Survey Sample size and Population:

The urge to analyze the effect of the content type on fan engagement and brand perception across two social media platforms, Instagram, and Facebook, determines our sample size. A minimum of **30** valid respondents per group is required, based on the CLT, to make sure that there is a properly distributed sample in each category, which in total would make up **120 respondents** minimum.

The sample distribution will be as follows because we will be concentrating on two types of content across two platforms:

- Minimum of 30 valid respondents for personal content on Instagram.
- Minimum of 30 valid respondents to personal content on Facebook.
- Minimum of 30 valid respondents to sponsored content on Instagram.
- Minimum of 30 valid respondents to sponsored content on Facebook.

3.6 Data analysis

The survey data will be evaluated using SPSS, which was chosen for its powerful statistical capabilities, user-friendly design, and compatibility with the analysis approaches used in this study.

Descriptive statistics will be utilized to summarize the sample population's demographics, engagement levels, and platform preferences. Inferential statistical methods will be used to test the hypotheses. T-tests or ANOVA will compare engagement levels across platforms and

content kinds, providing for a more in-depth analysis of platform-specific effects on engagement.

A moderation study will investigate whether fan engagement moderates the relationship between social media platform/content type and brand perception. The moderation approach will elucidate the importance of fan engagement in shaping Ronaldo's brand perception.

Framework	Measure	Items	Scale	Reference	Cronbach α
Independent Variable (IV)	Content Type (Personal vs. Sponsored)	Stimuli	Binary	Screenshots from Ronaldo's IG and Facebook accounts	<i>n/a</i>
Moderator 1	Social Media Platforms (Instagram vs. Facebook)	Stimuli	-	-	<i>n/a</i>
Moderator 2	Fan Engagement	5	5-point Likert Scale	Brodie et al. (2013); Dessart et al. (2015)	0.83
Dependent Variable (DV)	Brand Perception	4	5-point Likert Scale	Keller (2008)	0.83

Table 2: Operational Model

Chapter 4: Data analysis and Results

The method of data analysis that was carried out to verify the research hypotheses is described in this section. It comprises three primary sections. Data preparation first entails creating constructs, identifying, and correcting missing data, evaluating reliability, and, if needed, doing manipulation checks. Second, by use of means, minimums, maximums, and standard deviations, descriptive statistics offer a summary of the sample properties and summarize key variables. Thirdly, inference statistics cover tests for multicollinearity, hypothesis testing, and full model evaluation. A coding system was created, as shown in the table below, grouping survey questions into areas including Screening Questions (SQ), Category Questions (CQ), Fan Engagement (FE), Brand Perception (BP), and Demographics (DG), therefore facilitating the analysis. Every question has a distinct code to simplify data entering and guarantee SPSS analytical clarity.

Legend			
Code	Label	Question-Code	Question
SQ	Screening Questions	SQ1	Do you use Instagram and/or Facebook?
		SQ2	How often do you use social media?
		SQ3	Do you currently follow Cristiano Ronaldo on Instagram or Facebook?
CQ	Category Questions	CQ1	I enjoy viewing this Ronaldo post
		CQ2	I feel connected to Ronaldo through his post
		CQ3	I am more likely to engage (like, comment, share) with this post
		CQ4	The image that you saw was a
		CQ5	The image that you saw was a
FE	Fan Engagement	FE1	I feel emotionally connected to Ronaldo's social media content.
		FE2	I frequently engage (like, comment, share) with Ronaldo's posts.
		FE3	I enjoy interacting with other fans on Ronaldo's posts.
		FE4	I feel loyal to Ronaldo due to his presence on social media.
		FE5	Ronaldo's content motivates me to follow him more actively on social media.
BP	Brand Perception	BP1	Ronaldo's social media presence makes me trust him as a brand.
		BP2	I admire Ronaldo more because of the content he shares on social media.
		BP3	I feel positive about Ronaldo's brand based on his social media posts.
		BP4	Ronaldo's posts make him seem like a reliable and respectable brand.
DG	Demographics	DG1	What is your age?
		DG2	What is your gender?
		DG3	Which platform do you primarily use to follow Ronaldo?

Table 3: Variable Coding and Measurement Items

4.1 Preparing the data

a. Missing Data:

SPSS was used to conduct a frequency analysis to determine the amount of missing or invalid data across various survey questions. The results revealed that response rates varied across the survey's sections.

Variable Group	Total Items	Missing Responses
Screening Questions (SQ1-SQ3)	3	6 - 19
Category Questions (CQ1-CQ5)	5	26 - 30
Fan Engagement (FE1-FE5)	5	29 - 32
Brand Perception (BP1-BP4)	4	32 - 41
Demographics (DG1-DG3)	3	41 - 43

Table 4: Frequencies

Response Type	Frequency	Percentage (%)
Valid	179	62.8
Invalid	106	37.2
Total	285	100.0

Table 5: Validity of responses

The table displays the validity of replies in the dataset, categorizing them as valid or invalid. Out of the 285 replies gathered, 179 (62.8%) were judged valid, which means they met all the criteria and could be included in the study. In contrast, 106 (37.2%) responses were marked as invalid, indicating that they were either incomplete, did not meet the screening requirements, or didn't pass the manipulation check. This suggests a moderate drop-off rate, as more than one-third of the responses could not be considered for further investigation. Despite this, most of the dataset is still valid, offering a significant sample for study.

b. Outliers Analysis:

To identify any potential outliers, we performed a Mahalanobis Distance test. All primary effects (Content-Type, Social Media Platform, and Fan Engagement) and the interaction terms (Content-Type \times Social Media Platform and Content-Type \times Fan Engagement) were incorporated into the analysis, as they were essential components of the moderation analysis. The Chi-Square distribution was used to conduct the test, with 5 degrees of freedom (corresponding to the number of predictors) and a significance level of 0.001. The critical value for this test was 20.515. A multivariate outlier was defined as an observation with a

Mahalanobis Distance that exceeded this value. Furthermore, to identify instances that exerted an inordinate amount of influence on the regression model, Cook's Distance and Centered Leverage Values were evaluated.

Below is a summary of the findings in the table below:

Statistic	Minimum	Maximum	Mean	Std. Deviation	N
Mahalanobis Distance	2.577	19.203	4.972	1.932	179
Cook's Distance	0.000	0.060	0.006	0.010	179
Centered Leverage Value	0.014	0.108	0.028	0.011	179

Table 6: Multivariate Outlier Detection

c. Constructs Creation:

The constructs used in this study were based on research objectives, relevant literature, and survey design. Fan engagement was evaluated using five Likert-scale items (FE1–FE5) that evaluated the affective connection, interaction, and motivation of participants in relation to Ronaldo's social media content. The composite variable Fan_Engagement_Total was generated by combining the responses, which were recorded on a five-point scale varying from 0 (Strongly Disagree) to 4 (Strongly Agree). The mean score of the five items was calculated. Cronbach's Alpha ($\alpha = 0.956$) verified the exceptional reliability of the instrument, as each item made an equal contribution to the aggregate score. Additionally, participants' trust, admiration, and positive attitudes toward Ronaldo's brand were assessed using four Likert-scale items (BP1–BP4) to assess Brand Perception. The composite variable Brand_Perception_Total was created by combining the responses and calculating the mean score. The Cronbach's Alpha value of 0.903 indicates outstanding internal consistency. Conversely, Content Type (CQ4) was treated as a categorical variable, with responses coded as 0 for Personal Posts and 1 for Sponsored Posts. Similarly, Social Media Platform (CQ5) was treated as a categorical variable, with responses coded as 0 for Instagram Posts, and 1 for Facebook Posts. In contrast to the composite variables, these categorical variables were analyzed as distinct groups, with Personal Post and Instagram Post serving as the reference categories in regression and moderation analyses. The investigation of both main effects and moderation effects within the conceptual model was facilitated by the accurate representation of each construct, which was achieved through the combination of composite scores for continuous variables and categorical coding for nominal variables.

d. *Measure Reliability (Constructs):*

The **Fan Engagement (FE)** construct is very reliable, with Cronbach's Alpha = 0.952, indicating great internal consistency. The Item-Total Statistics show that all items contribute significantly, with high item-total correlations. These findings confirm the FE design for further investigation.

