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M.Sc. in Sports, Culture, Political Marketing

Revolutionizing Formula 1 Broadcasting: Unveiling the Impact of Personalized Virtual Advertising on Brand Recall through eye-tracking

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“No matter what your dream is, you have to dedicate yourself entirely to it”

~ Ayrton Senna ~

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Writing this master's thesis has felt like competing in a Formula 1 race—starting with high hopes on the grid, experiencing moments of pure speed and inspiration, followed by pit stops of doubt, and, of course, a few dramatic crashes into the barriers of writer's block. But just like in F1, success is never a solo effort; it requires a dedicated team behind the scenes.

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To all of you—thank you for making sure I crossed the finish line without crashing completely. While this thesis may not come with a champagne podium celebration, it marks the end of one race and the start of an even more challenging one—my PhD. So, instead of a long pit stop, I'm heading straight to the next lap. Buckle up, because the journey continues!

Konstantinos Alexopoulos

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LIST OF ABBREVIATIONS

3D: Three-Dimensional

4K: 4.000 pixels

AI: Artificial Intelligence

AOI: Area of Interest

B2B: Business to Business

B2C: Business to Consumer

CAGR: Compound Annual Growth Rate

CBSA: Commercial Billboards in Sports Arenas

EU: European Union

F1 TV Pro: Formula 1 TV Pro (Streaming Platform)

F1: Formula 1

FR: Fixation Ratio

GDPR: General Data Protection Regulation

Hz: Hertz

LED: Light Emitting Diode

NBA: National Basketball Association

OTT: Over-The-Top Media Service

PVA: Personalized Virtual Ad

QR: Quick Response

TTFF: Time to First Fixation

TV: Television

US: United States

USA: United States of America

VA: Virtual Advertising

DECLARATION

I declare that this thesis was composed by myself, that the work contained herein is my own except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or professional qualification.

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ABSTRACT

The revolution of virtual advertising has redefined sports broadcasting, enabling real-time, targeted, and dynamic brand messaging that enhances viewer engagement. This transformation has inspired an investigation into the impact of personalized messages within virtual advertisements on brand recall in a Formula 1 broadcast environment. This study leverages eye-tracking technology to analyze consumer attention and memory retention, addressing three key research questions: (1) the visibility percentage of virtual advertising in F1 broadcasts, (2) whether personalized ads accelerate time to first fixation, and (3) how advertisement placement and format influence brand recall. To quantify advertisement visibility, a Python-based computer vision script utilizing OpenCV was developed to detect virtual ad placements and calculate visibility percentages across broadcast frames. Results indicate that virtual ads occupied 7.63% of the total broadcast frame, with high-visibility placements—such as trackside billboards in Monaco's tunnel (20.31%) and Mexican Grand Prix turns (23.64%)—achieving the greatest visibility. Personalized virtual ads significantly reduced time to first fixation, with viewers noticing them 0.21–0.29 seconds faster than non-personalized ads. Additionally, brand recall increased by 13%, while lesser-known brands saw up to a 40% improvement in recognition rates when personalized messages were included. These findings provide valuable insights for advertisers, broadcasters, and sports marketers, demonstrating how personalized virtual signage enhances sponsorship impact. Academically, the study advances research on digital advertising effectiveness, highlighting its role in consumer attention and engagement. By integrating customized virtual ads with digital broadcasting, Formula 1 pioneers a new era of immersive brand communication in sports marketing.

Keywords: *Virtual Advertising, Personalized Virtual Advertising, Formula 1, Eye-tracking, Streaming Platforms, Sports Sponsorships*

ABSTRACT IN GREEK

Η εικονική διαφήμιση έχει μεταμορφώσει τη μετάδοση αθλητικών γεγονότων, προσφέροντας στοχευμένα και δυναμικά διαφημιστικά μηνύματα σε πραγματικό χρόνο, ενισχύοντας την αλληλεπίδραση με τους θεατές. Αυτή η εξέλιξη μας παρακίνησε στη διερεύνηση της επίδρασης των προσωποποιημένων διαφημίσεων στην ανάκληση εμπορικών σημάτων κατά τη μετάδοση αγώνων της Formula 1. Η μελέτη χρησιμοποιεί τεχνολογία ανίχνευσης οφθαλμικής κίνησης (Eye-Tracking) για την ανάλυση της προσοχής των συμμετεχόντων και της διάρθρωσης των διαφημιστικών μηνυμάτων, εστιάζοντας σε τρεις βασικές ερωτήσεις: (1) το ποσοστό ορατότητας των εικονικών διαφημίσεων σε διαδοχικά καρέ, (2) την επίδραση των εξατομικευμένων διαφημίσεων στον χρόνο μέχρι την πρώτη οπτική εστίαση (Time to First Fixation) και (3) τον ρόλο της τοποθέτησης των διαφημίσεων στην ανάκληση εμπορικών σημάτων. Για την ποσοτικοποίηση της ορατότητας των διαφημίσεων, αναπτύχθηκε αλγόριθμος υπολογιστικής όρασης σε Python με OpenCV, ο οποίος ανίχνευσε τις τοποθετήσεις των εικονικών διαφημίσεων και υπολόγισε τα ποσοστά ορατότητας σε καρέ από αγώνες της Formula 1. Τα αποτελέσματα δείχνουν ότι οι εικονικές διαφημίσεις κατέλαβαν το 7.63% σε μέσο όρο του συνολικού τηλεοπτικού «κάδρου», με τις περιοχές υψηλής ορατότητας – όπως οι διαφημιστικές πινακίδες στο τούνελ του Μονακό (20.31%) και οι στροφές στον αγώνα του Μεξικού (23.64%) – να επιτυγχάνουν τη μέγιστη έκθεση. Οι προσωποποιημένες εικονικές διαφημίσεις μείωσαν σημαντικά τον χρόνο μέχρι την πρώτη οπτική εστίαση, με τους θεατές να τις παρατηρούν 0.21 έως 0.29 δευτερόλεπτα ταχύτερα από τις μη εξατομικευμένες διαφημίσεις. Επιπλέον, η ανάκληση (recall) εμπορικών σημάτων αυξήθηκε κατά 13%, ενώ λιγότερα γνωστά εμπορικά σήματα παρουσίασαν βελτίωση αναγνωρισιμότητας (recognition) έως 40% όταν ενσωματώθηκαν εξατομικευμένα μηνύματα. Τα ευρήματα αυτά προσφέρουν πολύτιμες γνώσεις σε διαφημιστές, ραδιοτηλεοπτικούς φορείς και υπεύθυνους μάρκετινγκ, δείχνοντας ότι η προσωποποιημένη εικονική διαφήμιση ενισχύει τον αντίκτυπο των χορηγών. Ακαδημαϊκά, η μελέτη εμπλουτίζει τη βιβλιογραφία για την ψηφιακή διαφήμιση, αναδεικνύοντας τον ρόλο της στην προσοχή και αλληλεπίδραση των καταναλωτών. Η εισαγωγή προσωποποιημένων εικονικών διαφημίσεων στη Formula 1 και σε άλλες αθλητικές μεταδόσεις μέσω πλατφορμών ροής βίντεο (OTT) θα σηματοδοτήσει μια νέα εποχή στην επικοινωνία των εμπορικών σημάτων, επαναπροσδιορίζοντας το μάρκετινγκ αθλητικών χορηγιών.

Keywords: *Εικονικές Διαφημίσεις, Προσωποποιημένες Εικονικές Διαφημίσεις, Φόρμουλα 1, Τεχνολογία Καταγραφής Οφθαλμικών Κινήσεων, Πλατφόρμες Ροής Βίντεο, Αθλητικές Χορηγίες*

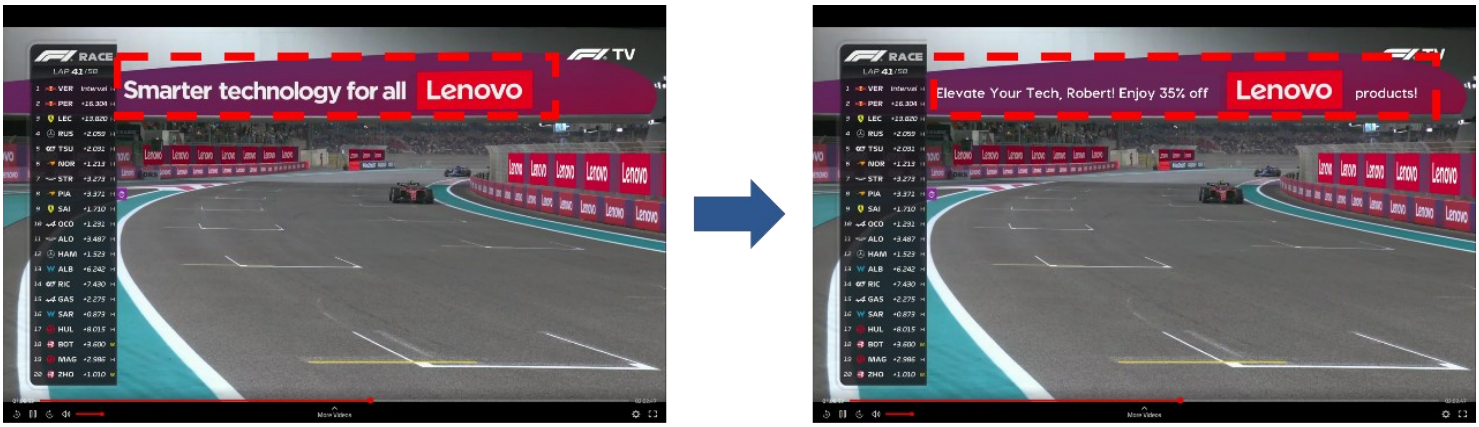
1. INTRODUCTION

Virtual Advertising, first introduced in the mid-1990s in the USA (Sander & Altobelli, 2011; Porter, 2022; Leadsom, 2023a; Goldman,2023), has been significantly advanced by companies such as Supponor, Vizrt, HEGO, Broadcast Virtual, UniqFEED and AE Live, which are at the forefront of its development. This technology allows for the real-time replacement of physical perimeter boards with virtual ones, presenting targeted ads to local broadcast audiences (Supponor, 2020; Turner & Cusumano, 2000; Burgi, 1997). In-person spectators do not see these virtual advertisements, as they are overlaid only on the broadcasted version of the event (Cianfrone et al., 2006). The 2006 FIFA World Cup in Germany marked a pivotal moment in the evolution of virtual advertising, enabling advertisers to deliver region-specific advertisements tailored to diverse global audiences. As a result, viewers in different parts of the world, such as America and Germany, were presented with different advertisements displayed on the stadium boards (Goldman,2023). Similarly, the 2024 UEFA European Championship highlighted virtual advertising's success, with Coca-Cola tailoring region-specific ads to appeal seamlessly to local preferences in Europe and Asia (PTF Blog, 2024). From then until today, numerous prestigious sports organizations, leagues, and teams across various disciplines, including Football (e.g., UEFA, La Liga, Serie A), Hockey (NHL, IIHF), Rugby (World Rugby, NRL), Cricket (Cricket Australia, New Zealand Cricket), and others, have adopted virtual advertising. Virtual advertising has since expanded its possibilities, offering dynamic, region-specific content delivery, innovative solutions like virtual billboards, seat covers, and on-field graphics, and enabling advertisers to optimize revenue while enhancing viewer engagement and broadcast quality (Broadcast Virtual, Website).

This thesis examines virtual advertising in Formula 1, a global sport with over 2 billion viewers across 180 countries (Formula 1, Website). Formula 1 serves as an ideal case study due to its innovative use of virtual advertising and the limited opportunities for traditional branding on race tracks. Additionally, the sport’s unique capacity to enable international brands to deliver regionally tailored advertisements through its digital infrastructure further underscores its relevance. The introduction of the sport’s own streaming platform, F1 TV Pro, in 2018 enhances its suitability for this research, as it provides a controlled environment for personalized and interactive advertising. This study aims to analyze the effect of personalized virtual advertising on brand recall while exploring how interactive and targeted signage can open new avenues for engaging spectators. By

addressing these aspects, the research seeks to contribute novel insights into how personalized advertising strategies can strengthen brand-audience relationships within the context of Formula 1.

Despite the growing interest in virtual advertising within sports broadcasting, there remains a notable gap in the literature regarding the impact of personalized virtual signage on fan engagement and brand recall. Previous research has primarily focused on general aspects of virtual advertising, often overlooking the specific effects of tailored messages. Addressing this gap provides an opportunity to explore how personalized advertising initiatives can deepen audience connection and improve brand associations. For instance, a Formula 1 TV Pro subscriber might receive a customized birthday message during a Grand Prix, fostering a stronger emotional bond with the sport, the team, and the sponsoring brand. Such personalization, like Robert receiving a bespoke greeting during the Formula 1 Etihad Airways Abu Dhabi Grand Prix, illustrates the potential for virtual advertising to transform traditional engagement into an interactive and emotionally resonant experience. However, current literature insufficiently addresses the implications of these advancements. This study thus aims to fill this gap by evaluating the effect of personalized virtual advertising on brand recall and by assessing the potential of interactive virtual signage to create innovative advertising opportunities for both viewers and sponsors.



(a) Non-Personalized Virtual Advertising Signage

(b) Personalized Virtual Advertising Signage

Figure 1: Depiction of the Research Problem: Comparison of Non-Personalized vs. Personalized Virtual Advertising Signage in Formula 1 Broadcasting

The current Master Thesis begins with an Introduction that emphasizes the rising impact of virtual advertising technology in sports, specifically addressing a gap in the literature regarding its effects on fan engagement and brand visibility in Formula 1 broadcasts and the authors introduce the terminology of "Personalized Virtual Advertising Technology". Following this, the Literature Review provides a comprehensive overview of virtual advertising technology and their applications in sports, supporting the research in established theories of advertising effectiveness. Building on this foundation, the Methodology outlines the experimental test, specifically detailing the innovative use of eye-tracking technology to assess viewer engagement with both personalized and non-personalized virtual advertisements. In the Results section, the findings are presented, illustrating the impact of different advertisements formats and advertisement placements on brand recall and viewer engagement. Finally, the Conclusion integrate these findings into the broader context of sports marketing, offering theoretical insights and practical recommendations, while also addressing the limitations of the study and suggesting avenues for future research.

2. LITERATURE REVIEW

2.1 Overview of Virtual Advertising

Virtual Advertising is defined as the incorporation of brands, products, trademarks, logos, slogans and 3D animations by means of digital, computer-supported television signal processing (Cianfrone et al, 2006; Pyun & Kim, 2004). Based on data provided by MarketsandMarkets, the market size of global virtual advertising is projected to experience a compound annual growth rate (CAGR) of 19.3% by 2026. This growth is anticipated to elevate the market from $12.9 billion in 2021 to $31.1 billion by 2026 (Leadsom, 2023a). From commercial point of view, it provides two key advantages: a) the ability to sell sponsorship placement multiple times and b) deliver customized messages tailored to specific broadcasts countries (Sander and Altobelli 2011). This approach minimizes costs by focusing advertising message on targeted market and potentially creating new opportunities in previously unbranded spaces (Walsh, 2023). Scholars and industry experts have identified the key advantages of this technology, which are presented as follows (uniqFEED Blog, 2023; Porter, 2022; Sander & Altobelli, 2011; Cianfrone et al, 2006):

- Right holders have the opportunity to enhance the commercial viability of the advertising space.

- Right holders have the ability to generate additional space, despite restrictions on certain placements due to broadcast regulations or safety concerns.
- Brands have the flexibility to customize messages to match local languages, providing them with adaptability and increased interaction.
- Brands have the capability to focus on particular, relevant markets, reducing unnecessary expenses and reducing inefficiencies.
- Sponsors can oversee and comply with specific market regulations.
- Global brands can synchronize messaging with regional campaigns.

Several research papers (Cianfrone et al., 2006; Nebenzahl & Hornik, 1985; Sander & Altobelli, 2011; Turner & Cusumano, 2000; Psyma, 1999; Pyun & Kim, 2004;) have examined the utilization of virtual advertising signage in the context of live sports event broadcasts. The study conducted by Sander and Altobelli (2011) stands out as valuable contribution, revealing that 77.5% of participants acknowledged the presence of virtual advertising signage. Furthermore, an immersive 92.7% correctly identified goal-side billboards, and 55.6% did not perceive this technology as irritating during television broadcasts. However, a 2002 study conducted by a German marketing firm revealed that while viewers generally accepted virtual ads, they expressed frustration when the ads appeared directly on the playing field, suggesting that they should not interfere with the main action on the field (Sasse & Ludwig, 2002). Other research has demonstrated that virtual advertising can be effective, leading to much higher recall rates (Psyma, 1999). For instance, Pyun, Han, and Ha (2004) discovered that virtual ads remain remained on-screen significantly longer than traditional ads, leading to nearly double the recognition rates among spectators. Furthermore, the effectiveness of virtual advertising is influenced by the placement of the ads and the specific sport in which they used, as highlighted by studies emphasizing the importance of these factors in determining the overall impact of the advertisements (Park & Inou, 2018; Sander & Altobelli, 2011).

To date, numerous prestigious sports disciplines / teams / leagues have adopted virtual advertising technology to enhance targeted commercial value. Several examples include: Deutsche Fußball Liga GmbH (DFL), National Hockey League (NHL), Formula 1 (F1), AJ Auxerre, A-League, International Ice Hockey Federation (IIHF), Federazione Italiana Giuoco del Calcio (FIGC - Italian Football Federation), FC Bayern München, English Football Association, VfL Wolfsburg, Real

Federación Española de Fútbol (RFEF- Royal Spanish Football Federation), FC Barcelona, LOSC Lille, 3ICE, La Liga (The clientele portfolios of Supponor, Broadcast Virtual and uniqFEED).

2.2 Types of Virtual Advertising Applications in Sports

It is intriguing to examine how industry experts utilize this technology. In this section, we will outline the different types of virtual advertising applications. We utilized the following information presented on the website of Broadcast Virtual:

1) **LED Replacement**: A technology that facilitates the customization of LED displays based on regional and demographic preferences. It delivers tailored graphics to viewers, thereby enhancing engagement and providing greater value to stakeholders through more targeted and relevant content.
2) **Sign Replacement**: It smoothly incorporates customized digital alternatives, improving broadcast quality and by surpassing the limitations of physical venue signage. This method enables multiple sales of the same signage spot, optimizing advertising revenue.
3) **Multi-Region Branding**: Enables advertisers to deliver customized ads to specific demographic groups while broadcasting the same live event. This approach maximize revenue by tailoring advertisements to different audience segments during a single broadcast.
4) **Targeted Ad**: Transforms Virtual Advertising by delivering customized content directly to viewers' devices. It enables precise targeting based on demographics or geographic location and integrates seamlessly into the event, avoiding the need for extra advertising space.
5) **Virtual Paint**: Is an innovative solution used around the world that offers the benefits of conventional paint without its drawbacks. It provides virtual advertisements in high-definition and 4K resolution for exceptional clarity, and utilizes advanced position-tracking technology to ensure accurate display of on-filed ads.
6) **Virtual Mats**: Is a solution that delivers detailed visuals without requiring physical field installations. They support dynamic ad rotations during gameplay and, when used with Multi-Region Branding, provide added value for broadcasters and stakeholders.

7) **Virtual Stickers**: Offer a flexible branding solution for indoor sports events by allowing realistic virtual stickers to be displayed on courts. This approach replaces physical stickers and eliminates the need for maintenance.
8) **Virtual Billboards**: Are high-resolution digital displays that can be strategically inserted into broadcasts, offering both flexibility and cost efficiency.
9) **Virtual LED**: Is an advanced technology that simulates the appearance of physical LEDs without their associated disadvantages.
10) **Virtual Seat Covers**: Are digital overlays used to enhance the appearance of empty seats during broadcasts, ensuring they remain in sync with the movement of the ball throughout the event.
11) **Virtual Lines**: Are dynamic markers used in racing broadcasts to enrich the viewing experience, and are currently used in harness racing.

Additionally, various virtual advertising industry's case studies present effective practices illustrating the diverse applications of this technology beyond placing virtual logos on LED boards. Katy Walsh, Head of Marketing & Communications at uniqFEED, offers some alternative approaches, including: a) Virtual QR codes, featuring unique codes tailored to specific markets, b) User-generated content, where fans can submit, for example, selfies displayed on virtual advertising boards, c) Athlete endorsements establish a connection between athletes and their endorsed brands by integrating virtual brand messages, d) Interactive, clickable sponsor messaging in streaming platforms, enabling fans to interact with their favorite club and brands, e) Virtual Graphs depicting game statistics.

2.3 Advertising Effectiveness

It's essential to recognize that virtual advertising is a technology that represents a novel method of advertising. The objective of advertising in general is to inform, remind and persuade consumers to pay for the product/service (Percy and Elliot 2005), and the rely on them to gather information necessary for making informed decisions among competing brands (O'Guinn, Allen and Semenik, 2009; Strydom, Jooste and Cant, 2000). Over the past decade advertising has increased considerably due to its crucial role in the development and maintenance of brand equity (Belch & Belch, 2004; Shimp, 2010). Brand is the most valuable asset for companies, as it enables customers to identify and select particular products, fostering repeat purchases. The challenge for brands is

to commit to consistently delivering a specific set of features, benefits, and services to the consumer (Kotler and Keller, 2009). The existing scholar conclude (Aaker 2010; Hauser 2011; Ye & Van Raaij 2004; Stapel 1998) the importance of building brand awareness, so to be recalled in consumers' minds (Aaker 2010; Brewer & Zhao 2010) and effecting on the consumption decision-making (Hoyer & Brown 2001; Macdonald & Sharp 2000; Aaker & Joachimsthaler 2000; Brewer & Zhao 2010). Moreover, a successful brand awareness involves not only the number of people who know about a brand (Hart & Murphy, 1998), but also how easily consumers can recall and recognize the brand, as well as identify the associated products and services (Keller, 2007; Macdonald & Sharp, 2003). Brand recall is defined as the ability of consumers to accurately retrieve the brand from memory when prompted with a relevant cue (Aaker, 2010). In contrast, brand recognition involves identifying a brand as one that has been encountered (Hoyer & Brown, 2001). It is the consumers' ability to confirm prior exposure to the brand when presented with it as a cue (Keller, 2007). Brand recognition also refers to the percentage of individuals who acknowledge having heard of a specific brand (Francois & MacLachlan, 1995) and requires that consumers accurately recognize the brand as something they have previously seen or heard (Aaker, 2010).

Advertising effectiveness is defined as the ability to imprint brand information in the consumers' memory (Wilson and Till, 2008). Nonetheless, it is critical to account for the sleeper effect, which proposes that an advertisement may not immediately impact consumer behavior after the exposure, but forces its influence over time (Cardwell, 1999). According to a study by Berger and Mitchell (1990), advertisements are more readily recalled when they are frequent exposed. Another key factor is that consumers should have prior awareness of the brand before exposure to the advertisement (Romaniuk, 2009; Ouwersloot and Duncan, 2008). Furthermore, research by Gerber and Terblanche-Smit (2014) demonstrated that a) extended exposure time of a brand within an advertisement enhances brand recognition (O'Guinn et al, 2009; Higgs,2004) and b) early appearance of the brand in an advertisement increases its recognition (Zigmond et al., 2009; Higgs, 2004). They concluded that a brand achieves optimal recognition if it appears around two-thirds of the way through the advertisement (Gerber and Terblanche-Smit, 2014).

2.4 The Impact of Commercial Billboards during a sports broadcasting

In this study, the focus is on embedded advertisements during a sport broadcasting. Embedded advertising refers to the practice of integrating advertisements into media content such as TV shows, magazines, or sports events, where they compete for attention alongside other stimuli (Cain, 2011). This approach is increasingly favored by companies as it offers several strategic benefits. Unlike traditional advertisements, which often employ a direct and persuasive approach, embedded ads are seamlessly incorporated into the main content, making the promotional message less obvious and more natural (Cowley & Barron, 2008). This integration not only minimizes viewer resistance but also enhances the effectiveness of the advertisement. Moreover, embedded advertisements are easier to repeat within the content. Since the advertisement is part of the primary material, viewers can be exposed to it multiple times without experiencing the fatigue or boredom typically associated with repetitive advertising (Schmidt & Eisend, 2015). This repeated exposure is crucial, as it operates similarly to the repetition of standalone advertisements, where increased frequency enhances the likelihood of message retention by the viewer (Pitts & Slattery, 2004). The effectiveness of embedded advertising is also heightened when viewers' interest in the primary content fluctuates. During moments of reduced attention, embedded messages can capture the viewer's focus, ensuring continued engagement with the brand's message (Bennett, 1999). However, one drawback of embedded advertising is that multiple sponsors are visible at the same time, which can reduce the effectiveness of each individual message (Boronczyk et al., 2018). This issue is especially noticeable during sports events, where viewers, whether viewed live or through broadcast, are exposed to several sponsorship messages simultaneously. This differs from TV commercials, where viewers focus on a single brand (Ruth & Simonin, 2003).

The most well-known tool used is advertisement billboards or commercial billboards in sports arenas (CBSA), placed in the venue where the action takes places (Nebenzahl and Hornik, 1985). CBSA are integral to the marketing strategies of brands looking to enhance their visibility and awareness among a wide-ranging audience. Their strategic placement ensures exposure to the spectators at the event and viewers at home, thereby maximizing the advertisement's reach. The visual appeal of these billboards, marked by bright colors, bold fonts, and dynamic images, greatly contributes to their effectiveness (Al-Natour et al., 2013; HIVO - Blog). Furthermore, billboards can create a strong association between the brand and the emotional experiences of the audiences, as excitement, anticipation and loyalty are tied to sports. This emotional bond can improve

consumer perceptions of the brand, fostering familiarity and trust. Repeated exposure to these advertisements during sports events enhances brand recognition and recall, making CBSA an effective tool for maintaining brand awareness and consumer engagement. With advancements in advertising technologies, digital billboards in sports have introduced additional dynamism and interactivity. These digital billboards can display moving images and real-times updates, creating a more engaging and immersive experience for audience (Reber et al., 2004). Consequently, they provide advertisers with innovative ways to capture and maintain consumer attention, thereby increasing advertisement's overall impact. Moreover, the study by Nebenzahl and Hornik (1985) suggests that the placement of these billboards is important, as those located at the extreme ends of the court are exposed for longer period of time, while those in the middle appear with greater frequency. All the aforementioned literature on commercial billboards is confirmed by industry reports such as the "Brand exposure value from the 2023-2024 NBA Regular Season" by Relo Metrics (2024). This report indicates that the configuration of courtside billboards significantly impacts brand exposure, with Extra-Large and Multi-panel courtside billboards offering more seconds of exposure more seconds per game than other types of arenas signages.

Billboard placement is critical decision in sports advertising, and with the introduction of virtual advertising, this process has become increasingly sophisticated. Commercial directors in sports now have the ability to insert virtual advertising signage dynamically. Research in vision science underscores that the relative size of objects in the visual field directly impacts attention and information processing, as larger objects are perceived as more meaningful and engaging (Palmer, 2002). In sports such as Formula 1, where race tracks extend approximately 5 to 7 kilometers, determining the optimal placement of these virtual ads presents a unique challenge. To address this, marketers employ a technique known as "white space analysis", which involves identifying unbranded areas that offer opportunities for brand insertion to maximize fan engagement. This analysis is often conducted using computer vision, a type of artificial intelligence that scans stadiums, racetracks, and other sporting environments to detect unused spaces. This technology not only identify potential locations but also calculate the expected media value of these spaces, enabling more strategic advertising decisions (Mike, 2020; Bullock, 2023).

Leveraging technological advancements, such as virtual advertising, for real-time adaption of sponsor messages can optimize sponsorship efficiency (Rumpf & Breuer, 2016). However, a

deeper understanding of how sports content influences sponsor message processing is essential. Watching sports induces arousal among the audience, particularly when the favorite teams compete (Kim et al., 2017; Biscaia et al., 2013). Recognizing how the flow of the game impacts viewer arousal is vital for optimizing sponsor message visibility. Research by Bruer et al. (2021) revealed significant practical implications concerning the effectiveness of billboards and game predictability. Attention to sponsor brands diminished when the game's outcome seemed certain and increased if the favorite team was likely to lose. Moreover, attention to sponsor brands decreased as the game progressed, with higher levels in the first half compared to the second half.

2.5 Streaming Platforms, aka Over-The-Top Media Services

As presented in the Introduction of this master thesis, the current study focuses on the impact that personalized virtual advertising may have within streaming platforms, as it is the ideal medium due to the straightforward collection of subscribers' data and preferences. In the US, Nielsen reports that streaming platforms surpassed cable and broadcast television for the first time in 2022. Moreover, in major European markets, spending on sports rights through OTT services rose from 12% in 2021 to 20% in 2022.

Streaming platforms or Over-the-Top Media Services (OTT) refers to the direct delivery of video content to viewers over the Internet, bypassing traditional cable or broadcast television platforms (Vaidya et al., 2023). The rise of OTT services has greatly enhanced audience viewing experiences. Consumers are no longer bound by time or location, granting them the flexibility to watch more content across different devices, in diverse environments and in any device like laptop, desktop, mobile, tablet, Smart Tv (Hutchins and Sanderson, 2017). Additionally, OTT services can customize the viewing experience for each user, enabling the formation of personalized viewing patterns (Hutchins and Sanderson, 2017).

In addition, numerous studies have been published on user behavior on OTT platforms (Gonçalves et al., 2014; Kim, 2015; Kwak et al., 2021; Nagaraj et al., 2021, Xu et al., 2023). Nagaraj et al. (2021) found that the youngest generations, regardless of gender, are more willing to pay for OTT subscription prices. Moreover, research by Williams (2020) examines the factors influencing consumer engagement with OTT platforms in sports, highlighting how various motivations and preferences shape fan behavior. "**Acquisition of Knowledge**" through media consumption enables fans to gain insights about games, driven by their identification with teams and active engagement

on OTT platforms (Trail & James, 2001; Chan-Olmsted & Xiao, 2019). This is closely linked to "**Advertising Preference**", where targeting passionate fans with sponsored messages, especially during major events, becomes crucial for effective marketing, given the fans' deep connection to their teams (Seo & Green, 2008; Su, 2020). Furthermore, "**Content Expectations**" underscore the need for unique, personalized content to cater to on-the-go viewing habits, which is complemented by the "**Convenience**" factor, emphasizing the importance of quick access to information in fostering brand loyalty (Trail et al., 2003; Nee, 2013; Hwang & Lim, 2015). As consumers shift from traditional cable to more flexible OTT subscriptions, "**Cost**" emerges as a significant consideration, with adaptable pricing strategies providing a competitive edge (Williams,2020). Additionally, the "**Entertainment**" value of OTT platforms lies in their ability to offer compelling storytelling experiences, although users may be less inclined to interact with other fans on these platforms (Karat et al., 2002; Seo & Green, 2008). The "**Escape**" factor, which refers to using sports as a means to overcome loneliness and provide mental break, further drives fan engagement (Korgaonkar & Wolin, 1999). "**Fanship**" is a key motivator for consuming sports content via mobile devices, reflecting the importance of strong identification with a team (Trail, Fink, & Anderson, 2003; Ha et al., 2017; Kang et al., 2015). Moreover, the emphasis on "**Information**" accessibility draws users to platforms that prioritize relevant content, as sports fans often focus on gathering information over other forms of content (Korgaonkar et al., 1999; Clavio & Walsh, 2014). Relatedly, "**Pass Time**" is another motivation for online sports viewing, while "**Sports Knowledge**" connects the information gained from traditional sports viewing to online consumption, further enhancing fans' understanding and engagement with the game (Rubin, 1981; Dietz-Uhler et al., 2000). "**Team support**" also plays a vital role, with social support within fandom communities fostering cohesion through emotional, tangible, and informational exchanges (Shumaker & Brownell, 1984; Gill & Williams, 2008). Lastly, "**Technical Quality**" is essential, as high-quality streaming experiences on OTT platforms are crucial for maintaining consumer satisfaction and engagement as these services continue to grow (Karat et al., 2002).

2.6 Formula 1

In 2018, F1 announced the launch of F1 TV, the official OTT platform of Formula 1, which offers a comprehensive experience for watching Grand Prix races. This includes pre- and post-shows, live race coverage, press conferences, documentaries and archival content (F1 Website, 2018). The

platform is available in 118 territories, with the live streaming option accessible in six languages across 85 territories (F1 Website, 2021).

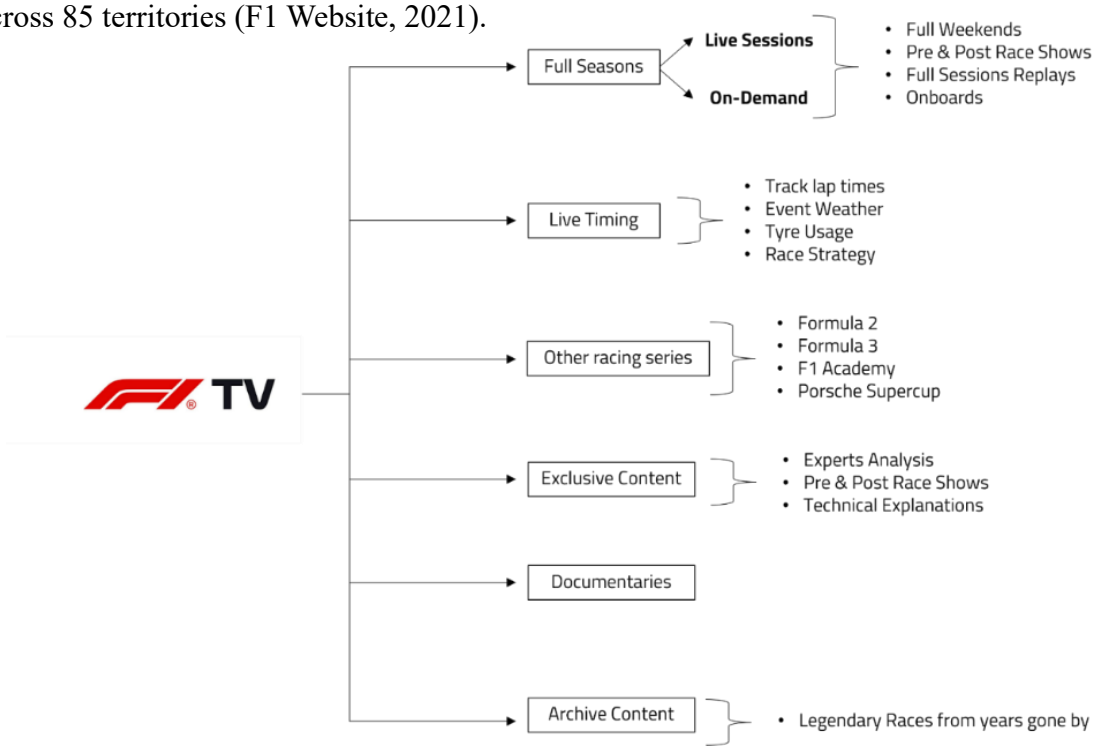


Figure 2: Overview of F1 TV Features and Content Offerings, Highlighting Opportunities for Revenue Growth Through Virtual Advertising

As illustrated in the diagram above, F1 TV provides a diverse range of content, Live and On-Demand, designed to bring consumers closer to the sport. This strategic initiative was implemented following the acquisition of Formula 1 by Liberty Media in 2017 (F1 Website,2017), marking a significant transformation in F1's digital strategy. The shift aimed to enhance fan engagement and accessibility, leveraging digital platforms to offer an enriched viewing experience. Additionally, virtual advertising on the OTT platform provides innovative revenue opportunities by allowing sponsors to adjust their commercial messages according to regional audiences and personalized preferences of subscribers (Leadsom, 2023). This approach is further supported by the recognition that sports fans are not a homogeneous group (Wang *et al.*, 2020), exhibiting varying degrees of loyalty (Dwyer, 2011), engagement (Yoshida *et al.*, 2014) and identification with the sport and the team (Wann and Branscombe, 1990).

Since its acquisition by Liberty Media in 2017, Formula 1 has undergone a comprehensive rebranding initiative, expanding into new markets and attracting a growing fan base. Presently, Formula 1 boasts a following of 500 million loyal fans. The organization hosts 24 race events

across the globe, surpassing 1.5 billion cumulative viewers and generating 3 billion online impressions. Notably Formula 1 stands as one of the fastest-growing sports entities on social media (Formula 1 Website). These statistics are highly appealing to potential sponsors aiming to enter the world of Formula 1 for B2C or/and B2B purposes. Hence, in the 2024 season, we observe a total of 294 sponsorship agreements spread across the 10 teams of the grid averaging 30 sponsorship partnerships per team (Tafà, 2024). As a result, Formula 1 provides an excellent case study for examining the impact of virtual advertising technology, given the global reach of the sport. The current research will focus exclusively on the partners of Formula 1, as these brands are prominently displayed (in-stadium or virtually) across the racetrack. In the 2024 season, Formula 1 featured 21 partners (Formula 1 Website), each with international business objectives.

2.7 Eye-Tracking Theory

Eye-tracking is a technology used to monitor and analyze where and how our eyes move, revealing what we're focusing on, the duration of our gaze, and the path our eyes follow (Realeye.io, Website). Tracking eye movements in response to advertisements is particularly valuable because scan paths offer an immediate visual representation of whether the viewer focused on or at least glanced over the intended text or object (Isaacowitz *et al.*, 2006; Orquin & Holmqvist, 2018; Wedel and Pieters, 2012; Duchowski, 2007). Yfantidou *et al*. (2018) assert that eye-tracking technology offers a cutting-edge approach to data collection, helping to formulate research questions and enhancing our understanding of how we perceive and interpret visual information. From an industry perspective, leading corporations such as Pepsi, Unilever and Procter & Gamble have increasingly adopted eye-tracking technology to measure the effectiveness of marketing stimuli and to predict consumer purchasing decisions by analysing their visual interactions with products and advertisements (Wedel and Pieters, 2012; Harris *et al.*, 2018; Ramsøy *et al.*, 2019). This technology enables marketing managers to optimize consumer engagement with advertisements, product packaging, and in-store displays (Wang *et al.*,2022).

The field of sports marketing remains underexplored in terms of consumer responses to sponsored advertisements using neurophysiological techniques, such as eye-tracking (Dos Santos *et al.*, 2019). The main argument is that traditional methodologies, such as self-reporting, may not accurately capture the extent of viewer attention to online sports advertisements or how they cognitively process the presented information (Yoshida, 2017). Specifically, few studies have

investigated the effect of virtual advertising on spectators' memory during sports broadcasts using eye-tracking technology. Porter (2022), for instance, demonstrated that while virtual advertisements gain more visual attention compared to traditional in-stadium ads during an NBA broadcast, they are less likely to be remembered. This suggests that although virtual ads frequently noticed, the level of cognitive engagement – such as deeper processing and recall – is limited, resulting in poorer memory retention.

Building on this gap, our analysis will explore the impact of virtual personalized messages on spectators compared to non-virtual personalized messages, using RealEye.io, an online eye-tracking platform. This research aims to lay the groundwork for an innovative approach to directly communicating with individual consumers, contributing new insights to the literature on personalized advertising strategies.

2.8 Research Questions

The current research investigates the impact of virtual advertising technology on the Formula 1 broadcast experience. The objective of this study is to analyze the effect that personalized virtual advertising signage may have on brand recall and to assess the potential for interactive virtual signage to offer innovative advertising opportunities for spectators. To address these aims, the study focuses on three key research questions:

RQ1. What is the average visibility of virtual advertising signage as percentage of the total frame size during a Formula 1 Grand Prix broadcast?

RQ2. Does the inclusion of personalized messages in virtual advertising reduce the time to first fixation on advertisements during Formula 1 broadcasts?

RQ3. How does the placement and format of virtual advertising, including non and personalized advertisements, during Formula 1 broadcasts influence brand recall and lasting impressions among viewers?

3. METHODOLOGY

RQ1. What is the average visibility of virtual advertising signage as percentage of the total frame size during a Formula 1 Grand Prix broadcast?

To address the first research question, we will utilize qualitative research methods, specifically content analysis. As indicated in the literature review, a key advantage of virtual advertising technology is its ability to digitally place advertisements in otherwise unbranded or underutilized areas of racetracks (uniqFEED Blog, 2023; Porter,2022; Sander & Altobelli, 2011; Cianfrone *et al*, 2006). The decision to evaluate virtual signage visibility during Formula 1 races is based on the understanding that visibility (Drive Sports Marketing Agency, 2023) significantly impacts Media Value Percentage, which in turn affects the overall Media Value. Additionally, visibility equates to exposure, which is crucial for enhancing brand awareness and image (Cornwell and Maignan, 1998; Olson and Thjømøe, 2009). In the sports sponsorships analytics industry, "visibility" is defined as the percentage of the logo within view/frame (Relo Metrics, Media Valuation 101, Learning Center, 2022). Exposures to logos during televised sports events generated brand recognition and likability effects comparable to those achieved by a 30-second advertisement (Olson and Thjømøe, 2009). Emphasizing this aspect is vital for sports stakeholders to identify optimal exposure opportunities, considering the varying dimensions of different sports venues (VISUA, 2022).

To calculate the visibility percentage of virtual advertising signage during Formula 1 broadcasts, the author developed a customized Python script. The Python script is designed for detecting a logo within a frame and saving the result with visual indicators. Utilizing the OpenCV library, the script begins by importing necessary modules: **'cv2'** for computer vision tasks, **'numpy'** for numerical operations, and **'webbrowser'** and **'os'** for file system interactions. The core functionality is encapsulated in the **'logo_detection_and_save'** function, which takes three parameters: **'image_path'** for input image, **'logo_path'** for the logo image to be detected, and **'output_path'** for saving the processed image. The function reads both the input and logo images using **'cv2.imread()'**. If either image fails to load, an error message is printed. The logo image is checked for an alpha channel (transparency) and converted to a BGR format if necessary. Both images are then converted to grayscale to simplify the template matching process. Template matching is performed with **'cv2.matchTemplate ()'**, and a correlation threshold of **'0.15'** is used to determine if a match is found. When a match is detected, the script calculates the dimensions and center of the logo draws a green rectangle around it using 'cv2.rectangle()', and computes the logo's visibility percentage relative to the total image size - **Visibility Percentage = (Total Size of Virtual or Logo signage / Total Image Size) *100** -. This percentage is overlaid on the image

with 'cv2.putText()'. The processed image is saved to the specific output path, and the script checks whether the saving was successful. In case of errors, such as the logo not being found or issues with saving or opening the image, appropriate error messages are displayed. Finally, the **'logo_detection_and_save'** function is called with a specified path for the input image, logo image, and output image, performing the logo detection and saving the processed result.

After thoroughly analyzing all the Formula 1 races from the 2023 season, we carefully selected frames containing various types of virtual advertising messages. An additional analysis of onboard camera footages (F1 TV Pro's feature) was conducted to verify that the detected advertisements were virtually integrated into the broadcast. This approach ensures that our calculations that our calculations account for the widest possible range of virtual advertising formats. The final selected frames, sourced from F1 TV Pro's International Feed, were standardized at a resolution of 1440 x 900 pixels. Screenshots were captured using a 16-inch laptop display, aligning with the study's focus on Over-the-Top (OTT) streaming capabilities. In total, 22 frames were selected from 10 different races in the 2023 Formula 1 season.

RQ2. Does the inclusion of personalized messages in virtual advertising reduce the time to first fixation on advertisements during Formula 1 broadcasts?

RQ3. How does the placement and format of virtual advertising, including non and personalized advertisements, during Formula 1 broadcasts influence brand recall and lasting impressions among viewers?

To evaluate the impact of personalized advertising, two surveys were administrated to 100 participants using Realeye.io, an eye-tracking platform. The participants were divided into two equal groups of 50. The first group was shown 20 screenshots from various Formula 1 races of 2023, each containing at least one virtual advertising signage. The second group viewed the same screenshots, but with four of the virtual advertising signages edited by personalized advertising messages. Both groups were further divided into subgroups: 30 undergraduate and 20 postgraduate students, all enrolled at Greek universities, including the University of Athens, the National and Technical University of Athens, and Aristotle University of Thessaloniki. Prior to the main study, the authors conducted a pre-check experiment involving a total of 20 participants, with each group consisting of 10 participants aged between 20 and 35.