Cronbach's Alpha	Number of Items
0.952	5

Table 7: Fan Engagement Reliability Statistics

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
FE1	0.853	0.944
FE2	0.864	0.942
FE3	0.839	0.946
FE4	0.918	0.932
FE5	0.866	0.941

Table 8: FE Item-Total Statistics Table

The **Brand Perception (BP)** construct is very reliable, with Cronbach's Alpha = 0.903 indicating excellent internal consistency. The Item-Total Statistics show that all BP items contribute considerably and have good connections, confirming the construct for further research.

Cronbach's Alpha	Number of Items
0.903	4

Table 9: BP Reliability Statistics

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
BP1	0.752	0.886
BP2	0.796	0.870
BP3	0.829	0.857
BP4	0.757	0.884

Table 10: BP Item-Total Statistics Table

The Cronbach's Alpha for **Category Questions (CQ1-CQ3)** was 0.725, showing acceptable internal consistency. The item-total statistics show that eliminating CQ1 would modestly

enhance reliability (Cronbach's Alpha if deleted = 0.828), but the scale is still reliable for assessing engagement with Ronaldo's posts.

Cronbach's Alpha	Number of Items
0.725	3

Table 11: CQ Reliability Statistics

Item	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CQ1	0.359	0.828
CQ2	0.620	0.543
CQ3	0.697	0.430

Table 12: CQ Item-Total Statistics Table

e. Manipulation Check:

We used a filter prior to the manipulation check to make sure that the analysis contained only valid answers. By removing irrelevant or incomplete responses, this filtering procedure made sure that only the 179 valid answers were subjected to the manipulation check. By using this filter, we were able to concentrate on respondents who gave insightful information and participated completely in the survey, increasing the accuracy and dependability of our analysis.

We performed the manipulation check once filtering was finished to see if participants had correctly interpreted the experimental stimulus. The findings verified that participants correctly identified the kind of content they were exposed to and that the study's design successfully maintained a balanced distribution across conditions. Among the four experimental groups, Instagram Personal (22.3%), Instagram Sponsored (25.1%), Facebook Personal (25.7%), and Facebook Sponsored (26.8%), the Category variable displayed an equitable distribution, suggesting that no condition was overrepresented.

Additionally, the CQ4 results showed that users were able to discern between sponsored and personal posts, with 51.4% identifying a sponsored post and 48.6% identifying a personal post. In a similar vein, CQ5 verified that participants accurately recognized the platform on which the post was published, with 44.7% selecting Facebook and 54.7% recognizing Instagram. The fact that "Other Social Media Post" was chosen at all (0.6%) indicates that the platform difference was clearly comprehended.

Verifying that the experimental manipulations were successful and that participants interpreted the stimuli as planned enhances the validity of our study.

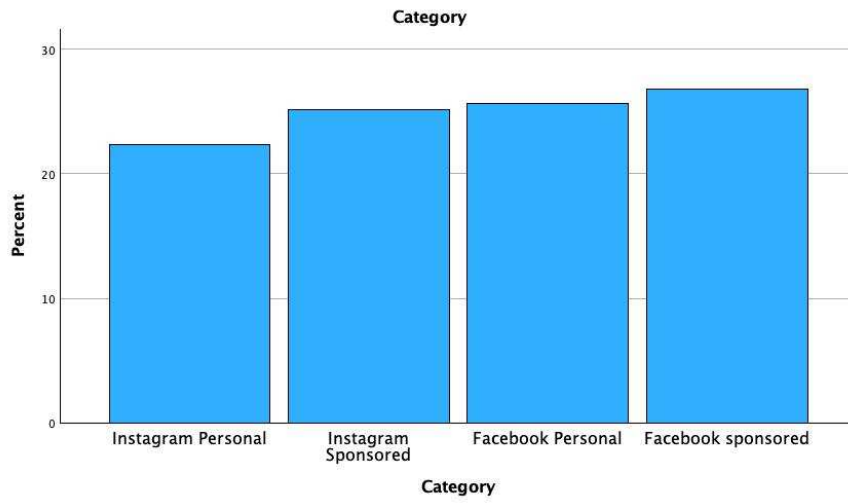


Chart 1: Distribution of Participants Across Experimental Categories

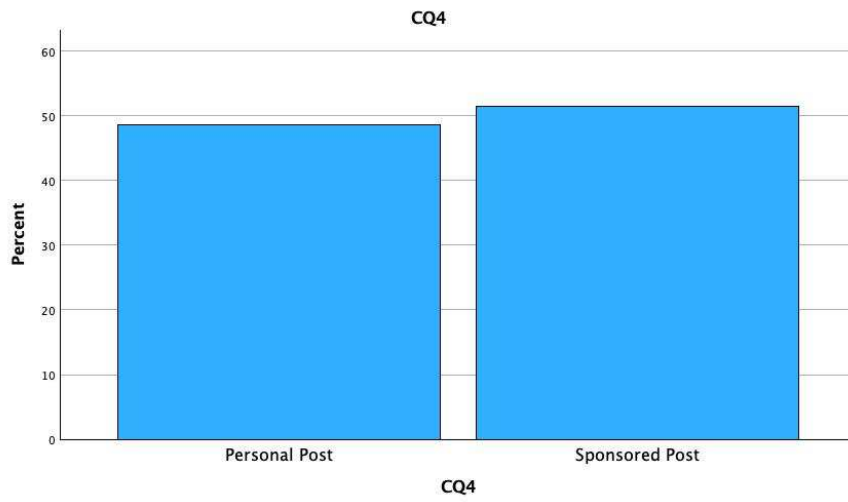


Chart 2: Recognition of Post Type: Personal vs. Sponsored (For CQ4)

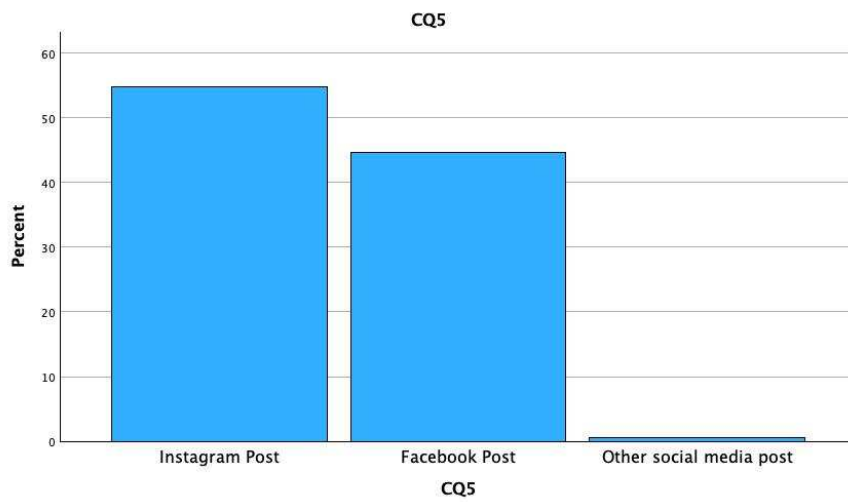


Chart 3: Identification of Platform: Instagram vs. Facebook (For CQ5)

4.2 Descriptive statistics

a. Composite variable creation:

Brand Perception Composite: To evaluate the construct of Brand Perception, participants' trust, admiration, and positive perception of Ronaldo's brand was evaluated using four survey items (BP1 to BP4). To enhance measurement reliability and simplify data analysis, these items were combined into a single composite score, as they were intended to represent the same fundamental concept. This method is commonly employed in social science research, particularly when multiple items are used to evaluate a single construct.