The experimental procedure was identical for both groups. RealEye.io (https://www.realeye.io), was used to conduct a cost-effective, webcam-based eye-tracking study, followed by a post-experiment questionnaire. This platform operates directly within a web browser, removing the need for external hardware or software installations, making it highly accessible. Participants required only a webcam and an internet connection, and they accessed the test via a link distributed through email. Also, the platform complies with EU data protection regulations (GDPR, Art.5.1(c)), ensuring that no data from the webcam is recorded throughout the experiment (RealEye – Technology Whitepaper, 2024).

The experimental procedure commenced with webcam calibration, allowing the program to track participants' eye movements as they focused on specific areas of the screen. Realeye.io assigns a grade to assess the quality of eye-tracking data for each participant, evaluating aspects such as sampling rate, data completeness, and the percentage of time the participant's gaze was accurately recorded on the screen (Realeye.io, Website).

Survey A

No.	Photo Name	Detected Sponsors	Personalized Message
1	FORMULA 1 ROLEX GRANDE PRÊMIO DE SÃO PAULO 2023 - Turn 5	LIQUI MOLY	
2	FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023 - Turn 5	ARAMCO / ROLEX	
3	FORMULA 1 QATAR AIRWAYS QATAR GRAND PRIX 2023 - Turn 5	ROLEX	
4	FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023 - Turn 9	MSC CRUISES / QATAR AIRWAYS	
5	FORMULA 1 GRAN PREMIO DE LA CIUDAD DE MÉXICO 2023 - Turn 13	DHL	
6	FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023 - Turn 11	HEINEKEN	
7	FORMULA 1 GRAND PRIX DE MONACO 2023 - Tunnel	QATAR AIRWAYS	
8	FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023 - Turn 8	DHL	
9	FORMULA 1 ROLEX GRANDE PRÊMIO DE SÃO PAULO 2023 - Turn 15	MSC CRUISES	
10	FORMULA 1 HEINEKEN SILVER LAS VEGAS GRAND PRIX 2023 - Turn 12	SALESFORCE	
11	FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023 - Turn 6	QATAR AIRWAYS	
12	FORMULA 1 LENOVO UNITED STATES GRAND PRIX 2023 - Turn 12	PIRELLI	
13	FORMULA 1 ETIHAD AIRWAYS ABU DHABI GRAND PRIX 2023 - Before Turn 8	LENOVO	
14	FORMULA 1 HEINEKEN SILVER LAS VEGAS GRAND PRIX 2023 - Turn 2	PARAMOUNT+	
15	FORMULA 1 ROLEX GRANDE PRÊMIO DE SÃO PAULO 2023 - Turn 13	SALESFORCE	
16	FORMULA 1 GRAND PRIX DE MONACO 2023 - Tunnel	HEINEKEN	
17	FORMULA 1 ROLEX GRANDE PRÊMIO DE SÃO PAULO 2023 - Turn 10	SALESFORCE	
18	FORMULA 1 SINGAPORE AIRLINES SINGAPORE GRAND PRIX 2023 - Turn 18	LIQUI MOLY	
19	FORMULA 1 LENOVO UNITED STATES GRAND PRIX 2023 - Turn 7	QATAR AIRWAYS	
20	FORMULA 1 ETIHAD AIRWAYS ABU DHABI GRAND PRIX 2023 - Before Turn 8	LIQUI MOLY	

Survey B

1	FORMULA 1 ROLEX GRANDE PRÊMIO DE SÃO PAULO 2023 - Turn 5	LIQUI MOLY	
2	FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023 - Turn 5	ARAMCO / ROLEX	
3	FORMULA 1 QATAR AIRWAYS QATAR GRAND PRIX 2023 - Turn 5	ROLEX	
4	FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023 - Turn 9	MSC CRUISES / QATAR AIRWAYS	
5	FORMULA 1 GRAN PREMIO DE LA CIUDAD DE MÉXICO 2023 - Turn 13	DHL	Happy Birthday, Nikos! Enjoy 15% off your next delivery with DHL!
6	FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023 - Turn 11	HEINEKEN	
7	FORMULA 1 GRAND PRIX DE MONACO 2023 - Tunnel	QATAR AIRWAYS	
8	FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023 - Turn 8	DHL	
9	FORMULA 1 ROLEX GRANDE PRÊMIO DE SÃO PAULO 2023 - Turn 15	MSC CRUISES	
10	FORMULA 1 HEINEKEN SILVER LAS VEGAS GRAND PRIX 2023 - Turn 12	SALESFORCE	
11	FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023 - Turn 6	QATAR AIRWAYS	
12	FORMULA 1 LENOVO UNITED STATES GRAND PRIX 2023 - Turn 12	PIRELLI	Drive in Style, John! SAVE 25% off TODAY
13	FORMULA 1 ETIHAD AIRWAYS ABU DHABI GRAND PRIX 2023 - Before Turn 8	LENOVO	Happy Birthday, George! Enjoy 35% off LENOVO products!
14	FORMULA 1 HEINEKEN SILVER LAS VEGAS GRAND PRIX 2023 - Turn 2	PARAMOUNT+	
15	FORMULA 1 ROLEX GRANDE PRÊMIO DE SÃO PAULO 2023 - Turn 13	SALESFORCE	
16	FORMULA 1 GRAND PRIX DE MONACO 2023 - Tunnel	HEINEKEN	
17	FORMULA 1 ROLEX GRANDE PRÊMIO DE SÃO PAULO 2023 - Turn 10	SALESFORCE	
18	FORMULA 1 SINGAPORE AIRLINES SINGAPORE GRAND PRIX 2023 - Turn 18	LIQUI MOLY	
19	FORMULA 1 LENOVO UNITED STATES GRAND PRIX 2023 - Turn 7	QATAR AIRWAYS	Mary, book your tickets for the next RACE today!
20	FORMULA 1 ETIHAD AIRWAYS ABU DHABI GRAND PRIX 2023 - Before Turn 8	LIQUI MOLY	

Figure 3: Detailed Analysis of 20 Frames (Survey A & Survey B), including Detected Sponsors per Frame and Personalized Messages in Survey B.

This was followed by practical instructions outlining the experimental process. In the first part of experiment, participants were exposed to 20 screenshots from the 2023 Formula 1 season, each containing at least one virtual advertising sign. Each screenshot was displayed for 3 seconds in continuous succession, with no pause between images, resulting in a total stimulus exposure time of 60 seconds.

In the second part of experiment, participants answered a series of unaided and aided brand recall and recognition questions to measure the effectiveness of the personalized advertisements.

Section	Question	Response Category
1	List all the brands you recall seeing in the provided photos.	Open Question
2	Which brand do you believe will leave a lasting impression on you based on the photos above?	Open Question
3	Based on your answer in Question 2, where did you see the selected brand on the Formula 1 track?	1… Grandstands (The brand was prominently displayed on a grandstand during race coverage) 2… Trackside (The brand was visible on trackside banners strategically placed around the circuit)
4	15 logos were shown individually, four of which were not Formula 1 sponsors: **1**. LIQUI MOLY **2**. QATAR AIRWAYS **3**. SALESFORCE **4.** ABB **5.** HEINEKEN **6.** PARAMOUNT + **7**. JULIUS BÄR **8.** LENOVO **9.** PANASONIC **10.** PIRELLI **11.** MSC CRUISES **12.** DHL **13.** ROLEX **14.** ARAMCO **15.** WORKABLE	1… Yes, I do recall seeing this brand advertised 2… No, I do not recall seeing this brand advertised

Figure 4: Questionnaire format for brand recall and recognition study following eye-tracking and observation of 20 frames with virtual advertisements.

In section 4, as shown in the table above, participants were asked to indicate whether they recalled seeing specific brands advertised in the provided frames. Following the methodology of previous studies (Maricic *et al.*, 2019; Bennett, 1999; Turley, 2000; Djohari *et al.*, 2019), we administrated the brand recall task immediately after participants viewed the 20 frames. To minimize random guessing, the study incorporated dummy brands following Bennett's (1999) method. For added realism in brand recognition, three logos from actual Formula E sponsors—JULIUS BÄR, ABB, PANASONIC, WORKABLE—were included among 15 logos. These brands were selected due to

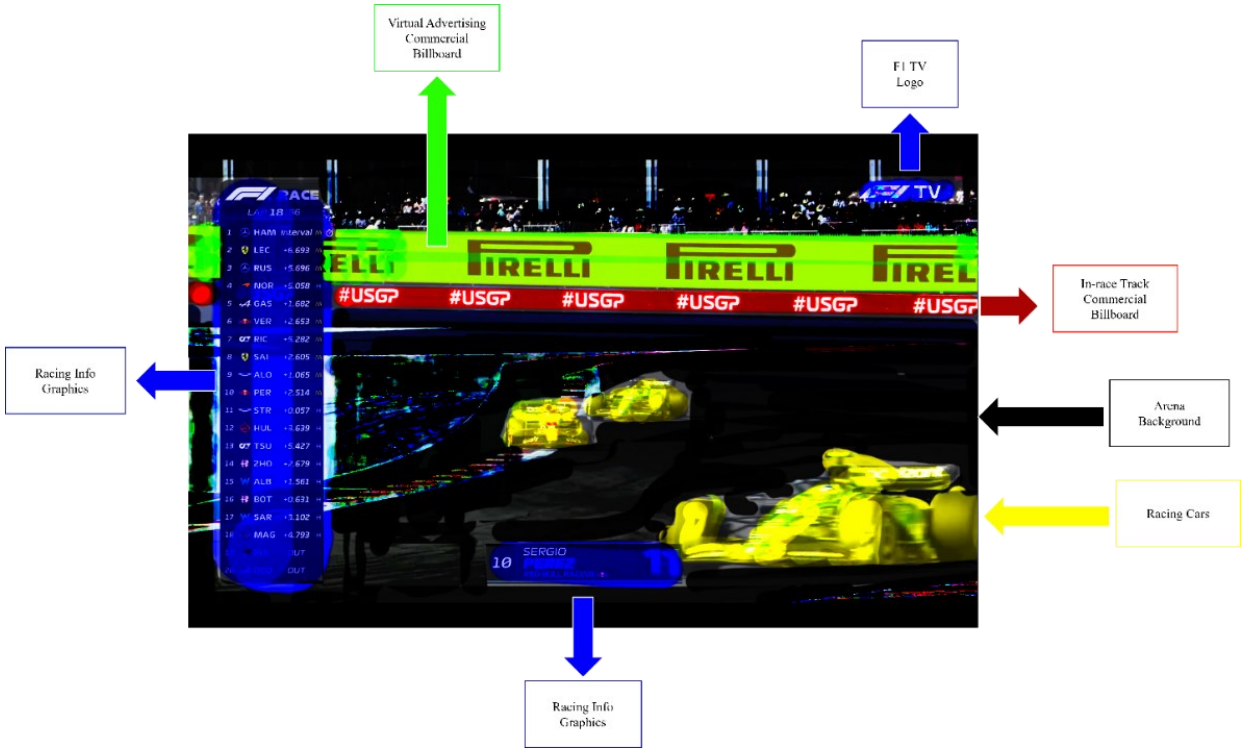
their involvement in the motorsport industry, ensuring the authenticity of the sponsorship context while preventing bias in brand recall responses. This combination provided a realistic framework for analyzing the impact of personalized advertising in a controlled experimental setting.

Upon completing the survey, participants were only required to provide their age and gender to facilitate more effective data analysis. Their names were not collected, ensuring the anonymity of the experiment. Once this demographic information was submitted, the experiment concluded.

As the current study uses RealEye.io, it is worth mentioning that is highly precise, with an accuracy of approximately 110 pixels. This level of precision allows us to accurately track and analyze a user's interactions on a website, down to the size of small elements like individual buttons (RealEye Technical Whitepaper, 2020). It tracks the user's gaze at a frequency of up to 60 times per second (60Hz), meaning it continuously monitors where a user is looking with high precision. RealEye operates by using AI to analyze video input from a standard webcam, as AI detects the participant's face and eyes, and then predicts where the person's gaze is focused on the screen (RealEye Technical Whitepaper, 2020).

Given that eye movements are characterized by their short, rapid and challenging, the segmentation of images into distinct Areas of Interest (AOIs) is crucial for accurately assessing attention (Wang *et al.*,2022). This approach is particularly important in visually complex environments, such as Formula 1 broadcasts, which feature numerous visual stimuli such as racing cars, leaderboard graphics, sponsor advertisements, and background elements. By dividing these frames into AOIs, researchers can more precisely determine which elements capture and hold viewer attention in such high-information contexts (Wang *et al.*, 2022). The objective of this eye-tracking analysis is to investigate whether personalized virtual advertising, specifically signage featuring a viewer's name, enhances attention in comparison to non-personalized advertising displays.

AOI EXAMPLE SURVEY A



AOI EXAMPLE SURVEY B

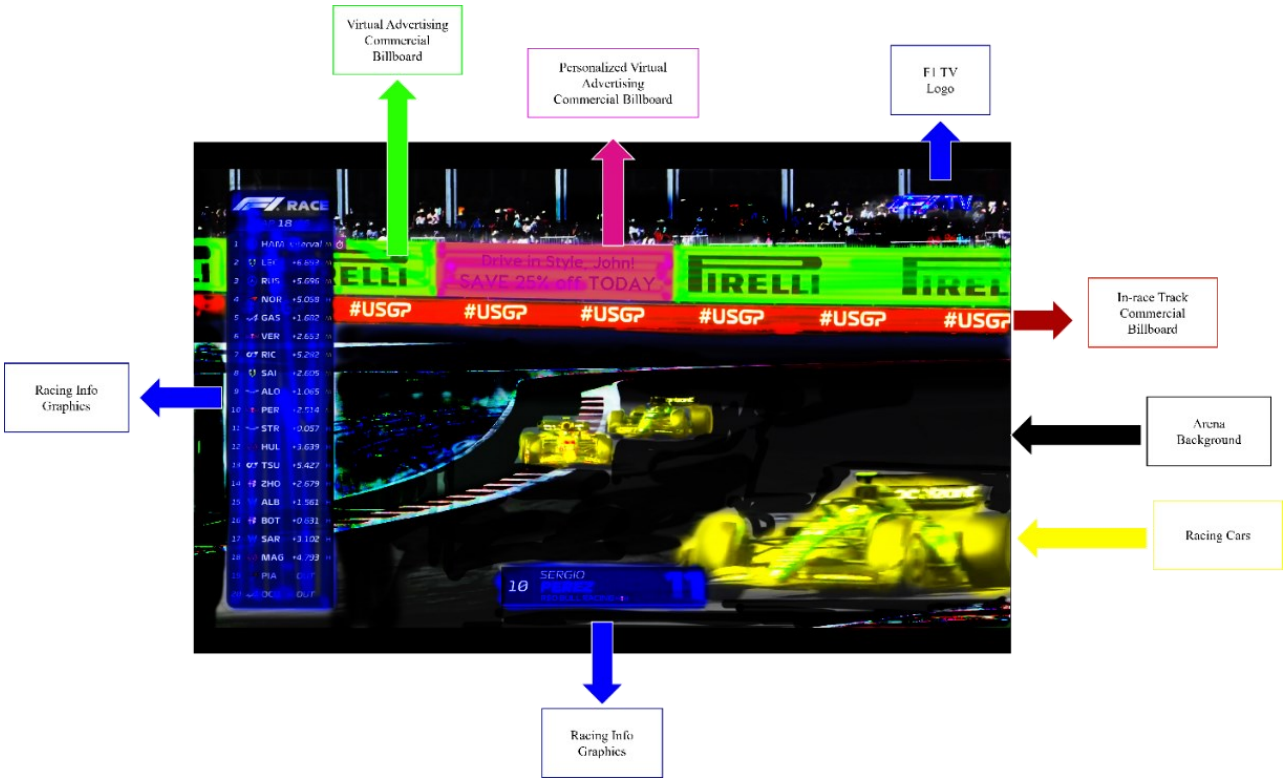


Figure 5: Examples of Areas of Interest (AOIs) for Both Surveys.

4. RESULTS

RQ1. What is the average visibility of virtual advertising signage as percentage of the total frame size during a Formula 1 Grand Prix broadcast?

Analyzing 22 screenshots from various 2023 Formula 1 races, each featuring at least one virtual advertisement, the average visibility of these signages was calculated to be 7.63% of the total frame size. In comparison, race standings -a common graphical element in Formula 1 broadcasts- covered an average of 10.81% of the frame. These findings underscore the prominence of virtual advertising within the visual field, indicating that strategic placement is essential to optimize visibility.

The data suggests that ad placement in particular track locations significantly enhances visibility. For instance, virtual signage positioned at key track turns, such as those in Mexican Grand Prix (23.64%), achieved higher visibility rates. Additionally, ads integrated into track infrastructure, such as bridge banners in Abu Dhabi and the tunnel in Monaco GP, were notably effective in enhancing brand prominence. A prominent example is the Qatar Airways advertisement in Monaco's tunnel, which reached a visibility rate of 20.31%, illustrating the importance of strategically positioned virtual ads to maximize brand exposure.

Frame Name	Detected Logo	Visibility Rate (%)
Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 9	MSC CRUISES	4.95%
Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 11	HEINEKEN	7.03%
Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 5	ARAMCO	5.07%
Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 8	DHL	0.86%
Formula 1 Heineken Silver Las Vegas Grand Prix 2023 - Turn 12	SALESFORCE	4.91%
Formula 1 Heineken Silver Las Vegas Grand Prix 2023 - Before Turn 14	SALESFORCE	6.13%
Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 15	MSC CRUISES	6.98%
Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 5	LIQUI MOLY	5.33%
Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 5 (A)	LIQUI MOLY	4.94%
Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 5 - Logo on the Track	LIQUI MOLY	1.42%
Formula 1 Etihad Airways Abu Dhabi Grand Prix 2023 - Before Turn 8	LENOVO	8.48%
Formula 1 STC Saudi Arabian Grand Prix 2023 - Turn 24	MSC CRUISES	2.61%
Formula 1 Pirelli Gran Premio D'italia 2023 - Turn 6	AWS	6.06%
Formula 1 Lenovo United States Grand Prix 2023 - Turn 12	PIRELLI	14.78%
Formula 1 Lenovo United States Grand Prix 2023 - Turn 7	QATAR AIRWAYS	3.39%
Formula 1 Lenovo United States Grand Prix 2023- Turn 19	PIRELLI	5.51%
Formula 1 Gran Premio De La Ciudad De México 2023 - Turn 5	LIQUI MOLY	23.64%
Formula 1 Gran Premio De La Ciudad De México 2023 - Turn 13	DHL	16.89%
Formula 1 Qatar Airways Qatar Grand Prix 2023 - Turn 9	MSC CRUISES	7.37%
Formula 1 Qatar Airways Qatar Grand Prix 2023 - Turn 5	ROLEX	10.67%
Formula 1 Grand Prix De Monaco 2023 - Turn 6	PIRELLI	0.50%
Formula 1 Grand Prix De Monaco 2023 - Tunnel	QATAR AIRWAYS	20.31%

Table 1: Results of Virtual Advertising Visibility Percentage Analysis in 22 Frames from the Formula 1 2023 Season - Source: Authors own work

RQ2. Does the inclusion of personalized messages in virtual advertising reduce the time to first fixation on advertisements during Formula 1 broadcasts?

A total of 100 participants completed the experiment, which included eye-tracking as well as brand recall and recognition questions, 44% of whom were Male and 56% were Female; none identified with an "Other" gender category. The sample's age ranged from 18 to 56 years, with 5 participants not reporting their age. This yielded 95 valid ages for analyses involving age. The A-Undergraduate group reported a mean age of 21.75 years (range 19 to 25, 2 missing values), while B-Undergraduate had a slightly higher mean age at 23.28 years (range 18 to 55, 1 missing value). For Postgraduates, A-Postgraduate group had average age at 25.42 years (range 23 to 31, 1 missing), whereas B-Postgraduate participants had the highest mean age at approximately 27.05 years (range 23 to 56, 1 missing). 60 participants were Undergraduates (n= 30 A-Undergraduate, n = 30 B-Undergraduate), and 40 were Postgraduates (n= 20 A-Postgraduate, n= 20 B-Postgraduate). The data were further categorized by the type of advertisement each participant viewed, resulting in equal groups of 50 receiving Non-Personalized Virtual Advertisements and 50 receiving Personalized Virtual Advertisements.

For each participant, our eye-tracking tool, Realeye.io, evaluated their performance and classified it as Perfect, Very Good, Good, Average, Low, or Very Low (Lewandowska, n.d., Realeye.io website). In total, 33% of participants were rated "Perfect", 45% "Very Good", and only a small percentage fell into the lower categories (Good, Average, Low, or Very Low). Table 2 displays the distribution of Data Quality ratings across the four experiment categories (A- Undergraduate, B-Undergraduate, A-Postgraduate, and B-Postgraduate). Notably, 40% of A- Undergraduates participants and 35% of B-Postgraduate participants achieved a "Perfect" rating, while B-Undergraduate and A-Postgraduate participants marked higher ratio of "Very Good" ratings. A small number of participants (≤ 5% in any subgroup) were categorized as the "Very Low" category.

Moreover, each frame in the study is divided into Areas of Interest (AOIs), enabling the measurement of several critical eye-tracking metrics. These metrics provide insights into participants' visual attention and engagement patterns. The metrics include (RealEye.io – Glossary):

1. **Average Time to First Fixation** (s): The average time it takes participants to look at a specific area for the first time.
2. **Average Time Spent** (s): The average duration participants spent looking at the area.
3. **Fixations**: The number of fixations within the AOI, with a higher number indicating greater visual attention.
4. **Fixation Ratio (%)**: The percentage of viewers who looked at the area, registering at least one fixation or gaze.
5. **Average Fixation Duration** (s): The average length of a single fixation in the AOI.
6. **Average First Fixation Duration** (s): The duration of the first fixation on average.
7. **K-coefficient**: A metric combining fixation durations and saccade amplitudes, standardized to provide an ambient/focal attentional coefficient for individual scan paths.
8. **Average Time to First Gaze** (s): The time it takes, on average, for participants to direct their gaze to the area for the first time.
9. **Average Gaze Time Spent** (s): The average duration of all gazes' participants directed at the AOI, offering a measure of sustained visual attention within the area.
10. **Gazes**: The total number of gazes registered in the AOI.
11. **Gaze Ratio** (%): The proportion of participants who directed their gaze towards the AOI at least once.
12. **Average Revisits**: The average number of times participants looked back at the AOI after initially looking away.
13. **AOI Size (%)**: The size of the AOI expressed as a percentage of the entire image.
14. **AOI Time Range** (s): The total duration for which the AOI values were calculated.

Survey ID	Perfect	Very Good	Good	Average	Low	Very Low	Total
A-Undergraduate (n=30)	12 (40%)	10 (33%)	5 (17%)	2 (7%)	1 (3%)	0 (0%)	30
B-Undergraduate (n=30)	8 (27%)	16 (53%)	3 (10%)	1 (3%)	1 (3%)	1 (3%)	30
A-Postgraduate (n=20)	6 (30%)	10 (50%)	3 (15%)	0 (0%)	0 (0%)	1 (5%)	20
B-Postgraduate (n=20)	7 (35%)	9 (45%)	3 (15%)	0 (0%)	0 (0%)	1 (5%)	20

Table 2: Eye-Tracking Data Quality by Survey ID (This experiment involved four distinct groups based on participants' education level and the type of stimuli: A – Non-Personalized Virtual Advertisements, B – Personalized Virtual Advertisements):Authors own work

Table 3 shows the Data Qualities categories separated by Type of Advertisement (Non-Personalized Virtual Ads vs. Personalized Virtual Ads). Among those viewing non-personalized ads, 36% were classified as "Perfect" compared to 30% for those viewing Personalized Ads. The Personalized group had a higher share of "Very Good" ratings (50% vs 40%), while the lower Data Quality categories (Average, Low, Very Low) were minimally represented in both advertisement types.

Data Quality	Non-Personalized Virtual Ads (n=50)	Personalized Virtual Ads (n=50)	Total (n=100)
Perfect	18 (36%)	15 (30%)	33 (33%)
Very Good	20 (40%)	25 (50%)	45 (45%)
Good	8 (16%)	6 (12%)	14 (14%)
Average	2 (4%)	1 (2%)	3 (3%)
Low	1 (2%)	1 (2%)	2 (2%)
Very Low	1 (2%)	2 (4%)	3 (3%)

Table 3:Data Quality by Advertisement Type: Authors own work

This study examines the effectiveness of virtual advertising placements in Formula 1 broadcasts using eye-tracking data. Specifically, it explores how undergraduate and postgraduate participants perceive various on-screen elements, including Racing Cars, Personalized Virtual Advertisements, Non-Virtual Advertisements, the Left-Hand Side Standing, Race Info Graphic, and the F1 TV Logo. By analyzing metrics such as Time to First Fixation, Time Spent, Fixation Ratios, Gaze Ratios, K-coefficients, and Revisits, the study highlights both the benefits and limitations of current virtual advertising placements. Additionally, it investigates the potential for incorporating personalized advertisements in a fast-paced sports context. In this section, we present a detailed analysis of the eye-tracking results for each photo used in the experiment.

PHOTO 1: FORMULA 1 ROLEX GRANDE PRÊMIO DE SÃO PAULO 2023- TURN 5 - LIQUI MOLY

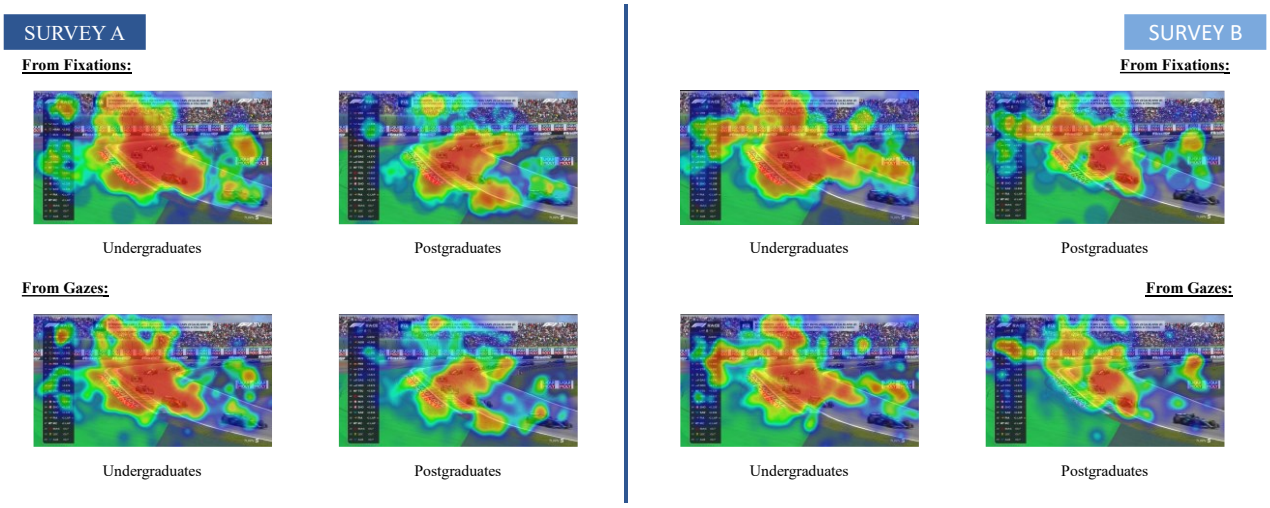


Figure 6: Heatmap Results Based on Fixation and Gaze Measures – Photo 1: Authors own work

The broadcast frame (**Photo 1**) included three separate virtual ads (VA1, VA2, VA3), a non-virtual ad, the racing cars, the Left-Hand Side Standings, a Race Info Graphic, and the F1 TV logo. To evaluate how each on-screen element attracted the eye, we recorded Time to First Fixation, Total Time Spent, Fixation and Gaze Ratios, K-coefficients (indicating focal or scanning behavior), and Revisits.

The Racing Cars drew the strongest attention from nearly every group. Undergraduates in Survey A, for example, reached a Fixation Ratio of 87% on the racing cars, while their Gaze Ratio was even higher at 97%. The participants' first fixation on the cars occurred within an average of 0.48 seconds. Similar results appeared in other subgroups, with up to 100% of postgraduates in Survey B looking at the cars at least once. The racing action thus dominated initial and repeated fixations, which aligns with existing research on primary action in sports broadcasts.

Among the virtual ads, Virtual Advertisement 1 achieved moderate to high Fixation Ratios, often between about 25% and 65%. In one case, undergraduates in Survey B recorded a Fixation Ratio of 57% and a Time to First Fixation of 1.58 seconds. Although they did not see Virtual Advertisement 1 immediately—likely because they were watching the cars first—they still devoted around 0.28 to 0.56 seconds to it once they noticed it. Virtual Advertisement 2 was generally detected faster. In some groups, such as undergraduates in Survey A, its Time to First Fixation averaged just 0.59 seconds, indicating that color contrast or positioning may have helped it stand out earlier. However, Virtual Advertisement 2's Fixation Ratio ranged from about 30% to

as high as 55%, suggesting that while it caught some viewers' eyes very quickly, others paid minimal attention.

Virtual Advertisement 3 struggled the most to capture attention, with Fixation Ratios often below 15%. Undergraduates in Survey A fixated on it just 3% of the time, and if participants did notice it, they often did so late: the average Time to First Fixation could be over two seconds. This was also visible in the postgraduates' data, where Virtual Advertisement 3 had an average time of more than two seconds to receive a first look. Such low engagement likely derived from its small visibility size, just 0.009% of the screen.

The cumulative virtual advertisements, representing the combined data from the three virtual ad elements, demonstrated moderate attention levels. In the undergraduates' Survey B data, its Fixation Ratio was approximately 34%, with an average Time to First Fixation of about 1.31 seconds. While more participants appeared to recognize the overlay compared to Virtual Advertisement 3, it did not match the appeal of the main racing content or the more prominent ads. In contrast, a non-virtual ad showed moderately variable engagement, with Fixation Ratios ranging from approximately 15% to 47%, depending on the group.

The Left-Hand Side Standings (a larger area at 10.5% of the screen) tended to catch more undergraduates' eyes, where Fixation Ratios could reach 47%, compared to some postgraduate groups that recorded values under 30%. In contrast, a Race Info graphic (approximately 3.4% of the screen size) engaged around 20% to 35% of viewers, with some postgraduate groups focusing more closely on the Stewards' decision not to further investigate a race incident. Finally, the F1 TV logo, occupying just 0.60% of the screen, barely registered in the eye-tracking data. In multiple subgroups, the Fixation Ratio was effectively zero.

Taken together, these results highlight that the Racing Cars strongly dominate viewers' attention. Ads positioned closer to that main action, or designed with high contrast, are more likely to be noticed quickly. VA1's moderate success is partly explained by its size (around 0.06% of the frame), while VA2's quicker detection suggests color or contrast can outweigh sheer size. At the same time, VA3's very low engagement shows that smaller or poorly contrasting ads can remain nearly invisible in a busy, dynamic setting. Differences between Survey A and Survey B—where, for instance, VA1's Fixation Ratio jumped from 33% to 57% for undergraduates—indicate that

instructions or task framing can also influence how intensively participants search for on-screen ads.

In practical terms, these findings confirm the importance of size, contrast, and placement to overcome the compelling visuals of an F1 broadcast. Large or visually distinct ads captured higher Fixation Ratios (sometimes over 50%) and were seen earlier, whereas smaller ads were often missed.

PHOTO 2: FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023- TURN 5 - ARAMCO

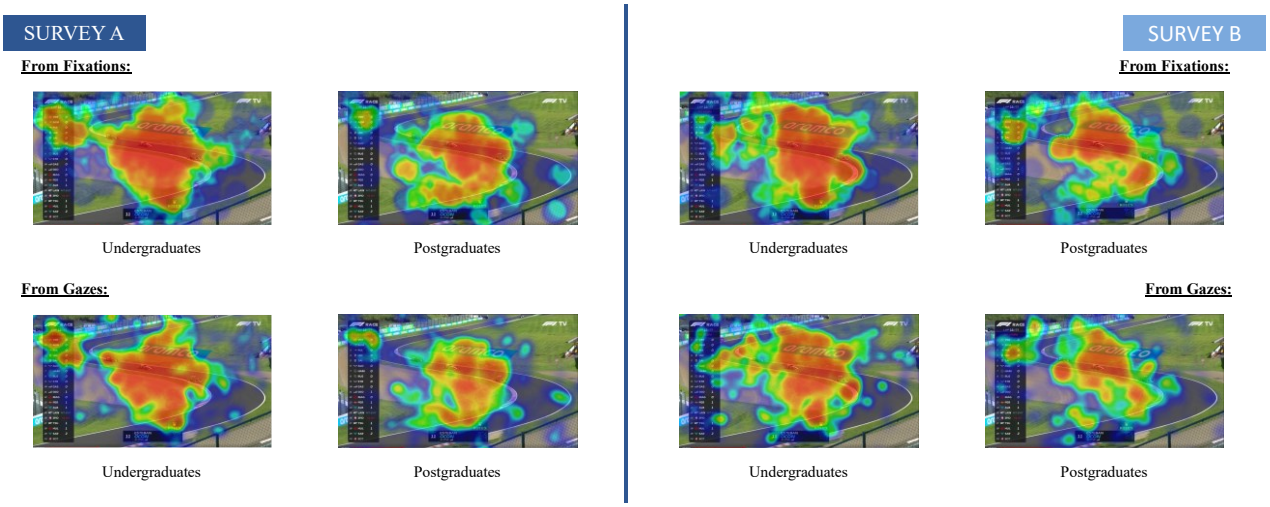


Figure 7: Heatmap Results Based on Fixation and Gaze Measures – Photo 2: Authors own work

In **Photo 2**, the Racing Cars once again attract substantial attention from both undergraduates and postgraduates. Across nearly all subgroups, the racing cars achieve relatively high Fixation Ratios (up to 75% in Postgraduates Survey A) and Gaze Ratios (reaching 90% and 95%, respectively). Their Time to First Fixation varies from about 0.98 to 1.32 seconds, which is slightly slower than might be expected for the main action, but they still earn the highest or second-highest overall Time Spent in most groups. Participants also revisit them multiple times, reflecting the cars' status as the central, most dynamic element on screen.

When comparing virtual ads and non-virtual ads, a few distinct patterns emerge. Virtual ads often receive moderate to strong engagement, particularly in Survey B. For instance, undergraduates in Survey B devote an average of 0.63 seconds to their virtual ad and reach a Gaze Ratio of 73%, while postgraduates in Survey B show a Gaze Ratio of 70% and a relatively high K-coefficient of +0.65, indicating more focal attention among those who fixate on the ad. By contrast, non-virtual

ads typically experience lower Fixation Ratios (as low as 3% for undergraduates in Survey B and 5% for postgraduates in Survey A), suggesting that any ad lacking in size or salient design may be overlooked, especially when viewers are drawn to the fast-paced race.

The Left-Hand Side Standing consistently maintained the attention of a modest yet steady group of viewers. In some cases, participants notice it earlier than the Racing Cars (for example, postgraduates in Survey A with a Time to First Fixation of 0.64 seconds), while in other cases, it appears after a one-second delay. Once participants look at the standings, they often spend slightly more time in this AOI compared to smaller ads. However, large variations in K-coefficient reveal differing viewing styles. Some subgroups (such as Undergraduates Survey A, with +0.39) exhibit a more focal approach, whereas Postgraduates Survey B show an ambient scanning attention at -0.74.

The Race Info Graphic draws relatively lower Fixation Ratios—often below 20% for postgraduates—but yields a moderate K-coefficient, indicating that those who do attend to it might be specifically seeking certain data. Nonetheless, it competes heavily with the racing cars, standing, and the more visually pronounced ads. Meanwhile, the F1 TV logo is almost universally ignored, showing no meaningful increase in fixation or gaze across any subgroup. This pattern underscores how a small, static logo in the periphery struggles to capture attention in a busy sports broadcast.

Overall, Photo 2 aligns with the general trend observed in Photo 1: the racing action consistently wins the most eye-time, and ad visibility depends strongly on factors such as size, location, design contrast, and participants' prior knowledge or prime (Survey A vs. Survey B). Virtual ads that receive focus (particularly in Survey B) often show moderately high average fixation times and positive K-coefficients, suggesting that once viewers notice a virtual ad, they give it relatively concentrated attention. Non-virtual ads and small, peripheral graphics receive fewer fixations, underscoring the critical role of visual prominence for any promotional element seeking to capture attention within the dynamic context of Formula 1.

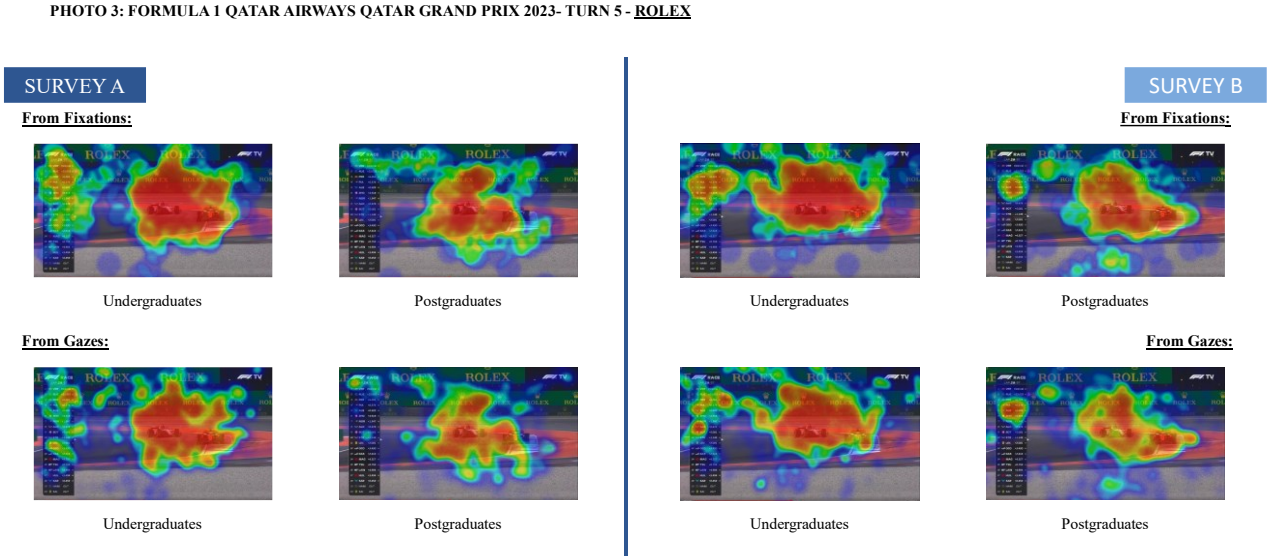


Figure 8: Heatmap Results Based on Fixation and Gaze Measures – Photo 3: Authors own work

In **Photo 3**, the racing cars once again function as the primary attractor of viewer attention, consistently achieving high Fixation Ratios (ranging from 65% up to 80% among undergraduates, and around 70% among postgraduates in Survey B). Participants tend to locate the cars within the first second or so, and they devote more total viewing time to them than to any other AOI in most groups. K-coefficient values for the racing cars often land in positive territory (e.g., +0.54 for Undergraduates Survey B, +0.70 for Postgraduates Survey A), indicating that viewers not only look at the action but also tend to focus on it, presumably to follow the happening race action.

In terms of virtual vs. non-virtual ads, the Virtual Ad emerges as a strong contender for attention. Undergraduates in Survey B notice it in under a second (0.87s) and spent around 0.56s, while postgraduates in Survey A detect it nearly as quickly (0.72s) and spent about 0.63s. Some subgroups—particularly Postgraduates Survey B—spot the Virtual Ad exceptionally fast (0.39s) and spend the highest average Time Spent of 0.79s, suggesting a potent visual draw. These data points confirm that design and positioning of the Virtual Ad can successfully command viewer attention, even amid the excitement of live racing visuals.

For Non-Virtual Ads, the results vary significantly. Non-Virtual Ad 1 and Non-Virtual Ad 2 frequently achieve moderately high Fixation Ratios, exceeding 50% in certain cases. However, Non-Virtual Ad 3 consistently struggles to engage more than 20% of participants, with undergraduates in Survey A showing particularly low engagement (just a 13% Fixation Ratio). The combined presence of multiple non-virtual ads within a single frame is reflected in the

"Cumulative Non-Virtual" metric, which demonstrates only moderate success, with Fixation Ratios ranging from approximately 25% to 37%. The K-coefficient values for these ads fluctuate between negative (indicating quick scanning) and positive (indicating deeper engagement), depending on group differences, highlighting that personal relevance or curiosity likely influences participants' engagement with these promotional elements.

Beyond advertisements, the Left-Hand Side Standings continues to engage a subset of viewers seeking detailed information on race positions. Undergraduates in both surveys devote between 0.56 and 0.60 seconds on average, while some postgraduates in Survey B spend as much as 0.77 seconds (nearly equal to racing cars), though the Fixations Ratios do not exceed about 40% in most groups. This inequality suggests that those who do look at the standings do so attentively, but a substantial proportion of viewers remain focused on other aspects of the broadcast.

As in earlier frames, the F1 TV Logo continues to be almost entirely ignored, with Fixations Ratios ranging from 0% to at most 5%. This repeated observation suggests that small, static logos located away from the main action are unlikely to be seen, a finding consistent with existing literature on peripheral brand elements.

Taken as a whole, the Photo 3 data reinforce key patterns observed in previous frames. Racing Cars maintain their status as the principal driver of gaze. Ads that are either larger (the Virtual Ad has a 10.3% AOI size here) or visually distinctive can secure meaningful attention. Non-Virtual Ads gain mixed levels of engagement, likely depending on their individual design and proximity to action. Meanwhile, high positive K-coefficients for certain ads show that, once viewers do notice them, they can become focal points for deeper engagement, an important consideration for advertisers seeking brand retention and recall. These insights offer further evidence that careful placement and design—coupled with a strategic understanding of how viewers watch the race—are vital for successfully integrating ads into a fast-moving broadcast environment.

PHOTO 4: FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023 TURN 9 – MSC CRUISES & QATAR AIRWAYS

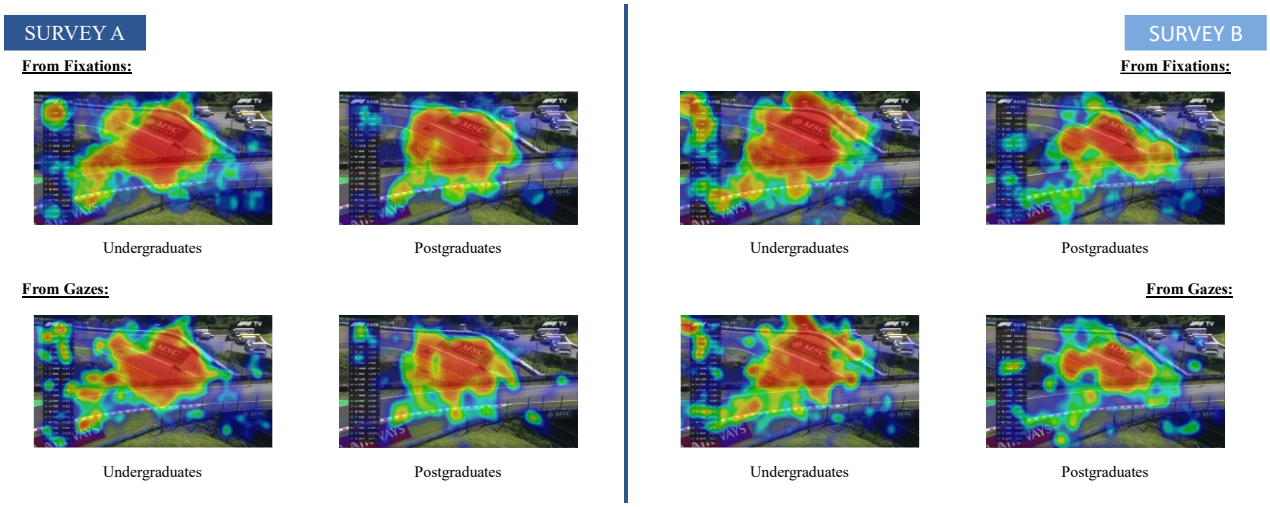


Figure 9: Heatmap Results Based on Fixation and Gaze Measures – Photo 4: Authors own work

In **Photo 4**, Racing Cars continue to capture a large share of viewer attention, though their Time to First Fixation is sometimes near or above one second. Across most subgroups, Fixations Ratios hover between 55% and 60%, suggesting that the majority of participants do eventually fixate on the cars, though not necessarily first. Time Spent on racing visuals remains near the top of the range (0.43–0.61s), reinforcing the view that they are a strong, if not immediate, focal point.

Among the virtual ads, Virtual Ad 1 usually outperforms Virtual Ad 2 in terms of both how quickly participants notice it and how many fixate. In Undergraduates Survey A, for example, Virtual Ad 1 is fixated on by 43% with an average Time Spent of 0.69s, compared to Virtual Ad 2's 13% and 0.29s. A similar pattern appears for postgraduates, though Virtual Ad 2 is sometimes detected very quickly by a small minority (e.g., 0.60s in Postgraduates Survey A) yet still ends up with a low Fixations Ratio (15%), implying that design or color may attract certain viewers rapidly but does not appeal to the majority. When results are analyzed cumulatively, fixation ratios across participants range from 28% to 35%, with moderate time spent viewing the ads. These aggregated findings provide further evidence that participants tend to engage more with Virtual Ad 1 than Virtual Ad 2, even when variations in attention patterns are considered.

Non-virtual ads display varied performance. Non-Virtual Ad 2 tends to do well among Undergraduates, with Fixation Ratios reaching 47%–50% in certain surveys. Non-Virtual Ad 3, on the other hand, is largely overlooked, especially among undergraduates in Survey A (Fixations Ratio just 3%) and postgraduates in Survey B (10%). When the results for all non-virtual ads are

analyzed cumulatively, approximately one-quarter to one-half of participants fixate on them. However, these fixations are often associated with negative or low-positive K-coefficients, indicating that participants tend to scan these ads briefly rather than engage with them deeply.

A recurring trend is that the Left-Hand Side Standing receives moderate attention: Fixation Ratios can climb to 33%–47% among undergraduates in Survey B, while postgraduates exhibit a somewhat lower or more scanning-based approach. This is consistent with previous frames, where some portion of viewers actively check the race order, but many are satisfied to watch the on-track action.

Finally, the F1 TV Logo remains effectively invisible. None of these subgroups shows any meaningful engagement with it, reaffirming that a small static logo off to the side attracts negligible attention in a busy F1 broadcast.

Overall, Photo 4's results reinforce central themes seen in earlier frames. Even though the racing cars do not always command the absolute fastest first fixations, they still secure broad reach and sustained gazes. Virtual Ad 1 emerges as a comparatively strong performer, while Virtual Ad 2 can catch the eye quickly in some subgroups yet fails to achieve a high overall fixation rate. Non-virtual ads produce mixed outcomes, suggesting that factors like size, positioning, or content relevance may drive viewer engagement. In combination, these findings imply that ad creators must combine strong visual contrast, timely placement, and alignment with on-screen action to draw viewers away from the high-interest racing visuals and other in-broadcast features.

PHOTO 5: FORMULA 1 GRAN PREMIO DE LA CIUDAD DE MÉXICO 2023- TURN 13 - DHL

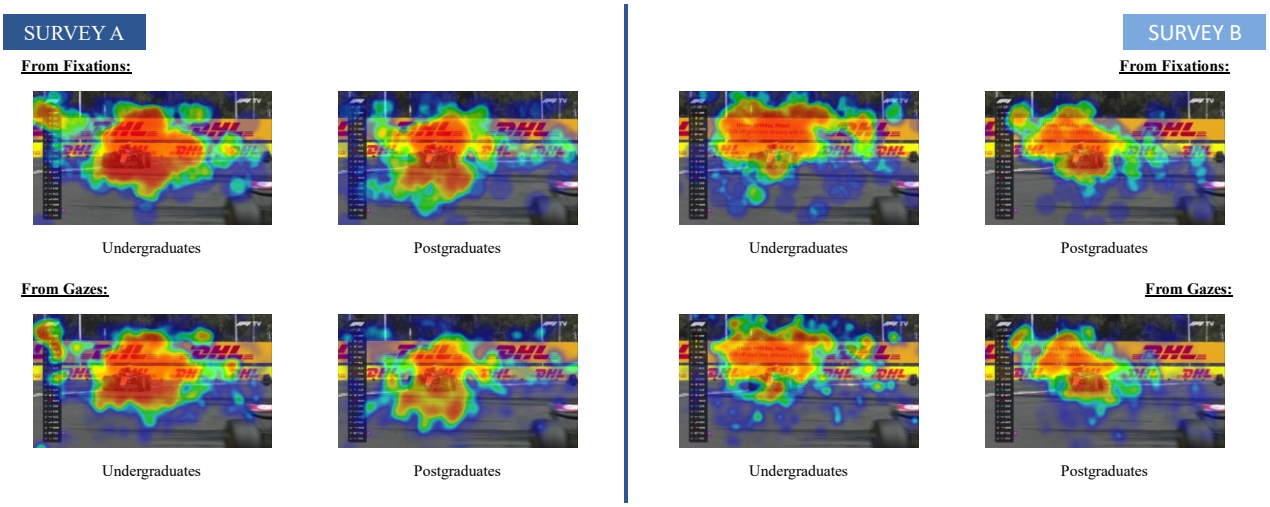


Figure 10: Heatmap Results Based on Fixation and Gaze Measures – Photo 5: Authors own work

In **Photo 5**, the introduction of a Personalized Virtual Advertisement in certain surveys (only in Survey Bs) appears to increase engagement compared to standard ads. Undergraduates in Survey B, for instance, show a Fixations Ratio of 73% and a Time Spent of 1.01 seconds on the personalized version, which is comparable to or even higher than typical non-virtual ads. A similar effect is observed among postgraduates in Survey B, where the personalized ad achieves a 60% fixation ratio, competing closely with the regular virtual ad, into which the personalized ad has been embedded (80%), and the racing cars (50%).

Racing cars still claim a significant share of attention overall, often drawing extended Time Spent values above one second in multiple subgroups. However, there are instances—such as Undergraduates Survey B and Postgraduates Survey B—where the racing cars' Fixations Ratio (43% or 50%, respectively) is lower than expected. This outcome suggests that a well-designed virtual advertisement or personalization cue can sometimes rival the main on-track visuals for viewer attention, at least within a short, three-second window.

Non-virtual ads continue to demonstrate variable performance. For example, in Postgraduates Survey B, the non-virtual ad yields a Time Spent of 0.92 s and a focal K-coefficient of +0.44, exceedingly even the personalized virtual ad for dwell time. In contrast, the Left-Hand Side Standing consistently attracts only a small fraction of viewers. However, those who do engage with it tend to be highly focused, as indicated by predominantly positive K-coefficients. Similarly, the F1 TV Logo remains almost unnoticed across all subgroups, reinforcing the observation that small or peripheral logos are unlikely to capture attention during fast-paced events.

Overall, Photo 5 underscores the potential power of personalized advertising as an engagement tool. While racing content still commands a major portion of viewer time, personalized virtual ads can compete strongly when placed strategically and designed to capture user interest. These findings suggest that personalization might be an effective tactic for sponsors seeking to stand out in a busy sports broadcast environment, provided it is executed with sufficient visual impact to draw the eye away from the main action.

PHOTO 6: FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023- TURN 11 - HEINEKEN

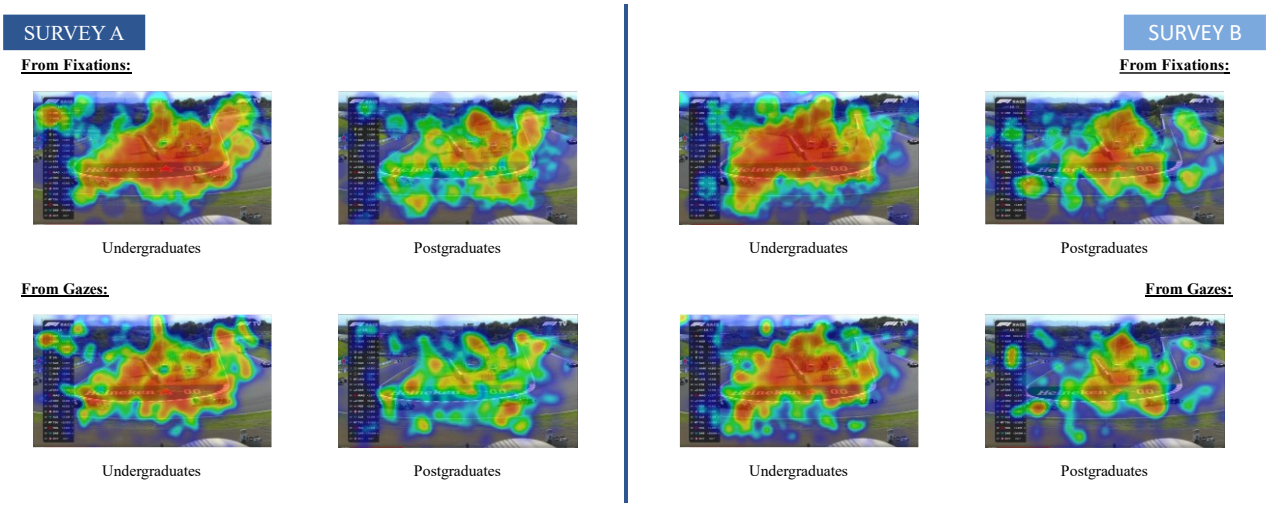


Figure 11: Heatmap Results Based on Fixation and Gaze Measures – Photo 6: Authors own work

In **Photo 6**, we see a pronounced divide in performance between certain Virtual Ads and the multitude of Non-Virtual Ads. For both Undergraduates and Postgraduates, Virtual Ad 1 consistently achieves higher Fixations Ratios (often above 70%) and faster Time to First Fixation (under 1 second in many cases). This pattern is especially visible in Postgraduates Survey B, where 85% of participants fixate on Virtual Ad 1 with a K-coefficient of +0.53, indicating a more focal viewing pattern. By contrast, Virtual Ad 2 is repeatedly neglected, sometimes registering a Fixations Ratio of just 3% or 5% and extremely late or no Time to First Fixation. This discrepancy may be due to differences in design or placement that make Virtual Ad 2 far less salient.

When participants engage with virtual ads, the cumulative analysis shows that fixation ratios typically range from 38% to 45% across various subgroups, representing the total impact of all virtual elements combined. This indicates a moderate level of overall engagement. The average time spent is often below 0.50 seconds, reflecting a relatively quick inspection rather than sustained focus. Similarly, the neutral to mildly positive K-coefficients (e.g., +0.26 or +0.43) suggest that while attention is moderately focused on the group of virtual elements, it is not deeply prolonged.

Non-Virtual Ads generally exhibit lower engagement. Many have Fixations Ratios below 20%, and in some subgroups, these ads appear only at the periphery of viewer attention. Some, like Non-Virtual Ad 2 in Undergraduates Survey B, do for a moment capture those who notice them (Time

Spent around 0.61s), but the overall fraction of viewers who fixate remains small. A few outliers, such as Non-Virtual Ad 5 in Postgraduates Survey A (Time Spent 0.91s by a tiny 5% of participants), suggest that if a viewer is personally intrigued or if the ad is well-positioned for a subset of the audience, dwell time can spike. However, these instances represent niche phenomena and do not reflect broader patterns of engagement.

The Racing Cars, typically the "anchor" of an F1 broadcast, generate mixed results in Photo 6. In some subgroups (e.g., Postgraduates Survey A), the Fixations Ratio on each racing car view hovers around 0.10–0.45, which is surprisingly low compared to earlier frames. Where participants do fixate, they often show a more focal style (positive K-values), reflecting genuine interest once engaged. However, the presence of multiple virtual ads—and especially the strong pull of Virtual Ad 1—may be dividing attention within the limited 3-second window.

Finally, the Left-Hand Side Standing and F1 TV Logo show similar patterns as in previous frames. The Standing attract anywhere from 20% to 40% of participants; some subgroups appear more inclined to check race info, while others skip it altogether. The F1 TV Logo remains almost entirely ignored, with near-zero fixations in every group.

In summary, Photo 6 reinforces the notion that certain virtual ads (notably Virtual Ad 1) can rival or surpass the racing visuals in terms of capturing early, sustained attention, particularly if they are well-designed or strategically placed. Non-virtual ads struggle for visibility in such a cluttered environment, except in rare cases where they catch the eye of a small subset of viewers who then spend an unusually long-time fixating. These results highlight the importance of strong visual cues, strategic positioning, and possibly unique content to break through the visual competition in a short time window.

PHOTO 7: FORMULA 1 GRAND PRIX DE MONACO 2023- TUNNEL - QATAR AIRWAYS

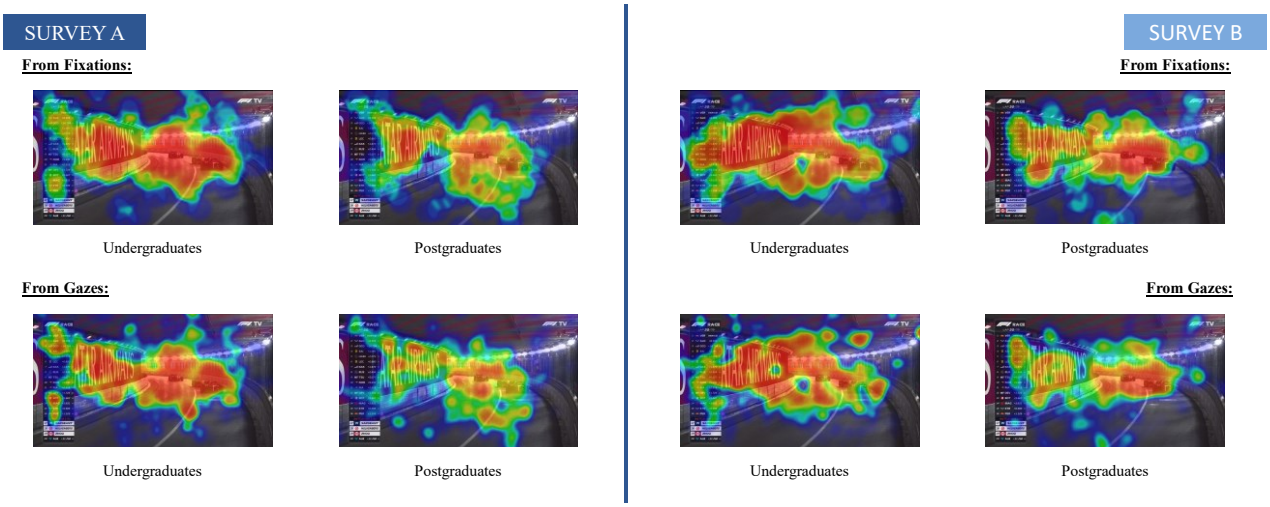


Figure 12: Heatmap Results Based on Fixation and Gaze Measures – Photo 7: Authors own work

In **Photo 7**, the Virtual Ad consistently stands out in both undergraduate and postgraduate groups, often surpassing or equaling the pull of the main racing action. In Undergraduates Survey A, it registers a Time to First Fixation of 0.65 seconds and a Fixations Ratio of 80%, indicating that most participants notice it early and look at it for a moderate duration of 0.60 seconds. By comparison, Non-Virtual Ad 1 and Non-Virtual Ad 2 show slightly later Times to First Fixation (1.17 and 1.03 seconds, respectively) and draw fewer viewers, with Fixations Ratios around 40% to 43%. Although they take longer to be noticed, the K-coefficient for Non-Virtual Ad 1 reaches +0.36, suggesting a somewhat more focused viewing style among those who eventually fixate.

Survey A also reveals that the Left-Hand Side Standing attracts fewer participants (Fixations Ratio of 33%) than the Virtual Ad, yet those who look spend on average 0.84 seconds there, which is longer than on the racing cars. In this same group, the Racing Cars attract a Fixations Ratio of 53% and a Time Spent of 0.56 seconds, slightly exceeding the dwell on most non-virtual ads but still trailing behind the strong performance of the Virtual Ad. Meanwhile, the F1 TV Logo gathers no fixations in this three-second window, reflecting a consistent pattern observed across multiple frames.

In Undergraduates Survey B, the Virtual Ad again demonstrates rapid capture (0.59 seconds to first fixation) and retains a high Fixations Ratio of 83%. While Non-Virtual Ad 1 and Ad 2 each capture 40 percent or fewer viewers, with Time to First Fixation values of 0.91 and 1.20 seconds respectively, the Left-Hand Side Standing emerges as a surprisingly strong contender, with 57

percent of participants fixating and a Time Spent of 0.49 seconds. Racing cars, by contrast, register a 37 percent Fixations Ratio and a 0.46-second dwell on average, suggesting that many undergraduates in this survey look to on-screen ads or information graphics.

Postgraduates in Survey A similarly devote attention to the Virtual Ad, which records a Time to First Fixation of 0.96 seconds and a Fixations Ratio of 80%, though a slightly negative K-coefficient of –0.12 indicates a more scanning-oriented approach. Non-Virtual Ad 2, in contrast, sees only 20 percent of viewers but boasts a notably high K-coefficient of +1.07 for that subset, implying that those few who fixate do so with considerable focus. Racing cars in Survey A draw 40 percent of participants with a 0.39-second average Time Spent, while the Left-Hand Side Standing also engages 40 percent, with an average spent time of 0.42 seconds but a scanning-based style (K-coefficient –0.36).

Among Postgraduates in Survey B, the Virtual Ad achieves its highest visibility, with 95% of participants first fixating at an average of 1.01 seconds. Even though it takes them slightly longer to see it compared to some undergraduates, the overall engagement level remains strong. Non-Virtual Ad 1 and Ad 2 each draw about one-third of the viewers, aligning with a broader trend whereby non-virtual ads typically lag behind the Virtual Ad's reach. Racing Cars interest half of this group, who linger for 0.64 seconds and display a notably focal K-coefficient of +0.75, underlining that those who do fixate on the race action tend to watch it closely. The Left-Hand Side Standing draws 35 percent with a 0.51-second Time Spent, while the F1 TV Logo captures only 10 percent and fails to hold attention for more than 0.32 seconds on average.

Overall, these data make clear that the Virtual Ad's compelling design or placement allows it to rival, or in some cases even surpass, the racing content's initial magnetism. Non-virtual ads remain visible to a moderate fraction of participants, particularly undergraduates, who may be drawn by novelty or specific visual cues, but they generally fail to match the Virtual Ad's high Fixations Ratios. Racing cars do retain a solid viewer base, though the relatively short spent times and sometimes moderate Fixations Ratios indicate that in the first three seconds, ads can effectively compete for attention. The consistent lack of engagement with the F1 TV Logo further demonstrates how peripheral, static branding elements are easily overlooked in a dynamic broadcast environment. Taken together, these findings underscore the value of strong visual

impact, strategic positioning, and potentially more interactive or personalized features in order to secure viewer attention during a fast-paced event.

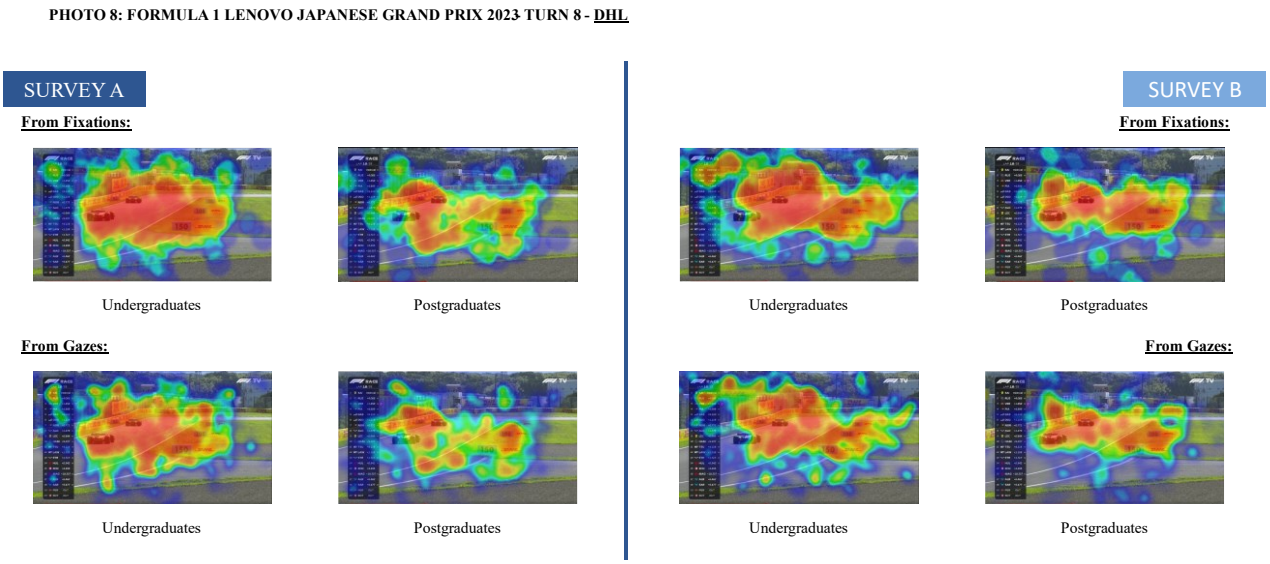


Figure 13: Heatmap Results Based on Fixation and Gaze Measures – Photo 8: Authors own work

Photo 8 features a range of virtual and non-virtual ads competing with the Racing Cars and Left-Hand Side Standing for viewer attention during a three-second interval. In the undergraduate samples, Virtual Ad 1 emerges as the most frequently noticed among the three virtual ads. Time to First Fixation values range from approximately 0.89 to 1.03 seconds. Fixation and Gaze Ratios, however, vary, reaching 20% to 40% in Survey A but declining to around 10% in Survey B. Virtual Ad 2 and Virtual Ad 3 often register even lower engagement, with Fixations Ratios below 10 percent and, in some cases, no viewers fixating at all. These results highlight how multiple, smaller virtual ads can be crowded out when displayed alongside more prominent non-virtual ads or racing visuals.

Non-virtual ads generally capture a moderate share of attention, often achieving fixation ratios of 30% to 40% among undergraduates. When analyzed cumulatively, these ads demonstrate their ability to attract and hold focal interest once noticed. For example, one non-virtual ad in Survey A recorded a Time Spent of approximately 0.59 seconds and a Fixation Ratio of 0.40, indicating its effectiveness in engaging the gaze of those who observed it. The Racing Cars maintain a steady presence, but their Fixations Ratios (ranging from roughly 27 to 53 percent) indicate that undergraduates do not invariably prioritize the live action if ads appear more visually compelling.

When viewers do look at the cars, spent time around half a second reflect a moderate level of curiosity or involvement. The Left-Hand Side Standings draw a smaller fraction of the group—often 20 to 33 percent—yet those who do check standings may linger for about half a second before scanning elsewhere. As in many earlier frames, the F1 TV logo sees almost no engagement, underscoring how small, static logos away from the main focal points tend to be overlooked.

Postgraduate data present a similar pattern. In Survey A, Virtual Ad 1 is occasionally noticed quickly, with a Time to First Fixation of approximately 0.50 seconds, but it engages only about 20% of viewers. Virtual Ad 2 and Virtual Ad 3 are even less successful in attracting attention. In contrast, larger non-virtual ads draw 30% to 50% of viewers. Nevertheless, the Racing Cars still compete effectively, as shown by Fixations Ratio of 35 to 85 percent Gaze Ratio across different subgroups, often accompanied by moderate to high Time Spent. Some viewers thus continue to value the race visuals over the surrounding ads. The Left-Hand Side Standing, as usual, gains attention from around one-third of postgraduates, who briefly consult them before returning to the race or other on-screen elements. The F1 TV logo remains consistently ignored, confirming that it fails to stand out in a busy frame.

Taken together, Photo 8 highlights how ad size, positioning, and visual impact can dictate the extent to which undergraduates and postgraduates notice and engage with on-screen promotional content. Smaller virtual ads, especially Virtual Ad 2 and Virtual Ad 3, risk being overlooked when the scene also includes sizable non-virtual ads, a left-hand side standings table, and attention-grabbing race visuals. At the same time, the racing cars themselves do not always dominate if participants are drawn to particular ads, emphasizing the competitive nature of limited viewer attention during a fast-paced broadcast segment.

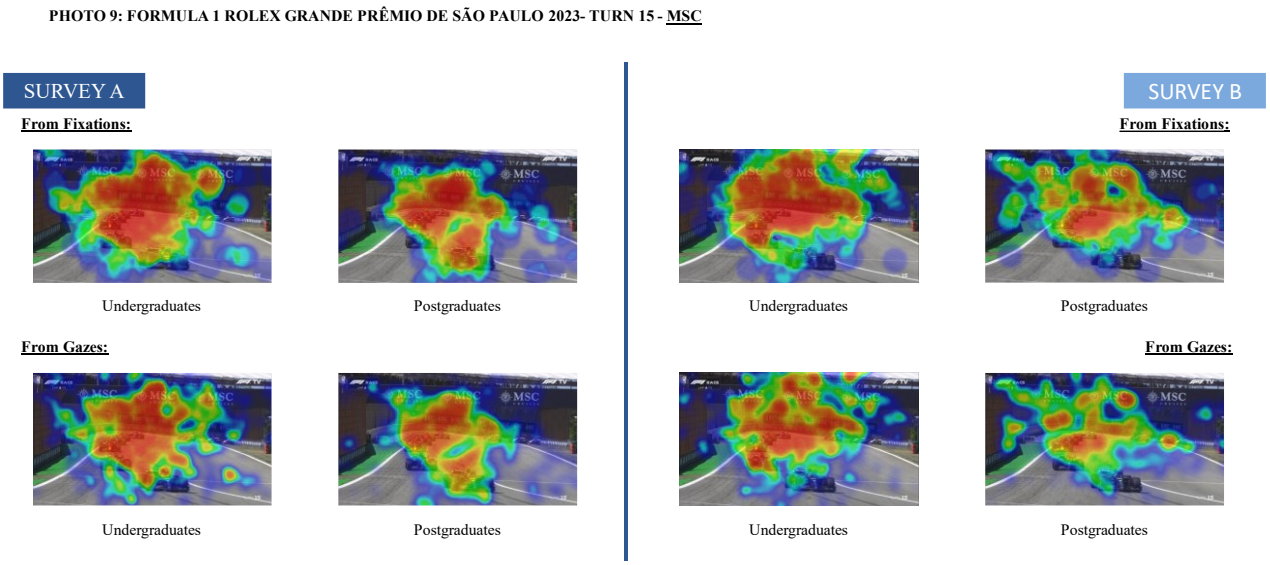


Figure 14: Heatmap Results Based on Fixation and Gaze Measures – Photo 9: Authors own work

Photo 9 reveals how both virtual and non-virtual advertisements compete with racing cars and, to a lesser extent, the Left-Hand Side Standing for viewer attention across undergraduates and postgraduates. In the undergraduate groups, Virtual Ad performance varies: in Survey A, its Fixations Ratio of around 63% indicates that many participants notice it in just over a second, while in Survey B a similarly high ratio (63%) appears but with a slightly slower detection time (1.11 seconds). Non-Virtual Ads 1 and 2 also garner significant attention, engaging up to 70% of viewers in some instances. When analyzed cumulatively, these ads collectively attract the gaze of approximately half of the participants, reflecting their impact on audience engagement. Despite these high Fixations Ratios for some ads, the Racing Cars remain a strong contender, often capturing Fixation Ratios exceeding 67% and Time Spent of roughly 0.80–0.86 seconds, suggesting that the core sporting content still forces a strong pull on many undergraduates' eyes.

Meanwhile, the Left-Hand Side Standings continue to demonstrate inconsistent visibility. In Survey A for undergraduates, it is noticed by only 10% of participants (with a late Time to First Fixation of 2.17 seconds), suggesting that many simply do not get around to checking it within the brief window. Survey B data for the standings are not consistently available, but in earlier photos, they generally show that a subset of undergraduates does consult the standings, although in scanning view. As in previous frames, the F1 TV logo attracts negligible attention, consistently displaying a Fixations Ratio of zero.

The postgraduate samples echo similar tendencies but with a few noteworthy differences. Some non-virtual ads, such as Non-Virtual Ad 2 in Survey A, draw a Fixations Ratio as high as 60% and spent times near 0.44 seconds, outperforming even certain virtual ads. The racing cars, as usual, claim a high or highest share of participants (up to 75% or 70% in Survey A and B, respectively), which is mirrored in their extended Time Spent around 0.90 seconds. Virtual Ad 1 retains a moderate to strong presence among postgraduates, especially in Survey A, where roughly 65% fixate with an unusually high K-coefficient of +0.97, suggesting very focal engagement for that advertisement.

The Left-Hand Side Standing in postgraduates likewise see lower Fixations Ratios (5%–20% in many groups), with scanning or partial focus by the small group that does look. The F1 TV logo remains essentially invisible in both Survey A and Survey B, reinforcing a near-universal pattern of zero or negligible fixations across demographics. Overall, these data confirm that in Photo 9, larger or more visually salient ads—particularly when their impact is assessed cumulatively—can compete with race visuals for attention. In contrast, smaller or peripheral elements, such as certain virtual ads or the F1 TV logo, struggle to attract notice within the brief three-second timeframe. The Racing Cars still maintain a substantial hold on viewers, but the presence of multiple ads can disperse attention, pointing to the strong interplay among design, placement, and timing in capturing viewers' eyes in a live sports context.

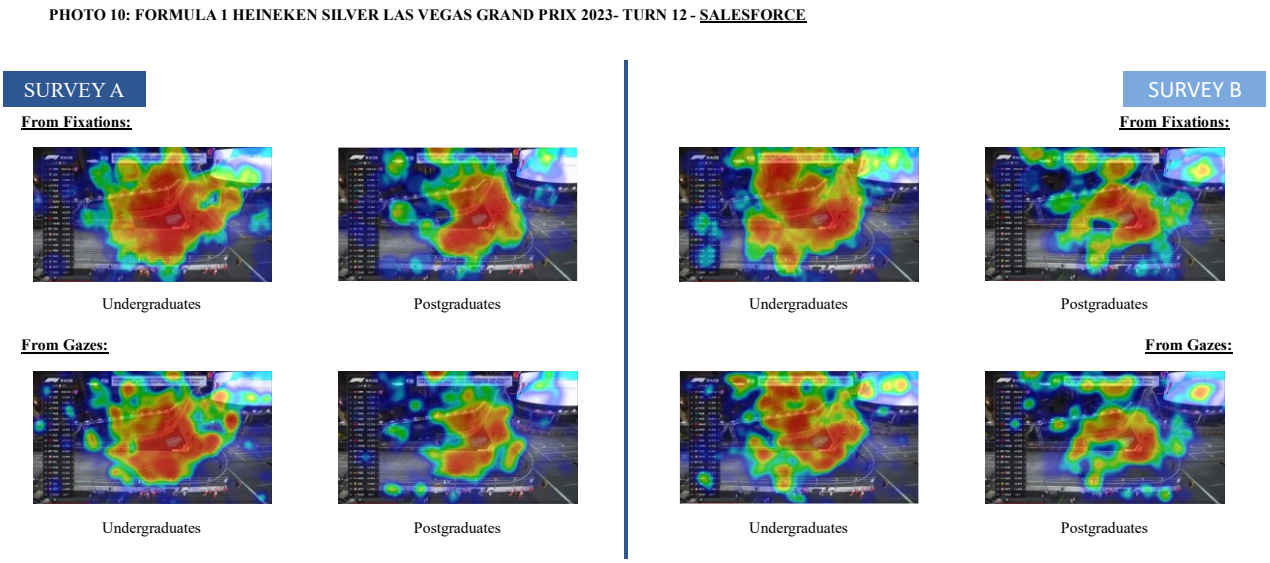


Figure 15: Heatmap Results Based on Fixation and Gaze Measures – Photo 10: Authors own work

Photo 10 illustrates how multiple virtual ads, non-virtual ads, racing cars, and race-related data (e.g., the Left-Hand Side Standing and Race Info Graphic) compete for viewers' attention in a tight three-second timeframe. Within undergraduates in Survey A, the Virtual Ad registers a 43% Fixations Ratio, with a K-coefficient of +0.68 that suggests a focal viewing style once it is noticed. Non-Virtual Ad 1 and Ad 2 each earn smaller shares of fixations (7% and 23%, respectively), though Ad 2's spent time is relatively substantial for those who see it. Racing Cars are surprisingly overshadowed in some circumstances, with Fixations Ratios hovering around 7%–20% for the different cars, highlighting the strong influence of ads in capturing attention.

In undergraduates Survey B, the Virtual Ad is again seen by half of participants (Fixations Ratio 50%), typically noticed after ~1.27 seconds, while Non-Virtual Ads 1–3 demonstrate varied traction. One ad, for instance, draws only 3% of fixations but features a K-coefficient of +1.01, indicating highly focal attention among the rare viewers who find it. The racing visuals display similar variability, with some cars receiving 17% (Fixations Ratio) – 33% (Gazes Ratio). The Left-Hand Side Standing and Race Info Graphic each draw up to 23%–37% of participants, suggesting that a subset does look these data even in a short window. The F1 TV Logo continues to see minimal or no engagement, consistent with its small, peripheral presence.

Among the postgraduates, the virtual ads sometimes show a moderate presence: in Survey A, the Virtual Ad's Fixations Ratio of 50% and K-coefficient of +0.43 point to a half of viewers who look at it, with decent focus. Non-Virtual Ads 2 or 3 can outcompete the Virtual Ad in certain metrics when a larger portion of the group finds them relevant, though that portion can be as low as 10–20%. Racing Cars also fluctuate in visibility, with Fixations Ratios occasionally reaching 33% and Gazes Ratio 50%, but in some instances dropping to 15% Fixations Ratio if overshadowed by multiple ads. The postgraduates who do watch the racing action typically show spent times of around 0.3–0.4 seconds, reflecting some curiosity, though not always dominating their visual attention. The Left-Hand Side Standing and Race Info Graphic each draw around 0.1–0.4 of the participants in various occasions, indicating that a subset is interested in race specifics, while others remain ad-focused or skip these info overlays. The F1 TV Logo remains overlooked across all subgroups, reinforcing earlier observations that a small, static brand element is easily lost.

Overall, Photo 10 restates the broader trends seen in previous frames. Virtual ads can capture a solid share of fixations, especially if their design and placement stand out, while non-virtual ads

may earn both focal and scanning attention depending on their visual appeal and size. The racing cars, though central to the broadcast, do not always command universal engagement within three seconds when multiple other elements compete on screen. Meanwhile, the Left-Hand Side Standing and Race Info Graphic cater to those specifically seeking detailed race information, with only part of the audience using their limited time to consult these displays. Lastly, the minimal fixations on the F1 TV Logo suggest that peripheral logos remain largely invisible amidst a crowded visual field.

PHOTO 11: FORMULA 1 LENOVO JAPANESE GRAND PRIX 2023- TURN 7 – QATAR AIRWAYS

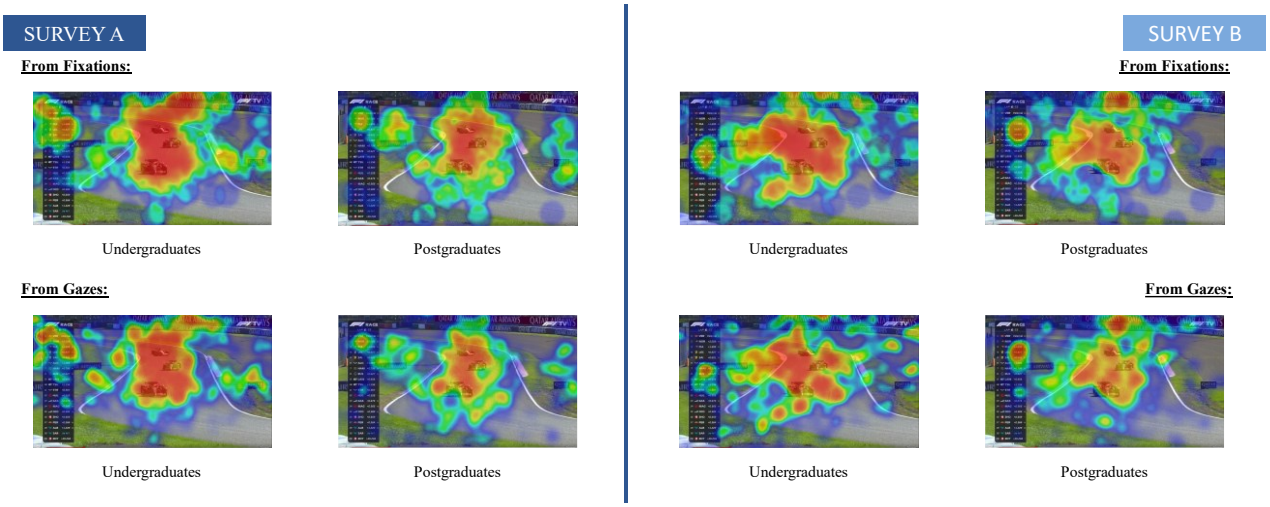


Figure 16: Heatmap Results Based on Fixation and Gaze Measures – Photo 11: Authors own work

Photo 11 underscores a recurring pattern of competition between virtual ads, non-virtual ads, and the racing action for viewers' limited attention in a brief three-second period. For undergraduates in Survey A, the Racing Cars again attract the largest share of fixations (Fixations Ratio 77%) and by far the most spent time (1.20 seconds). By comparison, a moderate number of participants look at certain non-virtual ads (with one or two drawing Fixations Ratios up to 20%), and the Virtual Ad garners attention from just over a quarter of the group. Some non-virtual ads are barely noticed at all (Fixations Ratio 3% - 7%), illustrating how smaller or less salient placements can be ignored. The Left-Hand Side Standing also receives attention from roughly 37% of participants, who dedicate around 0.61 seconds once they fixate, suggesting genuine interest in race position data.

Undergraduates in Survey B show a similar priority for Racing Cars, with about 77% fixating on the cars by 0.60 seconds into the frame and remaining there for 0.78 seconds on average. Most

non-virtual ads struggle to surpass 0.2 or 0.3 in Fixations Ratio, indicating that only a fraction of viewers shift away from the race cars. The Virtual Ad also sees a slightly lower engagement (Fixations Ratio 23%) compared to Survey A, but it still achieves moderately focal attention among those who do notice it. Meanwhile, the F1 TV Logo continues to register near-zero fixations.

For postgraduates, the racing cars consistently command the highest Spent Time and largest Fixations Ratios, especially in Survey A (85%) or Survey B (85%). Yet some non-virtual ads also reach a narrower but highly engaged subset of viewers. In one instance, Non-Virtual Ad 1 in Postgraduates Survey B is detected very quickly (0.52 s TFF) and holds participants for 0.70 seconds with a K-coefficient of +0.87, revealing a strongly focal reaction among that group. By contrast, smaller or less visually compelling ads often linger at or below 0.05–0.10 in Fixations Ratio. The Virtual Ad's performance varies widely (20% Fixation Ration & 30% Gazes Ratio), suggesting that design or size differences might be influencing the extent to which participants notice it before attending to the race footage. As in earlier photos, the Left-Hand Side Standing and Race Info Graphic each capture interest from a moderate proportion of postgraduates, who check these data quickly and may or may not return to the racing visuals or ads afterward.

Overall, Photo 11 reinforces the dominant role of racing cars as the primary visual magnet across all participant groups, while also highlighting that a few well-placed, larger non-virtual ads can secure pockets of deep engagement. Virtual ads tend to capture anywhere from 20% to 20% of viewers, and some subgroups do fixate fairly intently once they notice, but reach remains limited in the face of strong competition. The F1 TV Logo persists as the least-viewed AOI, with minimal to zero fixations across the board. These results underscore once more that an ad's ability to grab and hold attention depends on timing, size, salience, and the overall visual clutter of the broadcast, which is especially intense in a high-speed, information-rich sport like Formula 1.

PHOTO 12: FORMULA 1 LENOVO UNITED STATES GRAND PRIX 2023- TURN 12 - PIRELLI

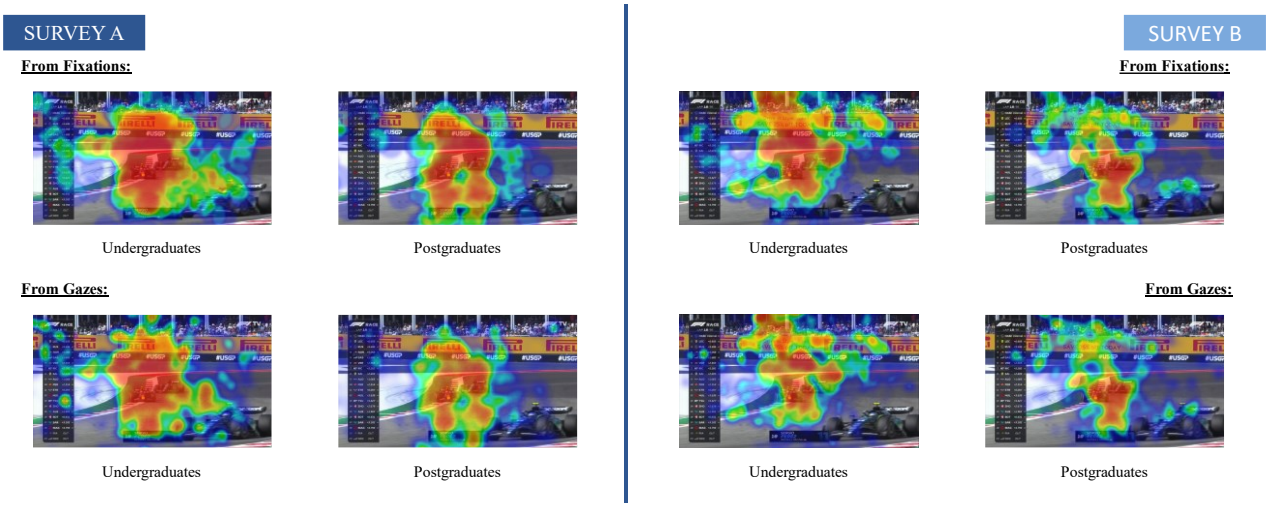


Figure 17: Heatmap Results Based on Fixation and Gaze Measures – Photo 12: Authors own work

Photo 12 further demonstrates the competition for viewers' attention among various ads and race visuals during a brief three-second snapshot. In Undergraduates Survey A, Racing Cars 2 achieves the highest fixations ratio (77%) and a relatively long Spent Time (0.87 seconds). Racing Cars 1 and the aggregated results for all racing cars also show notable levels of engagement. The Virtual Ad stands out with a quick detection time (0.42s) and a near-half Fixations Ratio (43%), suggesting that its visual design or position enables it to compete effectively against the race. Non-virtual ads likewise secure decent attention (up to 0.40 Fixations Ratio for one ad) when they appear large or well-placed. Meanwhile, the Left-Hand Side Standing and Race Info Graphic each reach a small subset of participants—20% and 13%, respectively—whose average Time Spent suggests moderate interest in race details. The F1 TV Logo remains unseen by the majority (Fixations Ratio 0% in Survey A).