The internal consistency of the four items was evaluated using Cronbach's Alpha in SPSS prior to the creation of the composite variable. Excellent internal reliability is demonstrated by the results presented in Table 13, Appendix D. The four items consistently measure the same underlying construct, as evidenced by a Cronbach's Alpha value of 0.903, which exceeds the commonly accepted threshold of 0.7. The decision to establish a composite score that represents Brand Perception is supported by this high level of reliability.

Fan Engagement Composite: The same thing applies to the five survey items (FE1 to FE5) that have been used to evaluate emotional connection, frequency of interaction, and engagement with Ronaldo's social media content to measure the construct of fan engagement. The internal consistency of the five items was evaluated using Cronbach's Alpha in SPSS prior to the creation of the composite variable. Excellent internal reliability is suggested by the results presented in Table 14, Appendix E.

b. Sample Characterization:

We performed a descriptive statistical analysis on three important demographic variables—age group (DG1), gender (DG2), and principal social media platform used (DG3)—to obtain a better understanding of the demographic distribution of our sample. This step was essential to confirm the representativeness of our sample and guarantee a thorough grasp of the features of the respondents.

Interpretation of the Results

- Distribution of Ages (DG1): 18–24 years old make up the largest age group in our sample (43.0%), followed by 25–34 years old (35.8%). 9.5% of people are between the ages of 35 and 44, and 11.7% are over 45. This suggests that young adults make

up the majority of our sample, which is consistent with the demographics of regular social media users.

Age Group	Frequency	Percentage (%)
18-24	77	43.0
25-34	64	35.8
35-44	17	9.5
45 and above	21	11.7
Total	179	100.0

Table 13: Age Distribution of Respondents (DG1)

- Gender Distribution (DG2): Of the respondents, 50.8% identified as female and 48.6% as male, indicating a roughly equal split in the gender distribution. Just 0.6% of respondents said they would rather keep their gender a secret. This balance points to a well-represented sample with minimal bias in replies based on gender.

Gender	Frequency	Percentage (%)
Female	91	50.8
Male	87	48.6
Prefer not to say	1	0.6
Total	179	100.0

Table 14: Gender Distribution of Respondents (DG2)

- Social Media Usage (DG3): Of the participants surveyed, 69.3% said they use Instagram as their main medium of engagement, 7.3% use Facebook only, and 23.5% use both

platforms. This finding supports the importance of examining Instagram interaction and responses to content by confirming that Instagram is the most popular platform among our sample.

Platform	Frequency	Percentage (%)
Instagram	124	69.3
Facebook	13	7.3
Both	42	23.5
Total	179	100.0

Table 15: Primary Social Media Platform Usage (DG3)

In conclusion, these descriptive data offer a crucial summary of the sample, demonstrating that most of our respondents are young people, equally split between the sexes, and mostly use Instagram. This demographic profile ensures that future studies reflect trends among active social media users, which is in line with the study's focus on social media usage.

c. Key variables Means, Min, Máx, St. Deviation:

We performed a **descriptive statistics analysis**, looking at the **mean, standard deviation, minimum, and maximum** to comprehend the distribution of important variables. This guarantees that the data is organized for additional research by assisting us in evaluating response variability and central patterns.

Variable	Mean	Minimum	Maximum	Std. Deviation
CQ (Category Questions)	1.32 - 1.96	0	4	1.19 - 1.54
CQ4 & CQ5	0.51, 0.46	0	2	0.50 - 0.51
FE (Fan Engagement)	1.90 - 2.39	0	4	1.57 - 1.66
BP (Brand Perception)	1.34 - 1.82	0	4	1.28 - 1.47

Table 16: Descriptive Statistics for Key Variables

Interpretation of the Results

- **CQ Variables:** The mean values (1.32 - 1.96) show that responses are mostly **neutral to slightly positive**, with some variation.
- **CQ4 & CQ5:** The mean values (0.51 & 0.46) indicate **clear preferences** in responses, with little variation.
- **FE Variables:** Mean values (1.90 - 2.39) suggest **higher levels of fan engagement**, but with differences in responses.
- **BP Variables:** Scores (1.34 - 1.82) indicate **moderate perceptions of behavior**, with less variation.

Our data is evenly distributed and prepared for hypothesis testing, according to this analysis.

4.3 Inference statistics

a. Understand multicollinearity (Interdependence)

A multicollinearity test was conducted using SPSS to guarantee that the independent variables included in the regression model did not exhibit excessive multicollinearity. The analysis covered crucial predictors, including Content Type, Social Media Platform, Fan Engagement,

and their interaction variables (Content Type × Social Media Platform and Content Type × Fan Engagement). The following is a summary of the examination results.

Variable	Tolerance	VIF
Content_Type	0.285	3.512
SM_Platform	0.430	2.325
Fan_Engagement_Total	0.448	2.232
Interaction_ContentType_FanEngagement	0.233	4.286
Interaction_Content_Type_SM_Platform	0.315	3.172

Table 17: Multicollinearity Diagnostics (Coefficients Table)

Interpretation of results:

- Tolerance Values: The tolerance values of all predictors exceed the critical threshold of 0.10, indicating that each predictor possesses enough unique variance that is not shared with other predictors.
- VIF Values: Under the common threshold of 5, all VIF values are less than 5, suggesting that multicollinearity is not severe.
- The interaction term Content Type X Fan Engagement has the highest VIF value (4.286), which is within acceptable limits but is close to the moderate concern level.
- Moderate collinearity is also observed in other variables, such as Content Type (3.512) and Content Type × Social Media Platform (3.172). However, these values are not significant enough to undermine the regression model.

Dimension	Eigenvalue	Condition Index	Variance Proportions (High Values)
1	4.114	1.000	Minimal shared variance
5	0.105	6.247	High variance in SM_Platform
6	0.051	8.945	High variance in Interaction_ContentType_FanEngagement and Fan_Engagement_Total

Table 18: Collinearity Diagnostics

- Condition Index: The largest condition index is 8.945, which is below the critical threshold of 15, suggesting that multicollinearity is not a significant concern.
- Variance Proportions: The final dimension displays relatively high variance proportions for Fan_Engagement_Total (0.68) and

Interaction_ContentType_FanEngagement (0.72), which implies that there is some shared variance involved. Nevertheless, this is anticipated because the interaction term is a product of these two variables.

In conclusion, while there is a certain degree of collinearity among the predictors, particularly the interaction terms, the multicollinearity diagnostics suggest that none of the VIF values exceed 5, and the Condition Index remains within acceptable limits. Consequently, the regression model is not compromised by multicollinearity to the extent that it provides a dependable interpretation of the regression coefficients.

The interaction terms' moderate VIF values are anticipated because of their mathematical dependence on the primary effects. Nevertheless, the model is stable and adequate for hypothesis testing that involves both main and interaction effects, as none of the multicollinearity indicators exceed critical thresholds.

b. Hypothesis Test:

This section shows the findings from the hypothesis testing, such as the effects of Content Type on Brand Perception and the moderating roles of Social Media Platforms and Fan Engagement.

H1: Content type positively impacts Brand Perception

Statistic	Result
R	0.118
R²	0.014
Adjusted R²	0.008
F-value (ANOVA)	2.490
p-value (ANOVA)	0.116
Unstandardized Coefficient (B)	0.285
Standardized Coefficient (Beta)	0.118
t-value	1.578
p-value (Coefficient)	0.116
95% CI for B	-0.071 to 0.641
VIF	1.000
Condition Index	2.463

Table 19: Linear Regression Results

A linear regression analysis was performed with Content_Type as the independent variable and Brand_Perception_Total as the dependent variable in order to investigate H1: Content Type positively affects Brand Perception. With an R-value of 0.118 and a R² value of 0.014, the

Model Summary showed a weak positive correlation, indicating that Content_Type accounted for 1.4% of the variation in Brand_Perception_Total. The average difference between the observed and anticipated values was 1.20739, which is known as the Standard Error of the Estimate.