Among Undergraduates Survey B, the Virtual Ad still claims a high Fixations Ratio (67%), though participants are more scanning than focal (K-coefficient –0.24). A Personalized Virtual Ad emerges with a 30% Fixations Ratio and Spent Time of 0.45s, implying that personalization draws a subset of Virtual Ad's viewers. Racing Cars AOIs are divided across multiple views, with each attracting anywhere from 17% to 57% of participants, some scanning (e.g., –1.21 K for Racing Cars 1) and others more neutral or mild focal. The Left-Hand Side Standing and Race Info Graphic each capture only a fraction of participants, and the F1 TV Logo again goes unnoticed. In short, while

car visuals still command the largest aggregated audience, ads—especially those that appear quickly or offer personalization—can hold meaningful segments of viewers in a short timeframe.

Postgraduate results show a similar distribution of attention. In Survey A, Racing Cars 2 hits a Fixations Ratio of 85% with a moderate Spent Time (0.57s), overshadowing other elements, though a well-timed Virtual Ad can still draw 40% of participants (with 0.68s Time Spent). Non-virtual ads vary widely in appeal; some remain under 30% Fixations Ratio, while others, if large or well-placed, can approach 55% Gazes Ratio. The Left-Hand Side Standing draws about one-fourth of viewers, scanning quickly, and the Race Info Graphic and F1 TV Logo remain peripheral to the main ad-race dynamic. Survey B further reinforces these tendencies. Racing Cars 2 remains a top draw (65% Fixations Ratio, 0.82s Time Spent), while a smaller fraction engages with the Virtual Ad (60% Fixation Ratio) or the Personalized Virtual Ad (30% Fixation Ratio). Non-virtual ads also maintain modest traction. As in all frames, the F1 TV Logo hovers near zero fixations, pointing again to its minimal visual pull.

Overall, Photo 12 once more emphasizes the power of racing visuals, typically discovered either immediately or at least within the first second or two, and often commanding the highest spent time. Certain ads—especially a strong Virtual Ad or a Personalized Virtual Ad—can compete effectively by attracting significant fixations early or maintaining average Spent Time. Non-virtual ads also achieve some success, but only for a subset of the audience, often reflecting focal interest from those who do notice. The smaller race info elements (Left Hand Side Standing, Race Info Graphic) remain secondary, appealing to those specifically seeking more detail. The universal neglect of the F1 TV Logo underlines how peripheral or static branding icons struggle to draw attention amid a busy and dynamic broadcast environment.

PHOTO 13: FORMULA 1 ETIHAD AIRWAYS ABU DHABI GRAND PRIX 2023- BEFORE TURN 8 - LENOVO

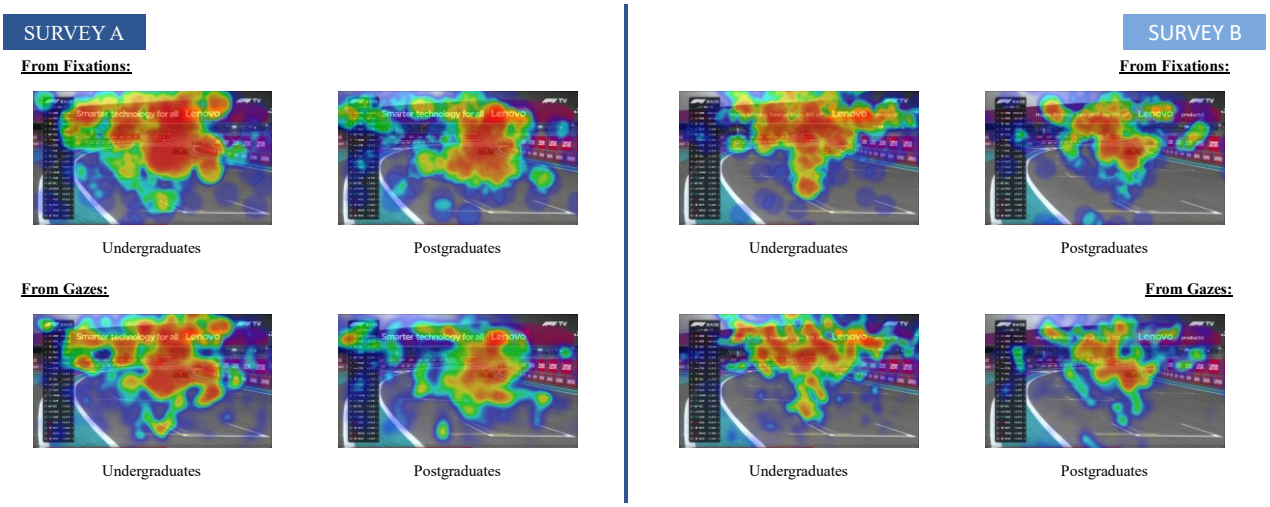


Figure 18: Heatmap Results Based on Fixation and Gaze Measures – Photo 13: Authors own work

Photo 13 demonstrates the ongoing competition among multiple virtual ads, non-virtual ads, and racing footage, with the added twist of a slogan featuring Personalized Virtual Ads. In Undergraduates Survey A, the first virtual ad (Virtual Ad 1) achieves the highest Fixations Ratio of ~63% and a Time Spent near 0.87 seconds, indicating substantial engagement. Other virtual ads show lower visibility, with fixation ratios often below 20%. Virtual Ad 2 stands out with a fixation ratio of 27%, although it demonstrates less focused engagement, as indicated by a K-coefficient of -1.2. Racing Cars, while historically dominant in many frames, draw only about 30% in Survey A, suggesting that multiple on-screen ads can fragment attention. The Left-Hand Side Standing is fixated by 23% of participants, discovered quickly by a fraction, and stay for about half a second.

Undergraduates Survey B reveals an interesting pattern: Virtual Ad 1 remains strong (73% Fixations Ratio, 0.89s Time Spent), but the Personalized Virtual Ad also stands out with 53% Fixation Ratio and a 0.66-second Spent Time, implying that personalization can significantly boost viewer interest. Other virtual ads achieve lower rates (10%–17% in Fixation Ratio). Racing Cars and non-virtual ads see modest engagement, mostly under 3% ratio, indicating that the personalized ad and the primary Virtual Ad overshadow them in the short timeframe. The Race Info Graphic and F1 TV Logo remain minimally viewed or not viewed at all.

Among postgraduates, Survey A once again exhibits strong presence for Virtual Ad 1 (65% Fixations Ratio, 0.81s Spent Time) and for certain non-virtual ads if they are visually appealing—though many non-virtual elements remain at 5% Fixation Ratio. Racing Cars obtain around 40%

in Fixations Ratio, while the Left-Hand Side Standing hits 40% as well, with a mild to moderate attention. Survey B further underscores the power of a Personalized Virtual Ad (55% Fixations Ratio, 0.65s Time Spent) and a large share of participants also noticing Virtual Ad 1 -include the personalized message- (60% Fixation Ratio). By contrast, Virtual Ad 4 is seldom seen, with a ratio of just 10%. Racing Cars do capture around 70% in Gazes Ratio, but Spent Times appear moderate (about 0.38s) as participants split attention among multiple on-screen items. The F1 TV Logo once again trails at near zero fixations.

In sum, Photo 13 indicates that a well-designed or personalized virtual ad can rival or surpass the racing cars for a sizeable fraction of participants, while other ads risk remaining unseen if they lack salience or appear in competition with more prominent elements. The Left-Hand Side Standing and Race Info Graphic each continue to draw a niche audience seeking race details, and the F1 TV Logo seldom garners notice amid the clutter. The net result is a clear demonstration that a short three-second viewing window forces viewers to prioritize certain ads or race footage, leading to highly varied Fixations Ratios depending on each AOI's immediate visual impact, size, or personalization cues.

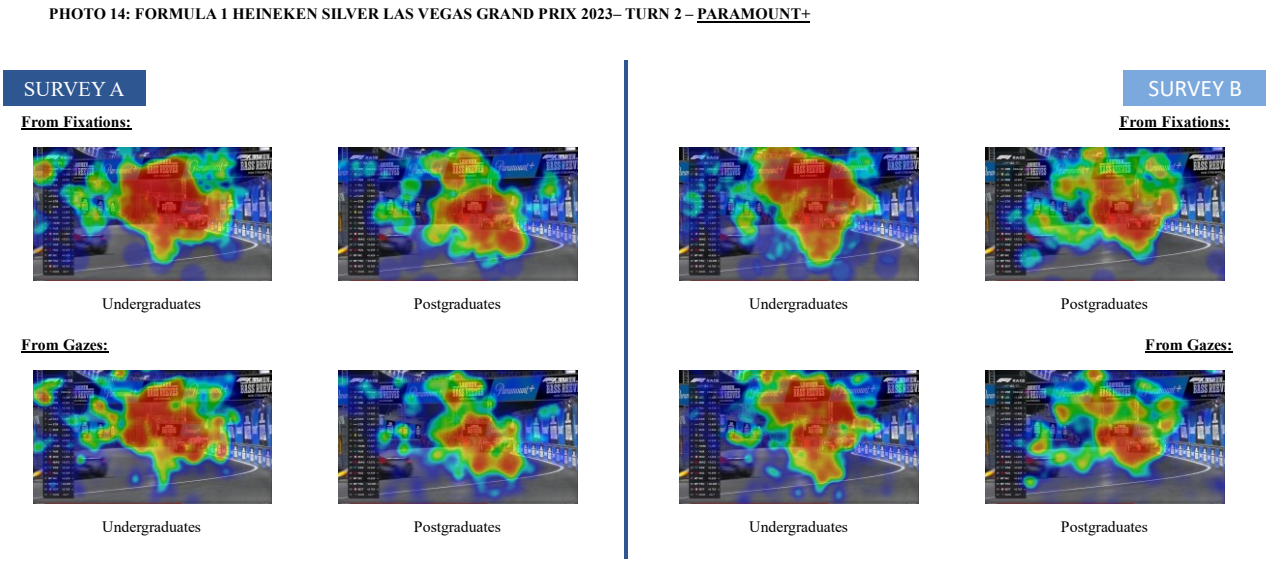


Figure 19: Heatmap Results Based on Fixation and Gaze Measures – Photo 14: Authors own work

Photo 14 reveals a consistent pattern of strong competition among multiple virtual ads, non-virtual ads, and the racing content within a three-second interval. Undergraduates in Survey A tend to focus notably on Virtual Ads 1 and 2 (with each surpassing 50% in Fixations Ratio) and devote considerable Spent Times (up to 0.55 - 0.77s), indicating that a well-positioned or visually salient virtual ad can attract a majority of viewers. The Racing Cars remain relevant, but their Fixations Ratios vary widely (10%–33% for Racing Cars 1 and 2), suggesting that participants sometimes prioritize the ads instead of or before noticing the race. Non-virtual ads in Survey A have modest engagement, rarely exceeding 27% Fixations Ratio, reflecting a smaller audience that may be overshadowed by the more prominent virtual elements.

In Survey B, Virtual Ad 1 again dominates early detection (0.46s TFF) and secures a 73% Fixations Ratio, while Virtual Ad 2 follows with a 40% Fixations Ratio. Both remain at least partially focal for the subset who attend to them. Racing Cars 1 and 2 show mixed results, with some fixations only coming late in the timeframe. Non-virtual ads continue to draw limited attention, and the Left-Hand Side Standing's ratio stays below 25%, often in scanning mode, indicating that detailed race data is not a high priority for most viewers in that short window.

Postgraduate data mirror these trends. In Survey A, Virtual Ad 1 and 2 each exceed 50% in Fixations Ratio, and some participants Spent Time on them for around 0.8–0.85 seconds, demonstrating robust interest. Racing Cars also claim a share of attention, but when multiple ads fill the screen, viewers' gaze fragments. The Left-Hand Side Standing attract more niche interest, typically below 30% in Gazes Ratio, with mostly scanning fixations. In Survey B, the first two virtual ads can again reach 40%–65% in Fixations Ratio, overshadowing later or smaller ads like Virtual Ad 3 (25% Fixations Ratio). Racing Cars can approach 85% in Gazes Ratio but Spent Times remain moderate due to the concurrency of ad content. As in previous frames, the F1 TV Logo is essentially dismissed, never surpassing 5% in Fixation Ratio.

These observations confirm that in Photo 14, compelling Virtual Ads—especially those placed or timed for quick detection—can match or outcompete the racing cars for a substantial fraction of participants during a brief, three-second exposure. Meanwhile, non-virtual ads and race detail overlays remain of secondary interest, capturing specific subsets of viewers who might either be scanning or showing short bursts of focal attention. The F1 TV Logo continues to be effectively

invisible to most participants, reinforcing the broader conclusion that small, peripheral branding has limited pull in a busy, dynamic Formula 1 broadcast.

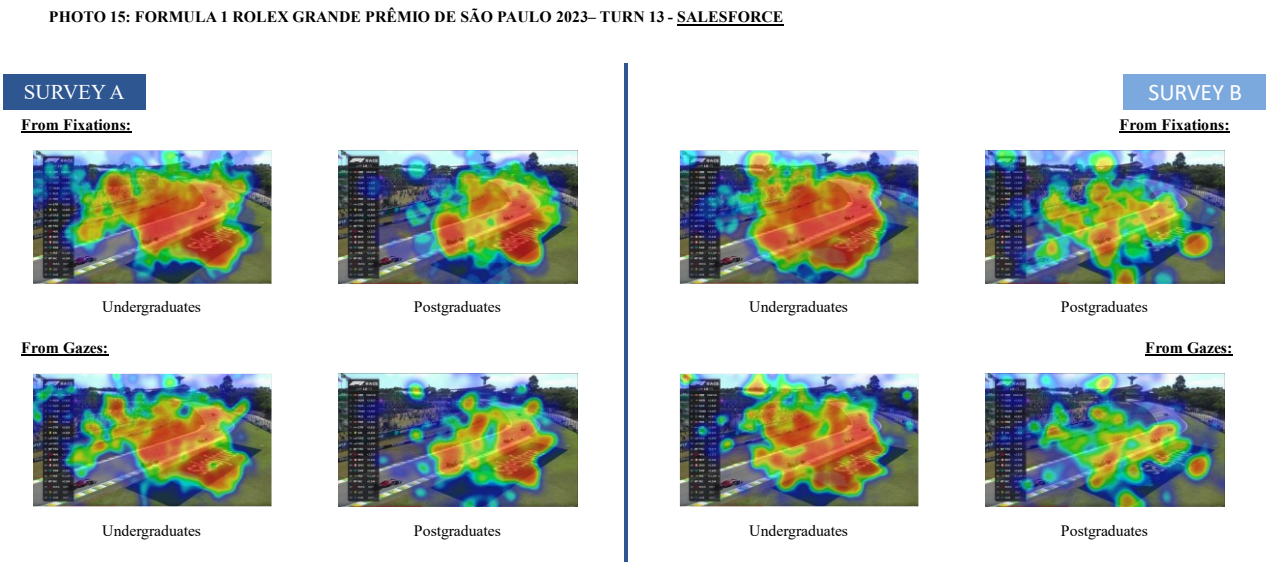


Figure 20: Heatmap Results Based on Fixation and Gaze Measures – Photo 15: Authors own work

The data for **Photo 15** continue to highlight how quickly and strongly a well-placed virtual ad can draw attention away from other broadcast elements in the first three seconds. Undergraduates in Survey A show a strong interest in Virtual Ad 1, with a Fixations Ratio of 63% and a Spent Time of 0.80 seconds, while Virtual Ad 2 sees fewer fixations (17% Fixations Ratio) but very focal engagement from those who do notice it (1.2). Racing Cars still garner a high Fixations Ratio of 63% in Survey A, though their K-coefficient (–0.16) suggests a scanning style. Non-virtual ads remain less popular, with only around 3% – 30% Fixations Ratios, overshadowed by the more visually striking virtual ads and the core race footage.

In Survey B, Virtual Ad 1 again dominates early detection (0.78s TTFF) and obtains a strong Spent Time of 1.08 seconds, indicating that a significant proportion of participants allocate a major section of their limited viewing window to it. The racing action is also prominent, with an impressive 93% Gazes Ratio for the cars, pointing to near-universal detection. Non-virtual ads achieve moderate traction, typically below 35% in Fixations Ratio, and the Left-Hand Side Standing registers only 10% Fixations Ratio, consistent with a smaller subset of viewers seeking that specific data.

Postgraduates in Survey A confirm the recurring theme that one or two virtual ads can dominate if they are especially salient or placed advantageously (e.g., Virtual Ad 1 at 75% Fixations Ratio, 0.78s TTFF). The Racing Cars remain highly relevant, drawing 60% Fixations Ratio and around 0.92 seconds of Time Spent; participants often revert to scanning (K-coefficient near 0). Non-Virtual Ads see fixations ratios of ~15% Fixations Ratio and 28% Gazes Ratio, overshadowed by both the main virtual ads and the race action. Meanwhile, Survey B similarly shows Virtual Ad 1 capturing 50% of participants quickly, with a 1.02-second Spent Time, while Racing Cars 2 approach 85% in Gazes Ratio for certain subgroups. Non-virtual ads have limited reach, mostly scanning-based engagement, and the Left-Hand Side Standing draws about 30% of participants' fixations.

In every subgroup, the F1 TV Logo remains near or at zero fixations ratio, further reinforcing the broader pattern that a small, static branding element positioned away from the main areas of visual interest struggles to garner attention in a dynamic broadcast environment. Overall, Photo 15 underscores once more the potent draw of the best-performing virtual ads, the persistent popularity of racing visuals for many participants, and the lesser but occasionally focal interest in non-virtual ads among a fraction of the audience. These findings highlight the competitive attention landscape in a short, high-paced time window, where only the most visually compelling or strategically placed elements stand out.

PHOTO 16: FORMULA 1 GRAND PRIX DE MONACO 2023– TUNNEL - HEINEKEN

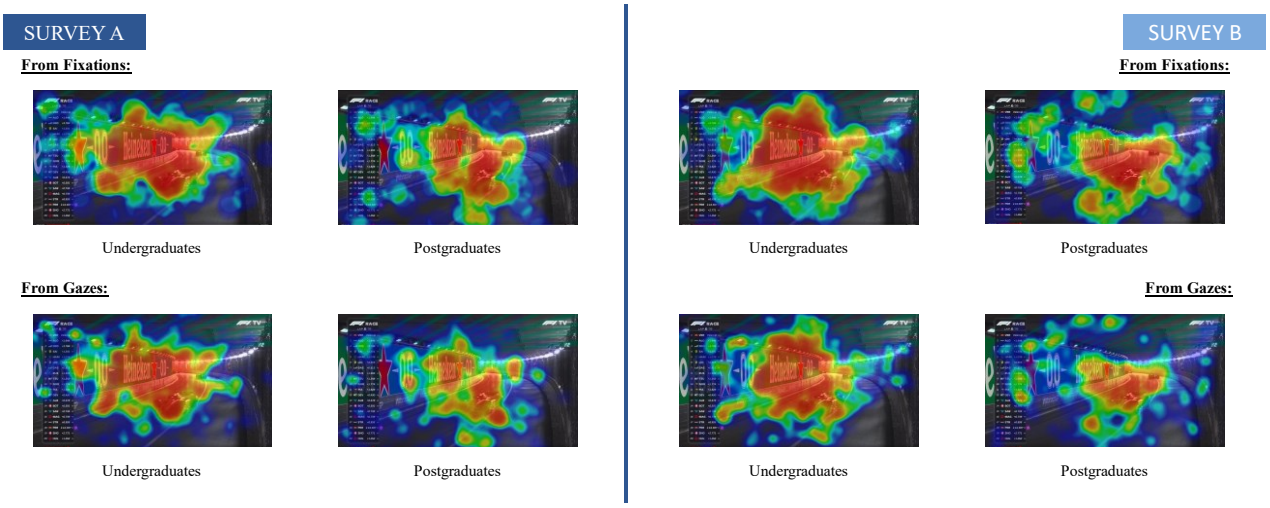


Figure 21: Heatmap Results Based on Fixation and Gaze Measures – Photo 16: Authors own work

The data in **Photo 16** underline the strong influence of well-placed and quickly detected ads, as well as the ongoing competition between advertisements and racing visuals. Among undergraduates in Survey A, the Virtual Ad stands out with a remarkably high Fixations Ratio of 90% and a Time Spent of 0.97s, implying that nearly everyone in this group sees it almost immediately and devotes close to a full second to it. The Non-Virtual Ad also performs decently, attracting just under half the participants (Fixations Ratio 47%) for about 0.62 seconds, which is relatively high for a non-virtual element. Racing Cars 1 and 2, meanwhile, see moderate engagement, though their dwell times and fixations ratios (43% and 30%, respectively) suggest they are overshadowed by the more salient ads in this short time frame. The Left-Hand Side Standing remains a niche element, capturing around 20% of participants.

In Survey B, the Virtual Ad similarly garners fast detection (0.44s TTFF) and a high Fixations Ratio (80%). Another noteworthy performer is the Non-Virtual Ad with a 57% Fixations Ratio, a sign that it is appealing enough to draw over half the viewers for ~0.54 seconds. The Racing Cars appear in about half of participants' fixations, but not necessarily first, often trailing behind the ads in detection time. Once again, the Left-Hand Side Standing sees only 20% of viewers, typically scanning. As with many prior frames, the F1 TV Logo sees no fixations in the undergrad group.

Postgraduates in Survey A repeat this trend, with the Virtual Ad at 70% ratio and 0.92s Time Spent—indicating a strong interest. Non-Virtual Ads also see Fixations Ratios near or above 0.45, which is relatively robust for that category. Racing Cars 1 and 2 share fixations with the ads, but do not universally dominate, as 60% of participants check Racing Cars 1 and about 35% see Racing Cars 2. Meanwhile, Survey B reaffirms that a well-designed Virtual Ad captures attention quickly and for a long dwell, while Racing Cars 1 sometimes surpasses 70% ratio. However, Racing Cars 2 lags behind at only 30% ratio, reflecting that participants may not cycle through all available racing cars' areas if multiple ads already captured their attention.

Throughout all subgroups, the Left-Hand Side Standing consistently maintains a smaller audience, typically below one-third fixations ratio, and the F1 TV Logo registers no fixations (or 0% Fixations Ratio) across the board. These patterns confirm that a visually striking or quickly noticed ad (especially the primary Virtual Ad) can hold a large share of the brief, 3-second attention window, which in turn reduces the share of fixations for secondary items such as secondary advertising areas, additional racing cars, or smaller brand logos.

PHOTO 17: FORMULA 1 ROLEX GRANDE PRÊMIO DE SÃO PAULO 2023– TURN 10 – SALESFORCE

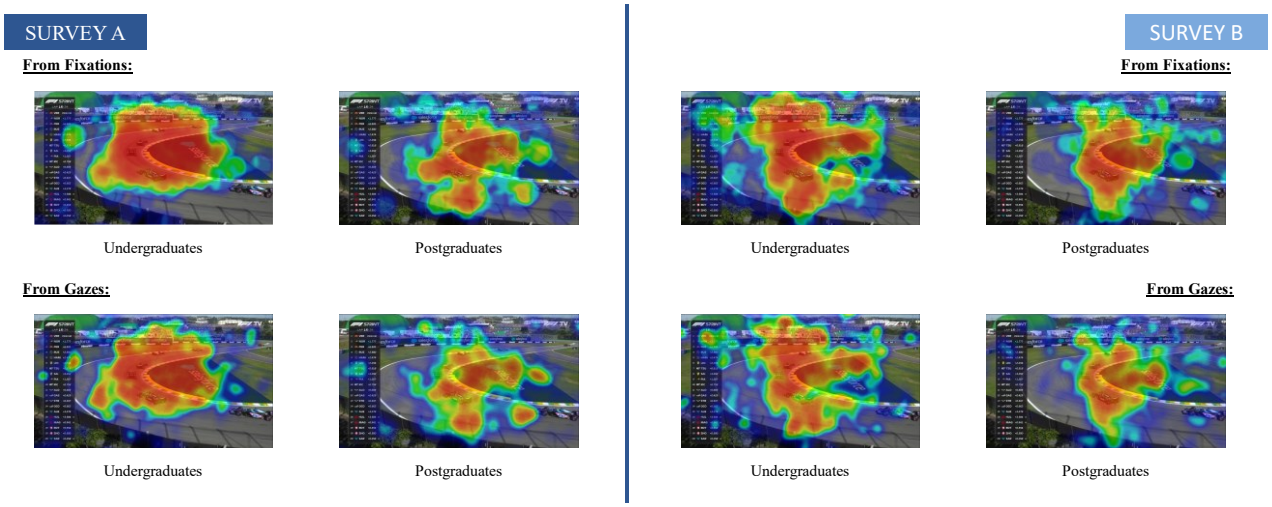


Figure 22: Heatmap Results Based on Fixation and Gaze Measures – Photo 17: Authors own work

The data from **Photo 17** continue to illustrate the tight competition among virtual ads, non-virtual ads, and racing footage in a three-second F1 broadcast snapshot. Undergraduates in Survey A show a high engagement with both Virtual Ad 1 (77% Fixations Ratio) and the Racing Cars (90% Fixations Ratio), indicating that these two items strongly dominate attention. Survey A's non-virtual ads reach moderate subsets (30% Fixations Ratio), spending around 0.37 seconds. Meanwhile, the Left-Hand Side Standing appeals to only about 20% of participants in a scanning mode, and the F1 TV Logo remains ignored.

Undergraduates in Survey B again reveal strong performance for Virtual Ad 1 (Fixations Ratio 70%) and the Racing Cars (70% Fixations Ratio and 90% Gazes Ratio). While the Time Spent on racing is significant (0.57 seconds), some participants prefer the virtual ads or non-virtual content. The Left-Hand Side Standing maintains a smaller audience (2% Fixations Ratio), consistent with prior frames. F1 TV Logo is once more left unnoticed.

Among postgraduates, Survey A sees Virtual Ad 1 capturing 75% of participants' fixations with about 0.8s Spent Time, while the racing cars remains appealing (7% Fixations Ratio, 0.77s Time Spent). Non-virtual ads sit around a 15% Fixations Ratio with ~0.38s Spent Time, overshadowed by more salient elements. The Left-Hand Side Standing typically draws around 10% of viewers scanning quickly. In Survey B, Virtual Ad 1 excels with fixations ratio of 85% and Time Spent near 0.72s, while the racing Cars achieve 7% Fixations Ratio and 0.65s Spent Time) also claims attention. Non-virtual ads remain of limited interest (10% Fixations Ratio), and the Left-Hand Side

Standing again sees only around 15% scanning. Some participants occasionally glance at the F1 TV Logo, but the fixation ratio remains extremely low (~1%) or zero, reinforcing its negligible impact.

Overall, Photo 17 highlights the repeated themes: a well-placed Virtual Ad can achieve early detection, high fixations ratio, and considerable dwell, sometimes surpassing or equaling the racing vantage in capturing immediate attention. Racing Cars remain a important competitor, especially for those who are drawn to the primary action, but in a short window, many participants do not split their fixations equally among multiple areas. Non-virtual ads and the Left-Hand Side Standing see moderate or smaller subsets, indicating that these viewers are either specifically curious or are scanning after finishing with the main ad or racing visuals. The F1 TV Logo yet again remains minimally or entirely ignored, consistent with its peripheral, static design.

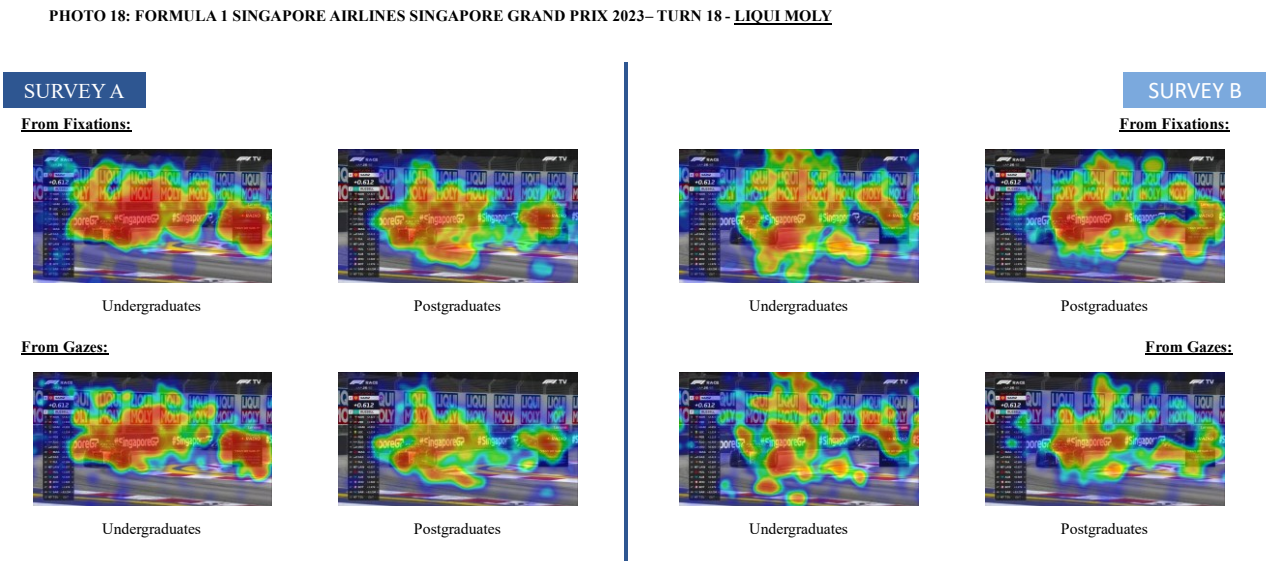


Figure 23: Heatmap Results Based on Fixation and Gaze Measures – Photo 18: Authors own work

The analysis for **Photo 18** shows the usual strong competition between one or two standout ads and the various viewpoints of racing coverage. For Undergraduates in Survey A, the Virtual Ad (Fixations Ratio 80%, TTFF ~0.64 s) and the Non-Virtual Ad (Fixations Ratio 80%, TFF ~0.8 s) both capture a large share of early attention, with Spent Times around 0.77–0.85s. Interestingly, Racing Cars 1 also draws a strong 43% Fixations Ratio, while Racing Cars 2 sees fewer participants (17%) picking it up later. The Race Info Graphic and Left-Hand Side Standing each

attract about 43% and 33%, respectively, indicating that a notable subset of viewers is interested in additional on-screen race data. Meanwhile, the F1 TV Logo is uniformly ignored at 0%.

For Undergraduates in Survey B, the Virtual Ad similarly dominates quick detection (~0.56 s TTFF, 67% Fixations Ratio), while the Non-Virtual Ad emerges with a 60% Fixations Ratio. Racing Cars 1 sees moderate engagement (~33% Fixations Ratio), while Racing Cars 2 remains low (7% Fixations Ratio), presumably overshadowed by the ads. The Race Info Graphic and Left-Hand Side Standing each draw low subsets, scanning style for the graphic (–0.24 K-coefficient) and occasional intense focus for the standings among a small subset. The F1 TV Logo is again mostly invisible.

Among Postgraduates in Survey A, a Non-Virtual Ad (Fixations Ratio 8%, Time Spent 0.76s) surprisingly equals or surpasses the Virtual Ad (70% Fixations Ratio, 0.65s Time Spent) for overall attention, indicating that well-designed or large non-virtual elements can effectively compete if placed advantageously. Racing Cars share fixations with these ads, typically around 60% Fixations Ratio for one vantage and only 25% for the other (Racing Cars 2). The Race Info Graphic commands around 30% Fixations Ratio, with a fairly focal style (K-coefficient ~ 0.73), and the Left-Hand Side Standing sees only 10% Fixations Ratio, although with a strongly attention approach among its few viewers.

For Postgraduates in Survey B, the Virtual Ad (0.36s TTFF, Fixations Ratio 75%) and Non-Virtual Ad (Fixations Ratio 65%) both claim early detection and strong Spent Time, overshadowing the two view racing cars points, which vary from 30% to 70% in Fixations Ratio. Race Info Graphic (4% Fixations Ratio) and Left-Hand Side Standing (~15% Fixations Ratio) again remain secondary or niche, while the F1 TV Logo sees minimal or no fixations, consistent with previous frames.

Overall, Photo 18 underscores the repeated theme: one or two ads—whether virtual or non-virtual—typically dominate if they are quickly noticed, overshadowing additional vantage points such as Racing Cars. Despite the short three-second window, a significant subset of viewers does check race info overlays, but their fixations ratio rarely exceeds 40%. Meanwhile, the F1 TV Logo remains in the periphery, with near-zero fixations across all segments.

PHOTO 19: FORMULA 1 LENOVO UNITED STATES GRAND PRIX 2023- TURN 7 – QATAR AIRWAYS

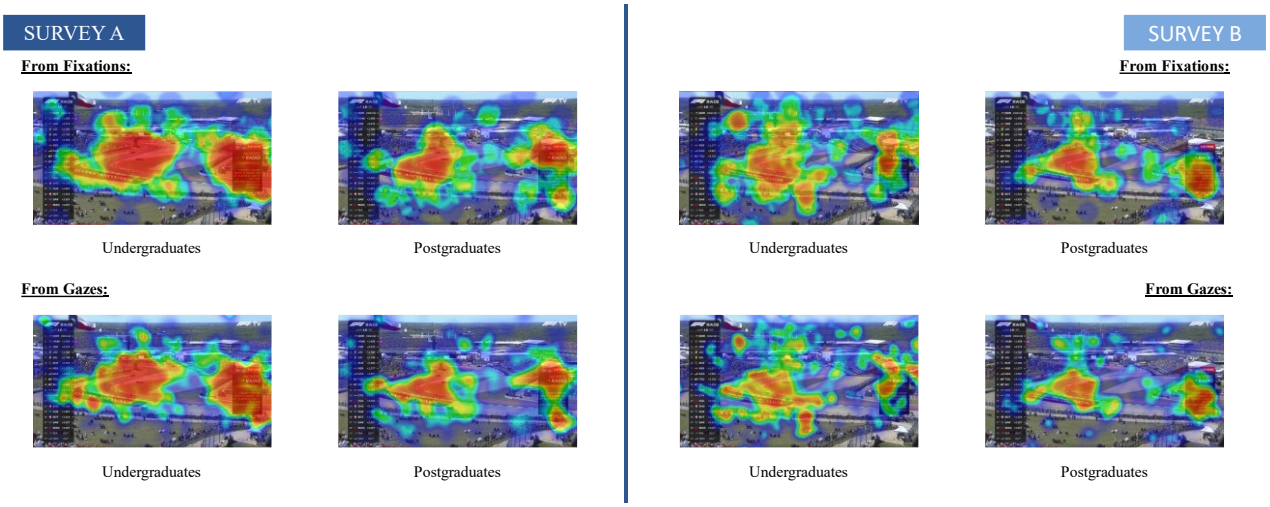


Figure 24: Heatmap Results Based on Fixation and Gaze Measures – Photo 19: Authors own work

Photo 19 illustrates how a variety of virtual and non-virtual ads, plus racing cars areas, compete for attention in a brief three-second timeframe. Among Undergraduates in Survey A, the Virtual Ads exhibit modest-to-high Fixations Ratios (27% for Virtual Ad 1, 13% for Virtual Ad 2, and 20% Cumulative), but Non-Virtual Ads also maintain small user segments. Racing Cars points (Racing Cars 1, Racing Cars 2, and their cumulative results) are noticed by approximately 10% to 39% of participants. Those who do engage tend to exhibit focal attention, as indicated by positive K-coefficients. The Left-Hand Side Standing pulls in about 30% of viewers, adopting a moderate Spent Time, while the F1 TV Logo remains at 0%.

In Undergraduates Survey B, Virtual Ads and Non-Virtual Ads continue to capture a range of fixations (for example, Virtual Ad 1 with 30% ratio, Virtual Ad 2 at 3%, Cumulative Virtual at 17%), though Time Spent can be as high as ~0.46 s for the personalized advertising message. Racing Cars points see inconsistent engagement, from ~3% to 7% Fixations Ratio, often overshadowed by ads. The Left-Hand Side Standing draws small fractions (0.47 Time Spent and 23% Fixations Ratio), usually scanning quickly. F1 TV Logo remains invisible.

Turning to Postgraduates Survey A, the data suggest that some vantage points (like Virtual Ad 2) may not be fixated at all, or have minimal detection, while Virtual Ad 1 draws around 25% for ~0.26s of scanning. Non-virtual ads and the racing cars points similarly gather small subsets (5%–20% Fixations Ratio). A notable outlier is Racing Cars 1, with a TTFF of 0.19s for certain

individuals, indicating lightning-fast detection among the few who look. The Left-Hand Side Standing captures ~35% of participants, some of whom fixate moderately.

Finally, Postgraduates in Survey B feature a more scattered approach: the personalized virtual ad is spotted by just 5% of participants but retains a high spent time of 1.15 s and a strongly focal K-coefficient (1.09). The main Virtual Ad 1 is seen more frequently, but still only by 25% of fixations with 0.62s Spent Time, overshadowing Non-Virtual Ads with lower ratio. Racing cars areas vary from ~5% Fixations Ratio to 30% in Gazes Ratio, often overshadowed by certain ads that appear more visually prominence. The Left-Hand Side Standing sees ~15% Fixations Ratio at a mostly scanning approach, and the F1 TV Logo remains again at 0%.

Overall, Photo 19 underscores the broad range of attention patterns. Some areas or ads may hardly be noticed while others—especially a strong Virtual Ad or a well-placed Non-Virtual Ad—can achieve moderate dwell times, even among a small fraction of viewers. The racing coverage, though typically a strong competitor, can still be overshadowed in a short timeframe if ads capture quick or visually distinct attention. Meanwhile, race info overlays like the Left-Hand Side Standing seem to attract niche subsets primarily interested in on-screen data. Across all groups, the F1 TV Logo repeatedly fails to garner fixations in any meaningful way, confirming a general pattern that small peripheral branding remains largely invisible.

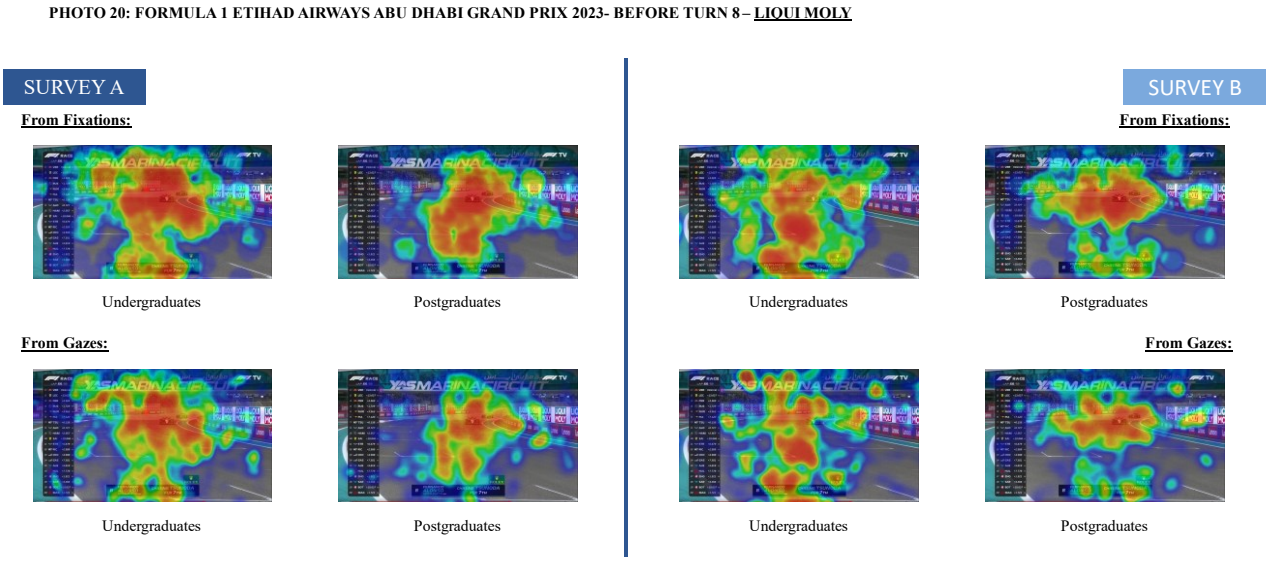


Figure 25: Heatmap Results Based on Fixation and Gaze Measures – Photo 20: Authors own work

Photo 20 highlights the intense competition for attention among multiple virtual ads, non-virtual ads, and racing vantage points, all constrained within a three-second timeframe. For undergraduates in Survey A, the virtual ads exhibit minimal fixation ratios (approximately 10% Fixations Ratio for each) but show high K-coefficients among the few participants who do fixate, indicating intense focus within a small group. Similarly, non-virtual ads in Survey A attract small subsets of viewers, with fixation ratios ranging from 1% to 17%. Racing Cars points display fixation ratios fluctuating between 23%, typically discovered after 1.79 seconds. These points often prompt moderate to strong attention engagement when fixated upon. The Race Info Graphic stands out with a fixation ratio of 37% and an average Spent Time of approximately 0.43 seconds, suggesting that a notable portion of participants is curious about race-related data. In contrast, the Left-Hand Side Standing captures a fixation ratio of just 13%, while the F1 TV Logo once again fails to attract any fixations.

In Undergraduates Survey B, the Virtual Ads achieve small to moderate fixation ratios, with 13% for Virtual Ad 1, 10% for Virtual Ad 2, 13% for Virtual Ad 3, and 12% in the cumulative analysis of virtual ads, though they are overshadowed by other visual elements. Non-virtual ads similarly show low engagement, with fixation ratios ranging from 3% to 13%, often surpassed by the racing cars or partial interest in other ads. The Racing Cars Area of Interest (AOI) receives a fixation ratio of 13%, with participants spending an average of 0.33 seconds viewing this element. The Race Info Graphic captures the attention of 27% of participants, with an average dwell time of approximately 0.57 seconds, while the Left-Hand Side data attracts 13% of viewers for about 0.17 seconds. Meanwhile, the F1 TV Logo remains unnoticed throughout.

For Postgraduates Survey A, the data shows that Virtual Ad 1 captures the attention of only 5% of participants, while Non-Virtual Ads achieve fixation ratios of 25% to 50% in some instances, surpassing certain Virtual Ads. Racing Cars and the Race Info Graphic record fixation ratios of 50% and 15%, respectively, with average viewing times of 0.3 to 0.5 seconds, suggesting that some elements remain appealing but do not attract universal attention. The Left-Hand Side Standing draws a fixation ratio of 15%, with participants scanning or moderately focusing for approximately 0.3 seconds. Meanwhile, the F1 TV Logo is again largely ignored across the data.

Postgraduates Survey B reveals a consistent pattern, with small subsets of participants focusing on different elements and no single feature dominating attention across the entire group. Virtual Ad 3

engages about 25% of participants, while Non-Virtual Ads achieve fixation ratios ranging from approximately 5% to 30%. Racing Cars maintain their prominence, with fixation ratios reaching up to 45%, emphasizing the race as a primary interest for many viewers. Overlays, such as the Race Info Graphic and the Left-Hand Side Standing, show moderate engagement, with fixation ratios of 35% and 15%, respectively, characterized by scanning or mildly attentive viewing styles. Meanwhile, the F1 TV Logo remains nearly unnoticed.

Photo 20 consolidates the recurring trends observed throughout the analysis. Ads—whether virtual or non-virtual—that are quickly detected and visually salient can capture strong focal engagement from a small subset of viewers. At the same time, racing elements and race information overlays continue to be significant attention drivers, with some areas engaging more than half of the participants. However, these elements are often overshadowed if the ads offer a compelling visual appeal. The F1 TV Logo consistently registers minimal to no fixations, underscoring the challenge of small, peripheral branding to stand out in the visually dense context of an F1 broadcast.

4.1 Detailed Analysis of Photos 5-12-13-19

Although virtual advertisements feature prominently in all twenty provided photos for both undergraduate and postgraduate participants, the introduction of Personalized Virtual Ad (PVA) in Survey B – specifically within Photos 5,12,13 and 19 – reveals how customization can influence eye-tracking results. Comparing these personalized ads to both standard virtual ads and non-virtual ads illustrates the conditions under which personalization can elevate engagement, as indicated by key metrics such as Time to First Fixation (TTFF) and Fixation Ratio (FR). The personalized messages are introduced as part of an existing Virtual Advertisement ("Virtual Ad" or "Virtual Ad 1" could be found in our detailed dataset). Rather than being an entirely separate advertisement, the personalized message operates as a sub-AOI within the broader Virtual Ad, allowing us to observe how customization impact viewer engagement with that specific section of the ad. The following explanation presents precise data references for these four photos to clarify the impact of this innovative idea of inserting personalized virtual advertising messages during a F1 broadcast under varying broadcast and demographic contexts.

A closer examination of the eye-tracking data for Photo 5 highlights the influence of personalized content on visual attention and engagement. Among undergraduates in Survey B, the Personalized Virtual Ad attracts an Average Time to First Fixation of 0.74 seconds, indicating that participants

begin fixating on the ad relatively early within the first three seconds of exposure. This initial capture of attention is supported by an Average Time Spent of 1.01 seconds, surpassing the Time Spent on several other stimuli in the frame. Undergraduates also gather 80 total Fixations on the Personalized Ad, substantially higher than 29 Fixations recorded by the postgraduates (Survey B). Their Fixation Ratio of 73% further suggests that a larger section of undergraduates directed their gaze to personalized content at least once. These findings collectively underscore an important conclusion: once undergraduates detect personally relevant cues, they spent a meaningful amount of time visually scrutinizing them.

Although, postgraduates (Survey B) engage with the same personalized stimulus, they exhibit a notably longer Average Time to First Fixation at 1.17 seconds, implying a more delayed recognition of and orientation to the ad. Overall Average Time on the personalized content stands at 0.70 seconds, for this group, well below the undergraduate average of 1.01 seconds. Nonetheless, once postgraduates do fixate on the ad, they spent somewhat longer per fixation: an Average Fixation Duration of 0.30 seconds, compared to 0.27 seconds for undergraduates, and a First Fixation Duration of 0.33 seconds, exceeding the undergraduates' 0.26 seconds. In short, the postgraduates' fewer but longer fixations suggest a more measured scanning strategy, wherein participants take longer to notice the ad initially but then examine it more sustained once their attention is fixated.

These group-based differences become more evident when considering the K-coefficient, which integrates fixation duration and saccade width to distinguish between focal and surrounding viewing. Undergraduates produce a K-coefficient of 0.48 in their interactions with the Personalized Virtual Ad, whereas postgraduates register 0.36. Higher K-coefficients generally indicate a more focal style of attention, suggesting that undergraduates, once drawn to the ad, concentrate intently upon it. The dynamics of gaze patterns similarly support these conclusions: undergraduates average 0.9 seconds in total gaze time, accumulate 1,026 total Gazes, and revisit the ad 0.87 times on average —results that eclipse the corresponding postgraduate metrics of 0.64 seconds, 437 Gazes, and 0.50 revisits. Although postgraduates trail behind in these measures, their slightly longer fixations once they do look suggest a depth of scrutiny less apparent in the undergraduates' quicker but more frequent engagements.

It is instructive to contextualize these findings by comparing them to related results from Survey A, even though Survey A did not contain a labeled "Personalized Virtual Ad" for direct one-to-one analysis. Instead, both undergraduates and postgraduates in Survey A were exposed to a "Virtual Ad" AOI that was similar in its general brand-based function but larger in AOI Size (16.4%) than the Personalized Virtual Ad in Survey B (5.2%). Among undergraduates in Survey A, this non-personalized Virtual Ad elicited an Average Time to First Fixation of 0.95 seconds, substantially slower than the 0.74 seconds for the Personalized Virtual Ad in Survey B. Undergraduates also spent less total time (0.79 seconds) on the non-personalized Virtual Ad in Survey A than on the personalized one in Survey B (1.01 seconds). Moreover, the Fixation Ratio climbed from 60% in Survey A (Virtual Ad) to 73% in Survey B (Personalized Virtual Ad), suggesting that personalization may be a key driver in boosting the share of participants who actually attend to the ad at least once. Interestingly, the K-coefficient in Survey A for the Virtual Ad stands at 0.74, exceeding the 0.48 observed in Survey B's personalized stimulus; however, the difference in AOI Size (16.4% vs. 5.2%) complicates direct interpretation. A larger area may encourage more extended scanning, sometimes enlarging the K-coefficient by increasing average fixation durations and adjusting saccade amplitudes. By contrast, the personalized ad's smaller area still reaches more viewers more quickly, highlighting the potential of customization in capturing immediate attention despite its reduced size.

A similar pattern emerges for postgraduates when contrasting Survey A's Virtual Ad with Survey B's Personalized Virtual Ad. Survey A participants fixated on the standard Virtual Ad for an average of 0.77 seconds, discovered it in about 0.73 seconds, and exhibited a Fixation Ratio of 70%. Yet when exposed to a smaller, Personalized Virtual Ad in Survey B, the postgraduates did not locate it until 1.17 seconds on average and ended up dedicating only 0.70 seconds of total viewing time to it. The K-coefficient likewise dips slightly (from 0.37 in Survey a's Virtual Ad to 0.36 in Survey B's Personalized Virtual Ad), reflecting a small but observable shift in scanning style. Importantly, though, the Survey B personalized stimulus still captures a significant section of the postgraduate audience (Fixation Ratio of 60%) in spite of being both smaller and, for some participants, more challenging to locate. This outcome suggests that personalization may offer an incremental engagement benefit, though it might also demand more deliberate searching and recognition among more methodical viewers.

Taken together, these comparisons indicate that personalized virtual advertisements demonstrate a strong ability to stimulate faster and more sustained engagement than a similar, non-personalized Virtual Ad, particularly among undergraduates. Even postgraduates, who in Survey B discovered the personalized ad later and fixated fewer times overall, still exhibited comparable or greater attentional depth with each fixation once the ad was located. The heightened early engagement observed for personalized content in Survey B stands out most starkly in the undergraduate data, reinforcing the hypothesis that younger viewers, possibly more aware of personalized cues, can be caused by focus on specialized marketing messages more quickly. Meanwhile, postgraduates' slightly delayed but deeper focus may reflect a preference for scanning the entire frame before returning on prominent details, again suggesting that personalization remains effective, although in a slightly different temporal pattern.

Ultimately, the alignment of Survey A and Survey B findings emphasizes that just the exposure to a large, standard virtual advertisement does not necessarily guarantee prompt or intense viewer attention. Instead, the presence of individualized content appears to serve as a more compelling trigger for immediate engagement, even if the ad's size is smaller and even if certain participants adopt a slower orientation phase.

In Photo 12, the Personalized Virtual Ad in Survey B provides further evidence of personalization's effect on viewer behavior. Among undergraduates (Survey B), the Personalized Virtual Ad elicits an Average Time to First Fixation of 1.06 seconds, indicating that participants orient to this specific ad within a little over one second of the three-second AOI time range. Although this inactivity is longer than the 0.89 seconds recorded for the standard Virtual Ad in the same survey, undergraduates ultimately display average engagement once the personalized stimulus is noticed. They devote an Average Time Spent of 0.45 seconds to the personalized ad, register 15 Fixations (compared with 51 for the standard Virtual Ad), and attain a Fixation Ratio of 30%, reflecting that nearly a third of undergraduates fixated at least once on the Personalized Virtual Ad. These numbers are more modest than for some of the larger or more central AOIs (for example, the Racing Cars), but the fact that the ad still captures a measurable share of participants' visual attention underscores the potential attention of personalization in an otherwise cluttered broadcast frame.

Further insight into the undergraduates' viewing of the personalized ad emerges from fixation-duration measures. The Average Fixation Duration for the Personalized Virtual Ad, a sub-area of interest (sub-AOI) within Virtual Ad 1, is 0.25 seconds—nearly identical to the 0.24 seconds observed for the standard Virtual Ad. This similarity suggests that once students fixate on an advertisement, whether personalized or not, their gaze duration remains consistent, indicating comparable levels of engagement once attention is captured. Their Average First Fixation Duration of 0.26 seconds underscores this consistency: initial encounters with the personalized stimulus match the duration of fixations across comparable ads, indicating that while personalization might not drastically lengthen individual fixations, it still appears to capture roughly the same degree of momentary scrutiny. However, the undergraduates' K-coefficient for the personalized ad stands at −0.17, notably lower than the −0.24 recorded for the standard Virtual Ad and considerably lower than positive or near-zero values sometimes associated with more focal scan patterns. This negative K-coefficient, along with a quite delayed Time to First Fixation, implies that many undergraduates may identify the ad in a more diffuse or peripheral manner rather than instantly honing in on its personalized cues.

Turning to gaze-based metrics, undergraduates log a total of 232 Gazes on the Personalized Virtual Ad, which translates to a Gaze Ratio of 57%—meaning that well over half of the participants did look at the ad at least once. Their Average Time to First Gaze (1.10 seconds) aligns closely with the 1.06 seconds recorded for the first fixation, indicating that undergraduates usually fixate and gaze at this stimulus around the same point in the photo. Average Gaze Time Spent, however, comes in at just 0.31 seconds, suggesting relatively brief, concentrated looks that do not build into extensive visual inspection. Their Revisits to the ad amount to an average of 0.14, a short number that signals the ad attract some re-engagement but not repeatedly so. The smaller AOI Size (2.3%) for the personalized ad likely shows these patterns: although undergraduates do notice it, the ad's limited message size constrains the scope for extended or repeated fixations.

Comparisons with undergraduates in Survey A provide additional context, even though no "Personalized Virtual Ad" label appears in that data. Instead, Survey A participants encountered a "Virtual Ad" occupying 11.5% of the frame—significantly larger than the 2.3% for the Personalized Virtual Ad in Survey B. Undergraduates in Survey A discovered their larger Virtual Ad more quickly (0.42 seconds to first fixation) and spent more total time on it (0.69 seconds) than

Survey B participants spent on the personalized version (0.45 seconds). The Fixation Ratio also reached 43% in Survey A's Virtual Ad (versus 30% for the Personalized Virtual Ad in Survey B). Such differences remind us that AOI size and on-screen prominence powerfully shape engagement metrics, potentially overshadowing or confounding any benefit introduced by personalization when the latter is embedded in a smaller AOI. At the same time, the fact that a smaller ad with personalized content still secures attention from 30% of viewers suggests personalization can partly engaged in limited space, capturing a fair share of the audience despite a reduced footprint.

Moving to the postgraduate sample, the Personalized Virtual Ad in Survey B registers a markedly longer Average Time to First Fixation of 1.61 seconds, indicating that these older or more advanced students take even longer than undergraduates to locate the stimulus. Their overall Average Time Spent is 0.41 seconds, and they produce just 8 total Fixations, corresponding to a Fixation Ratio of 30%. Intriguingly, once postgraduates do fixate on the personalized content, they exhibit slightly longer fixation durations compared to undergraduates: the Average Fixation Duration is 0.33 seconds, exceeding the undergraduates' 0.25 seconds. The Average First Fixation Duration likewise sits at 0.33 seconds, again outpacing the 0.26 seconds for the undergraduates. These findings suggest that while the postgraduates are less immediately drawn to the ad, once they direct their attention, they devote more sustained focus to each fixation.

Their K-coefficient of 0.65 reinforces the notion of a relatively focal scanning style once they do focus on the ad; in fact, it stands in contrast to the negative coefficients recorded by undergraduates for both standard and personalized ads. This positive coefficient suggests that postgraduates who do notice the Personalized Virtual Ad are scanning it with a narrower, more intense focus, rather than flitting peripherally around its edges. Likewise, postgraduates' Gaze Ratio of 50% means half of the surveyed group actually looked at the ad at least once, a figure only marginally below the 57% ratio for undergraduates. However, their total Gazes amount to just 129—far lower than the 232 undergraduates generated—implying that once recognized, postgraduates scrutinize the ad deeply in fewer gazes, while undergraduates resort to briefer but more numerous glances. The postgraduates' Revisits, during this time, stand at 0, indicating that those who look once rarely come back, emphasizing the idea that postgraduate attention is more deliberate and complete on the first pass rather than repetitive.

When held up against the standard Virtual Ad in Survey B, which the postgraduates notice in 1.19 seconds on average, the personalized advertisement at 1.61 seconds is not identified as quickly. This slower detection of the Personalized Virtual Ad, a sub-area of interest (sub-AOI) within Virtual Ad 1, arguably stems from either its smaller size or less visually prominent design, factors that may overshadow any heightened interest conferred by the label "personalized." Similarly, Survey A's Virtual Ad data for postgraduates—featuring Virtual Ads without direct personalization—reveals shorter average detection times (1.20 seconds) alongside a larger AOI (11.5%), reinforcing the idea that visual prominence within an AOI can outweigh the effects of personalization in capturing immediate attention. Still, once the postgraduates do fixate on the smaller, personalized design, they exhibit a more pronounced depth of focus per fixation relative to both the undergraduates and their own interactions with standard ads, as indicated by the 0.65 K-coefficient and 0.33-second average fixations duration.

Taken as a whole, these findings for Photo 12 follow same patterns observed elsewhere: undergraduates discover personalized stimuli somewhat more quickly overall, though not as rapidly as larger or more central ads, and they engage with it in short, repeated gazes. Postgraduates, on the other hand, demonstrate a delayed scanning but a deeper, more focal mode of close examination once their gaze reaches on the ad. Throughout, the ad's smaller visibility in Survey B restricts extended viewing, yet personalization still appears sufficient to attract a meaningful set of participants' attention.

Photo 13 examines the broader implications of personalization within a dynamic and visually complex setting. In Survey B, undergraduates demonstrated an Average Time to First Fixation of 1.14 seconds for the Personalized Virtual Ad, a sub-area of interest (sub-AOI) embedded within the broader Virtual Ad 1. This positions its initial attention capture slightly behind Virtual Ad 1 as a whole, which recorded an average time of 1.00 seconds as the most visually dominant among standard virtual ads. Notably, the Personalized Virtual Ad outperformed other virtual ads within the frame, underscoring its ability to draw attention effectively even within a competitive visual context. Once undergraduates fixate on the personalized content, they allocate 0.66 seconds of Average Time Spent. Although this figure ranks among the higher engagement durations for any advertisement in Survey B, the total number of Fixations (40) is more moderate when compared to the 75 recorded for Virtual Ad 1. The Fixation Ratio, at 53%, indicates that just over half of the

undergraduate participants fixated at least once on the personalized ad—a figure that equivalent, and in some cases excels, the share of participants who positioned to several non-virtual ads in the same condition.

Undergraduates' fixation-duration metrics shed light on how deeply they scrutinize the Personalized Virtual Ad once they do look at it. Their Average Fixation Duration (0.26 seconds) is identical to the 0.26 seconds recorded for Virtual Ad 1, suggesting that the ad manages to hold their gaze in a manner comparable to the largest standard virtual advertisement. The Average First Fixation Duration (0.28 seconds) similarly approaches the baseline established by the other virtual ads, implying that personalized messaging may not drastically alter how long each initial glance endures, but rather influences whether or not a viewer looks in the first place. The K-coefficient, at 0.20, is somewhat modest relative to the 0.55 recorded for the entire set of virtual ads (Cumulative Virtual). While a higher K-coefficient usually implies a more focal, less ambient scan style, the undergraduates' midrange value may signal that they neither skim nor spent time excessively once their attention lands on the personalized message; instead, they maintain a balanced viewing strategy.

In terms of gaze patterns, undergraduates direct 610 total Gazes toward the Personalized Virtual Ad, equating to a Gaze Ratio of 77%. This high ratio aligns with the 77% also recorded for Virtual Ad 1, indicating that when it comes to drawing at least a quick look from the audience, the personalized message effectively rivals the larger, more noticeable ads. Delving deeper, the Average Time to First Gaze (0.94 seconds) aligns closely with the 1.14 seconds it takes to fixate, indicating that viewers generally move from detecting the ad to fully gazing upon it with little delay. The Average Gaze Time Spent, 0.59 seconds, demonstrates a meaningful but not prolonged inspection period. Meanwhile, the undergraduates' Revisits to the personalized ad average 0.40, suggesting that a notable subset returns at least once after looking away—a sign that personalization may prompt some participants to recheck the content out of curiosity or perceived relevance.

Comparisons with Survey A undergraduates, who did not encounter a designated "Personalized Virtual Ad," offer broader context. In Survey A, Virtual Ad 1 garnered an Average Time to First Fixation of 0.98 seconds, roughly in the same range as the 1.14 seconds for the personalized version in Survey B, despite the latter having a smaller AOI Size (6.4% vs. 14.20% for Virtual Ad

1). The standard ads in Survey A generally achieved a Fixations Ratio between 10% and 63%, depending on their size and prominence, which the Personalized Virtual Ad in Survey B essentially matches or exceeds at 53%. This alongside indicates that personalization can help a smaller ad maintain attentional competitiveness. However, the largest standard ad in Survey A (Virtual Ad 1) maintains a robust 61 fixations compared to the personalized ad's 40, underscoring that, despite the benefits of personalization, AOI size and prominence remain critical factors in capturing and retaining viewer attention.

Turning to the postgraduates, the Personalized Virtual Ad in Survey B achieves an Average Time to First Fixation of 0.88 seconds, notably quicker than the 2.65 seconds required to locate Non-Virtual Ad 1 and the 2.11 seconds it takes to notice Virtual Ad 4. The postgraduates thus appear to identify the personalized stimulus relatively early, even though the total Fixations (29) fall short of the 42 for Virtual Ad 1 and the 53 for the entire set of virtual ads (Cumulative Virtual). Their Fixation Ratio, at 55%, means that a little over half the postgraduate viewers fixated on the ad, comparing favorably with the 60% ratio for Virtual Ad 1. Once postgraduates do fixate, they spend an average of 0.65 seconds on the ad, closely mirroring the 0.66 seconds undergraduates devote.

Examining the depth of their attention, postgraduates register an Average Fixation Duration of 0.25 seconds, a figure closely aligned with the undergraduates' 0.26 seconds. Their Average First Fixation Duration, at 0.28 seconds, similarly matches the undergraduates, suggesting that the initial level of scrutiny is comparable across both educational groups. However, the K-coefficient for the postgraduate group is −0.22, indicating a somewhat more generic scan motif for the personalized ad compared with the positive or near-zero values associated with more focal attention. Such a negative coefficient suggests that postgraduates, while relatively quick to identify the personalized message, do not necessarily concentrate on it to the same extent as they might a larger, more central feature. This conclusion is reinforced by the moderate total Gazes of 360, which is about half the 610 undergraduates generated.

Contrast these results with the postgraduates' Survey A data, where no explicit personalization was labeled. There, the largest standard ad (Virtual Ad 1) in Photo 13 had an Average Time to First Fixation of 1.27 seconds, overshadowing the smaller ads that often went unnoticed altogether or drew fewer fixations. Nonetheless, once discovered, the Survey A Virtual Ad 1 gathered 42

fixations—a figure quite close to the 29 fixations on the smaller Personalized Virtual Ad in Survey B. The fact that a smaller but personalized stimulus can attract fixations count in the same range as a larger ad suggests personalization can partially compensate for a decreased visual area. At the same time, the standard Virtual Ad 1 in Survey A benefited from a somewhat higher average fixation duration (0.25 seconds vs. the ad's 0.28 seconds in Survey B), indicating that postgraduates could sustain attention on a large stimulus as effectively as on a smaller, personalized one. In sum, the data for Photo 13 reveal that personalization forces a visible influence on eye-tracking metrics, even when the ad's area size is relatively small. Undergraduates in Survey B show a strong tendency to discover, fixate upon, and revisit the Personalized Virtual Ad, achieving a Fixation Ratio of 53% and a Gaze Ratio of 77%, equivalent or better than many larger non-personalized ads. Postgraduates, while also relatively quick to notice the personalized ad at 0.88 seconds, fixate less frequently and adopt a slightly more generic scan motif, as evidenced by a negative K-coefficient and fewer revisits. Against the dataset of Survey A, where standard ads with bigger AOIs typically reached quicker or more numerous fixations, the Personalized Virtual Ad in Survey B demonstrates that tailored content can help smaller ads hold their attention. However, the synergy between personalization and ad prominence remains critical: when personalization aligns with sufficient size and strategic positioning, viewer engagement metrics tend to increase further. Therefore, these insights underline how, for both undergraduates and postgraduates, personalized virtual ads can serve as a powerful tool to secure attention, but their ultimate effectiveness is shaped by the correlations of design, placement, and audience scanning strategies.

Photo 19 further illustrates personalization's impact within a cluttered broadcast frame. Among undergraduates in Survey B, the Personalized Virtual Ad elicits an Average Time to First Fixation of 1.10 seconds, placing it in the midrange of their detection times relative to other virtual and non-virtual stimuli. This inactive period is slightly longer than the 0.88 seconds it takes participants to notice Virtual Ad 2, yet still quite competitive considering the broader field of on-screen elements. Once undergraduates do focus to the personalized content, they spend on average 0.46 seconds examining it, a duration that surpasses the 0.20–0.25 seconds spent on some of the non-virtual ads in the same set, suggesting that personalization may confer a moderate advantage in sustaining attention.

The undergraduates' fixation-based measures provide additional insight. They register 6 total Fixations on the Personalized Virtual Ad, corresponding to a Fixation Ratio of 0.13—meaning that 13% of participants fixated on it at least once. Although this ratio appears lower compared to the 30% observed for Virtual Ad 1, it is important to keep in mind that the Personalized Virtual Ad occupies only 1% of the screen, which is smaller or comparable to other ads that often fail to register significantly higher fixation ratios. The undergraduates' Average Fixation Duration, at 0.29 seconds, aligns closely with the 0.27–0.33 range for the other ads they do fixate upon, implying that once their gaze stays on the personalized message, they scrutinize it for roughly the same period of time as they devote to standard marketing content of the frame. Nonetheless, a negative K-coefficient (-0.43) suggests a slightly ambient scan pattern: although the ad may receive a relatively intensive look from some viewers, a good section of the group's attention might remain scattered, as they view other on-screen cues or switch quickly among multiple AOIs.

Gaze-based indicators underscore a similar pattern of moderate engagement. Undergraduates accumulate 123 total Gazes on the Personalized Virtual Ad, driving a Gaze Ratio of 33%. In other words, a third of the respondents direct their gaze to the ad at least once, which notably matches or surpass the ratio that glimpse at certain non-virtual ads of similar size. The Average Time to First Gaze (0.87 seconds) is marginally below the 1.10 seconds for first fixation, suggesting that once the ad is within the viewer's peripheral field, it does not take long for the viewer to shift from peripheral awareness to a noticeable gaze. However, the shorter intervals between fixations and gazes likewise correlate with the negative K-coefficient, supporting that the group's overall scanning pattern for this personalized content remains slightly more generic than focal.

Comparisons with Survey A undergraduates, who did not encounter a labeled "Personalized Virtual Ad," provide additional perspective. In Survey A, the most prominent ad (Virtual Ad 1) garnered 10 fixations, a Fixation Ratio of 0.27, and was identified around 1.06 seconds—metrics that generally surpass those for the smaller personalized version in Survey B. Yet the differences in AOI size (1.8% for Virtual Ad 1 vs. 1% for the Personalized Virtual Ad) and overall scene context complicate direct comparisons. Still, the Survey A data illustrate that a larger virtual ad will typically earn a higher share of fixations. That the personalized message in Survey B gathers even a part of that attention highlights the potential of personalization to prompt viewers to take notice, despite its limited space area.

Turning to the postgraduates in Survey B, the Personalized Virtual Ad draws their initial fixation in an Average Time to First Fixation of 0.94 seconds, a more rapid detection than for several other ads in the same condition, including Virtual Ad 1 (1.81 seconds) and Virtual Ad 2 (1.42 seconds). This finding suggests that postgraduates may more readily detect or respond to personalized elements, even though the total number of Fixations is just 3, corresponding to a Fixation Ratio of 5%. While this group appears small, it falls within the lower engagement range expected for smaller ads across the postgraduate sample, many of whom generally exhibit a cautious, selective scanning style. Indeed, once postgraduates fixate on the personalized content, they log an Average Fixation Duration of 0.38 seconds, exceeding the 0.31 or 0.27 seconds observed for the standard virtual ads, indicating that their scrutiny deepens once they do look.

The K-coefficient of 1.09 for postgraduates aligns with this conclusion of more intense engagement: a positive and relatively high coefficient indicates a focal scan pattern, where participants stay and fixate more deeply on prominent content. Thus, even though only a small subset fixates on the ad, those who do engage invest significant attentional time period. A similar dynamic emerges from gaze-based data. Postgraduates direct 73 total Gazes at the personalized stimulus (Gaze Ratio of 40%), repeating the idea that while the absolute number of gazes remains average, an important share of the postgraduate group who notice the ad choose to revisit it multiple times. By contrast, some standard ads in Survey B garner more fixations overall but with a lower average fixation duration or a negative K-coefficient, highlighting that personalization may appeal to a smaller but highly engaged participants among postgraduates.

Against the group of Survey A postgraduates, the more standard Virtual Ad 1 achieved 5 fixations, a 25% Fixation Ratio, and an overall negative K-coefficient (-0.38)—observations reflecting a more scattered approach to scanning a larger but generic photo's area. The personalized version in Survey B, by contrast, manages fewer fixations but a higher fixation duration and a strongly positive K-coefficient (1.09). This pattern underlines the conclusion that personalization can prompt deeper, more focal attention among certain viewers, especially if they notice the ad at all. In a sense, personalization introduces an interesting point of view: some participants overlook a smaller ad entirely, but those who do see it appear more likely to engage in concentrated viewing.

Taken together, these findings for Photo 19 suggest that while the Personalized Virtual Ad competes with numerous on-screen elements, it still secures a significant level of attention,

particularly from undergraduates who arrive slightly late but spend a decent space between inspecting it, and from postgraduates who appear more selective but maintain a more focal scan once they focused on the ad. The smaller AOI (1%) inevitably constrains the total fixation count relative to larger or more visually prominent ads, yet personalization nonetheless gathers interest from a meaningful part of participants. These observations point to the strategic potential of personalized ads in contexts where visibility percentage is limited and visual competition is intense: even if only a part of viewers look, those who do may engage more deeply, possibly leading to stronger brand recall. As in other frames, larger or more conspicuous stimuli capture broad but occasionally generic attention, while the personalized approach taps into a more selectively engaged audience, especially among postgraduates who display a strong attentional depth once their interest is achieved.

The analysis of the above data from Photo 5, 12, 13 and 19 reveals significant correlations between personalized virtual advertisements and various metrics of viewer attention and engagement. The following correlations highlight how personalized ads influence both the eye-movement speed and depth of visual interactions, with distinct patterns developing between undergraduate and postgraduate participants.

1. **Quick Detection Drives Broader Engagement**
    - Shorter Average Time to First Fixation correlates with higher Fixation Ratios, indicating that quicker detection of personalized ads leads to broader viewer engagement (e.g., Photo 5: 0.74 seconds detection time for undergraduates, Fixation Ratio 73%).
    - Faster Average Time to First Gaze aligns with higher Revisits, as seen in Photo 13, where undergraduates (0.94 seconds to first gaze) revisited the ad an average of 0.40 times.
2. **Fixation Durations Reflects Focused Attention**
    - Longer Average Fixation Duration correlates with higher K-coefficients, signaling more focal attention. For instance, in Photo 19, postgraduates recorded an Average Fixation Duration of 0.38 seconds and a K-coefficient of 1.09 on the personalized ad.
3. **Personalized Ads Foster Recurring Engagement**

- Revisits are more frequent for personalized ads compared to standard ads, especially among undergraduates. In Photo 12, undergraduates revisited the personalized ad 0.14 times on average, despite its smaller AOI size.

4. **Balancing AOI Size and Attention Depth**
    - Smaller AOIs result in fewer fixations but maintain attention depth through higher fixation durations. For example, in Photo 12, postgraduates' Fixation Ratio for the personalized ad was 30%, but their Average Fixation Duration was 0.33 seconds, showing deeper engagement.
5. **Distinct Attention Patterns Across Groups**
    - Undergraduates engage with personalized ads more quickly and revisit them more often (e.g., 123 total Gazes in Photo 19, Gaze Ratio 33%).
    - Postgraduates exhibit slower initial engagement but demonstrate greater attentional focus once oriented, as evidenced by metrics such as the 0.38-second Average Fixation Duration and a positive K-coefficient of 1.09 observed for Photo 19.

RQ3. How does the placement and format of virtual advertising, including non and personalized advertisements, during Formula 1 broadcasts influence brand recall and lasting impressions among viewers?

After viewing the 20 frames, participants completed a series of Brand Recall and Recognition questions to assess the potential impact of personalized virtual advertisements. The first question asked participants to list all the brands they recall seeing in the provided images. The second question asked: Which brand do you believe will leave a lasting impression based on the images you reviewed? The third question followed up by asking: Based on your response to Question 2, where did you notice the selected brand on the Formula 1 track? Subsequently, participants were presented with 15 different logos and asked to indicate whether they recalled seeing each logo in the provided images. To comprehensively evaluate the effects of Personalized vs. Non-personalized Virtual advertisements within the Formula 1 broadcast environment, the collected responses were systematically analyzed using IBM SPSS Statistics 29.0. This section integrates Frequency Analyses, Survey ID breakdown (A-Undergraduate, A-Postgraduate, B-Undergraduate, B-Postgraduate), Gender Crosstabulations, and comparisons between Non-Personalized Virtual

Ads (A Groups) and Personalized Virtual Advertisements (B Groups). These analyses focus on four survey's questions as described detailed in the above paragraph. The findings illuminate which brands achieve the strongest resonance, how different segments engage with Formula 1 Virtual Advertisements, and the relative influence of personalized versus non-personalized virtual ads content.

Participants' open-ended brand recall (Q1) revealed that Heineken and Qatar Airways were each mentioned by 55% of the overall sample, while Rolex followed closely at 53%, DHL at 48%, and Lenovo at 37%. These percentages reflect total mentions across all participants, but the breakdown by Survey ID further clarifies which advertisement type and educational level favored particular brands. Among A-Undergraduates (exposed to Non-Personalized Ads), 70% recalled Rolex, whereas 66.7% recalled Heineken; both figures exceed the average for these sponsors. In contrast, B-Undergraduates (Personalized Ads) showed higher recall for DHL at 60% and Qatar Airways at 63.3%, each roughly 15-20 percentage points above their recall levels in the A Groups. Both brands featured a personalized message inserted by the author into the photo (e.g., NAME – Hypothetical direct offer by the brand). Aramco, Liqui Moly, and Salesforce – which reached around 5% or less among A-Postgraduates and B-Postgraduates – demonstrated that some performance or technology-oriented sponsors lacked spontaneous awareness among most segments unless participants had prior familiarity. Additionally, Paramount+ remained below 5% recall overall, matching the low rates of MSC Cruises (15% total, mostly within A Groups). In terms of Gender, female participants in the B-Undergraduate category recalled Qatar Airways at 71.4% and DHL at 61.9%, outpacing their male participants for these service-oriented brands, while some male subgroups reached higher recall for beer-related brands, such as Heineken (e.g. 77.35% among A Groups in male participants). This pattern suggests that personalized strategies may confer advantages to specific industries, particularly brands within the B2B sector.

Brands	A Underg.	A Postgrad.	B Underg.	B Postgrad.
Heineken	66.7%	65%	43.3%	45%
QATAR AIRWAYS	46.7%	65%	63.3%	45%
ROLEX	70%	65%	36.7%	40%
DHL	30%	40%	60%	65%
Lenovo	33.3%	45%	36.7%	35%
PIRELLI	30%	25%	10%	15%
salesforce	0%	5%	0%	5%
LIQUI MOLY	0%	5%	0%	5%
aramco	0%	5%	0%	5%
MSC CRUISES	15%	15%	0%	0%
Paramount+	0%	5%	0%	5%
Other Brands	**13.2%**	**10%**	**13.3%**	**30%**

Figure 26: Question 1 – Unaided Brand Recall (%) by Brand and Survey Group: Authors own work

This table provides a snapshot of how frequently each brand was spontaneously recalled by participants after they viewed the Formula 1 frames. The "%" refers to the percentage of respondents within each survey group who mentioned that brand unprompted.

Regarding perceived lasting impression (Q2), Rolex was the most frequently cited brand, with an overall 25% of participants indicating it would leave the strongest impression, followed by Heineken at 18%, and both DHL and Qatar Airways at 15% each. Examining subgroup data shows that A-Undergraduates favored Rolex at 36.7%, well above the overall average. Heineken was especially strong among A-Postgraduates (20%), maintaining its premium F1 sponsor appeal. Conversely, B-Undergraduates showed a preference for practical brands such as DHL and Qatar Airways, with recall rates of 20-23.3%, consistent with earlier findings. Further distinctions emerged in the gender crosstabs: 42.9% of A-Undergraduate males recalled Rolex, compared to 31.3% of females, while 18.8% of female A-Undergraduates mentioned Qatar Airways – a

completely contrast to 0% among males in the same group. Even though Lenovo gained 11% overall, its memorability varied widely by subgroup, staying closer to 15% among A-Postgraduates but near 13.3% to 6.7% in others. Meanwhile, brands like Liqui Moly and Aramco remained below 5% in all segments, aligning with their modest recall percentages. MSC Cruises, despite a 15% recall rate in some A Groups, received no citations for lasting impression – a reminder that recall alone does not translate into deeper brand impact.

Brands	A Underg.	A Postgrad.	B Underg.	B Postgrad.
ROLEX	36.7%	30%	20%	10%
Heineken	23.3%	20%	16.7%	10%
DHL	6.7%	15%	20%	20%
QATAR AIRWAYS	10%	10%	23.3%	15%
Lenovo	6.7%	15%	13.3%	10%
PIRELLI	3.3%	0%	3.3%	0%
MSC CRUISES	0%	0%	0%	0%
Paramount+	15%	15%	0%	0%
aramco	0%	0%	0%	15%
salesforce	0%	5%	0%	5%
LIQUI MOLY	0%	5%	0%	0%
Other Brands	3.3%	0%	0%	15%

Figure 27: Question 2 - Perceived Lasting Impression (%) by Brand and Survey Group: Authors own work

Here, participants identified which brand they believed would leave a lasting impression. This question goes beyond basic recall, probing the depth of brand impact.

Advertisement placement recognition (Q3) showed that overall, 53% of participants recalled noticing ads trackside, while 47% noticed them in track infrastructure. By splitting these data by Survey ID, clear patterns revealed: A-Undergraduates had a near-even split (53.3% Trackside vs. 46.7% Infrastructure), whereas B-Undergraduates chose excessively trackside (66.7%), and B-Postgraduates favored Infrastructure Placements (60%). When viewed alongside the recall data,

these figures suggest that B-Undergraduates not only respond to personalized content but also tend to remember brands displayed in more conspicuous advertising location formats around the race track. In Contrast, B-Postgraduates appear more receptive to embedded signages, such as tunnels or bridges, possibly reflecting a preference for different brand integrations. Gender Crosstabulations magnify this effect further. In B-Undergraduate, 77.8% of male respondents recalled trackside location compared to 61.9% of females, indicating that personalization may specifically highlight whichever placement a subgroup finds most appealing. Meanwhile, A-Postgraduate females were 62.5% trackside versus 33.3% among A-Postgraduate males, who chose infrastructure as the location that remembered the last impressed brand (in Q2) at 66.7%.

Track Location	A Underg.	A Postgrad.	B Underg.	B Postgrad.
 Trackside	**53.3%**	**45%**	**66.7%**	**40%**
 Track Infrastructure	**46.7%**	**55%**	**33.3%**	**60%**

Figure 28: Question 3 – Advertisement Placement Recognition (%) by Survey Group: Authors own work

This table focuses on where participants noticed the brand on the Formula 1 track, distinguishing between trackside banners and track infrastructure ads. This pattern implies that personalization may not only shape whether a brand is recalled or deemed memorable but also the type of track placement viewers consciously watches.

Brands	A Underg.	A Postgrad.	B Underg.	B Postgrad.
QATAR AIRWAYS	90%	85%	90%	80%
DHL	86.7%	70%	93.3%	95%
Heineken	93.3%	75%	86.7%	75%
ROLEX	86.7%	90%	70%	70%
Lenovo	83.3%	80%	70%	70%
PIRELLI	80%	70%	63.3%	70%
MSC CRUISES	63.3%	45%	50%	40%
Paramount+	40%	45%	30%	15%
aramco	56.7%	40%	20%	25%
salesforce	60%	70%	76.7%	55%
LIQUI MOLY	63.3%	75%	63.3%	50%

Figure 29: Question 4 – Brand Logo Recognition (%) by Brand and Survey Group: Authors own work

Logo recognition rates capture how frequently participants recognized each sponsor's logo after being shown it, thereby distinguishing between unaided and aided brand awareness.

Logo Recognition (Q4) demonstrated high "Yes" responses for Qatar Airways, DHL, Heineken, Rolex, Lenovo, and Pirelli, often exceeding 70% and reaching up to 90% in certain subgroups. Specifically, B Groups recognized DHL at 93.3% and 95%, respectively, while A Groups reached 86.7% and 75% for the same brand, retaining strong but slightly lower recognition. Heineken, although, achieved its highest logo recognition (93.3%) among A-Undergraduates – likely reflecting the brand's multi-year presence in F1 world – yet maintained 86.7% in B-Undergraduate. Rolex peaked at 90% in A-Postgraduate, slipping to 70% among B-Undergraduate and B-Postgraduate, showing again to the brand's reliance on broad, legacy-style advertising rather than personalization to stay top of mind. Lenovo registered recognition rates ranging from 70% in B-Undergraduate to as high as 83-90% among A-Postgraduate or B-Postgraduate, suggesting that

both advertising approaches can drive strong results for technology sponsors with clear, distinctive slogan or logo. Meanwhile, ABB, Julius Bär, Panasonic, and Workable each remained below 10% across nearly all groups. These brands were added to the survey to secure against random answers from participants. Moreover, additional gender breakdowns revealed that men were more inclined to recognize automotive-oriented brands like Pirelli, with an average recognition rate of 75.33% across all groups. Personalized messages featuring male names, such as "Drive in style, John! SAVE 25% off TODAY," were implemented to evaluate whether such targeted strategies could enhance recall among this demographic, achieving a recognition rate of 66.70% in both Group B subcategories. While women more frequently recalled service-focused logos when tailored content appealed to their interests (e.g., 5–10% higher logo recognition for DHL among female B-Undergraduates).

Overall, the results highlight a complex correlation between brand presence, demographic factors, and advertisement strategy within Formula 1. Historic sponsors such as Rolex and Heineken not only enjoy high recall (53%+ in total) and strong recognition (often 80-90% in specific subgroups) but also maintain perceived memorability (up to 36.7% for Rolex in A-Undergraduates, 25% for Heineken Overall). By contrast, personalized advertisements prove particularly effective for service-oriented and technology-driven brands like DHL and Lenovo. DHL, for instance, experiences recall surges to 60-65% in B Groups and hits recognition highs of 93.3-95%, while Lenovo can reach 70-90% in logo recognition. This shift highlights the role of personalization in delivering a clearer message for consuming or logistics-focused brands, effectively resonating with specific audience segments—particularly B-Undergraduates, who prioritize trackside signage. Furthermore, the significance of advertisement placement emerges as a pivotal factor: personalized advertisements enhance recall within environments that participants find most memorable. For instance, 66.7% of B-Undergraduates recalled trackside ads, while 60% of B-Postgraduates recalled infrastructure-based ads. These findings suggest that aligning brand integration strategies with audience expectations is essential for maximizing impact. Gender differences similarly reveal that male participants are often drawn to oil and gas-driven brands, such as Aramco or Liqui Moly, while female participants connect more with service-based sponsors like Qatar Airways or DHL, particularly if the advertising is personalized. Brands with strong visual identities, including Salesforce and Liqui Moly, see their logo recognition rise 30–40 percentage points above their unaided brand recall procedure. MSC Cruises and Paramount+ performed poorly across all

metrics, underscoring that a lack of synergy between brand identity and the F1 environment can significantly undermine sponsor impact. It is important to note that these brands have a limited presence in the Greek market, which may have further contributed to their weak performance. Taken together, these insights indicate that Formula 1 sponsors must strategically align their advertisement type (generic vs. customized) and their ad placements (Trackside vs. Infrastructure) with the preferences of the target audience.

5. CONCLUSION

5.1 Research Conclusions

This master thesis aims to demonstrate the potential of virtual advertising by introducing the concept of "Personalized Virtual Advertisement" – a form of virtual advertising in which the viewer's name is incorporated into the advertising message. This study employs a comprehensive set of eye-tracking and recall data to analyze how the visibility, personalization, and placement of virtual advertising signage affect viewer engagement during Formula 1 broadcasts.

Our data analysis revealed clear variability in logo visibility – ranging from 0.50% (Pirelli at Turn 6 in Monaco) to 23.64% (Liqui Moly at Turn 5 in Mexico) – alongside interested differences in fixation and recall metrics. By incorporating additional eye-tracking measures beyond Time to First Fixation, including Fixations Ratio, Average Time Spent, K-coefficient, and Gaze Time Spent, a multifaced analysis showcases how personalized and non-personalized virtual advertisements perform in experimental conditions.

From the visibility perspective, the widely unstable coverages values highlight that on-screen presence is not uniform across sponsors. Frames exceeding 10% coverage (e.g. DHL at 16.89% and Qatar Airways at 20.31) generally attract higher fixations and gaze counts. In parallel, fixations ratio – the percentages of total fixations devoted to a specific Area of Interest (AOI) – was consistently higher (often exceeding 70% to 80%) in frames where coverage exceeded 15%, suggesting that large or centrally placed ads more effectively direct visual attention.

Personalized virtual advertisements add an additional layer of complexity. Some photos indicate that personalized ads achieve comparatively shorter Time to First Fixation (e.g., 0.68-0.95 seconds) and moderately higher fixations ratio (often ≥ 50%) than non-personalized alternatives within the same broadcast frame, suggesting that prominent personalized cues can facilitate faster

attention capture. However, the data also contain instances where personalized ads did not show improved performance – particularly when personalization was visually subtle or placed peripherally. In these cases, the Average Time Spent did not exceed that of non-personalized signage, and the K-coefficient (a measure derived from fixation duration and saccadic transitions) occasionally registered negative or near-zero values, indicating limited viewer engagement.

Brand recall measures in Group A and B further align with these eye-tracking results. Repeated "Yes" responses for established sponsors such as Heineken, Rolex, and Pirelli were evident in frames exhibiting moderate-to-high coverage percentages and in those with multiple exposures (e.g., trackside plus infrastructures banners). In certain personalized – ad conditions (B-Undergraduate and B-Postgraduate groups), lesser-known or newly introduced brands recorded modest gains in recall, particularly when participants had fixation durations above 0.25s and gaze time was reported around 0.30-0.50s, implying that even unfamiliar brands can benefit if the personalization is sufficient visible and distinct. However, the data also confirm that not all personalized formats outperform standard signages, supporting that effective design (color contrast, dynamic text overlays) is critical factor in harnessing the potential advantage of personalization.

Despite these findings, several methodological concerns must be considered. First, screen coverage varies significantly, ranging from less than 1% to over 20%, indicating that some sponsors receive much more visibility than others. Second, the K-coefficients show considerable variation, from negative to highly positive values, suggesting that the impact of virtual advertising is inconsistent. Third, self-reported recall is influenced by prior familiarity with sponsors, which may drive to bias selection. These factors should be carefully accounted for when analyzing the results. Nonetheless, the evidence points firmly toward size, repetition, and visible personalization as core drivers of viewer attention and recall. Specifically, frames featuring high-coverage or repeated exposures correlated with fixations ratio often above 70%, while personalized ads that leveraged unique color or text elements demonstrated, on average, quicker attention capture and marginally higher recall for less-established sponsors.

Overall, these findings highlight that while high visibility alone can command attention (reflected by strong fixation metrics and higher Average Gaze Time Spent), personalization -when visibly prominent- can further expedite initial eye-contact (lower Time to First Fixation) and, in some

cases, enhance memory outcomes. Ultimately, the integrated data underscore the practical significance of strategic ad design – combining high coverage, repeated exposures, and well-executed personalized features- to optimize viewer engagement and sponsor recall during Formula 1 broadcasts.