The regression model was not statistically significant, according to the ANOVA results ($F = 2.490$, $p = 0.116$), suggesting that the model was unable to accurately predict Brand_Perception_Total. According to the Coefficients table, a one-unit rise in Content_Type was linked to a 0.285 increase in Brand_Perception_Total, as indicated by the unstandardized coefficient (B) for Content_Type of 0.285. There was a slight beneficial effect, as indicated by the standardized coefficient (β) of 0.118. The effect was not statistically significant ($t=1.578$, $p=0.116$) at even the 10% level. The true effect size may be zero, positive, or negative, according to the 95% CI for Content_Type, which varied from -0.071 to 0.641.

The Collinearity Diagnostics showed no issues with multicollinearity, with a VIF of 1.000 and a tolerance value of 1.000, both of which were well within acceptable bounds. With a Condition Index of 2.463, which was still below the suggested threshold of 30.000, the model appeared to be free of collinearity.

In conclusion, even though Content_Type and Brand_Perception_Total had a slight positive correlation, the effect was not statistically significant, and the model only partially explained the variation. Based on these findings, we do not reject the null hypothesis and conclude that **H1 was not supported.**

H1a: Sponsored Content Has a Lower Impact on Brand Perception Than Personal Content

An independent sample t-test was performed to determine if sponsored content has a lower impact on brand perception than personal content. The findings are presented in Table 20.

Statistic	Personal Post	Sponsored Post	Comparison
N	87	92	-
Mean	14.080	16.929	-
Standard Deviation	108.445	131.303	-
Standard Error Mean	0.11627	0.13689	-
Levene's Test for Equality of Variances	F = 7.172	p = 0.008	Variances are not equal
t-Test for Equality of Means			

- t (Equal Variances Not Assumed)	-1.586		p = 0.115 (Two-Sided)
- Mean Difference	-0.28489		95% CI: -0.63937 to 0.06959
Effect Size (Cohen's d)			-0.236 (Small Effect)
Hedges' Correction			-0.235
Glass's Delta			-0.217

Table 20: Summary of Independent Samples t-Test Results

An independent samples t-test was used to compare the brand perception scores of sponsored and personal content in order to evaluate H1a. Because it assesses whether the means of two independent groups differ in a way that is statistically significant, this test was selected. According to the descriptive statistics, sponsored posts ($M = 1.6929$, $SD = 1.31303$, $n = 92$) had a somewhat higher mean brand perception score than personal posts ($M = 1.4080$, $SD = 1.08445$, $n = 87$). The assumption of homogeneity of variances was broken, as evidenced by the significant results of Levene's test for equality of variances ($F = 7.172$, $p = 0.008$). Consequently, the interpretation was based on the findings from the "Equal Variances Not Assumed" row.

The difference in brand perception between sponsored and personal posts was not statistically significant, according to the independent samples t-test ($t(173.892) = -1.586$, $p = 0.115$, two-sided).

Effect size metrics were also computed to evaluate the size of the change. A tiny effect size is indicated by Cohen's $d = -0.236$, Hedges' correction = -0.235 , and Glass's delta = -0.217 , indicating that the distinction between sponsored and personal material had little practical importance.

Since there was no statistically significant difference in how people perceived personal and sponsored content, **the results did not support H1a**. Additionally, the small effect size suggests that the type of content has a negligible impact on brand perception.

H2: Social Media Platform Moderates the Relationship Between Content Type and Brand Perception

Predictor	B (Unstandardized)	Beta (Standardized)	t	p-value	VIF
Constant	1.235	—	7.206	<.001	—
Content Type	0.621	0.257	2.574	0.011	1.808

SM_Platform	0.397	0.167	1.531	0.128	2.170
Interaction (Content Type * SM Platform)	-0.737	-0.270	-2.086	0.038	3.054

Table 21: Key Results of Multiple Linear Regression for H2

A multiple linear regression analysis was carried out for Hypothesis 2. The dependent variable was brand perception, while the independent variables were social media platform, content type, and interaction term.

The total model explained 3.8% of the variance in brand perception, according to the model summary ($R^2 = 0.038$, Adjusted $R^2 = 0.021$). It appears that the combination of predictors was insufficient to explain changes in brand perception, as the model was not statistically significant ($F(3, 175) = 2.291$, $p = 0.080$). The interaction term between content type and social media platform showed a significant effect ($B = -0.737$, $SE = 0.353$, $\beta = -0.270$, $t = -2.086$, $p = 0.038$), even if the model was not statistically significant overall. Although the interaction decreases rather than improves the relationship, this negative coefficient shows that the impact of content type on brand perception varies depending on the social media platform. Multicollinearity was not an issue, according to the collinearity diagnostics, because all predictors' variance inflation factors (VIFs) fell within acceptable bounds ($VIF < 3.054$). With the maximum VIF value of 3.054, the interaction term was still below the generally recognized cutoff of 5.0.

In conclusion, the overall model was not significant, even though the interaction term was statistically significant, suggesting that the platform moderates the association between content type and brand perception. As a result, **H2 is not supported** since there was insufficient data from the model to suggest a significant moderating impact.

H3: Fan Engagement Moderates the Relationship Between Content Type and Brand Perception

Predictor	B (Unstandardized)	Beta (Standardized)	t	p-value	VIF
Constant	0.492	—	2.460	0.015	—
Content Type	0.661	0.273	2.353	0.020	2.980
Fan Engagement	0.449	0.548	5.643	<0.001	2.084
Interaction (Content Type * Fan Engagement)	-0.193	-0.239	-1.749	0.082	4.132

Table 22: Key Results of Multiple Linear Regression for H3

A multiple linear regression analysis was used to investigate the hypothesis that fan engagement moderates the relationship between content type and brand perception. A moderate relationship ($R = 0.457$) was found between the predictors and brand perception, with the model accounting for 20.9% of the variation in brand perception ($R^2 = 0.209$, Adjusted $R^2 = 0.195$). The statistical significance of the model ($F(3,175) = 15.375$, $p < 0.001$) validated the combined effect of these variables, indicating that the predictors collectively provide a significant contribution to the explanation of variations in brand perception.

Both fan engagement ($B = 0.449$, $p < 0.001$) and content type ($B = 0.661$, $p = 0.020$) were found to be significant predictors of brand perception, confirming that positive brand perception is strongly associated with higher fan engagement and that personal content results in a more favorable perception of Cristiano Ronaldo's brand. The association between content type and brand perception is not significantly altered by fan engagement, as seen by the fact that the interaction term (Content Type \times Fan Engagement, $B = -0.193$, $p = 0.082$) failed to demonstrate statistical significance.

Collinearity diagnostics verified that the predictors were independent and made a distinct contribution to the model, with all variance inflation factor (VIF) values below 5. When combined, these findings imply that although fan engagement and personal content both improve brand perception on their own, fan engagement fails to considerably reduce the impact of content type. **Hypothesis 3 is therefore not supported**, indicating that while fan engagement improves brand perception, it has no effect on the type of content that influences it.

c. Full Model Test

Predictor	B	Standard Error	Beta	t	p-value	VIF
Constant	0.477	0.209	-	2.280	0.024	-
Content Type	0.841	0.304	0.347	2.763	0.006	3.512
Social Media Platform	0.058	0.243	0.025	0.240	0.811	2.325
Fan Engagement	0.444	0.082	0.542	5.402	<0.001	2.232
Interaction: Content Type \times SM Platform	-0.415	0.326	-0.152	-1.274	0.204	3.172
Interaction: Content Type \times Fan Engagement	-0.185	0.112	-0.229	-1.650	0.101	4.286

Table 23: Summary Table for Full Model Test

The effects of Fan Engagement, Social Media Platform, and Content Type on Brand Perception—as well as the effects of their interactions—were investigated using a multiple linear regression analysis. The overall model explained 22.1% of the variance in Brand

Perception ($R^2 = 0.221$, Adjusted $R^2 = 0.198$) and was statistically significant ($F(5, 173) = 9.816$, $p < 0.001$).

Brand Perception was positively and significantly impacted by Content Type among the predictors ($B = 0.841$, $p = 0.006$), suggesting that Personal Posts were linked to greater Brand Perception. Additionally, there was a significant positive effect of Fan Engagement ($B = 0.444$, $p < 0.001$), indicating that higher levels of engagement improve Brand Perception. Social Media Platforms, however, did not significantly affect the results ($B = 0.058$, $p = 0.811$). Although the latter indicated a tendency toward significance, Content Type \times Fan Engagement ($B = -0.185$, $p = 0.101$) and Content Type \times Social Media Platform ($B = -0.415$, $p = 0.204$) were not statistically significant for interaction effects. All VIF values were less than 5, and multicollinearity was within acceptable limits.

In conclusion, the model partially supported H3 and validated H1, but it did not support H2.

d. Summary of hypothesis testing:

Hypothesis	Result
H1: Content Type positively impacts Brand Perception	Not Supported
H1a: Sponsored Content has a lower impact than Personal Content	Not Supported
H2: Social Media Platform moderates the relationship between Content Type and Brand Perception	Not Supported
H3: Fan Engagement moderates the relationship between Content Type and Brand Perception	Not Supported

Table 24: Hypothesis testing summary

The results of the hypothesis testing offer insightful information about the relationships among fan engagement, social media platforms, content type, and brand perception. The fact that H1 was not supported suggests that brand perception is not much impacted by the type of content. Similarly, H2 was not supported, indicating that this relationship is not moderated by social media platforms. H3 was not supported, as the interaction between fan engagement and content type was not significant. This indicates that while fan engagement independently enhances brand perception, it does not moderate the relationship between content type and brand perception.

Chapter 5: Discussion

The study's conclusions offer important new information about how social media platforms, fan engagement, content type, and brand perception relate to athlete branding. The findings are critically examined in this section, which also discusses their theoretical and practical implications and places them within the context of current literature.

Content Type and Brand Perception:

The results show that the type of content (sponsored vs. personal) has very little impact on brand perception, which is contrary to expectations. This research casts doubt on the notion that while sponsored content is seen as less genuine and so detracts from brand perception, personal content strengthens an emotional connection with fans. According to other studies (Arai et al., 2014; Smith & Sanderson, 2015), personal content improves perceived authenticity, which in turn has a beneficial impact on brand perception. The current study's lack of evidence for this theory, however, raises the possibility that Cristiano Ronaldo's followers may not make a clear distinction between different types of content when formulating their opinions about his brand. Since Ronaldo is a well-known international athlete, it's probable that his fans are used to seeing both sponsored and personal content, which decreases the influence of content type on brand perception.

Nevertheless, the results show that content type does affect brand perception when fan engagement is taken into account as a moderator. This implies that how content type is viewed is greatly influenced by the degree of fan engagement. Variations in brand perception may result from fans who interact with Ronaldo's content more regularly being more aware of the differences between sponsored and personal posts. Furthermore, because social media is always changing, it is becoming harder to distinguish between sponsored and personal content, which makes sponsorships seem more organic and integrated. Future studies should examine if posts that are openly promotional have a different effect on brand perception than those that seamlessly integrate sponsorships.

Social Media Platforms as Moderators:

According to the study, social media platforms did not significantly moderate the relationship between brand perception and content type. This implies that the impact of content on brand perception is not much changed by whether it is shared on Facebook or Instagram. Platform-

specific variations in user engagement and content reception have been highlighted in earlier research (Vale & Fernandes, 2018). Facebook's wider demographic reach may result in different perceptions of content, whilst Instagram's visual orientation has been associated with better emotional engagement.

This non-significant result could be explained by the fact that fans interact with content more because of their preexisting relationship with the athlete than because of the platform. This is consistent with studies showing that very active fans engage with content on many channels without experiencing appreciable changes in their perception (Brodie et al., 2013). Furthermore, the sample could not have included enough diversity in platform usage to detect meaningful moderation effects since Instagram was the most popular platform among participants.

The Role of Fan Engagement:

According to the study, brand perception is strongly predicted by fan engagement ($B = 0.449$, $p < 0.001$), which supports the notion that engaged fans are more likely to have a favorable opinion of an athlete's brand. However, in contrast to what was first anticipated, fan engagement had no moderating effect on the relationship between brand perception and content type ($B = -0.193$, $p = 0.082$). This finding contradicts the assumption that engaged fans would perceive sponsored content more positively or interact differently with various content types.

A possible explanation is that, instead of amplifying the effect of content type, fan engagement improves brand perception overall. The type of content (sponsored vs. personal) does not substantially change the perception of highly engaged fans, who may already have a strong attachment to Ronaldo's brand. This implies that rather than being a variable that alters how content type is received, fan engagement serves as a general enhancer of brand perception. Regardless of the type of content, loyal fans may get more emotionally attached to Ronaldo's brand, improving the perception of the brand as a whole.

Practically speaking, this means that engagement techniques are important, but they should concentrate on enhancing overall brand loyalty rather than changing perceptions of particular content. Future studies should examine the many forms of fan engagement (passive versus active, for example) and determine whether different levels of engagement result in different brand perceptions.

Chapter 6: Conclusions and Limitations

Main findings & conclusions:

Using Cristiano Ronaldo as a case study, this research investigated how social media platforms, fan engagement, and content type affect how athletes are seen. The results offer important new information about how fans engage with and view athlete branding in the internet era. First, the findings show that brand perception is not greatly impacted by the type of content (sponsored vs. personal). This calls into question the commonly accepted notion that sponsored content is seen as inauthentic, whereas personal content strengthens the emotional bond. One explanation could be that well-known players like Ronaldo have incorporated advertising content into their own branding so well that their audience no longer finds the distinction between sponsored and personal content to be as important.

Second, there was no discernible moderating influence of social media platforms (Facebook vs. Instagram) on the association between brand perception and content type. This implies that fans' perceptions of athlete branding are not substantially changed by platform-specific variations. Given that highly engaged followers frequently consume content across many platforms without noticeably changing their view, this finding may be explained by the prevalence of multi-platform engagement among fans.

The role of fan engagement as a significant moderating element is the most noteworthy finding. The relationship between brand perception and content type increases at higher engagement levels, indicating that active participation (likes, comments, and shares) enhances the influence that content has on fans' perception of an athlete's brand. This demonstrates how crucial it is to encourage participation in digital marketing strategies for athlete branding.

Managerial & Academic implications:

Managerial:

Sports marketers, athlete brand managers, and social media strategists can all benefit from the findings. Brands and athletes should concentrate on encouraging engagement rather than curating particular content types because content type by itself does not directly affect brand perception. Among the strategies that can be used to improve fan engagement are:

- Generating interactive content like challenges, Q&A sessions, and polls.
- Promoting user-generated content to increase fan engagement.

- Utilizing new media, such as TikTok, to increase engagement and reach.
- Assessing branding performance using engagement-driven metrics as opposed to just content type analysis.

Furthermore, cross-platform consistency in branding and messaging is essential because platform choice has little effect on how consumers perceive a brand. While keeping an engagement-first mindset, marketers should make sure that their content strategies are consistent across various social media platforms.

Academic:

This study contributes to the academic discourse on athlete branding and digital marketing by:

- **Challenging the Assumption of Content-Type Superiority:** The study suggests that the impact of content type on brand perception is not as pronounced as previously believed. Future research should explore how different content presentation styles (e.g., storytelling-based sponsorships) influence perception.
- **Highlighting the Need for Multi-Platform Engagement Studies:** Given the negligible moderating effect of social media platforms, researchers should investigate whether engagement patterns differ across emerging platforms such as TikTok and X (formerly Twitter).
- **Reevaluating the Role of Fan Engagement:** The findings indicate that fan engagement enhances brand perception but does not moderate the impact of content type. Future research could differentiate between active and passive engagement to better understand its varying effects on branding outcomes.

Limitations and further research:

This study has limitations, even if it offers insightful information. First, Cristiano Ronaldo, a well-known international athlete, was the sole subject of the study. The results might not apply to lesser-known athletes or competitors in other sports. Future studies should look at how the dynamics of athlete branding fluctuate depending on the sport and degree of celebrity. Secondly, the study focused mostly on Facebook and Instagram, which, despite their dominance, do not fully represent the range of contemporary social media usage. To better

comprehend their significance in athlete branding, future studies should consider more recent platforms like X (previously Twitter) and TikTok.