5.2 Theoretical Implications

This study advances sports marketing research by revealing the effectiveness of personalized virtual advertising in enhancing brand recall and recognition, aligning with established work on virtual advertising, by showing how personalized content boosts brand recall and engagement (Percy & Elliot, 2005; Sander & Altobelli, 2011). Eye-tracking data supports previous findings (Duchowski, 2007; Wedel & Pieters, 2012), showing that personalized ads reduce fixation time and boost viewer engagement. This supports the idea that personalized content enhances emotional connection and ad effectiveness (Kotler & Keller, 2009; Ramsøy et al., 2019).

This study extends research on brand recall by demonstrating that personalized virtual ads not only capture immediate attention but also enhance memory retention. These findings align with overload theory, which highlights the importance of strategically managing visual elements to ensure effective information processing (Ha & McCann, 2008). By reducing clutter and focusing on targeted, personalized messaging, virtual ads optimize viewer engagement and recall. This suggests that future research could delve deeper into the impact of virtual advertising on long-term memory retention, exploring whether its effects persist beyond the immediate viewing experience (Berger & Mitchell, 1990; Maricic et al., 2019; Porter, 2022).

This strategic placement of virtual ads in high-visibility areas, such as Monaco tunnel, further underscores the importance of location for maximizing exposure, influenced by factors such as ad size and camera angles which have been shown to play a crucial role in ad visibility (Olson & Thjømøe, 2009; Rumpf & Breuer, 2016; Bullock, 2023). By utilizing eye-tracking, this study contributes a novel methodological approach, providing deeper insights into consumer attention and behavior (Yfantidou et al., 2018; Wang et al., 2022). Personalized ads' ability to quickly capture sports viewers' attention highlights their potential to significantly redefine sports marketing strategies.

5.3 Practical Implications

The findings of this study present a transformative opportunity for redefining sports sponsorships and fan engagement through the integration of personalized virtual advertising in Formula 1 broadcasts. This innovative advertising approach will not only address the limitations of traditional marketing strategies but also leverages the dynamic environment of Formula 1 to deliver tailored, contextually relevant content to global audiences. Personalized virtual advertising could offer stakeholders -including sponsors, advertisers and broadcasters- a powerful mechanism to optimize visibility, enhance brand recall, and create meaningful connections with viewers.

For advertisers and sponsors, the ability to tailor ads based on viewer demographics -such as language, cultural preferences, and age- ensures that messages are contextually relevant, thereby increasing brand recall and reducing ad waste. Personalized virtual ads offer a quicker Time to First Fixation, capturing viewer attention faster than traditional ads. This direct engagement, coupled with strategic placement on high-visibility areas of the track, is crucial for optimizing brand recall. Brands are encouraged to invest in virtual advertising in visually prominent spots, such as track infrastructures or track corners, where viewers are more likely to focus during the action.

For Formula 1 management, these findings provide valuable insights for monetizing virtual advertising in ways that go beyond traditional billboards. By strategically integrating personalized virtual ads into the F1 TV Pro platform, management can offer sponsors more customizable and interactive ad solutions that meet the evolving demands of digital viewers. This approach not only increases the commercial value of Formula 1's digital assets but also allows the organization to cater to a global audience with localized content, fostering deeper engagement across diverse viewer segments.

For sports marketers and broadcasters, the insights underline the growing relevance of personalized and interactive advertising formats in sports. Leveraging data from eye-tracking studies, marketers can better understand the effectiveness of ad placements and viewer interactions with personalized ads. This can guide future sponsorships strategies, enabling more efficient allocation of resources to maximize ad performance in live and on-demand broadcasts. Moreover, virtual ads offer a solution to consumers' growing resistance to traditional advertising by

seamlessly blending promotional content into the live viewing experience, enhancing ad acceptance and reducing bothering.

Lastly, for viewers, personalized virtual advertisements create an opportunity for a more tailored viewing experience, where ads are relevant to their individual interests and viewing context. This approach contributes to a more engaging and enjoyable viewing environment, ultimately fostering stronger connections with both the sport and the brands involved. Enhanced viewer engagement with personalized ads also will benefit sponsors, as emotionally resonant experiences often lead to higher brand loyalty and customer retention

6. LIMITATIONS & FUTURE RESEARCH

While this thesis introduces and provides valuable insights into the impact of personalized virtual advertising in Formula 1 broadcasts, several limitations must be acknowledged. First, the study's reliance on static frame analysis and an online eye-tracking tool may not fully capture the dynamic and immersive nature of live broadcasts experience. Static frames, while useful for controlled experimental setups, lack the continuous flow and contextual nuances of live sports events. As a result, the findings may not entirely reflect how viewers interact with personalized virtual ads in real-time environments. Moreover, while the sample size of 100 participants provides some statistical validation for our results, future studies should be conducted with a broader multinational sample, ensuring that personalized messages are presented in participants' native languages to enhance cultural and linguistic relevance. Another limitation relates to the scope of the study restricted to Formula 1, a fast-paced and visually complicated sport. The results may not generalize to other sports with different viewing patterns and audience characteristics. Moreover, the personalized messages used in this study did not include individual participants' names, potentially limiting the strength of the personal connection such messaging could evoke. Personalization at this level might create stronger viewer engagement and should be explored in future studies. Lastly, the study focused solely on static virtual advertisements, leaving other formats, such as video overlays, interactive ads, and personalization slogans, unexplored. These alternative formats could offer insights into how dynamic or interactive personalization influences attention, engagement, and brand recall.

To address these limitations, future research should incorporate real-time eye-tracking during live broadcasts. This approach would provide a more comprehensive understanding of how viewers engage with personalized virtual ads in a dynamic and complicated setting, offering a closer approximation to actual viewing experiences. Expanding the sample size and demographic diversity would also enhance the reliability and applicability of the findings, allowing for greater confidence in the conclusions drawn. Additionally, exploring how AI predictive models, which utilize historical sports viewing preferences, behavior patterns, and other factors, could enhance the appeal and engagement of virtual advertising is crucial. These models could be applied not only to live broadcasts or streaming but also to on-demand and social media content.

In addition, comparative research across different sports—such as soccer, basketball, and tennis—could explore how sport-specific factors influence the effectiveness of personalized virtual ads. Future studies should also examine the impact of integrating individual-level personalization, such as using participants' names or preferences, to assess whether deeper personalization increases engagement and emotional resonance. Furthermore, exploring a broader array of ad formats, including animated or interactive elements, could provide actionable insights into the design of virtual advertisements that optimize both viewer attention and brand recall. Furthermore, investigating the potential impact of making personalized virtual ads clickable could offer valuable insights into how interactivity alters user engagement and the effectiveness of embedded advertisements. This line of inquiry could redefine the role of virtual ads within sports media by enhancing user interaction and engagement. Addressing these fields would enrich the theoretical framework and practical applications of personalized virtual advertising, contributing significantly to the evolving landscape of sports media marketing.

7. REFERENCES

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8. APPENDIX

8.1 Appendix A

In Appendix A, the raw data from our Python script will be presented for each photo used to answer Research Question 1.

Photo 1 - Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 9 (MSC CRUISES)

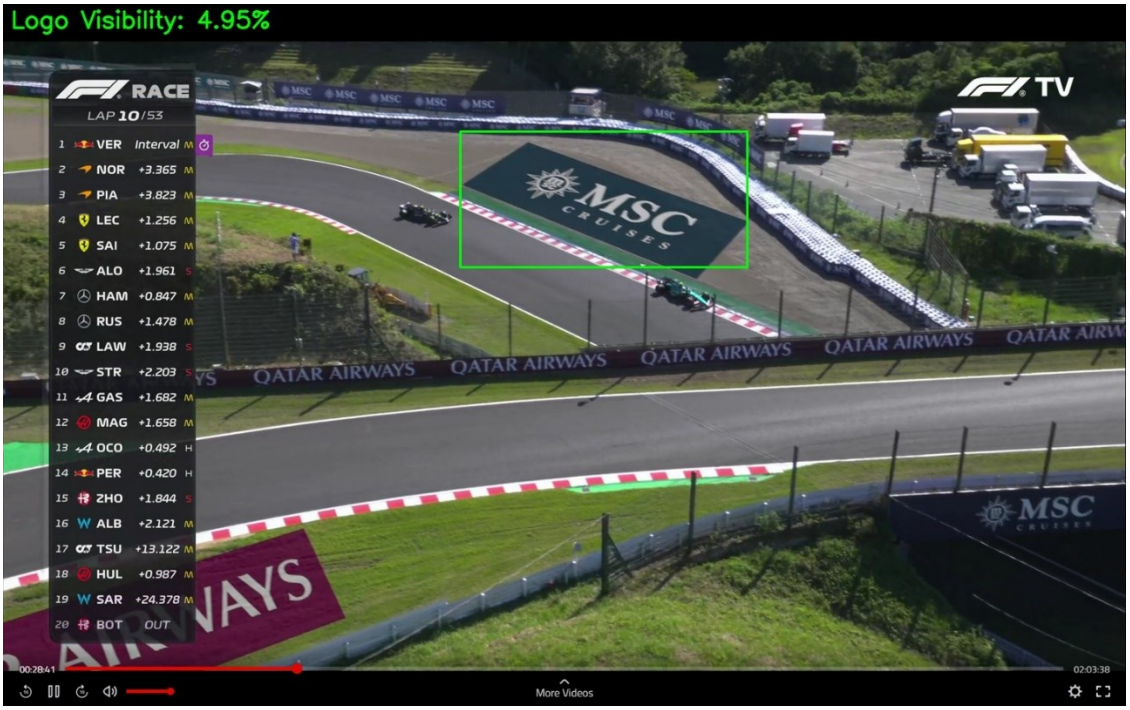

Photo 2 - Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 11 (HEINEKEN)

Photo 3 - Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 5 (ARAMCO)

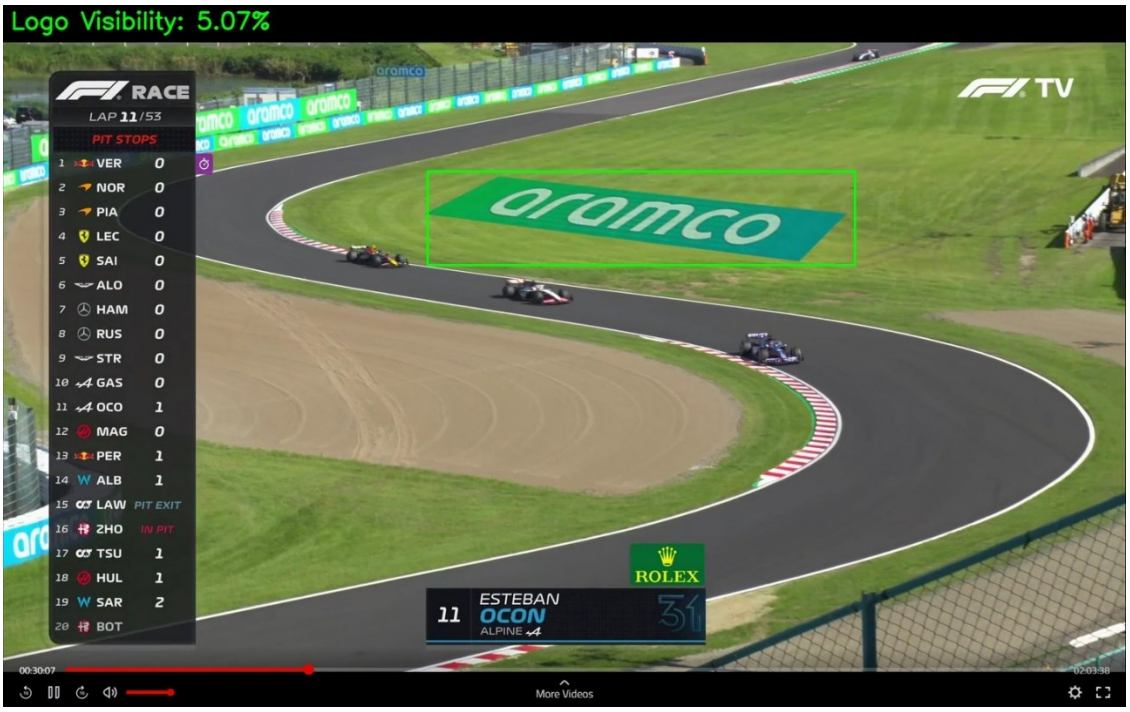

Photo 4 - Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 8 (DHL)

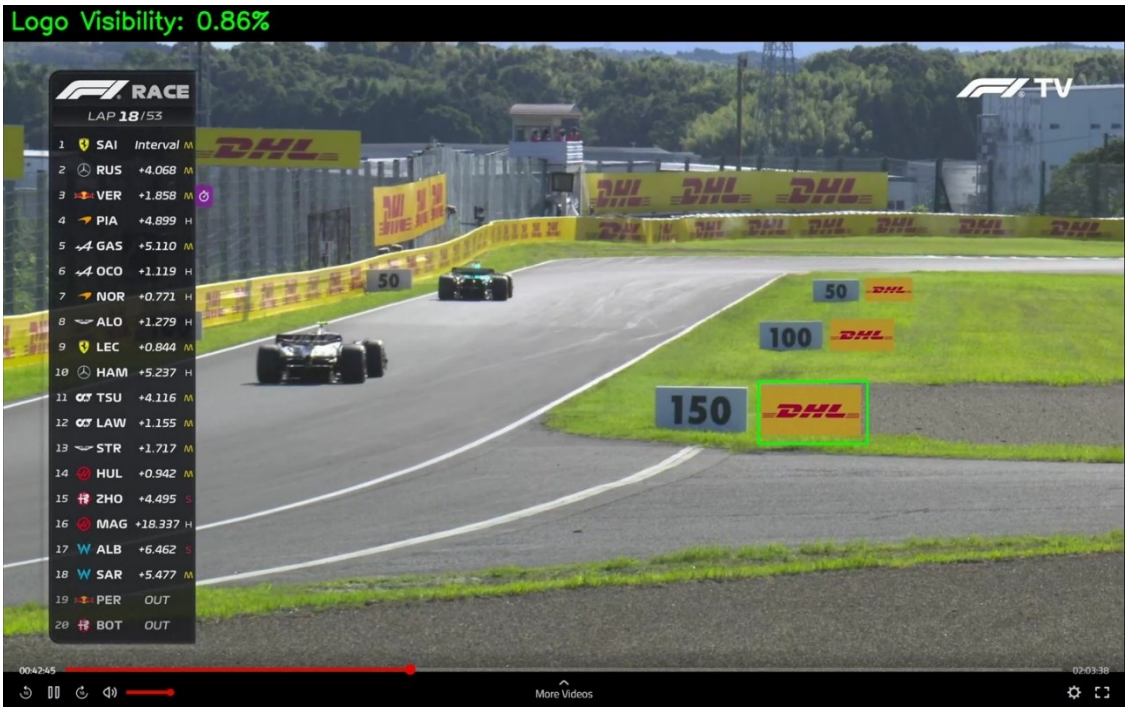

Photo 5 - Formula 1 Heineken Silver Las Vegas Grand Prix 2023 - Turn 12 (SALESFORCE)

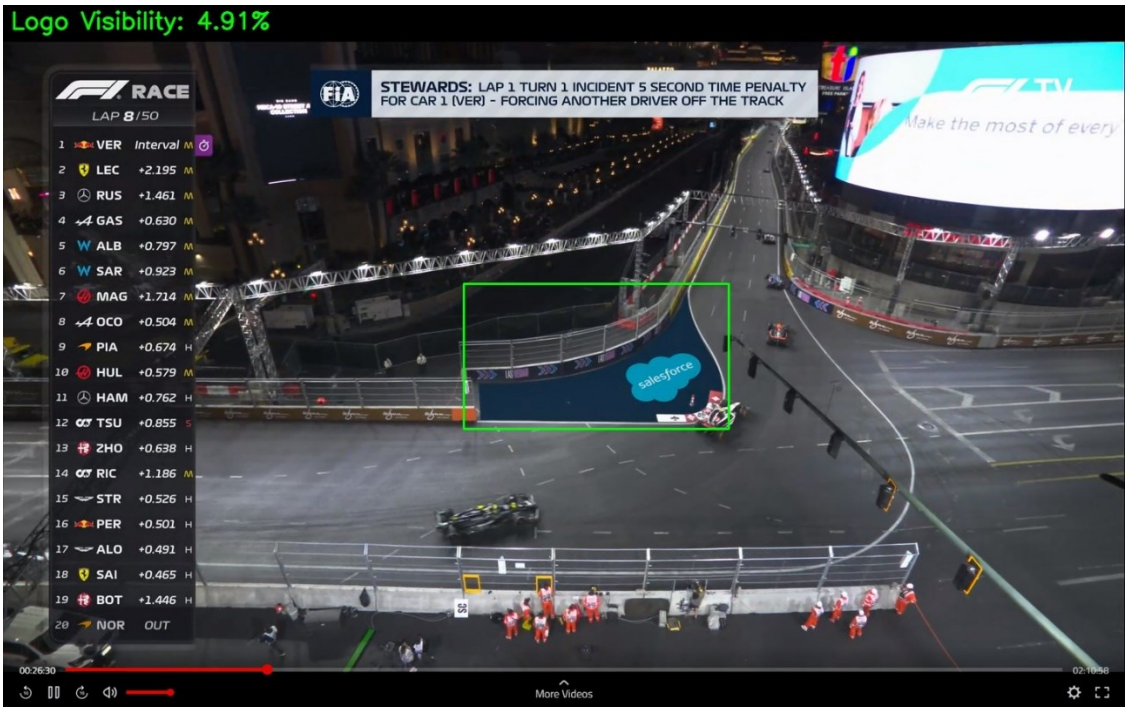

Photo 6 - Formula 1 Heineken Silver Las Vegas Grand Prix 2023 - Before Turn 14 (SALESFORCE)

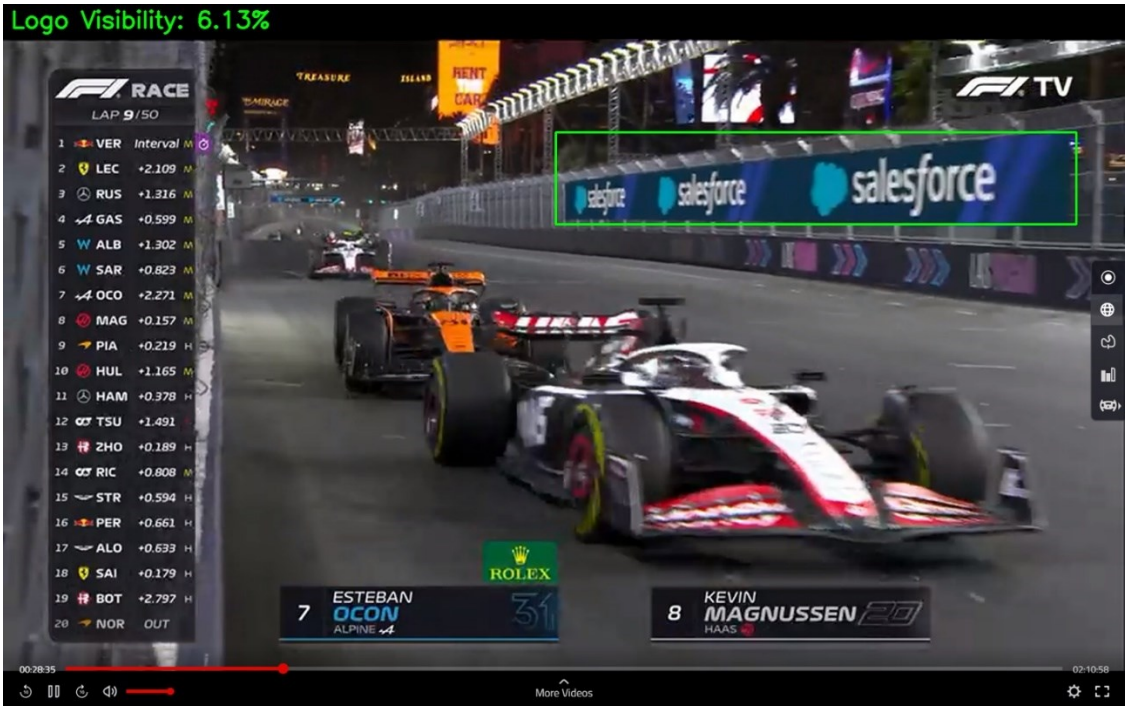

Photo 7 - Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 15 (MSC CRUISES)

Photo 8 - Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 5 (LIQUI MOLY)

Photo 9 - Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 5 (A) (LIQUI MOLY)

Photo 10 - Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 5 - Logo on the Track (LIQUI MOLY)

Photo 11 - Formula 1 Etihad Airways Abu Dhabi Grand Prix 2023 - Before Turn 8 (LENOVO)

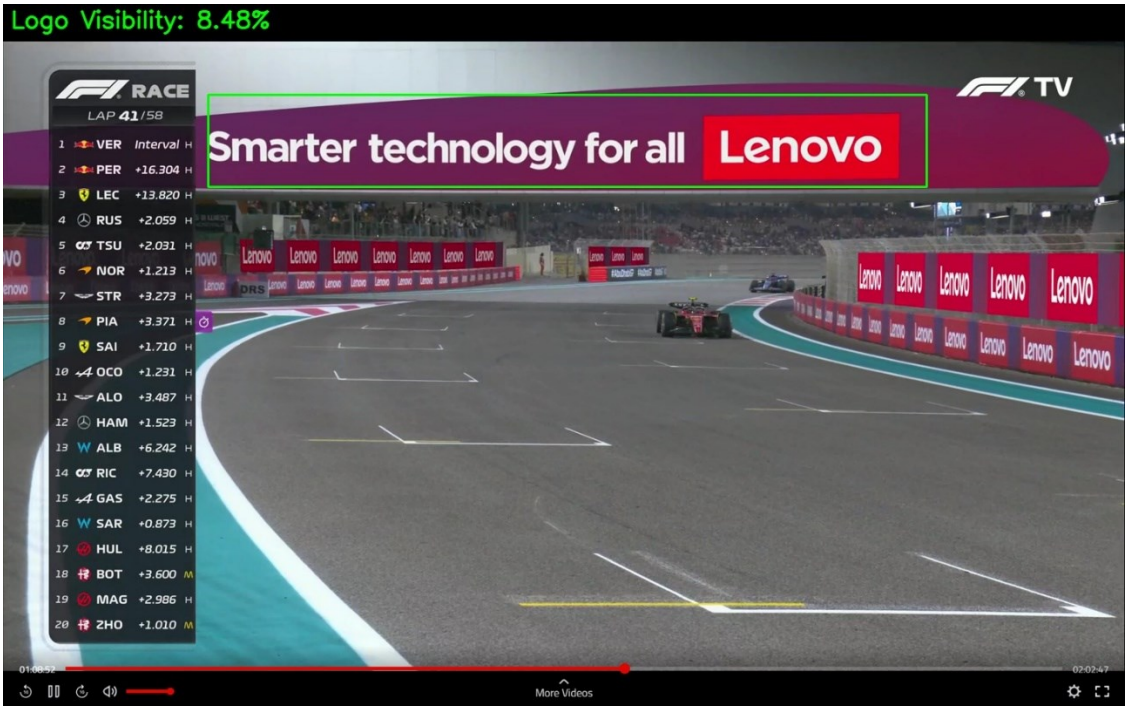

Photo 12 - Formula 1 STC Saudi Arabian Grand Prix 2023 - Turn 24 (MSC CRUISES)

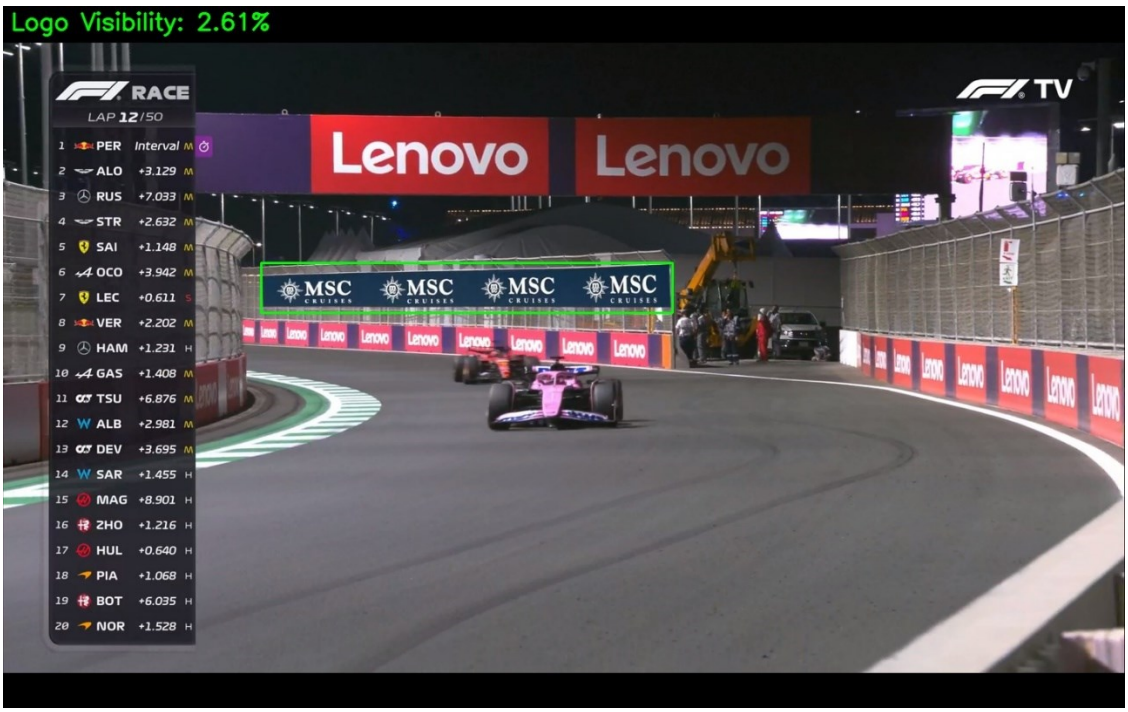

Photo 13 - Formula 1 Pirelli Gran Premio D'italia 2023 - Turn 6 (AWS)

Photo 14 - Formula 1 Lenovo United States Grand Prix 2023 - Turn 12 (PIRELLI)

Photo 15 - Formula 1 Lenovo United States Grand Prix 2023 - Turn 7 (QATAR AIRWAYS)

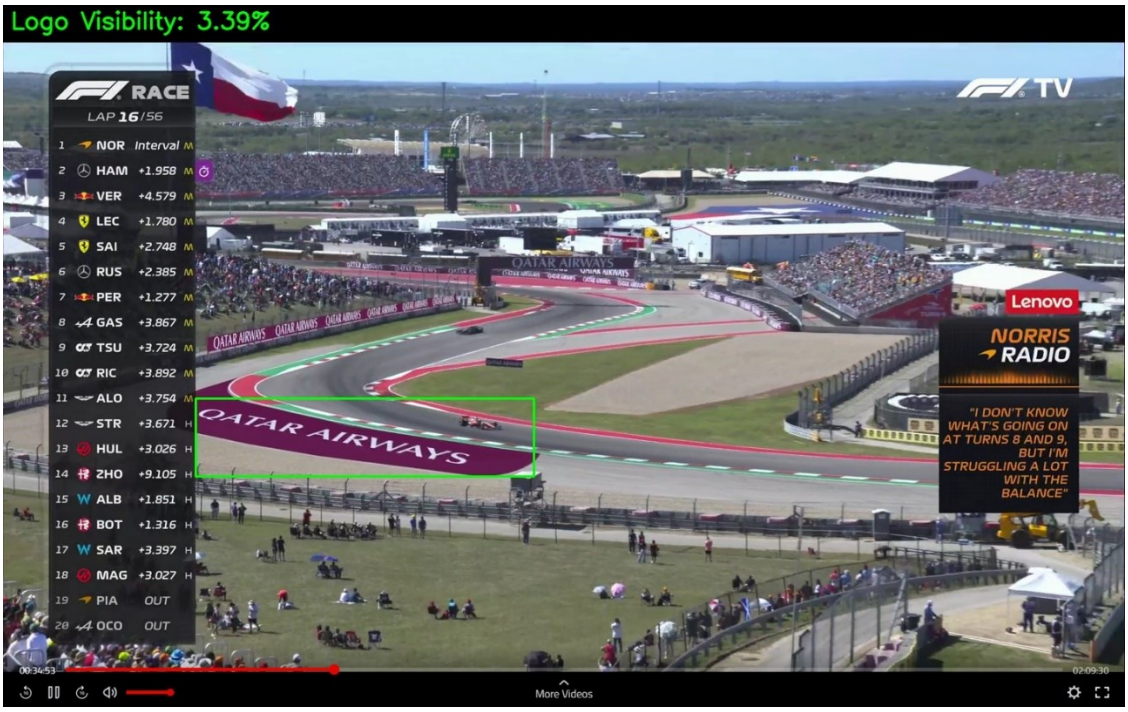

Photo 16 - Formula 1 Lenovo United States Grand Prix 2023- Turn 19 (PIRELLI)

Photo 17 - Formula 1 Gran Premio De La Ciudad De México 2023 - Turn 5 (LIQUI MOLY)

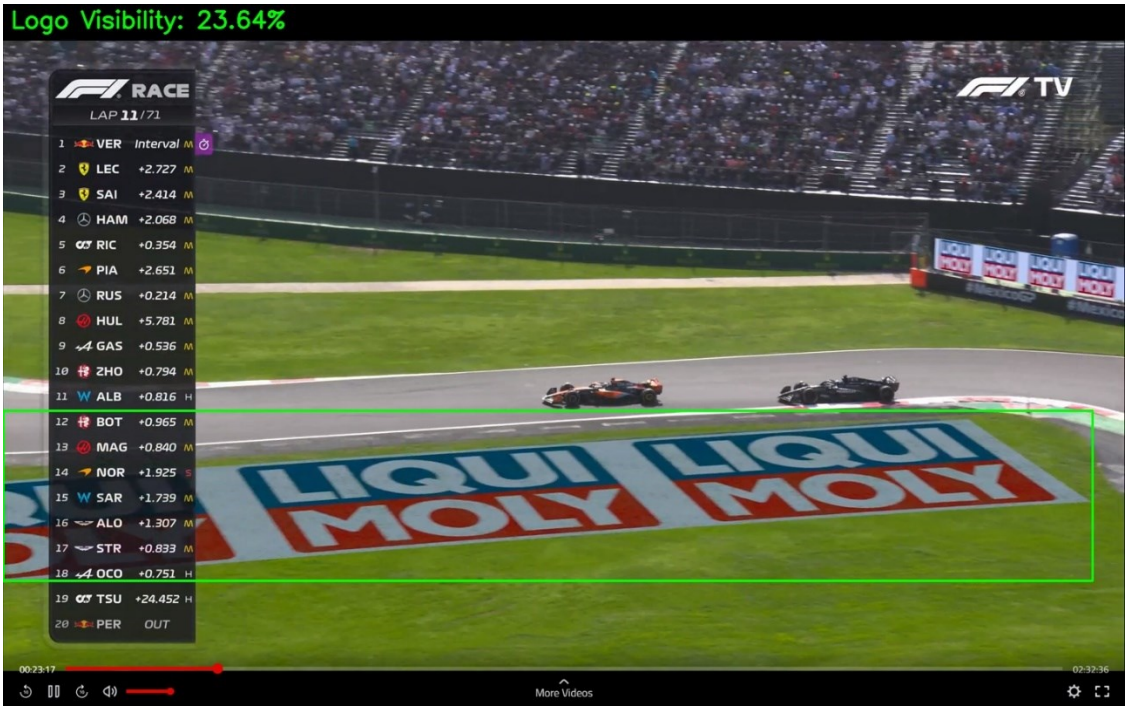

Photo 18 - Formula 1 Gran Premio De La Ciudad De México 2023 - Turn 13 (DHL)

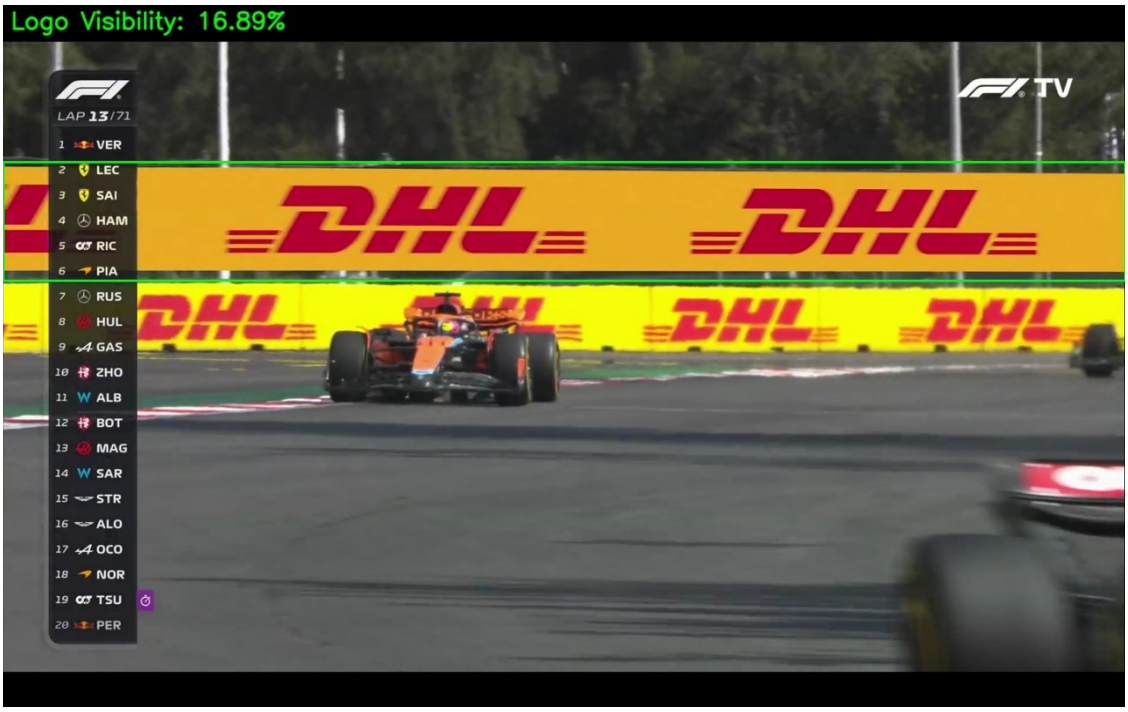

Photo 19 - Formula 1 Qatar Airways Qatar Grand Prix 2023 - Turn 9 (MSC CRUISES)

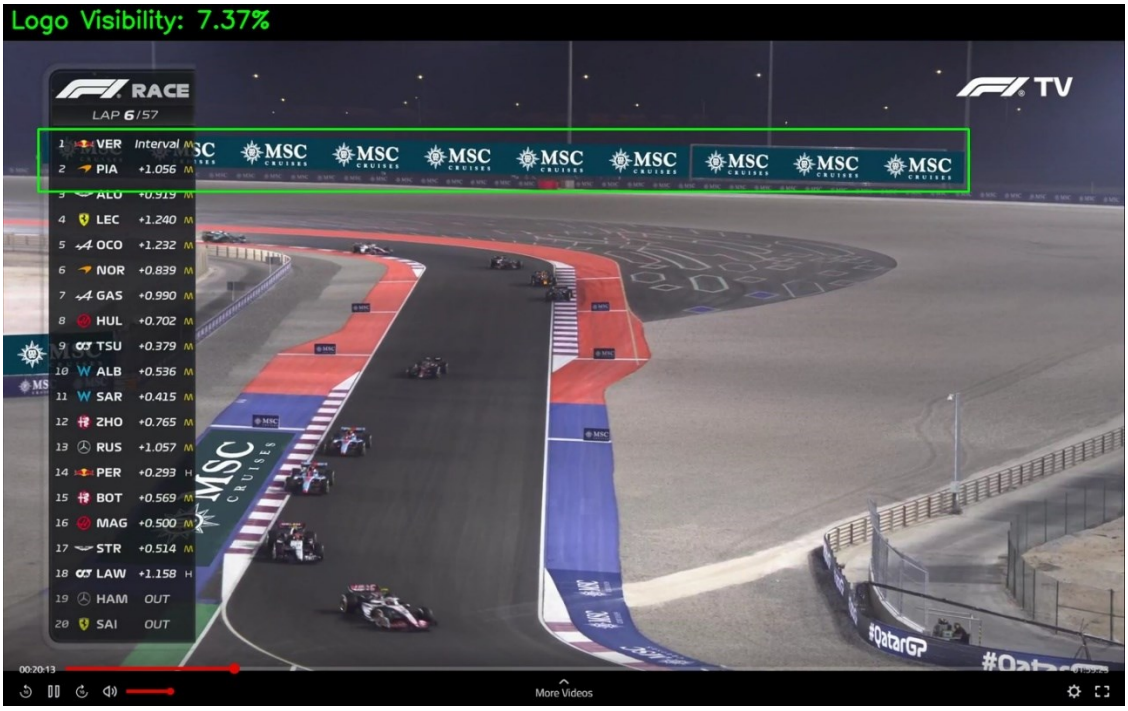

Photo 20 - Formula 1 Qatar Airways Qatar Grand Prix 2023 - Turn 5 (ROLEX)

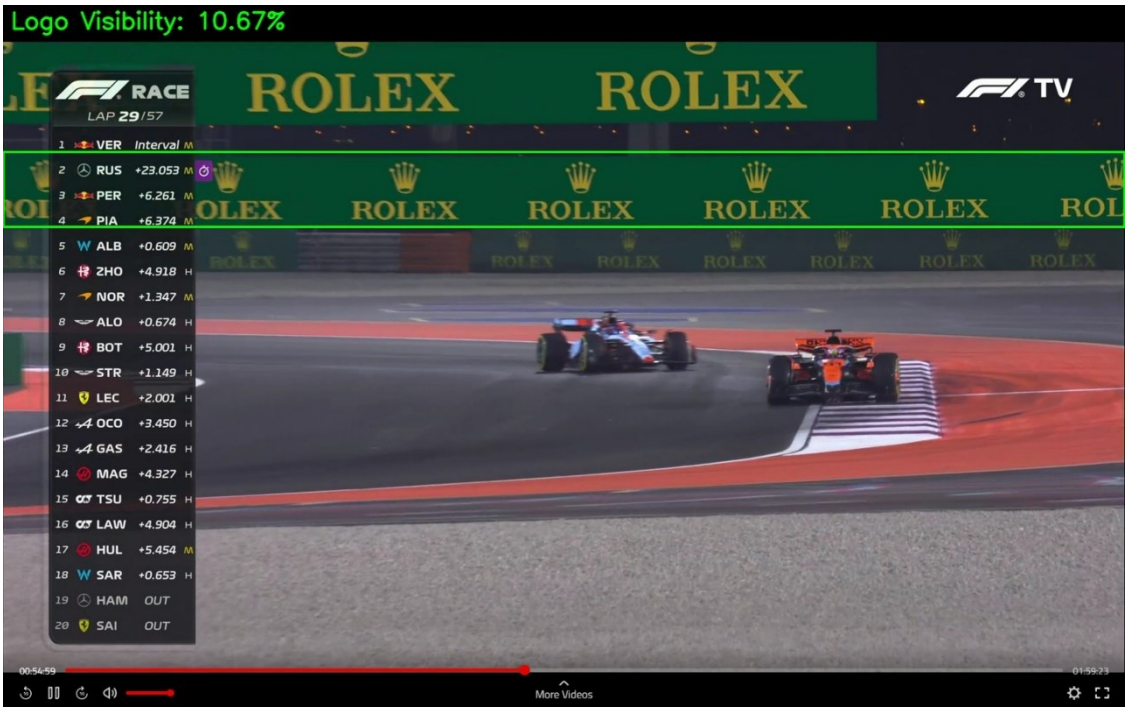

Photo 21 - Formula 1 Grand Prix De Monaco 2023 - Turn 6 (PIRELLI)

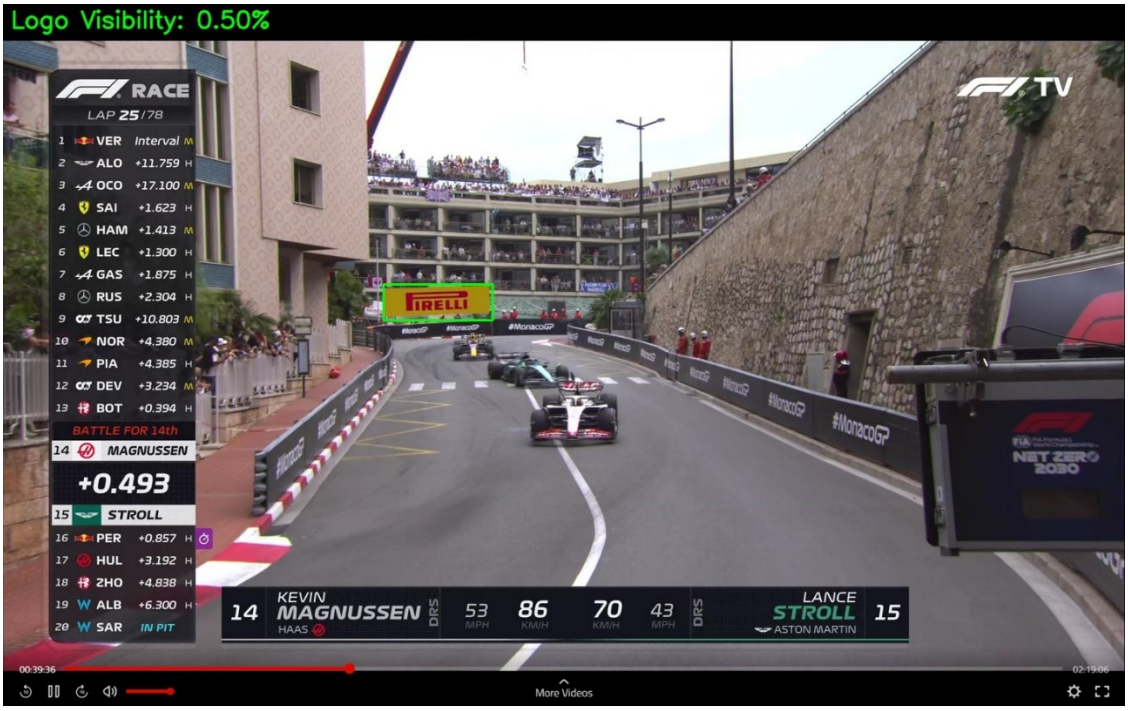

Photo 22 - Formula 1 Grand Prix De Monaco 2023 - Tunnel (QATAR AIRWAYS)

8.2 Appendix B

In Appendix B, the eye-tracking data collected by each survey group and each education level for each frame will be presented.

Photo 1: Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 5 (LIQUI MOLY)

Undergraduates

Photo 1

Survey A

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.23	0.59	2.72	1.51	1.44	0.48	1.69	1.71	N/A
Average Time Spent (s)	0.38	0.57	0.29	0.41	0.33	0.75	0.45	0.43	0
Fixations	14	14	1	29	7	67	19	11	0
Fixations Ratio (%)	0.33	0.3	0.03	0.22	0.23	0.87	0.37	0.23	0
Average Fixation Duration (s)	0.3	0.37	0.29	0.32	0.33	0.27	0.27	0.29	N/A
Average First Fixation Duration (s)	0.27	0.39	0.29	0.32	0.33	0.28	0.28	0.32	N/A
K-coefficient	0.29	1.17	-1.55	-0.03	0.28	0.44	-0.33	-0.39	N/A
Average Time to First Gaze (s)	1.3	0.83	2.34	1.49	1.17	0.45	1.48	1.36	N/A
Average Gaze Time Spent (s)	0.26	0.27	0.11	0.21	0.13	0.63	0.35	0.28	0
Gazes	238	230	30	498	112	832	224	167	0
Gazes Ratio (%)	0.7	0.63	0.23	0.52	0.63	0.97	0.5	0.43	0
Avg. Revisits	0.07	0.07	0	0.05	0	1	0.07	0.03	0
AOI Size (%)	0.06	0.019	0.009	0.03	0.031	0.074	0.105	0.034	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.58	0.77	1.57	1.31	1.18	0.81	1.82	2.3	2.46
Average Time Spent (s)	0.28	0.39	0.24	0.30	0.32	0.44	0.38	0.28	0.17
Fixations	22	16	4	42	17	37	21	7	1
Fixations Ratio (%)	0.57	0.33	0.13	0.34	0.47	0.7	0.47	0.2	0.03
Average Fixation Duration (s)	0.21	0.24	0.24	0.23	0.27	0.25	0.24	0.24	0.17
Average First Fixation Duration (s)	0.23	0.24	0.24	0.24	0.27	0.24	0.28	0.24	0.17
K-coefficient	0.29	-0.17	-0.9	-0.26	0.06	0.38	-0.21	0.25	-0.61
Average Time to First Gaze (s)	1.35	0.85	1.26	1.15	1.16	0.42	1.47	1.62	1.9
Average Gaze Time Spent (s)	0.26	0.23	0.16	0.22	0.15	0.43	0.39	0.24	0.22
Gazes	304	193	40	537	182	505	285	138	12
Gazes Ratio (%)	0.87	0.67	0.2	0.58	0.9	0.9	0.53	0.43	0.03
Avg. Revisits	0.03	0.13	0	0.05	0.1	0.37	0.07	0	0
AOI Size (%)	0.06	0.019	0.009	0.03	0.031	0.074	0.105	0.034	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 1

Survey A

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.61	0.56	2.02	1.40	0.82	0.55	1.33	1	N/A
Average Time Spent (s)	0.43	0.51	0.31	0.42	0.28	0.77	0.5	0.4	0
Fixations	10	14	3	27	4	45	6	10	0
Fixations Ratio (%)	0.25	0.35	0.15	0.25	0.15	0.80	0.15	0.35	0
Average Fixation Duration (s)	0.22	0.26	0.31	0.26	0.2	0.25	0.27	0.29	N/A
Average First Fixation Duration (s)	0.22	0.29	0.31	0.27	0.19	0.24	0.31	0.3	N/A
K-coefficient	0.27	-0.1	0.75	0.31	0.98	0.25	0.4	-0.18	N/A
Average Time to First Gaze (s)	1.01	0.68	2.07	1.25	1.12	0.45	1.4	0.92	N/A
Average Gaze Time Spent (s)	0.23	0.27	0.12	0.21	0.15	0.66	0.26	0.36	0
Gazes	123	170	15	308	84	541	77	128	0
Gazes Ratio (%)	0.6	0.7	0.15	0.48	0.65	0.95	0.35	0.4	0
Avg. Revisits	0.22	0.25	0	0.16	0.05	0.89	0.12	0.16	0
AOI Size (%)	0.06	0.019	0.009	0.03	0.031	0.074	0.105	0.034	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	0.93	0.56	2.21	1.23	1.47	0.94	0.59	1.58	N/A
Average Time Spent (s)	0.56	0.36	0.39	0.44	0.16	0.65	0.69	0.41	0
Fixations	26	9	2	37	3	28	15	8	0
Fixations Ratio (%)	65	35	10	36.67	0.15	0.65	0.3	0.25	0
Average Fixation Duration (s)	0.27	0.27	0.39	0.31	0.16	0.28	0.26	0.24	N/A
Average First Fixation Duration (s)	0.3	0.27	0.39	0.32	0.16	0.3	0.28	0.26	N/A
K-coefficient	0.26	0.23	0.6	0.36	0.17	0.57	0.33	0.05	N/A
Average Time to First Gaze (s)	0.99	0.6	2.37	1.32	1.05	0.94	0.81	1.74	N/A
Average Gaze Time Spent (s)	0.38	0.23	0.23	0.28	0.18	0.49	0.59	0.31	0
Gazes	287	112	40	439	129	425	210	82	0
Gazes Ratio (%)	0.85	0.55	0.2	0.53	0.8	1	0.4	0.3	0
Avg. Revisits	0.6	0.12	0	0.24	0	0.42	0.25	0.15	0
AOI Size (%)	0.06	0.019	0.009	0.03	0.031	0.074	0.105	0.034	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 2: Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 5 (ARAMCO)

Undergraduates

Photo 2

Survey A

	Virtual Ad	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.68	0.79	1.32	1.28	1.55	N/A
Average Time Spent (s)	0.35	0.26	0.49	0.69	0.37	0
Fixations	15	3	35	19	9	0
Fixations Ratio (%)	0.4	0.1	0.63	0.3	0.23	0
Average Fixation Duration (s)	0.28	0.26	0.26	0.34	0.31	N/A
Average First Fixation Duration (s)	0.28	0.26	0.25	0.35	0.33	N/A
K-coefficient	0.25	-0.04	0.22	0.39	0.52	N/A
Average Time to First Gaze (s)	1.2	1.14	0.83	0.83	1.18	2.41
Average Gaze Time Spent (s)	0.33	0.12	0.44	0.56	0.25	0.06
Gazes	291	43	527	297	95	6
Gazes Ratio (%)	0.67	0.27	0.9	0.4	0.3	0.07
Avg. Revisits	0.07	0	0.33	0.17	0.07	0
AOI Size (%)	0.031	0.016	0.034	0.106	0.027	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	0.92	0.02	1.05	1.03	1.69	N/A
Average Time Spent (s)	0.63	0.24	0.35	0.44	0.28	0
Fixations	23	1	21	13	4	0
Fixations Ratio (%)	0.37	0.03	0.5	0.3	0.13	0
Average Fixation Duration (s)	0.29	0.24	0.25	0.29	0.28	N/A
Average First Fixation Duration (s)	0.27	0.24	0.25	0.3	0.28	N/A
K-coefficient	0.29	-0.38	0.39	-0.02	-0.12	N/A
Average Time to First Gaze (s)	0.81	1.03	0.68	1.09	1.55	1.76
Average Gaze Time Spent (s)	0.39	0.1	0.3	0.4	0.2	0.09
Gazes	394	42	371	208	81	4
Gazes Ratio (%)	0.73	0.33	0.9	0.4	0.33	0.03
Avg. Revisits	0.28	0	0.17	0.03	0	0
AOI Size (%)	0.031	0.016	0.034	0.106	0.027	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 2

Survey A

	Virtual Ad	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.2	2.49	1.19	0.64	1.04	N/A
Average Time Spent (s)	0.48	0.37	0.5	0.43	0.23	0
Fixations	14	1	26	9	3	0
Fixations Ratio (%)	0.35	0.05	0.75	0.3	0.1	0
Average Fixation Duration (s)	0.26	0.37	0.28	0.27	0.14	N/A
Average First Fixation Duration (s)	0.28	0.37	0.29	0.29	0.11	N/A
K-coefficient	0.23	-0.11	0.2	0.36	-0.23	N/A
Average Time to First Gaze (s)	1.26	2.09	0.98	0.68	1.11	N/A
Average Gaze Time Spent (s)	0.36	0.03	0.42	0.49	0.13	0
Gazes	180	2	315	157	43	0
Gazes Ratio (%)	0.55	0.1	0.9	0.35	0.35	0
Avg. Revisits	0.2	0	0.3	0.1	0.13	0
AOI Size (%)	0.031	0.016	0.034	0.106	0.027	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.13	1.9	0.98	1.34	1.26	N/A
Average Time Spent (s)	0.49	0.39	0.58	0.36	0.32	0
Fixations	13	2	24	13	4	0
Fixations Ratio (%)	0.4	0.1	0.5	0.4	0.2	0
Average Fixation Duration (s)	0.3	0.39	0.25	0.22	0.32	N/A
Average First Fixation Duration (s)	0.29	0.39	0.26	0.25	0.32	N/A
K-coefficient	0.65	1.48	0.5	-0.74	0.04	N/A
Average Time to First Gaze (s)	1.22	1.61	0.84	1.2	1.4	N/A
Average Gaze Time Spent (s)	0.43	0.17	0.35	0.35	0.14	0
Gazes	255	58	298	173	39	0
Gazes Ratio (%)	0.7	0.4	0.95	0.55	0.3	0
Avg. Revisits	0.1	0	0.42	0.1	0	0
AOI Size (%)	0.031	0.016	0.034	0.106	0.027	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 3: Formula 1 Qatar Airways Qatar Grand Prix 2023 - Turn 5 (ROLEX)

Undergraduates

Photo 3

Survey A

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.02	1.43	0.98	1.1	1.17	1.07	1.02	N/A
Average Time Spent (s)	0.58	0.41	0.51	0.24	0.39	0.75	0.56	0
Fixations	41	14	28	5	47	61	30	0
Fixations Ratio (%)	0.63	0.3	0.53	0.13	0.32	0.8	0.43	0
Average Fixation Duration (s)	0.26	0.25	0.28	0.21	0.25	0.3	0.25	N/A
Average First Fixation Duration (s)	0.27	0.26	0.27	0.21	0.25	0.29	0.27	N/A
K-coefficient	0.26	-0.46	0.19	0.1	-0.06	0.3	0.13	N/A
Average Time to First Gaze (s)	0.9	1.51	0.68	1.8	1.33	0.65	1.31	1.39
Average Gaze Time Spent (s)	0.5	0.38	0.45	0.14	0.32	0.82	0.5	0.02
Gazes	526	215	457	55	727	887	354	1
Gazes Ratio (%)	0.8	0.43	0.77	0.33	0.51	0.8	0.53	0.03
Avg. Revisits	0.56	0.07	0.23	0.04	0.11	0.57	0.21	0
AOI Size (%)	0.103	0.088	0.042	0.017	0.05	0.048	0.11	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.87	1.6	1.09	1.08	1.26	0.75	1.09	1.99
Average Time Spent (s)	0.56	0.39	0.47	0.33	0.40	0.81	0.6	0.19
Fixations	46	14	30	9	53	54	20	1
Fixations Ratio (%)	0.7	0.33	0.57	0.2	0.37	0.67	0.3	0.03
Average Fixation Duration (s)	0.26	0.27	0.26	0.23	0.25	0.29	0.25	0.19
Average First Fixation Duration (s)	0.28	0.28	0.26	0.21	0.25	0.27	0.24	0.19
K-coefficient	-0.05	0.42	-0.02	0.49	0.30	0.54	0.79	-0.17
Average Time to First Gaze (s)	0.7	1.6	0.83	1.31	1.25	0.66	1.08	2.13
Average Gaze Time Spent (s)	0.54	0.28	0.4	0.13	0.27	0.66	0.46	0.02
Gazes	604	188	463	67	718	748	283	1
Gazes Ratio (%)	0.83	0.5	0.83	0.37	0.57	0.87	0.47	0.03
Avg. Revisits	0.34	0.11	0.31	0.07	0.16	0.2	0.13	0
AOI Size (%)	0.103	0.088	0.042	0.017	0.05	0.048	0.11	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 3

Survey A

	Virtual Ad	Non-Virtual Ad	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.72	0.91	1.07	1.57	1.18	0.76	1.42	1.55
Average Time Spent (s)	0.63	0.66	0.39	0.39	0.48	0.92	0.64	0.38
Fixations	26	12	12	1	25	40	9	1
Fixations Ratio (%)	0.55	0.25	0.45	0.05	0.25	0.65	0.25	0.05
Average Fixation Duration (s)	0.26	0.29	0.3	0.39	0.33	0.3	0.36	0.38
Average First Fixation Duration (s)	0.28	0.3	0.31	0.39	0.33	0.31	0.36	0.38
K-coefficient	0.58	0.26	0.49	0.47	0.41	0.7	-0.38	0.1
Average Time to First Gaze (s)	0.91	0.95	0.73	2.11	1.26	0.69	1.33	2.2
Average Gaze Time Spent (s)	0.48	0.37	0.28	0.11	0.25	0.76	0.41	0.16
Gazes	305	148	174	19	341	551	147	16
Gazes Ratio (%)	0.75	0.45	0.7	0.2	0.45	0.85	0.4	0.1
Avg. Revisits	0.4	0.21	0.16	0	0.12	0.35	0.17	0
AOI Size (%)	0.103	0.088	0.042	0.017	0.05	0.048	0.11	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.39	1.39	1.2	1.12	1.24	1.15	0.79	N/A
Average Time Spent (s)	0.79	0.32	0.33	0.78	0.48	0.77	0.77	0
Fixations	28	7	15	7	29	37	14	0
Fixations Ratio (%)	0.5	0.25	0.6	0.15	0.33	0.7	0.3	0
Average Fixation Duration (s)	0.28	0.21	0.25	0.28	0.25	0.29	0.33	N/A
Average First Fixation Duration (s)	0.24	0.21	0.25	0.29	0.25	0.3	0.36	N/A
K-coefficient	0.49	-1.32	0.47	-0.15	-0.33	0.33	-0.08	N/A
Average Time to First Gaze (s)	0.38	1.3	0.69	0.97	0.99	0.82	0.74	0.12
Average Gaze Time Spent (s)	0.74	0.32	0.3	0.53	0.38	0.72	0.6	0.03
Gazes	408	103	197	100	400	517	216	1
Gazes Ratio (%)	0.65	0.35	0.75	0.2	0.43	0.8	0.4	0.05
Avg. Revisits	0.55	0.05	0.1	0.13	0.09	0.74	0.15	0
AOI Size (%)	0.103	0.088	0.042	0.017	0.05	0.048	0.11	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 4: Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 9 (MSC CRUISES)

Undergraduates

Photo 4

Survey A

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.68	2.41	1.55	0.85	0.63	2.25	1.24	1.2	1.2	N/A
Average Time Spent (s)	0.69	0.29	0.49	0.59	0.45	0.17	0.40	0.61	0.58	0
Fixations	31	5	36	17	23	1	41	33	19	0
Fixations Ratio (%)	0.43	0.13	0.28	0.23	0.5	0.03	0.25	0.6	0.33	0
Average Fixation Duration (s)	0.31	0.24	0.28	0.24	0.28	0.17	0.23	0.32	0.29	N/A
Average First Fixation Duration (s)	0.3	0.25	0.28	0.26	0.28	0.17	0.24	0.32	0.32	N/A
K-coefficient	0.39	-0.06	0.17	-0.01	0.37	-0.64	-0.09	0.36	-0.23	N/A
Average Time to First Gaze (s)	0.81	2	1.41	1.01	0.78	2.05	1.28	0.74	1.39	N/A
Average Gaze Time Spent (s)	0.5	0.22	0.36	0.33	0.28	0.15	0.25	0.48	0.4	0
Gazes	478	79	557	186	328	28	542	546	279	0
Gazes Ratio (%)	0.7	0.27	0.49	0.43	0.9	0.13	0.49	0.83	0.5	0
Avg. Revisits	0.36	0	0.18	0.31	0.2	0	0.17	0.3	0.24	0
AOI Size (%)	0.027	0.022	0.025	0.038	0.038	0.019	0.032	0.023	0.106	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.7	2.07	1.39	0.96	1.36	0.89	1.07	0.93	1.19	N/A
Average Time Spent (s)	0.67	0.16	0.42	0.5	0.41	0.23	0.38	0.43	0.52	0
Fixations	34	5	39	19	21	2	42	27	26	0
Fixations Ratio (%)	0.47	0.17	0.32	0.37	0.47	0.07	0.30	0.57	0.47	0
Average Fixation Duration (s)	0.27	0.16	0.22	0.29	0.28	0.23	0.27	0.27	0.28	N/A
Average First Fixation Duration (s)	0.28	0.16	0.22	0.31	0.27	0.23	0.27	0.28	0.31	N/A
K-coefficient	0.27	0.46	0.37	0.41	0.41	-1.06	-0.08	0.63	-0.38	N/A
Average Time to First Gaze (s)	0.76	1.84	1.30	0.81	0.93	1.65	1.13	0.75	0.94	N/A
Average Gaze Time Spent (s)	0.51	0.12	0.32	0.35	0.33	0.12	0.27	0.35	0.43	0
Gazes	483	56	539	259	329	25	613	373	317	0
Gazes Ratio (%)	0.7	0.37	0.54	0.53	0.77	0.17	0.49	0.8	0.57	0
Avg. Revisits	0.37	0	0.19	0.21	0.18	0	0.13	0.17	0.17	0
AOI Size (%)	0.027	0.022	0.025	0.038	0.038	0.019	0.032	0.023	0.106	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 4

Survey A

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.92	0.6	0.76	1.15	0.84	1.83	1.27	1.11	0.51	N/A
Average Time Spent (s)	0.79	0.35	0.57	0.17	0.39	0.4	0.32	0.5	0.43	0
Fixations	28	4	32	5	14	2	21	25	6	0
Fixations Ratio (%)	0.55	0.15	0.35	0.2	0.45	0.1	0.25	0.6	0.2	0
Average Fixation Duration (s)	0.31	0.27	0.29	0.15	0.26	0.4	0.27	0.24	0.25	N/A
Average First Fixation Duration (s)	0.32	0.23	0.28	0.15	0.27	0.4	0.27	0.23	0.26	N/A
K-coefficient	0.33	0.34	0.34	0.48	0.41	0.71	0.53	0.02	-0.85	N/A
Average Time to First Gaze (s)	0.88	0.87	0.88	1.33	0.88	1.9	1.37	0.91	0.95	N/A
Average Gaze Time Spent (s)	0.57	0.22	0.40	0.16	0.28	0.33	0.26	0.47	0.39	0
Gazes	374	49	423	69	219	30	318	352	107	0
Gazes Ratio (%)	0.75	0.25	0.50	0.5	0.85	0.1	0.48	0.85	0.3	0
Avg. Revisits	0.5	0.06	0.28	0.08	0.24	0	0.11	0.35	0	0
AOI Size (%)	0.027	0.022	0.025	0.038	0.038	0.019	0.032	0.023	0.106	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.34	1.69	1.52	0.94	1.36	2.54	1.61	1.09	1.48	N/A
Average Time Spent (s)	0.50	0.35	0.43	0.52	0.40	0.31	0.41	0.49	0.37	0
Fixations	19	4	23	6	14	2	22	19	14	0
Fixations Ratio (%)	0.55	0.15	0.35	0.20	0.55	0.10	0.28	0.55	0.45	0
Average Fixation Duration (s)	0.28	0.25	0.27	0.36	0.32	0.31	0.33	0.28	0.25	N/A
Average First Fixation Duration (s)	0.29	0.29	0.29	0.35	0.34	0.31	0.33	0.28	0.27	N/A
K-coefficient	0.22	-1.40	-0.59	0.37	0.09	-3.58	-1.04	-0.08	-0.81	N/A
Average Time to First Gaze (s)	1.18	1.68	1.43	0.68	0.88	2.32	1.29	0.80	1.25	N/A
Average Gaze Time Spent (s)	0.44	0.24	0.34	0.31	0.25	0.18	0.25	0.34	0.38	0
Gazes	255	65	320	104	184	32	320	250	171	0
Gazes Ratio (%)	0.65	0.30	0.48	0.40	0.90	0.20	0.50	0.85	0.50	0
Avg. Revisits	0.15	0.00	0.08	0.05	0.10	0.00	0.05	0.11	0.00	0
AOI Size (%)	0.027	0.022	0.025	0.038	0.038	0.019	0.032	0.023	0.106	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 5: Formula 1 Gran Premio De La Ciudad De México 2023 - Turn 13 (DHL)

Undergraduates

Photo 5

Survey A

	Virtual Ad	N/A	Non-Virtual Ad 1	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.95	N/A	0.82	0.7	0.92	N/A
Average Time Spent (s)	0.79	N/A	0.94	1.21	0.74	0
Fixations	52	N/A	72	89	10	0
Fixations Ratio (%)	0.6	N/A	0.8	0.8	0.13	0
Average Fixation Duration (s)	0.28	N/A	0.3	0.31	0.32	N/A
Average First Fixation Duration (s)	0.29	N/A	0.31	0.34	0.31	N/A
K-coefficient	0.74	N/A	0.3	0.18	0.78	N/A
Average Time to First Gaze (s)	0.55	N/A	0.55	0.67	0.72	N/A
Average Gaze Time Spent (s)	0.64	N/A	0.87	1.14	0.56	0
Gazes	738	N/A	1110	1375	178	0
Gazes Ratio (%)	0.87	N/A	0.97	0.9	0.23	0
Avg. Revisits	0.63	N/A	0.77	0.73	0.1	0
AOI Size (%)	0.164	N/A	0.104	0.038	0.065	0.004
AOI Time Range (s)	0s – 3s	N/A	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Personalized Virtual Ad	Non-Virtual Ad 1	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.58	0.74	0.93	1.04	0.72	2.88
Average Time Spent (s)	1.38	1.01	0.51	0.53	0.25	0.16
Fixations	123	80	45	25	2	1
Fixations Ratio (%)	0.8	0.73	0.67	0.43	0.07	0.03
Average Fixation Duration (s)	0.26	0.27	0.23	0.26	0.25	0.16
Average First Fixation Duration (s)	0.26	0.26	0.24	0.26	0.25	0.16
K-coefficient	0.37	0.48	0.19	0.2	-0.44	1
Average Time to First Gaze (s)	0.38	0.66	0.68	0.83	0.66	2.21
Average Gaze Time Spent (s)	1.44	0.9	0.52	0.42	0.16	0.03
Gazes	1652	1026	606	342	23	3
Gazes Ratio (%)	0.87	0.87	0.9	0.6	0.13	0.07
Avg. Revisits	1.23	0.87	0.43	0.13	0	0
AOI Size (%)	0.164	0.052	0.104	0.038	0.065	0.004
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 5

Survey A

	Virtual Ad	N/A	Non-Virtual Ad 1	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.73	N/A	0.93	0.94	1.14	2.24
Average Time Spent (s)	0.77	N/A	0.69	0.68	0.23	0.15
Fixations	45	N/A	32	40	4	1
Fixations Ratio (%)	0.7	N/A	0.7	0.85	0.15	0.05
Average Fixation Duration (s)	0.24	N/A	0.28	0.27	0.17	0.15
Average First Fixation Duration (s)	0.23	N/A	0.29	0.27	0.2	0.15
K-coefficient	0.37	N/A	0.64	0.54	0.93	-0.56
Average Time to First Gaze (s)	0.56	N/A	0.93	1.03	1.41	2.26
Average Gaze Time Spent (s)	0.9	N/A	0.7	0.66	0.19	0.05
Gazes	537	N/A	543	576	63	2
Gazes Ratio (%)	0.7	N/A	0.9	1	0.35	0.05
Avg. Revisits	0.68	N/A	0.35	0.6	0.07	0
AOI Size (%)	0.164	N/A	0.104	0.038	0.065	0.004
AOI Time Range (s)	0s – 3s	N/A	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Personalized Virtual Ad	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.01	1.17	0.86	0.71	0.85	N/A
Average Time Spent (s)	0.86	0.7	0.92	1.02	0.72	0
Fixations	50	29	50	36	3	0
Fixations Ratio (%)	0.8	0.6	0.65	0.5	0.05	0
Average Fixation Duration (s)	0.26	0.3	0.24	0.29	0.24	N/A
Average First Fixation Duration (s)	0.29	0.33	0.26	0.3	0.38	N/A
K-coefficient	0.17	0.36	0.44	0.71	-0.26	N/A
Average Time to First Gaze (s)	0.77	0.81	0.67	0.73	0.43	N/A
Average Gaze Time Spent (s)	0.96	0.64	0.71	0.75	0.33	0
Gazes	783	437	588	503	29	0
Gazes Ratio (%)	0.9	0.75	0.95	0.75	0.1	0
Avg. Revisits	0.6	0.5	1.06	0.72	0.5	0
AOI Size (%)	0.164	0.052	0.104	0.038	0.065	0.004
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 6: Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 11 (HEINEKEN)

Undergraduates

Photo 6

Survey A

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Non-Virtual Ad 4	Non-Virtual Ad 5	Non-Virtual Ad 6	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Racing Cars 3	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.39	N/A	0.39	N/A	1.38	1.63	1.55	N/A	2.27	1.71	1.19	1.12	1.43	1.25	1.52	1.6
Average Time Spent (s)	0.91	0	0.46	0	0.28	0.24	0.43	0	0.15	0.18	0.36	0.46	0.45	0.42	0.59	0.24
Fixations	75	0	75	0	5	7	13	0	2	27	9	11	7	27	18	1
Fixations Ratio (%)	0.83	0	0.42	0	0.17	0.2	0.3	0	0.07	0.12	0.23	0.23	0.17	0.21	0.27	0.03
Average Fixation Duration (s)	0.3	N/A	0.30	N/A	0.28	0.21	0.31	N/A	0.15	0.24	0.25	0.25	0.3	0.27	0.27	0.24
Average First Fixation Duration (s)	0.31	N/A	0.31	N/A	0.28	0.23	0.29	N/A	0.15	0.24	0.25	0.23	0.31	0.26	0.28	0.24
K-coefficient	0.31	N/A	0.31	N/A	-0.08	-0.31	0.18	N/A	-1.26	-0.37	0.55	0.25	0.67	0.49	-0.03	-1.19
Average Time to First Gaze (s)	0.37	2.19	1.28	N/A	1.43	1.39	1.18	1.88	2.23	1.62	1.15	1.19	1.69	1.34	1.29	2.14
Average Gaze Time Spent (s)	0.87	0.03	0.45	0	0.12	0.16	0.22	0.18	0.12	0.13	0.23	0.21	0.18	0.21	0.43	0.11
Gazes	1077	7	1084	0	91	94	158	33	16	392	139	145	81	365	230	20
Gazes Ratio (%)	0.93	0.13	0.53	0	0.57	0.43	0.57	0.13	0.1	0.30	0.43	0.5	0.33	0.42	0.4	0.13
Avg. Revisits	0.67	0	0.34	0	0	0	0.07	0	0	0.01	0	0.11	0.06	0.06	0.2	0
AOI Size (%)	0.085	0.004	0.045	0.001	0.011	0.01	0.015	0.003	0.005	0.01	0.017	0.018	0.017	0.017	0.113	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Non-Virtual Ad 4	Non-Virtual Ad 5	Non-Virtual Ad 6	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Racing Cars 3	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.85	2.05	1.45	1.23	1.11	1.78	1.15	1.96	2.1	1.56	1.02	1.08	1.05	1.05	1.31	N/A
Average Time Spent (s)	0.75	0.2	0.48	0.13	0.61	0.33	0.32	0.11	0.27	0.30	0.43	0.35	0.23	0.34	0.43	0
Fixations	66	1	67	1	7	7	11	1	1	28	9	8	3	20	12	0
Fixations Ratio (%)	0.73	0.03	0.38	0.03	0.13	0.2	0.3	0.03	0.03	0.12	0.2	0.2	0.1	0.17	0.2	0
Average Fixation Duration (s)	0.24	0.2	0.22	0.13	0.33	0.29	0.25	0.11	0.27	0.23	0.25	0.26	0.23	0.25	0.2	N/A
Average First Fixation Duration (s)	0.25	0.2	0.23	0.13	0.31	0.32	0.24	0.11	0.27	0.23	0.27	0.24	0.23	0.25	0.22	N/A
K-coefficient	0.31	0.21	0.26	0.01	0.89	0.65	0.35	1.52	-0.51	0.49	0	0.09	-0.07	0.01	-0.05	N/A
Average Time to First Gaze (s)	0.52	1.1	0.81	0.77	0.86	1.61	0.89	1.45	1.15	1.12	1.05	1.52	1.03	1.20	1.31	N/A
Average Gaze Time Spent (s)	0.77	0.11	0.44	0.07	0.2	0.13	0.24	0.11	0.11	0.14	0.29	0.2	0.15	0.21	0.26	0
Gazes	856	34	890	6	142	71	147	14	9	389	117	91	37	245	131	0
Gazes Ratio (%)	0.83	0.23	0.53	0.07	0.5	0.4	0.43	0.1	0.07	0.26	0.3	0.33	0.2	0.28	0.4	0
Avg. Revisits	0.63	0	0.32	0	0.1	0.04	0.07	0	0	0.04	0.03	0.04	0	0.02	0.12	0
AOI Size (%)	0.085	0.004	0.045	0.001	0.011	0.01	0.015	0.003	0.005	0.01	0.017	0.018	0.017	0.017	0.113	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 6

Survey A

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Non-Virtual Ad 4	Non-Virtual Ad 5	Non-Virtual Ad 6	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Racing Cars 3	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.84	0.75	0.80	N/A	1.68	1.04	1.81	1.84	2.64	1.80	0.71	1.74	1.89	1.45	1.32	2.51
Average Time Spent (s)	0.54	0.09	0.32	0	0.24	0.45	0.25	0.91	0.31	0.36	0.66	0.45	0.26	0.46	0.34	0.09
Fixations	33	1	34	0	3	3	5	3	1	15	4	6	4	14	8	1
Fixations Ratio (%)	0.8	0.05	0.43	0	0.15	0.1	0.2	0.05	0.05	0.09	0.1	0.2	0.2	0.17	0.3	0.05
Average Fixation Duration (s)	0.27	0.09	0.18	N/A	0.24	0.33	0.17	0.3	0.31	0.27	0.35	0.28	0.26	0.30	0.26	0.09
Average First Fixation Duration (s)	0.29	0.09	0.19	N/A	0.24	0.28	0.19	0.39	0.31	0.28	0.4	0.29	0.26	0.32	0.27	0.09
K-coefficient	0.37	0.25	0.31	N/A	0.63	2.04	-1	0.04	-0.2	0.30	0.43	0.34	0.75	0.51	-0.28	-0.21
Average Time to First Gaze (s)	0.46	1.14	0.80	N/A	0.78	0.87	1.27	2.07	2.13	1.42	0.82	1.87	1.36	1.35	1.3	2.32
Average Gaze Time Spent (s)	0.57	0.06	0.32	0	0.12	0.29	0.15	0.16	0.08	0.13	0.21	0.28	0.19	0.23	0.36	0.13
Gazes	448	6	454	0	51	48	80	38	14	231	55	109	71	235	132	10
Gazes Ratio (%)	0.9	0.1	0.50	0	0.5	0.2	0.65	0.25	0.2	0.30	0.3	0.45	0.45	0.40	0.4	0.1
Avg. Revisits	0.4	0	0.20	0	0	0.06	0.06	0.5	0	0.10	0.07	0.05	0	0.04	0.05	0
AOI Size (%)	0.085	0.004	0.045	0.001	0.011	0.01	0.015	0.003	0.005	0.01	0.017	0.018	0.017	0.017	0.113	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Non-Virtual Ad 4	Non-Virtual Ad 5	Non-Virtual Ad 6	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Racing Cars 3	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.78	0	0.39	N/A	1.32	1.28	0.74	N/A	1.53	1.22	1.15	1.48	1.72	1.45	1.4	N/A
Average Time Spent (s)	0.66	0.1	0.38	0	0.32	0.67	0.41	0	0.36	0.29	0.5	0.34	0.32	0.39	0.51	0
Fixations	42	1	43	0	5	4	3	0	1	13	6	9	4	19	10	0
Fixations Ratio (%)	0.85	0.05	0.45	0	0.25	0.1	0.1	0	0.05	0.08	0.2	0.4	0.15	0.25	0.3	0
Average Fixation Duration (s)	0.25	0.1	0.18	N/A	0.32	0.35	0.29	N/A	0.36	0.33	0.3	0.3	0.25	0.28	0.31	N/A
Average First Fixation Duration (s)	0.25	0.1	0.18	N/A	0.32	0.4	0.37	N/A	0.36	0.36	0.3	0.3	0.22	0.27	0.34	N/A
K-coefficient	0.53	0.32	0.43	N/A	-1	0.09	0.04	N/A	-0.02	-0.22	-0.26	0.17	-0.38	-0.16	0.1	N/A
Average Time to First Gaze (s)	0.58	0.57	0.58	1.36	1.13	1.67	1.15	2.03	2.35	1.62	1.53	1.62	2.09	1.75	1.35	2.61
Average Gaze Time Spent (s)	0.63	0.04	0.34	0.03	0.14	0.23	0.17	0.02	0.1	0.12	0.25	0.2	0.12	0.19	0.41	0.02
Gazes	532	5	537	4	67	72	77	2	14	236	103	123	40	266	165	1
Gazes Ratio (%)	0.95	0.15	0.55	0.15	0.55	0.35	0.5	0.1	0.15	0.30	0.45	0.65	0.35	0.48	0.45	0.05
Avg. Revisits	0.65	0	0.33	0	0	0	0	0	0	0.00	0	0	0.05	0.02	0.06	0
AOI Size (%)	0.085	0.004	0.045	0.001	0.011	0.01	0.015	0.003	0.005	0.01	0.017	0.018	0.017	0.017	0.113	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 7: Formula 1 Grand Prix De Monaco 2023 - Tunnel (QATAR AIRWAYS)

Undergraduates

Photo 7

Survey A

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.65	1.17	1.03	1.10	1.27	0.83	N/A
Average Time Spent (s)	0.6	0.4	0.42	0.41	0.56	0.84	0
Fixations	53	18	21	39	30	25	0
Fixations Ratio (%)	0.8	0.4	0.43	0.42	0.53	0.33	0
Average Fixation Duration (s)	0.25	0.27	0.24	0.26	0.29	0.34	N/A
Average First Fixation Duration (s)	0.26	0.29	0.24	0.27	0.29	0.36	N/A
K-coefficient	0.15	0.36	0.26	0.31	-0.04	0.4	N/A
Average Time to First Gaze (s)	0.41	0.8	0.94	0.87	0.98	0.8	N/A
Average Gaze Time Spent (s)	0.67	0.28	0.27	0.28	0.42	0.73	0
Gazes	728	228	262	490	356	350	0
Gazes Ratio (%)	0.83	0.63	0.73	0.68	0.63	0.37	0
Avg. Revisits	0.4	0.17	0.17	0.17	0.24	0.15	0
AOI Size (%)	0.08	0.037	0.039	0.04	0.021	0.11	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.59	0.91	1.2	1.06	1.21	0.72	2.09
Average Time Spent (s)	0.72	0.41	0.35	0.38	0.46	0.49	0.39
Fixations	65	18	16	34	17	32	1
Fixations Ratio (%)	0.83	0.4	0.37	0.39	0.37	0.57	0.03
Average Fixation Duration (s)	0.26	0.26	0.24	0.25	0.29	0.24	0.39
Average First Fixation Duration (s)	0.27	0.27	0.25	0.26	0.27	0.24	0.39
K-coefficient	0.1	0.22	0.15	0.19	0.14	0.03	-0.2
Average Time to First Gaze (s)	0.53	0.77	0.81	0.79	0.96	0.68	2.09
Average Gaze Time Spent (s)	0.75	0.29	0.28	0.29	0.29	0.46	0.06
Gazes	900	263	209	472	214	384	5
Gazes Ratio (%)	0.9	0.67	0.57	0.62	0.57	0.63	0.07
Avg. Revisits	0.77	0.17	0.1	0.14	0.18	0.37	0
AOI Size (%)	0.08	0.037	0.039	0.04	0.021	0.11	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 7

Survey A

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.96	1.5	1.07	1.29	1.51	0.85	N/A
Average Time Spent (s)	0.57	0.35	0.7	0.53	0.39	0.42	0
Fixations	39	7	8	15	13	13	0
Fixations Ratio (%)	0.8	0.25	0.2	0.23	0.4	0.4	0
Average Fixation Duration (s)	0.24	0.2	0.36	0.28	0.27	0.25	N/A
Average First Fixation Duration (s)	0.26	0.2	0.36	0.28	0.27	0.25	N/A
K-coefficient	-0.12	-0.4	1.07	0.34	0.23	-0.36	N/A
Average Time to First Gaze (s)	0.92	0.88	1.2	1.04	1.43	0.64	2.75
Average Gaze Time Spent (s)	0.63	0.21	0.25	0.23	0.25	0.35	0.04
Gazes	491	117	141	258	145	179	5
Gazes Ratio (%)	0.9	0.6	0.65	0.63	0.65	0.55	0.1
Avg. Revisits	0.42	0.13	0.24	0.19	0.12	0.11	0
AOI Size (%)	0.08	0.037	0.039	0.04	0.021	0.11	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.01	0.98	0.95	0.97	1.02	1.26	1.55
Average Time Spent (s)	0.48	0.37	0.34	0.36	0.64	0.51	0.32
Fixations	36	9	9	18	21	14	2
Fixations Ratio (%)	0.95	0.3	0.35	0.33	0.5	0.35	0.1
Average Fixation Duration (s)	0.24	0.24	0.25	0.25	0.29	0.18	0.32
Average First Fixation Duration (s)	0.24	0.2	0.23	0.22	0.31	0.21	0.32
K-coefficient	-0.05	0.24	0.32	0.28	0.75	-0.5	0.3
Average Time to First Gaze (s)	0.73	1.17	0.8	0.99	0.82	1.06	1.21
Average Gaze Time Spent (s)	0.51	0.23	0.22	0.23	0.57	0.44	0.09
Gazes	442	168	158	326	359	202	12
Gazes Ratio (%)	0.95	0.8	0.8	0.80	0.7	0.5	0.15
Avg. Revisits	0.5	0.16	0.11	0.14	0.33	0.05	0
AOI Size (%)	0.08	0.037	0.039	0.04	0.021	0.11	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 8: Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 8 (DHL)

Undergraduates

Photo 8

Survey A

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.89	0.56	N/A	0.73	1.22	1.22	1.22	1.31	1.48	0.01
Average Time Spent (s)	0.25	0.09	0	0.11	0.49	0.59	0.54	0.61	0.51	0.28
Fixations	7	1	0	8	20	22	42	22	11	1
Fixations Ratio (%)	0.2	0.03	0	0.08	0.4	0.4	0.40	0.37	0.2	0.03
Average Fixation Duration (s)	0.22	0.09	N/A	0.16	0.28	0.32	0.30	0.3	0.29	0.28
Average First Fixation Duration (s)	0.22	0.09	N/A	0.16	0.29	0.33	0.31	0.32	0.28	0.28
K-coefficient	-0.51	-0.59	N/A	-0.55	0.12	0.4	0.26	0.64	0.11	-0.85
Average Time to First Gaze (s)	1.3	0.71	0.86	0.96	1.07	1.23	1.15	1.2	1.67	0.15
Average Gaze Time Spent (s)	0.13	0.05	0.08	0.09	0.41	0.4	0.41	0.32	0.4	0.13
Gazes	70	14	7	91	296	324	620	340	171	6
Gazes Ratio (%)	0.4	0.2	0.07	0.22	0.53	0.6	0.57	0.77	0.33	0.03
Avg. Revisits	0.04	0	0	0.01	0.24	0.3	0.27	0.2	0.07	0
AOI Size (%)	0.008	0.003	0.002	0.00	0.047	0.032	0.04	0.021	0.11	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.03	1.83	N/A	1.43	0.81	0.96	0.89	1.17	1.74	N/A
Average Time Spent (s)	0.39	0.33	0	0.24	0.53	0.48	0.51	0.43	0.51	0
Fixations	3	2	0	5	23	20	43	12	18	0
Fixations Ratio (%)	0.1	0.07	0	0.06	0.4	0.4	0.40	0.27	0.27	0
Average Fixation Duration (s)	0.39	0.33	N/A	0.36	0.26	0.31	0.29	0.26	0.2	N/A
Average First Fixation Duration (s)	0.39	0.33	N/A	0.36	0.28	0.29	0.29	0.26	0.19	N/A
K-coefficient	0.24	-0.88	N/A	-0.32	0.3	0.25	0.28	0.02	0.28	N/A
Average Time to First Gaze (s)	1.07	1.12	0.82	1.00	0.96	0.89	0.93	0.71	1.5	1.26
Average Gaze Time Spent (s)	0.23	0.1	0.05	0.13	0.43	0.31	0.37	0.27	0.37	0.02
Gazes	70	31	11	112	328	285	613	184	199	1
Gazes Ratio (%)	0.23	0.23	0.17	0.21	0.57	0.7	0.64	0.53	0.4	0.03
Avg. Revisits	0	0	0	0.00	0.23	0.23	0.23	0.1	0.15	0
AOI Size (%)	0.008	0.003	0.002	0.00	0.047	0.032	0.04	0.021	0.11	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 8

Survey A

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.5	0.24	N/A	0.37	1.34	1.38	1.36	1.91	0.92	N/A
Average Time Spent (s)	0.41	0.4	0	0.27	0.35	0.59	0.47	0.51	0.44	0
Fixations	6	3	0	9	9	19	28	12	12	0
Fixations Ratio (%)	0.2	0.1	0	0.10	0.3	0.5	0.40	0.35	0.35	0
Average Fixation Duration (s)	0.3	0.29	N/A	0.30	0.24	0.31	0.28	0.27	0.27	N/A
Average First Fixation Duration (s)	0.31	0.25	N/A	0.28	0.26	0.33	0.30	0.28	0.28	N/A
K-coefficient	0.29	0.15	N/A	0.22	0.37	0.4	0.39	0.22	0.19	N/A
Average Time to First Gaze (s)	1.18	1.85	2.33	1.79	1.02	1.22	1.12	1.18	0.81	N/A
Average Gaze Time Spent (s)	0.19	0.13	0.03	0.12	0.24	0.45	0.35	0.28	0.43	0
Gazes	70	31	3	104	103	289	392	207	157	0
Gazes Ratio (%)	0.45	0.25	0.1	0.27	0.5	0.75	0.63	0.85	0.4	0
Avg. Revisits	0.11	0.05	0	0.05	0.05	0.29	0.17	0.2	0.05	0
AOI Size (%)	0.008	0.003	0.002	0.00	0.047	0.032	0.04	0.021	0.11	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.19	1.11	N/A	1.15	1.74	1.79	1.77	0.9	2.24	N/A
Average Time Spent (s)	0.46	0.33	0	0.26	0.41	0.27	0.34	0.72	0.24	0
Fixations	5	3	0	8	11	7	18	22	2	0
Fixations Ratio (%)	0.15	0.15	0%	0.10	0.4	0.35	0.38	0.5	0.1	0
Average Fixation Duration (s)	0.25	0.33	N/A	0.29	0.28	0.27	0.28	0.31	0.24	N/A
Average First Fixation Duration (s)	0.31	0.33	N/A	0.32	0.29	0.27	0.28	0.32	0.24	N/A
K-coefficient	0.63	0.31	N/A	0.47	0.61	-0.48	0.07	-0.01	-0.97	N/A
Average Time to First Gaze (s)	1.32	1.16	2.41	1.63	1.4	1.58	1.49	0.8	1.69	N/A
Average Gaze Time Spent (s)	0.26	0.15	0.06	0.16	0.41	0.21	0.31	0.44	0.2	0
Gazes	61	35	2	98	186	137	323	300	54	0
Gazes Ratio (%)	0.25	0.25	0.05	0.18	0.55	0.75	0.65	0.75	0.3	0
Avg. Revisits	0.07	0	0	0.02	0.05	0	0.03	0.22	0	0
AOI Size (%)	0.008	0.003	0.002	0.00	0.047	0.032	0.04	0.021	0.11	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 9: Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 15 (MSC CRUISES)