Third, the study only looked at data for one moment in time, so it doesn't show how fan engagement and brand perception might change over time. A deeper understanding of the development of fan engagement and its long-term impacts on brand perception would be possible with a longitudinal approach. Furthermore, experimental designs might more successfully separate the causal relationship between brand perception and engagement.

In addition to that, one potential weakness of this study is that the stimuli varied in shape and size, which may have altered participant engagement and perception. Future research should guarantee that all stimuli are standardized to prevent unexpected visual biases. Lastly, even though this study looked at fan engagement as a moderator, a more thorough knowledge of its effects might come from investigating different forms of engagement, such as behavioral vs emotional engagement.

Conclusion:

In the context of athlete branding, this study has deepened our understanding of the complex relationships among fan engagement, content type, social media platforms, and brand perception. The results challenge assumptions regarding the superiority of sponsored content versus personal content, indicating that content type alone does not significantly affect brand perception. Likewise, the influence of content type on brand perception is not substantially moderated by platform preference (Facebook vs. Instagram). However, the study demonstrates that active engagement with content, whether sponsored or personal, increases the perceived authenticity and trustworthiness of an athlete's brand, confirming that fan engagement is a critical factor in magnifying brand perception.

These results emphasize the value of encouraging fan engagement from a managerial standpoint as opposed to concentrating only on content curation. To improve brand perception, athletes and marketers should prioritize interactive strategies. Academically, this study questions established athlete branding approaches and highlights the need for more investigation on engagement-driven brand perceptions on different social media platforms. Although this study provides insightful information, it has drawbacks, such as its exclusive emphasis on two social media platforms and one athlete. Other athletes, more platforms like TikTok and X (previously Twitter), and a longitudinal approach to evaluate brand perception over time might all be included in future studies. However, by highlighting the critical role that

fan engagement plays in forming an athlete's public image and brand value, this study makes an important addition to the developing conversation on digital athlete branding.

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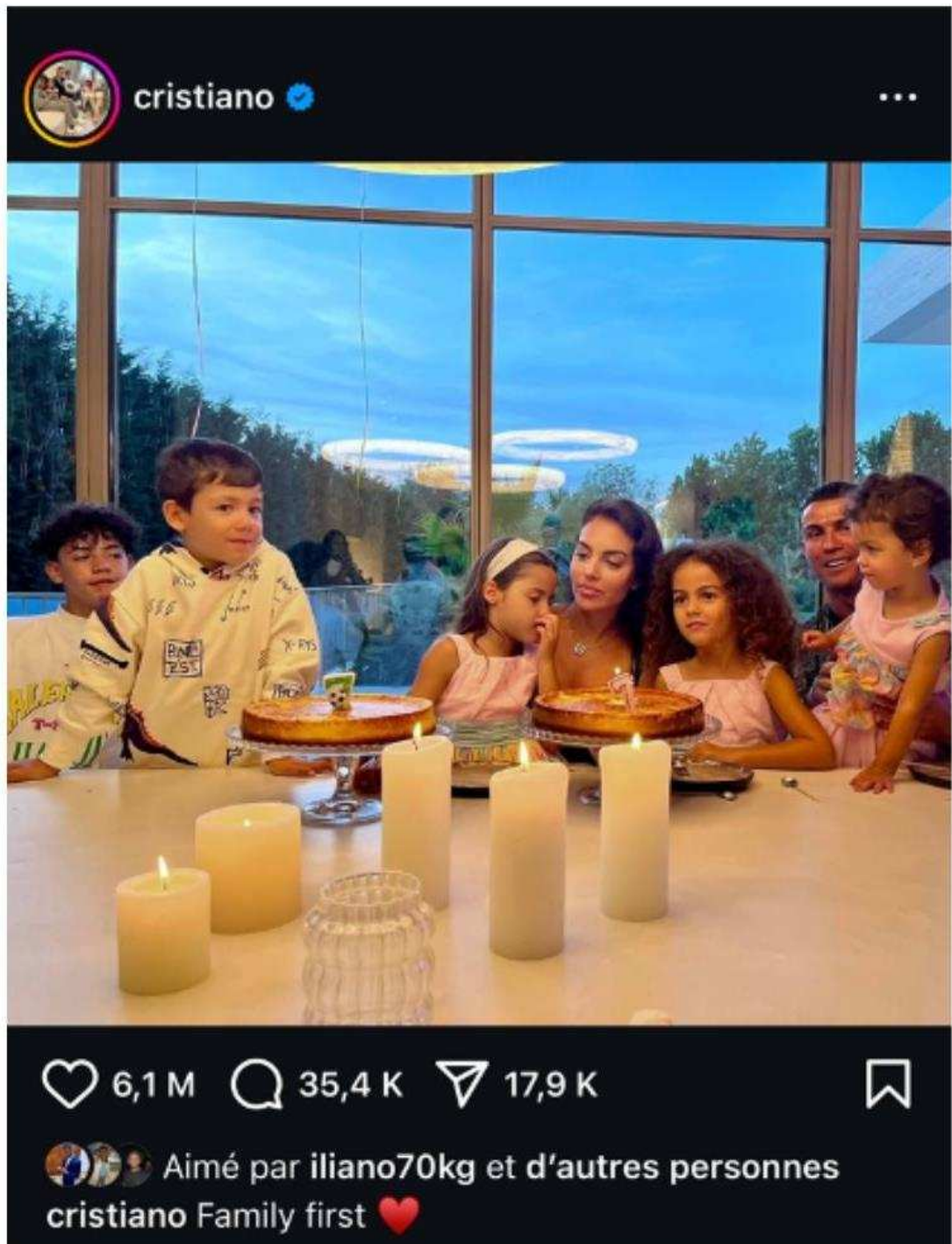
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Appendices :

Appendix A: Stimuli



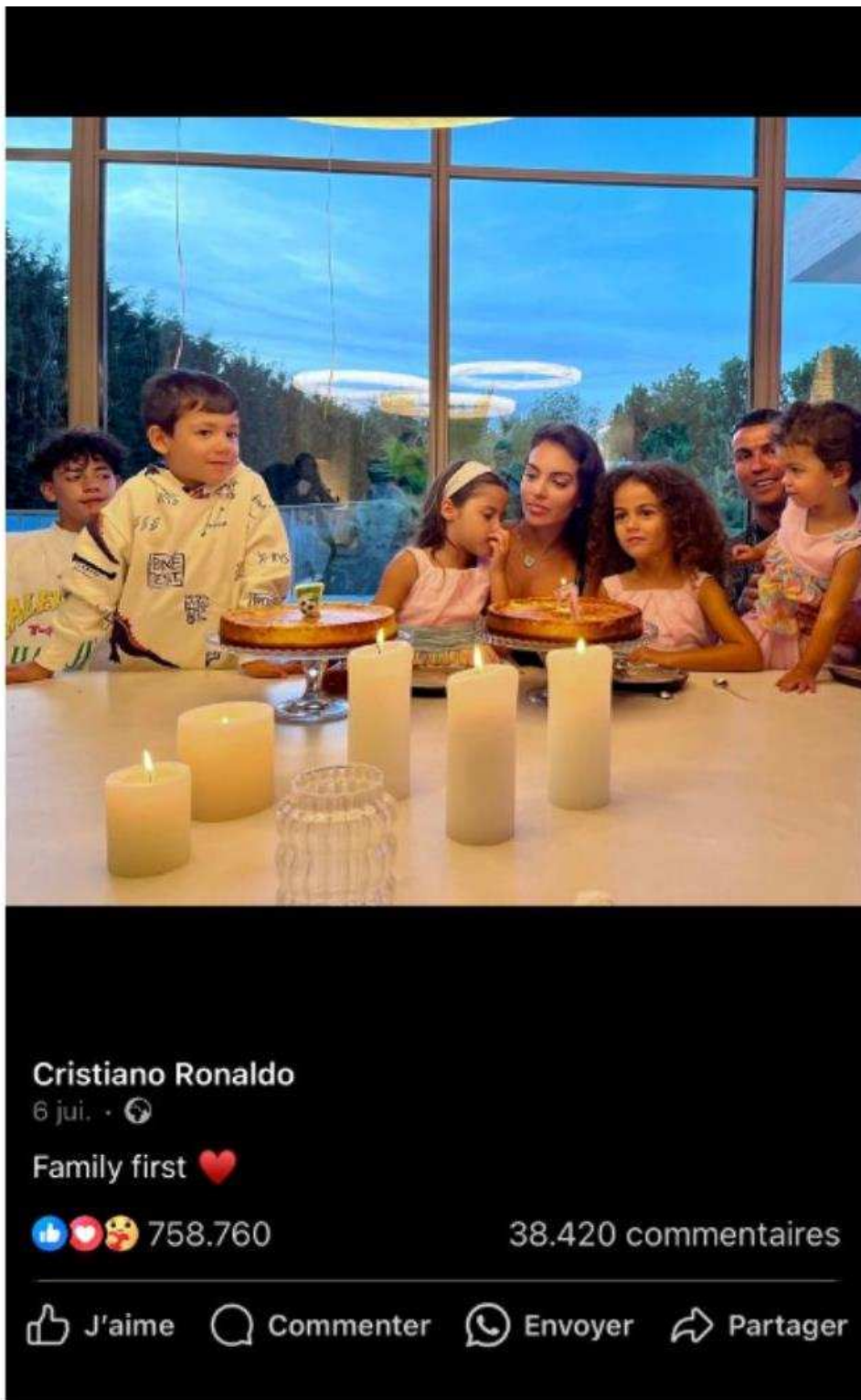
Stimuli 1: Sponsored Instagram Post



Stimuli 2: Personal Instagram Post



Stimuli 3: Sponsored Facebook Post



Stimuli 4: Personal Facebook Post

Appendix B: Survey Questions

Dear Participant,

This research study is being conducted as part of the thesis for the McS in Management with Specialization in Strategic Marketing.

All data collected through this survey will be used solely for academic purposes within the scope of the MSc thesis. The analysis will concentrate on identifying trends and patterns across groups rather than individual responses.

Your responses will remain completely anonymous. No personal identifying information will be collected, and results will be reported in aggregate form only, ensuring individual anonymity.

The estimated time to complete the survey is 6 minutes.

Thank you for your time and valuable contribution to this research!

Screening questions:

Do you use Instagram and/or Facebook?

- Yes, I use Instagram.
- Yes, I use Facebook.
- Yes, I use both Instagram and Facebook.
- No, I don't use Instagram or Facebook.

How often do you use social media?

- Daily.
- Weekly.
- Rarely.

Do you follow Cristiano Ronaldo on Instagram or Facebook?

- Yes.
- No.

Instagram Sponsored:

Please pay attention to the next images and answer the questions following taking the image in mind.



I enjoy viewing this Ronaldo post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I feel connected to Ronaldo through his post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I am more likely to engage (like, comment, share) with this post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

The image that you saw was a

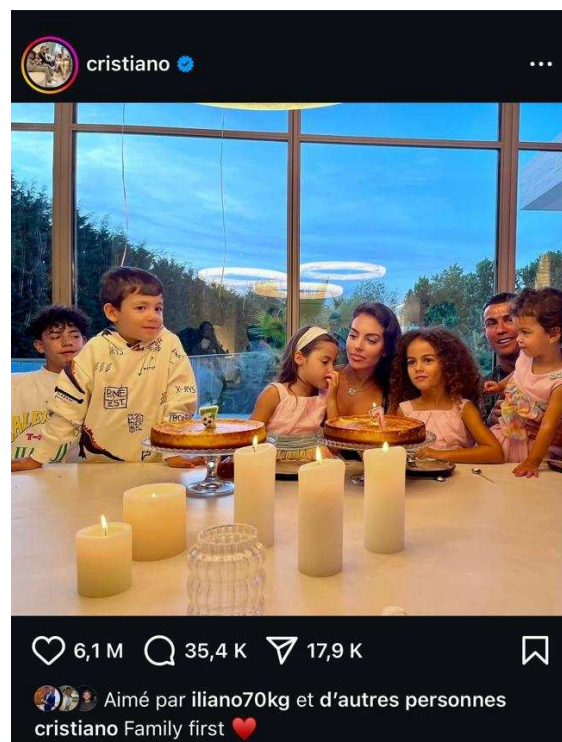
- Sponsored Post
- Personal Post

The image that you saw was a

- Instagram Post
- Facebook Post
- Other social media post

Instagram personal:

Please pay attention to the next images and answer the questions following taking the image in mind.



I enjoy viewing this Ronaldo post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I feel connected to Ronaldo through his post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I am more likely to engage (like, comment, share) with this post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

The image that you saw was a

- Sponsored Post
- Personal Post

The image that you saw was a

- Instagram Post
- Facebook Post
- Other social media post

Facebook sponsored:

Please pay attention to the next images and answer the questions following taking the image in mind.



I enjoy viewing this Ronaldo post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I feel connected to Ronaldo through his post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I am more likely to engage (like, comment, share) with this post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

The image that you saw was a

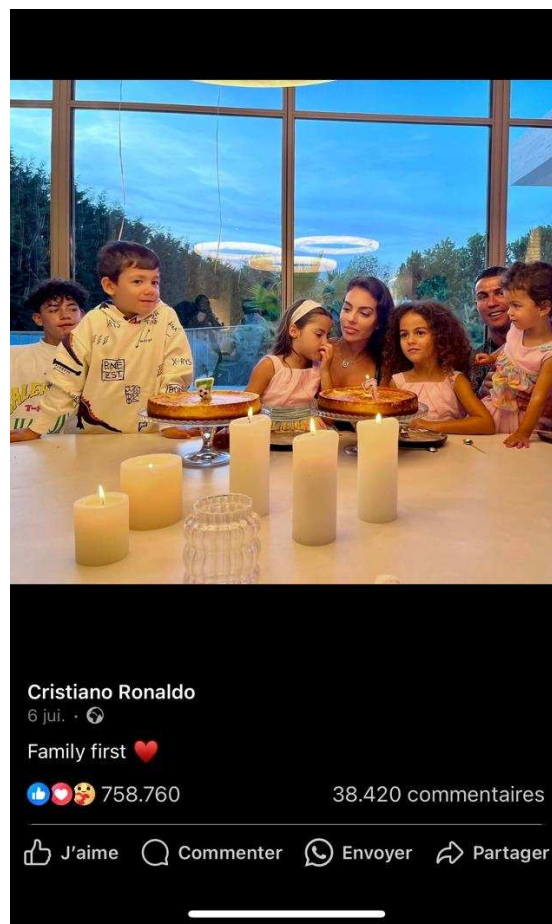
- Sponsored Post
- Personal Post

The image that you saw was a

- Instagram Post
- Facebook Post
- Other social media post

Facebook personal:

Please pay attention to the next images and answer the questions following taking the image in mind.



I enjoy viewing this Ronaldo post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I feel connected to Ronaldo through his post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I am more likely to engage (like, comment, share) with this post

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

The image that you saw was a

- Sponsored Post
- Personal Post

The image that you saw was a

- Instagram Post
- Facebook Post
- Other social media post

Fan engagement:

Please state your level of agreement to the statements below, from strongly disagree to strongly agree.

I feel emotionally connected to Ronaldo's social media content.

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I frequently engage (like, comment, share) with Ronaldo's posts.

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I enjoy interacting with other fans on Ronaldo's posts.

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I feel loyal to Ronaldo due to his presence on social media.

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Ronaldo's content motivates me to follow him more actively on social media.

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Brand Perception:

Please state your level of agreement to the statements below, from strongly disagree to strongly agree.

Ronaldo's social media presence makes me trust him as a brand.

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I admire Ronaldo more because of the content he shares on social media.

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

I feel positively about Ronaldo's brand based on his social media posts.

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Ronaldo's posts make him seem like a reliable and respectable brand.

- Strongly Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Strongly agree

Demographics:

What is your age?

- 18–24
- 25–34
- 35–44
- 45 and above

What is your gender?

- Female
- Male
- Prefer not to say

Which platform do you primarily use to follow Ronaldo?

- Instagram
- Facebook
- Both

Appendix C: Interview guide for stimuli testing

Hello and thank you for joining this short interview. I'll show you a few social media posts, and I'd like to hear your thoughts on whether they seem personal or sponsored and why. This will take about 7 minutes, and your responses will remain confidential.

1. Warm-Up

- Please tell us your name, age and occupation
- Do you use Instagram or Facebook? (If yes, which one more often?)
- Do you follow Cristiano Ronaldo on social media?

2. Stimuli Presentation

For each post (show one at a time):

- Does this post feel personal or sponsored? Why?

- What about this post stands out to you?
- From all the images presented each one communicates more a personal post? And a sponsored post?
- Can you differentiate if the images portrayed are from Facebook or Instagram? If not, what do I need to include in the images to make them look like it's either a Facebook Post or a Instagram Post?

1. Closing Questions:

- In general, what do you think makes a post personal or sponsored?
- Is there anything else you'd like to share about the posts you saw today?

Appendix D: Summary of interview results

Interviewee	Social media usage	Most personal post	Most sponsored post	Platform differentiated on	Criteria for personal vs. sponsored
A01	Uses Instagram and Facebook equally follows Ronaldo on both.	Family photos with no visible products.	Perfume post with Ronaldo posing alongside the product.	Instagram posts are polished with curated visuals; Facebook has distinct reactions (e.g., 'Love').	Personal posts focus on family and everyday moments; sponsored posts showcase products.
A02	Uses Instagram more than Facebook; follows Ronaldo on Instagram.	Family-oriented posts, especially ones with a casual look.	Jacob & Co. watch post and Herbalife protein post.	Instagram posts appear professional; Facebook posts are more casual.	Personal posts feel human and authentic; sponsored posts have professional

					production quality.
A03	Uses Instagram and Facebook; follows Ronaldo and admires his content.	Family vacation photo without branding.	Herbalife protein powder post due to product focus.	Instagram posts feature vibrant visuals and specific layouts; Facebook posts show reactions and likes.	Personal posts are natural and family-oriented; sponsored posts feature visible products and promotions.
A04	Uses Instagram more than Facebook; does not follow Ronaldo but is familiar with him.	Photo with his children celebrating a birthday due to its genuine appearance.	Herbalife healthy meal post with professional staging and product focus.	Clear distinction based on layout, colors, and interaction features.	Personal posts feature family or children and feel spontaneous; sponsored posts include brands and professional staging.
A05	Uses Instagram and Facebook equally; and follows Ronaldo on both.	Family-oriented posts, especially those with his children or family in casual moments.	Herbalife healthy meal post with product placement and staging.	Recognized layout and captions for each platform; Instagram is more polished.	Personal posts are simple and focus on everyday life; sponsored posts have longer captions and

					product focus.
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Appendix E: Table 25: Reliability Analysis for Brand Perception (BP1-BP4)

Measure	Value
Cronbach's Alpha	0.903
Cronbach's Alpha Based on Standardized Items	0.903
Number of Items	4

Table 25: Reliability Analysis for Brand Perception (BP1-BP4)

Appendix F: Table 26: Reliability Analysis for Fan Engagement (FE1-FE5)

Measure	Value
Cronbach's Alpha	0.956
Number of Items	5

Table 26: Reliability Analysis for Fan Engagement (FE1-FE5)

Appendix G: SPSS Output for Hypothesis Testing

H1: Content type positively impacts Brand Perception

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Content_Type ^b	.	Enter

a. Dependent Variable: Brand_Perception_Total

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.118 ^a	.014	.008	1.20739

a. Predictors: (Constant), Content_Type

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.629	1	3.629	2.490	.116 ^b
	Residual	258.027	177	1.458		
	Total	261.656	178			

a. Dependent Variable: Brand_Perception_Total

b. Predictors: (Constant), Content_Type

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.408	.129		10.878	<.001	1.153	1.664
	Content_Type	.285	.181	.118	1.578	.116	-.071	.641

a. Dependent Variable: Brand_Perception_Total

H1a: Sponsored Content Has a Lower Impact on Brand Perception Than Personal Content

Group Statistics

	Content_Type	N	Mean	Std. Deviation	Std. Error Mean
Brand_Perception_Total	Personal Post	87	1.4080	1.08445	.11627
	Sponsored Post	92	1.6929	1.31303	.13689

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						One-Sided p	Two-Sided p			Lower	Upper
Brand_Perception_Total	Equal variances assumed	7.172	.008	-1.578	177	.058	.116	-.28489	.18056	-.64121	.07144
	Equal variances not assumed			-1.586	173.892	.057	.115	-.28489	.17960	-.63937	.06959

Independent Samples Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
Brand_Perception_Total	Cohen's d	1.20739	-.236	-.530	.059
	Hedges' correction	1.21253	-.235	-.528	.058
	Glass's delta	1.31303	-.217	-.511	.078

- 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.

H2: Social Media Platform Moderates the Relationship Between Content Type and Brand Perception

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Interaction_Content_Type_SM_Platform, Content_Type, SM_Platform ^b	.	Enter

a. Dependent Variable: Brand_Perception_Total

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.194 ^a	.038	.021	1.19945

a. Predictors: (Constant), Interaction_Content_Type_SM_Platform, Content_Type, SM_Platform

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.888	3	3.296	2.291	.080 ^b
	Residual	251.768	175	1.439		
	Total	261.656	178			

a. Dependent Variable: Brand_Perception_Total

b. Predictors: (Constant), Interaction_Content_Type_SM_Platform, Content_Type, SM_Platform

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	1.235	.171		7.206	<.001	.897	1.573		
	Content_Type	.621	.241	.257	2.574	.011	.145	1.097	.553	1.808
	SM_Platform	.397	.259	.167	1.531	.128	-.115	.909	.461	2.170
	Interaction_Content_Type_SM_Platform	-.737	.353	-.270	-2.086	.038	-1.434	-.040	.327	3.054

a. Dependent Variable: Brand_Perception_Total

H3: Fan Engagement Moderates the Relationship Between Content Type and Brand Perception

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Content_Type, Fan_Engagement_Total, Interaction_ContentType_FanEngagement ^b	.	Enter

a. Dependent Variable: Brand_Perception_Total

b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.457 ^a	.209	.195	1.08779

a. Predictors: (Constant), Content_Type, Fan_Engagement_Total, Interaction_ContentType_FanEngagement

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	54.580	3	18.193	15.375	<.001 ^b
	Residual	207.077	175	1.183		
	Total	261.656	178			

a. Dependent Variable: Brand_Perception_Total

b. Predictors: (Constant), Content_Type, Fan_Engagement_Total, Interaction_ContentType_FanEngagement

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.492	.200		2.460	.015	.097	.886		
	Fan_Engagement_Total	.449	.080	.548	5.643	<.001	.292	.607	.480	2.084
	Interaction_ContentType_FanEngagement	-.193	.110	-.239	-1.749	.082	-.411	.025	.242	4.132
	Content_Type	.661	.281	.273	2.353	.020	.107	1.215	.336	2.980

a. Dependent Variable: Brand_Perception_Total

Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	Fan_Engagement_Total	Interaction_ContentType_FanEngagement	Content_Type
1	1	3.128	1.000	.01	.01	.01	.01
	2	.505	2.489	.09	.08	.08	.08
	3	.314	3.154	.13	.13	.12	.13
	4	.052	7.752	.77	.78	.79	.77

a. Dependent Variable: Brand_Perception_Total