Undergraduates

Photo 9

Survey A

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.06	0.85	0.94	0.90	0.88	2.17	N/A
Average Time Spent (s)	0.47	0.84	0.42	0.63	0.86	0.29	0
Fixations	28	45	19	64	66	3	0
Fixations Ratio (%)	0.63	0.5	0.47	0.49	0.8	0.1	0
Average Fixation Duration (s)	0.32	0.31	0.3	0.31	0.3	0.29	N/A
Average First Fixation Duration (s)	0.32	0.34	0.31	0.33	0.32	0.29	N/A
K-coefficient	0.31	0.46	-0.14	0.16	0.32	-0.9	N/A
Average Time to First Gaze (s)	1.01	0.73	0.72	0.73	0.59	2.28	N/A
Average Gaze Time Spent (s)	0.36	0.81	0.25	0.53	0.82	0.16	0
Gazes	405	664	284	948	937	26	0
Gazes Ratio (%)	0.83	0.63	0.83	0.73	0.87	0.13	0
Avg. Revisits	0.23	0.48	0.17	0.33	0.77	0	0
AOI Size (%)	0.042	0.126	0.036	0.08	0.108	0.011	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.11	0.74	1.45	1.10	0.69	N/A	N/A
Average Time Spent (s)	0.42	0.59	0.39	0.49	0.83	0	0
Fixations	28	51	24	75	59	0	0
Fixations Ratio (%)	0.63	0.7	0.5	0.60	0.67	0	0
Average Fixation Duration (s)	0.28	0.24	0.24	0.24	0.27	N/A	N/A
Average First Fixation Duration (s)	0.29	0.25	0.27	0.26	0.27	N/A	N/A
K-coefficient	0.34	-0.2	0.16	-0.02	0.55	N/A	N/A
Average Time to First Gaze (s)	0.76	0.73	1.05	0.89	0.56	1.96	N/A
Average Gaze Time Spent (s)	0.39	0.61	0.28	0.45	0.73	0.03	0
Gazes	417	635	321	956	853	2	0
Gazes Ratio (%)	0.8	0.77	0.9	0.84	0.87	0.07	0
Avg. Revisits	0.21	0.7	0.31	0.51	0.77	0	0
AOI Size (%)	0.042	0.126	0.036	0.08	0.108	0.011	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 9

Survey A

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.29	0.95	0.98	0.97	0.8	0	N/A
Average Time Spent (s)	0.54	0.79	0.44	0.62	0.93	0.36	0
Fixations	25	21	20	41	48	1	0
Fixations Ratio (%)	0.65	0.35	0.6	0.48	0.75	0.05	0
Average Fixation Duration (s)	0.29	0.29	0.27	0.28	0.29	0.36	N/A
Average First Fixation Duration (s)	0.29	0.28	0.28	0.28	0.27	0.36	N/A
K-coefficient	0.97	0.34	0.15	0.25	0.26	0.56	N/A
Average Time to First Gaze (s)	0.65	0.48	0.59	0.54	0.73	0.87	N/A
Average Gaze Time Spent (s)	0.52	0.68	0.3	0.49	0.87	0.18	0
Gazes	362	327	256	583	724	18	0
Gazes Ratio (%)	0.8	0.55	0.95	0.75	0.95	0.1	0
Avg. Revisits	0.35	0.47	0.4	0.44	0.95	0	0
AOI Size (%)	0.042	0.126	0.036	0.08	0.108	0.011	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.9	0.71	0.81	0.76	0.76	1.98	N/A
Average Time Spent (s)	0.34	0.67	0.5	0.59	0.91	0.26	0
Fixations	13	28	16	44	39	4	0
Fixations Ratio (%)	0.4	0.55	0.5	0.53	0.7	0.2	0
Average Fixation Duration (s)	0.21	0.26	0.32	0.29	0.32	0.26	N/A
Average First Fixation Duration (s)	0.2	0.31	0.33	0.32	0.31	0.26	N/A
K-coefficient	0.27	0.15	0.32	0.24	0.25	0.3	N/A
Average Time to First Gaze (s)	0.76	0.59	0.73	0.66	0.63	1.53	N/A
Average Gaze Time Spent (s)	0.28	0.61	0.3	0.46	0.8	0.25	0
Gazes	192	410	228	638	565	47	0
Gazes Ratio (%)	0.8	0.75	0.85	0.80	0.8	0.2	0
Avg. Revisits	0.2	0.47	0.22	0.35	0.78	0	0
AOI Size (%)	0.042	0.126	0.036	0.08	0.108	0.011	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 10: Formula 1 Heineken Silver Las Vegas Grand Prix 2023 - Turn 12 (SALESFORCE)

Undergraduates

Photo 10

Survey A

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Racing Cars 3	Cumulative Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.48	1.04	1.53	1.87	1.48	2.68	1.42	2.8	2.30	1.24	1.31	N/A
Average Time Spent (s)	0.65	0.17	0.45	0.24	0.29	0.33	0.4	0.13	0.29	0.39	0.26	0
Fixations	26	2	11	2	15	2	8	1	11	4	6	0
Fixations Ratio (%)	0.43	0.07	0.23	0.07	0.12	0.07	0.2	0.03	0.10	0.1	0.2	0
Average Fixation Duration (s)	0.31	0.17	0.26	0.24	0.22	0.33	0.29	0.13	0.25	0.3	0.26	N/A
Average First Fixation Duration (s)	0.33	0.17	0.25	0.24	0.22	0.33	0.3	0.13	0.25	0.34	0.26	N/A
K-coefficient	0.68	-0.22	0.16	0.36	0.10	-2.01	0.8	-0.8	-0.67	-0.78	1.04	N/A
Average Time to First Gaze (s)	0.8	0.59	1.53	1.76	1.29	1.48	1.45	1.85	1.59	0.8	1.05	1.86
Average Gaze Time Spent (s)	0.52	0.16	0.43	0.08	0.22	0.13	0.19	0.1	0.14	0.31	0.15	0.03
Gazes	484	65	150	16	231	60	88	20	168	67	80	1
Gazes Ratio (%)	0.7	0.33	0.27	0.17	0.26	0.33	0.33	0.17	0.28	0.17	0.4	0.03
Avg. Revisits	0.21	0	0.04	0	0.01	0	0.07	0	0.02	0	0	0
AOI Size (%)	0.018	0.01	0.058	0.009	0.026	0.008	0.006	0.007	0.007	0.11	0.034	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Racing Cars 3	Cumulative Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.27	1.71	1.88	1.41	1.67	2.01	1.45	1.66	1.71	0.85	1.01	1.66
Average Time Spent (s)	0.29	0.32	0.4	0.39	0.37	0.27	0.34	0.29	0.30	0.42	0.43	0.32
Fixations	17	5	16	1	22	6	7	3	16	12	18	2
Fixations Ratio (%)	0.5	0.13	0.37	0.03	0.18	0.17	0.17	0.1	0.15	0.23	0.37	0.07
Average Fixation Duration (s)	0.27	0.24	0.26	0.39	0.30	0.21	0.24	0.29	0.25	0.23	0.24	0.32
Average First Fixation Duration (s)	0.26	0.23	0.29	0.39	0.30	0.24	0.25	0.29	0.26	0.21	0.23	0.32
K-coefficient	0.21	0.5	0.06	1.01	0.52	-0.69	0.76	-0.41	-0.11	-0.12	-0.25	0.15
Average Time to First Gaze (s)	1.12	1.51	1.71	1.64	1.62	1.79	1.28	1.45	1.51	0.76	0.93	2.01
Average Gaze Time Spent (s)	0.23	0.16	0.38	0.12	0.22	0.15	0.25	0.11	0.17	0.41	0.32	0.23
Gazes	239	47	226	27	300	65	107	49	221	122	228	41
Gazes Ratio (%)	0.8	0.23	0.43	0.17	0.28	0.33	0.33	0.33	0.33	0.23	0.53	0.13
Avg. Revisits	0.03	0.04	0.03	0	0.02	0	0.03	0	0.01	0.1	0.17	0
AOI Size (%)	0.018	0.01	0.058	0.009	0.026	0.008	0.006	0.007	0.007	0.11	0.034	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 10

Survey A

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Racing Cars 3	Cumulative Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.4	1.27	1.91	1.77	1.65	1.06	1.9	1.52	1.49	0.53	0.98	2.42
Average Time Spent (s)	0.25	0.17	0.43	0.16	0.25	0.44	0.31	0.32	0.36	0.53	0.39	0.39
Fixations	12	2	7	1	10	4	4	1	9	5	8	1
Fixations Ratio (%)	0.5	0.1	0.2	0.05	0.12	0.15	0.15	0.05	0.12	0.1	0.3	0.05
Average Fixation Duration (s)	0.21	0.17	0.23	0.16	0.19	0.31	0.24	0.32	0.29	0.21	0.28	0.39
Average First Fixation Duration (s)	0.2	0.17	0.26	0.16	0.20	0.31	0.22	0.32	0.28	0.14	0.26	0.39
K-coefficient	0.43	-0.54	0.69	0	0.05	0.09	-0.1	0.4	0.13	-0.48	-0.59	1.99
Average Time to First Gaze (s)	0.95	1.13	2.05	2.36	1.85	0.55	1.59	1.7	1.28	0.8	1.42	2.44
Average Gaze Time Spent (s)	0.24	0.1	0.36	0.06	0.17	0.29	0.1	0.13	0.17	0.25	0.21	0.19
Gazes	193	29	88	6	123	67	40	43	150	42	85	9
Gazes Ratio (%)	0.85	0.35	0.25	0.1	0.23	0.25	0.5	0.35	0.37	0.2	0.45	0.05
Avg. Revisits	0.12	0	0	0	0.00	0	0.11	0	0.04	0.14	0.11	0
AOI Size (%)	0.018	0.01	0.058	0.009	0.026	0.008	0.006	0.007	0.007	0.11	0.034	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Racing Cars 3	Cumulative Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.41	1.28	1.76	0.17	1.07	1.69	1.81	1.8	1.77	0.77	1.06	N/A
Average Time Spent (s)	0.32	0.36	0.53	0.18	0.36	0.25	0.39	0.39	0.34	0.29	0.4	0
Fixations	7	2	12	2	16	2	6	2	10	3	11	0
Fixations Ratio (%)	0.25	0.1	0.35	0.1	0.18	0.1	0.25	0.1	0.15	0.15	0.4	0
Average Fixation Duration (s)	0.24	0.36	0.31	0.18	0.28	0.25	0.32	0.39	0.32	0.29	0.28	N/A
Average First Fixation Duration (s)	0.26	0.36	0.35	0.18	0.30	0.25	0.32	0.39	0.32	0.29	0.26	N/A
K-coefficient	0.14	-0.76	0.88	-0.91	-0.26	0.64	0.67	0.8	0.70	0.39	-0.04	N/A
Average Time to First Gaze (s)	0.88	0.84	1.84	0.91	1.20	1.48	1.25	2.21	1.65	0.66	1.34	2.97
Average Gaze Time Spent (s)	0.2	0.08	0.44	0.1	0.21	0.12	0.33	0.05	0.17	0.29	0.34	0.07
Gazes	121	21	160	24	205	29	118	23	170	50	154	3
Gazes Ratio (%)	0.7	0.3	0.4	0.25	0.32	0.3	0.4	0.45	0.38	0.2	0.5	0.05
Avg. Revisits	0.13	0	0	0	0.00	0	0	0	0.00	0	0.16	0
AOI Size (%)	0.018	0.01	0.058	0.009	0.026	0.008	0.006	0.007	0.007	0.11	0.034	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 11: Formula 1 Lenovo Japanese Grand Prix 2023 - Turn 6 (QATAR AIRWAYS)

Undergraduates

Photo 11

Survey A

	Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.53	0.85	1.68	N/A	1.27	0.52	1.56	0.05
Average Time Spent (s)	0.33	0.44	0.38	0	0.27	1.2	0.61	0.18
Fixations	13	8	1	0	9	86	23	1
Fixations Ratio (%)	0.27	0.2	0.03	0	0.08	0.77	0.37	0.03
Average Fixation Duration (s)	0.22	0.34	0.38	N/A	0.36	0.33	0.29	0.18
Average First Fixation Duration (s)	0.26	0.31	0.38	N/A	0.35	0.33	0.34	0.18
K-coefficient	0.9	0.69	0.68	N/A	0.69	0.27	0.39	1.35
Average Time to First Gaze (s)	1.06	0.81	1.31	2.31	1.48	0.53	1.18	1.5
Average Gaze Time Spent (s)	0.35	0.2	0.22	0.03	0.15	1.1	0.57	0.06
Gazes	157	117	29	6	152	1325	302	10
Gazes Ratio (%)	0.33	0.43	0.1	0.13	0.22	0.9	0.4	0.13
Avg. Revisits	0.08	0.07	0	0	0.02	0.87	0.11	0
AOI Size (%)	0.033	0.027	0.004	0.006	0.012	0.65	0.109	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.13	1.41	2.59	1.41	1.80	0.6	1.3	N/A
Average Time Spent (s)	0.34	0.32	0.31	0.21	0.28	0.78	0.32	0
Fixations	9	7	1	1	9	62	14	0
Fixations Ratio (%)	0.23	0.2	0.03	0.03	0.09	0.77	0.33	0
Average Fixation Duration (s)	0.27	0.27	0.31	0.21	0.26	0.28	0.23	N/A
Average First Fixation Duration (s)	0.28	0.27	0.31	0.21	0.26	0.26	0.25	N/A
K-coefficient	0.13	0.87	0.7	0.95	0.84	0.32	-0.09	N/A
Average Time to First Gaze (s)	1.03	1.16	2.05	1.54	1.58	0.56	1.18	1.2
Average Gaze Time Spent (s)	0.16	0.16	0.12	0.08	0.12	0.75	0.31	0.1
Gazes	108	87	9	32	128	918	183	10
Gazes Ratio (%)	0.5	0.43	0.07	0.27	0.26	0.9	0.47	0.07
Avg. Revisits	0.03	0	0	0	0.00	0.6	0.03	0
AOI Size (%)	0.033	0.027	0.004	0.006	0.012	0.65	0.109	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 11

Survey A

	Virtual Ad	Non-Virtual Ad	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.11	2.3	N/A	1.36	1.83	0.66	1.55	0.01
Average Time Spent (s)	0.48	0.15	0	0.28	0.14	0.84	0.35	0.33
Fixations	6	2	0	2	4	48	13	1
Fixations Ratio (%)	0.2	0.1	0	0.1	0.07	0.85	0.45	0.05
Average Fixation Duration (s)	0.33	0.15	N/A	0.28	0.22	0.29	0.23	0.33
Average First Fixation Duration (s)	0.33	0.15	N/A	0.28	0.22	0.31	0.25	0.33
K-coefficient	-0.16	0.59	N/A	-0.8	-0.11	0.49	0.66	-0.63
Average Time to First Gaze (s)	0.8	1.07	1.29	1.08	1.15	0.54	1.52	0.2
Average Gaze Time Spent (s)	0.2	0.09	0.04	0.09	0.07	0.8	0.32	0.17
Gazes	56	31	7	23	61	671	158	7
Gazes Ratio (%)	0.3	0.4	0.15	0.3	0.28	0.95	0.55	0.05
Avg. Revisits	0.11	0	0	0	0.00	0.75	0.05	0
AOI Size (%)	0.033	0.027	0.004	0.006	0.012	0.65	0.109	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.88	0.52	2.12	1.47	1.37	0.74	1.07	2.56
Average Time Spent (s)	0.27	0.7	0.09	0.09	0.29	0.73	0.47	0.2
Fixations	6	10	1	1	12	43	16	1
Fixations Ratio (%)	0.3	0.2	0.05	0.05	0.10	0.85	0.45	0.05
Average Fixation Duration (s)	0.27	0.24	0.09	0.09	0.14	0.27	0.25	0.2
Average First Fixation Duration (s)	0.27	0.18	0.09	0.09	0.12	0.27	0.27	0.2
K-coefficient	0.3	0.87	-0.34	-0.55	-0.01	-0.13	0.16	-3.44
Average Time to First Gaze (s)	1.46	1.04	2.28	1.6	1.64	0.65	1.04	1.29
Average Gaze Time Spent (s)	0.33	0.3	0.06	0.14	0.17	0.61	0.48	0.17
Gazes	119	121	4	14	139	0.69	189	25
Gazes Ratio (%)	0.4	0.45	0.1	0.1	0.22	615	0.45	0.15
Avg. Revisits	0	0.25	0	0	0.08	1	0.05	0
AOI Size (%)	0.033	0.027	0.004	0.006	0.012	0.65	0.109	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 12: Formula 1 Lenovo United States Grand Prix 2023 - Turn 12 (PIRELLI)

Undergraduates

Photo 12

Survey A

	Virtual Ad	N/A	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	0.42	N/A	0.71	1.94	0.81	1.38	1.53	1.45	N/A
Average Time Spent (s)	0.69	N/A	0.45	0.42	0.87	0.65	0.58	0.34	0
Fixations	31	N/A	18	17	62	79	12	5	0
Fixations Ratio (%)	0.43	N/A	0.4	0.4	0.77	0.59	0.2	0.13	0
Average Fixation Duration (s)	0.29	N/A	0.29	0.27	0.31	0.29	0.26	0.27	N/A
Average First Fixation Duration (s)	0.32	N/A	0.3	0.28	0.33	0.31	0.22	0.25	N/A
K-coefficient	0.38	N/A	0.41	-0.55	0.18	-0.19	-0.24	-0.88	N/A
Average Time to First Gaze (s)	0.54	N/A	0.43	1.82	0.61	1.22	1.5	1.6	1.37
Average Gaze Time Spent (s)	0.5	N/A	0.34	0.32	0.87	0.60	0.5	0.21	0.06
Gazes	427	N/A	291	227	943	1170	176	89	3
Gazes Ratio (%)	0.63	N/A	0.63	0.53	0.83	0.68	0.27	0.33	0.03
Avg. Revisits	0.32	N/A	0.1	0.03	0.53	0.28	0.11	0	0
AOI Size (%)	0.115	N/A	0.056	0.1	0.04	0.07	0.107	0.02	0.005
AOI Time Range (s)	0s – 3s	N/A	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Personalized Virtual Ad	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	0.89	1.06	1.34	1.96	1.17	1.57	0.72	1.97	N/A
Average Time Spent (s)	0.61	0.45	0.5	0.2	0.5	0.35	0.28	0.19	0
Fixations	51	15	25	5	32	37	10	2	0
Fixations Ratio (%)	0.67	0.3	0.43	0.17	0.57	0.37	0.2	0.07	0
Average Fixation Duration (s)	0.24	0.25	0.24	0.2	0.25	0.23	0.15	0.19	N/A
Average First Fixation Duration (s)	0.24	0.26	0.25	0.2	0.26	0.23	0.16	0.19	N/A
K-coefficient	-0.24	-0.17	0.14	-1.21	-0.05	-0.63	-0.62	-1.88	N/A
Average Time to First Gaze (s)	0.69	1.1	0.72	2.01	0.92	1.47	0.62	1.36	2.97
Average Gaze Time Spent (s)	0.69	0.31	0.36	0.2	0.49	0.35	0.36	0.12	0.03
Gazes	638	232	374	53	480	533	106	20	2
Gazes Ratio (%)	0.7	0.57	0.77	0.2	0.73	0.47	0.23	0.13	0.03
Avg. Revisits	0.57	0.14	0.17	0	0.28	0.14	0.1	0	0
AOI Size (%)	0.115	0.023	0.056	0.1	0.04	0.07	0.107	0.02	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 12

Survey A

	Virtual Ad	N/A	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.2	N/A	1.55	1.35	0.88	1.12	0.58	1.04	N/A
Average Time Spent (s)	0.68	N/A	0.5	0.35	0.57	0.46	0.26	0.28	0
Fixations	18	N/A	11	7	34	41	6	6	0
Fixations Ratio (%)	0.4	N/A	0.3	0.3	0.85	0.58	0.25	0.2	0
Average Fixation Duration (s)	0.29	N/A	0.28	0.3	0.29	0.30	0.21	0.22	N/A
Average First Fixation Duration (s)	0.32	N/A	0.29	0.28	0.31	0.30	0.21	0.21	N/A
K-coefficient	0.7	N/A	0.77	-0.58	-0.14	-0.36	-0.56	-1.15	N/A
Average Time to First Gaze (s)	0.94	N/A	0.71	1.36	0.57	0.97	0.99	1.52	2.29
Average Gaze Time Spent (s)	0.62	N/A	0.32	0.27	0.55	0.41	0.26	0.21	0.23
Gazes	272	N/A	178	128	463	591	88	107	9
Gazes Ratio (%)	0.5	N/A	0.65	0.55	0.95	0.75	0.4	0.55	0.05
Avg. Revisits	0.37	N/A	0.21	0	0.6	0.30	0.05	0.05	0
AOI Size (%)	0.115	N/A	0.056	0.1	0.04	0.07	0.107	0.02	0.005
AOI Time Range (s)	0s – 3s	N/A	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Personalized Virtual Ad	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	Race Info Graphic	F1 TV Logo
Average Time To First Fixation (s)	1.19	1.61	0.64	1.29	0.81	1.05	0.04	1.52	N/A
Average Time Spent (s)	0.59	0.41	0.77	0.45	0.82	0.64	0.74	0.28	0
Fixations	25	8	15	14	37	51	2	7	0
Fixations Ratio (%)	0.6	0.3	0.3	0.4	0.65	0.53	0.05	0.25	0
Average Fixation Duration (s)	0.28	0.33	0.31	0.27	0.27	0.27	0.37	0.19	N/A
Average First Fixation Duration (s)	0.28	0.33	0.28	0.3	0.28	0.29	0.39	0.22	N/A
K-coefficient	-0.04	0.65	-0.02	-0.08	0.4	0.16	-0.24	0.11	N/A
Average Time to First Gaze (s)	0.88	1.13	1.08	1.44	0.99	1.22	0.07	1.39	N/A
Average Gaze Time Spent (s)	0.56	0.3	0.34	0.44	0.74	0.59	0.74	0.25	0
Gazes	319	129	196	187	581	768	34	68	0
Gazes Ratio (%)	0.65	0.5	0.65	0.5	0.85	0.68	0.05	0.3	0
Avg. Revisits	0.15	0	0.27	0.18	0.4	0.29	0	0	0
AOI Size (%)	0.115	0.023	0.056	0.1	0.04	0.07	0.107	0.02	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 13: Formula 1 Etihad Airways Abu Dhabi Grand Prix 2023 - Before Turn 8 (LENOVO)

Undergraduates

Photo 13

Survey A

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Virtual Ad 4	Cumulative Virtual	N/A	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.98	1.08	1.24	1.4	1.18	N/A	1.67	2.01	1.11	1.60	1.78	0.52	N/A
Average Time Spent (s)	0.87	0.36	0.28	0.23	0.44	N/A	0.45	0.32	0.29	0.35	0.33	0.53	0
Fixations	61	4	8	4	77	N/A	9	4	4	17	11	13	0
Fixations Ratio (%)	0.63	0.1	0.2	0.13	0.27	N/A	0.2	0.13	0.13	0.15	0.3	0.23	0
Average Fixation Duration (s)	0.28	0.27	0.21	0.23	0.25	N/A	0.29	0.32	0.29	0.30	0.27	0.33	N/A
Average First Fixation Duration (s)	0.26	0.32	0.2	0.23	0.25	N/A	0.31	0.32	0.29	0.31	0.29	0.31	N/A
K-coefficient	-0.17	-1.2	0.64	0.5	-0.06	N/A	-0.36	-0.36	-0.11	-0.28	0.4	-0.39	N/A
Average Time to First Gaze (s)	0.94	1.62	1.19	1.12	1.22	N/A	1.73	1.01	1.24	1.33	1.57	0.78	1.38
Average Gaze Time Spent (s)	0.82	0.16	0.15	0.11	0.31	N/A	0.19	0.1	0.09	0.13	0.16	0.39	0.21
Gazes	841	72	106	45	1064	N/A	99	61	33	193	139	167	19
Gazes Ratio (%)	0.77	0.33	0.53	0.3	0.48	N/A	0.4	0.43	0.27	0.37	0.63	0.33	0.07
Avg. Revisits	0.57	0.06	0.07	0	0.18	N/A	0.07	0	0	0.02	0.07	0.1	0
AOI Size (%)	0.142	0.023	0.012	0.002	0.04	N/A	0.02	0.008	0.001	0.010	0.008	0.108	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	N/A	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Virtual Ad 4	Cumulative Virtual	Personalized Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1	2.04	1.21	2.07	1.58	1.14	1.76	0.59	N/A	1.18	1.56	1.59	2.67
Average Time Spent (s)	0.89	0.27	0.25	0.33	0.44	0.66	0.34	0.39	0	0.24	0.31	0.31	0.22
Fixations	75	2	5	3	85	40	4	8	0	12	9	4	1
Fixations Ratio (%)	0.73	0.07	0.17	0.1	0.27	0.53	0.1	0.13	0	0.08	0.23	0.1	0.03
Average Fixation Duration (s)	0.26	0.27	0.25	0.33	0.28	0.26	0.26	0.2	N/A	0.23	0.24	0.24	0.22
Average First Fixation Duration (s)	0.25	0.27	0.25	0.33	0.28	0.28	0.27	0.22	N/A	0.25	0.23	0.27	0.22
K-coefficient	-0.13	1.23	0.16	0.92	0.55	0.2	0.72	-0.42	N/A	0.15	-0.02	0.05	-0.13
Average Time to First Gaze (s)	0.68	2.16	0.99	1.21	1.26	0.94	1.65	0.95	1.46	1.35	1.23	1.45	2.29
Average Gaze Time Spent (s)	0.99	0.17	0.16	0.07	0.35	0.59	0.22	0.23	0.04	0.16	0.15	0.18	0.22
Gazes	1029	45	90	32	1196	610	45	77	13	135	70	53	18
Gazes Ratio (%)	0.77	0.2	0.43	0.37	0.44	0.77	0.17	0.27	0.23	0.22	0.33	0.23	0.07
Avg. Revisits	0.63	0	0	0	0.16	0.4	0.04	0.04	0	0.03	0.07	0.04	0
AOI Size (%)	0.142	0.023	0.012	0.002	0.04	0.064	0.02	0.008	0.001	0.010	0.008	0.108	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 13

Survey A

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Virtual Ad 4	Cumulative Virtual	N/A	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.27	2.51	0.7	N/A	1.49	N/A	2.09	2.21	0.23	1.51	1.16	1.23	N/A
Average Time Spent (s)	0.81	0.28	0.35	0	0.36	N/A	0.24	0.38	0.39	0.34	0.44	0.46	0
Fixations	42	2	1	0	45	N/A	1	1	1	3	13	15	0
Fixations Ratio (%)	0.65	0.1	0.05	0	0.20	N/A	0.05	0.05	0.05	0.05	0.40	0.4	0%
Average Fixation Duration (s)	0.25	0.28	0.35	N/A	0.29	N/A	0.24	0.38	0.39	0.34	0.23	0.25	N/A
Average First Fixation Duration (s)	0.27	0.28	0.35	N/A	0.30	N/A	0.24	0.38	0.39	0.34	0.24	0.27	N/A
K-coefficient	0.28	-0.22	1.8	N/A	0.62	N/A	0	1.23	0.07	0.43	0.28	0.29	N/A
Average Time to First Gaze (s)	0.91	1.97	1.28	0.82	1.25	N/A	1.5	1.02	1.26	1.26	1.3	0.96	N/A
Average Gaze Time Spent (s)	0.94	0.07	0.12	0.1	0.31	N/A	0.12	0.09	0.06	0.09	0.19	0.52	0
Gazes	531	25	38	25	619	N/A	25	24	23	72	106	217	0
Gazes Ratio (%)	0.65	0.35	0.35	0.25	0.40	N/A	0.25	0.3	0.45	0.33	0.7	0.45	0
Avg. Revisits	0.4	0	0	0	0.10	N/A	0	0	0	0.00	0.25	0.29	0
AOI Size (%)	0.142	0.023	0.012	0.002	0.04	N/A	0.02	0.008	0.001	0.010	0.008	0.108	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	N/A	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Virtual Ad 4	Cumulative Virtual	Personalized Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.77	2.39	0.36	2.11	1.41	0.88	2.65	0.65	N/A	1.65	1.25	0.94	N/A
Average Time Spent (s)	0.94	0.23	0.49	0.21	0.47	0.65	0.39	0.2	0	0.20	0.38	0.65	0
Fixations	42	5	4	2	53	29	1	3	0	4	8	7	0
Fixations Ratio (%)	0.60	0.25	0.15	0.1	0.28	0.55	0.05	0.15	0	0.07	0.25	0.15	0%
Average Fixation Duration (s)	0.28	0.23	0.37	0.21	0.27	0.25	0.39	0.2	N/A	0.30	0.21	0.21	N/A
Average First Fixation Duration (s)	0.3	0.23	0.38	0.21	0.28	0.28	0.39	0.2	N/A	0.30	0.23	0.23	N/A
K-coefficient	0.26	-1.01	0.65	0.4	0.08	-0.22	0.45	-0.15	N/A	0.15	0.35	0.05	N/A
Average Time to First Gaze (s)	0.9	2.05	0.63	1.44	1.26	0.8	2.25	0.94	1.4	1.53	1.6	0.94	N/A
Average Gaze Time Spent (s)	0.87	0.23	0.19	0.09	0.35	0.74	0.07	0.09	0.06	0.07	0.18	0.68	0
Gazes	571	59	64	21	715	360	13	23	19	55	107	95	0
Gazes Ratio (%)	0.75	0.3	0.4	0.25	0.43	0.55	0.2	0.35	0.35	0.30	0.7	0.15	0
Avg. Revisits	0.45	0	0	0	0.11	0.25	0	0	0	0.00	0.17	0.11	0
AOI Size (%)	0.142	0.023	0.012	0.002	0.04	0.064	0.02	0.008	0.001	0.010	0.008	0.108	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 14: Formula 1 Heineken Silver Las Vegas Grand Prix 2023 - Turn 2 (Paramount+)

Undergraduates

Photo 14

Survey A

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.91	1.15	1.35	1.14	0.71	1.35	1.03	1.15	1.28	1.22	1.37	N/A
Average Time Spent (s)	0.77	0.55	0.41	0.58	0.54	0.21	0.38	0.23	0.51	0.37	0.38	0
Fixations	55	27	7	89	15	2	17	3	18	21	11	0
Fixations Ratio (%)	0.67	0.5	0.17	0.45	0.27	0.07	0.17	0.1	0.33	0.22	0.27	0
Average Fixation Duration (s)	0.27	0.31	0.3	0.29	0.28	0.21	0.25	0.23	0.28	0.26	0.29	N/A
Average First Fixation Duration (s)	0.25	0.31	0.3	0.29	0.29	0.21	0.25	0.23	0.3	0.27	0.3	N/A
K-coefficient	0.43	0.52	-0.08	0.29	0.2	-0.45	-0.13	-0.6	0.03	-0.29	-0.2	N/A
Average Time to First Gaze (s)	0.6	0.74	1.3	0.88	0.76	1.46	1.11	1.31	1.27	1.29	0.98	0.54
Average Gaze Time Spent (s)	0.85	0.41	0.18	0.48	0.46	0.1	0.28	0.15	0.4	0.28	0.33	0.02
Gazes	779	365	122	1266	206	40	246	38	263	301	175	1
Gazes Ratio (%)	0.7	0.67	0.5	0.62	0.33	0.3	0.32	0.17	0.5	0.34	0.4	0.03
Avg. Revisits	0.47	0.17	0.07	0.24	0.17	0	0.09	0	0.2	0.10	0.08	0
AOI Size (%)	0.185	0.017	0.022	0.075	0.086	0.01	0.05	0.035	0.018	0.03	0.108	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.46	0.87	0.95	0.76	1.95	1.49	1.40	2.16	1.01	1.52	1.28	1.58
Average Time Spent (s)	0.93	0.42	0.33	0.56	0.4	0.25	0.40	0.24	0.54	0.39	0.23	0.37
Fixations	76	16	5	97	9	2	108	4	11	123	9	1
Fixations Ratio (%)	0.73	0.4	0.13	0.42	0.2	0.07	0.23	0.07	0.2	0.17	0.23	0.03
Average Fixation Duration (s)	0.26	0.3	0.27	0.28	0.28	0.25	0.27	0.11	0.33	0.24	0.18	0.37
Average First Fixation Duration (s)	0.27	0.31	0.24	0.27	0.28	0.25	0.27	0.09	0.3	0.22	0.18	0.37
K-coefficient	-0.18	-0.24	0.86	0.15	-1.18	0.57	-0.15	0.56	0.37	0.26	-0.55	-1.63
Average Time to First Gaze (s)	0.48	0.75	1.23	0.82	1.1	0.72	0.88	1.24	0.82	0.98	1.33	1.38
Average Gaze Time Spent (s)	0.93	0.24	0.21	0.46	0.38	0.11	0.32	0.15	0.31	0.26	0.22	0.12
Gazes	1051	186	84	1321	129	30	1480	34	145	1659	74	12
Gazes Ratio (%)	0.83	0.6	0.3	0.58	0.27	0.2	0.35	0.17	0.37	0.30	0.27	0.07
Avg. Revisits	0.8	0.14	0	0.31	0.08	0	0.13	0.05	0.18	0.12	0.07	0
AOI Size (%)	0.185	0.017	0.022	0.075	0.086	0.01	0.05	0.035	0.018	0.03	0.108	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 14

Survey A

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.65	0.77	0.31	0.58	1.06	0.85	0.83	2.37	0.66	1.29	1.15	N/A
Average Time Spent (s)	0.85	0.44	0.6	0.63	0.47	0.21	0.44	0.3	0.43	0.39	0.44	0
Fixations	39	18	5	62	11	3	76	2	15	93	6	0
Fixations Ratio (%)	0.6	0.55	0.1	0.42	0.3	0.15	0.29	0.1	0.45	0.28	0.15	0
Average Fixation Duration (s)	0.27	0.26	0.23	0.25	0.28	0.21	0.25	0.3	0.25	0.27	0.2	N/A
Average First Fixation Duration (s)	0.28	0.26	0.26	0.27	0.28	0.21	0.25	0.3	0.26	0.27	0.25	N/A
K-coefficient	0.6	0.1	-0.25	0.15	0.66	-0.42	0.13	0.68	0.25	0.35	-0.71	N/A
Average Time to First Gaze (s)	0.48	0.66	1.08	0.74	0.91	1.25	0.97	2.62	1.15	1.58	1.08	2.06
Average Gaze Time Spent (s)	0.97	0.38	0.32	0.56	0.31	0.08	0.32	0.15	0.28	0.25	0.33	0.05
Gazes	508	240	73	821	116	25	962	19	180	1161	85	2
Gazes Ratio (%)	0.6	0.75	0.25	0.53	0.45	0.35	0.44	0.15	0.75	0.45	0.3	0.05
Avg. Revisits	0.26	0.25	0.18	0.23	0.11	0	0.11	0	0.2	0.10	0.13	0
AOI Size (%)	0.185	0.017	0.022	0.075	0.086	0.01	0.05	0.035	0.018	0.03	0.108	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.84	1	2.22	1.35	1.41	1.84	1.63	1.39	0.84	1.12	1.67	N/A
Average Time Spent (s)	0.57	0.45	0.17	0.40	0.45	0.44	0.45	0.23	0.56	0.40	0.29	0
Fixations	30	14	5	49	5	5	10	5	16	21	4	0
Fixations Ratio (%)	0.65	0.4	0.25	0.43	0.15	0.2	0.18	0.25	0.45	0.35	0.15	0
Average Fixation Duration (s)	0.27	0.25	0.17	0.23	0.27	0.34	0.31	0.23	0.29	0.26	0.21	N/A
Average First Fixation Duration (s)	0.29	0.27	0.17	0.24	0.32	0.34	0.33	0.23	0.3	0.27	0.2	N/A
K-coefficient	0.12	0.91	0.09	0.37	-0.18	-0.05	-0.12	-0.29	0.51	0.11	0.42	N/A
Average Time to First Gaze (s)	0.56	0.54	1.55	0.88	1.29	2.07	1.68	1.64	0.97	1.31	1.68	N/A
Average Gaze Time Spent (s)	0.63	0.31	0.13	0.36	0.18	0.16	0.17	0.22	0.32	0.27	0.33	0
Gazes	424	207	61	692	79	68	147	81	246	327	43	0
Gazes Ratio (%)	0.75	0.75	0.5	0.67	0.5	0.45	0.48	0.4	0.85	0.63	0.15	0
Avg. Revisits	0.3	0.1	0	0.13	0	0	0.00	0	0.1	0.05	0	0
AOI Size (%)	0.185	0.017	0.022	0.075	0.086	0.01	0.05	0.035	0.018	0.03	0.108	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 15: Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 13 (SALESFORCE)

Undergraduates

Photo 15

Survey A

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.98	1.97	1.48	1.16	2.88	2.02	1.08	0.89	N/A
Average Time Spent (s)	0.8	0.36	0.58	0.34	0.11	0.23	0.62	0.42	0
Fixations	52	7	59	9	1	10	41	6	0
Fixations Ratio (%)	0.63	0.17	0.40	0.3	0.03	0.17	0.63	0.13	0
Average Fixation Duration (s)	0.29	0.25	0.27	0.34	0.11	0.23	0.28	0.27	N/A
Average First Fixation Duration (s)	0.32	0.31	0.32	0.34	0.11	0.23	0.29	0.26	N/A
K-coefficient	0.31	1.2	0.76	0.36	1.88	1.12	-0.16	0.41	N/A
Average Time to First Gaze (s)	0.92	1.42	1.17	0.89	1.1	1.00	0.73	0.91	N/A
Average Gaze Time Spent (s)	0.78	0.22	0.50	0.12	0.13	0.13	0.41	0.38	0
Gazes	796	96	892	115	20	135	531	119	0
Gazes Ratio (%)	0.77	0.33	0.55	0.7	0.13	0.42	0.97	0.23	0
Avg. Revisits	0.33	0.04	0.19	0	0	0.00	0.5	0.08	0
AOI Size (%)	0.118	0.016	0.07	0.015	0.005	0.01	0.078	0.108	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.78	1.41	1.10	1.4	0.63	1.02	0.8	1.22	N/A
Average Time Spent (s)	1.08	0.36	0.72	0.34	0.24	0.29	0.6	0.31	0
Fixations	59	3	62	13	1	14	55	4	0
Fixations Ratio (%)	0.57	0.07	0.32	0.3	0.03	0.17	0.87	0.1	0
Average Fixation Duration (s)	0.3	0.23	0.27	0.22	0.24	0.23	0.26	0.23	N/A
Average First Fixation Duration (s)	0.35	0.3	0.33	0.23	0.24	0.24	0.28	0.23	N/A
K-coefficient	0.4	1.53	0.97	-0.19	1.01	0.41	0.23	-0.63	N/A
Average Time to First Gaze (s)	0.61	1.88	1.25	1.14	1.32	1.23	0.46	1.35	N/A
Average Gaze Time Spent (s)	1.02	0.11	0.57	0.13	0.08	0.11	0.62	0.28	0
Gazes	937	67	1004	100	15	115	783	56	0
Gazes Ratio (%)	0.7	0.43	0.57	0.6	0.17	0.39	0.93	0.17	0
Avg. Revisits	0.29	0.04	0.17	0.1	0	0.05	0.47	0	0
AOI Size (%)	0.118	0.016	0.07	0.015	0.005	0.01	0.078	0.108	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 15

Survey A

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.78	2.17	1.48	1.8	N/A	1.80	0.54	0.63	N/A
Average Time Spent (s)	0.89	0.34	0.62	0.34	0	0.17	0.92	0.41	0
Fixations	46	1	47	4	0	4	38	2	0
Fixations Ratio (%)	0.75	0.05	0.40	0.15	0	0.08	0.6	0.05	0
Average Fixation Duration (s)	0.27	0.34	0.31	0.25	N/A	0.25	0.28	0.21	N/A
Average First Fixation Duration (s)	0.26	0.34	0.30	0.21	N/A	0.21	0.29	0.15	N/A
K-coefficient	0.11	-0.22	-0.06	-0.47	N/A	-0.47	0.48	-1.04	N/A
Average Time to First Gaze (s)	0.7	1.85	1.28	1.56	1.69	1.63	0.46	0.54	N/A
Average Gaze Time Spent (s)	0.82	0.15	0.49	0.17	0.06	0.12	0.72	0.17	0
Gazes	702	27	729	60	7	67	533	15	0
Gazes Ratio (%)	0.95	0.2	0.58	0.4	0.15	0.28	0.85	0.1	0
Avg. Revisits	0.47	0	0.24	0.06	0	0.03	0.8	0.14	0
AOI Size (%)	0.118	0.016	0.07	0.015	0.005	0.01	0.078	0.108	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.75	0.45	0.60	1.3	2.86	2.08	0.91	1.72	N/A
Average Time Spent (s)	1.02	0.41	0.72	0.33	0.15	0.24	0.83	0.38	0
Fixations	33	5	38	6	1	7	31	9	0
Fixations Ratio (%)	0.5	0.15	0.33	0.25	0.05	0.15	0.55	0.3	0
Average Fixation Duration (s)	0.3	0.22	0.26	0.31	0.15	0.23	0.28	0.24	N/A
Average First Fixation Duration (s)	0.29	0.24	0.27	0.31	0.15	0.23	0.32	0.28	N/A
K-coefficient	0.45	-0.17	0.14	0.29	-2.27	-0.99	0.27	0.14	N/A
Average Time to First Gaze (s)	0.69	1.06	0.88	1.09	2.89	1.99	0.59	1.27	N/A
Average Gaze Time Spent (s)	0.79	0.26	0.53	0.12	0.15	0.14	0.58	0.3	0
Gazes	504	73	577	72	6	78	433	107	0
Gazes Ratio (%)	0.7	0.3	0.50	0.65	0.05	0.35	0.85	0.4	0
Avg. Revisits	0.4	0.07	0.24	0.07	0	0.04	0.58	0	0
AOI Size (%)	0.118	0.016	0.07	0.015	0.005	0.01	0.078	0.108	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 16: Formula 1 Grand Prix De Monaco 2023 - Tunnel (HEINEKEN)

Undergraduates

Photo 16

Survey A

	Virtual Ad	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.53	1.22	0.94	1.39	1.17	1.5	N/A
Average Time Spent (s)	0.97	0.62	0.7	0.35	0.53	0.47	0
Fixations	86	25	31	10	41	13	0
Fixations Ratio (%)	0.9	0.47	0.43	0.3	0.37	0.2	0
Average Fixation Duration (s)	0.29	0.36	0.29	0.32	0.31	0.23	N/A
Average First Fixation Duration (s)	0.3	0.36	0.27	0.33	0.30	0.27	N/A
K-coefficient	0.43	0.59	0.53	-0.01	0.26	0.12	N/A
Average Time to First Gaze (s)	0.5	0.95	1.01	1.13	1.07	1.47	N/A
Average Gaze Time Spent (s)	0.94	0.41	0.51	0.18	0.35	0.36	0
Gazes	1245	426	476	139	615	157	0
Gazes Ratio (%)	1	0.77	0.7	0.57	0.64	0.33	0
Avg. Revisits	0.73	0.2	0.3	0	0.15	0.19	0
AOI Size (%)	0.103	0.04	0.038	0.013	0.03	0.108	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.44	1	0.98	1.28	1.13	1.21	N/A
Average Time Spent (s)	0.78	0.54	0.61	0.38	0.50	0.29	0
Fixations	73	31	28	9	37	7	0
Fixations Ratio (%)	0.8	0.57	0.43	0.23	0.33	0.2	0
Average Fixation Duration (s)	0.25	0.29	0.29	0.28	0.29	0.23	N/A
Average First Fixation Duration (s)	0.28	0.31	0.28	0.28	0.28	0.24	N/A
K-coefficient	0.24	0.41	0.27	0.76	0.52	-0.41	N/A
Average Time to First Gaze (s)	0.36	0.87	0.86	1.06	0.96	1.4	N/A
Average Gaze Time Spent (s)	0.89	0.43	0.54	0.21	0.38	0.23	0
Gazes	1081	420	408	122	530	102	0
Gazes Ratio (%)	0.9	0.73	0.57	0.47	0.52	0.33	0
Avg. Revisits	0.6	0.27	0.24	0.07	0.16	0	0
AOI Size (%)	0.103	0.04	0.038	0.013	0.03	0.108	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 16

Survey A

	Virtual Ad	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.7	1.24	1.14	1.39	1.27	1.63	N/A
Average Time Spent (s)	0.92	0.32	0.6	0.33	0.47	0.52	0
Fixations	47	12	27	8	35	12	0
Fixations Ratio (%)	0.7	0.45	0.6	0.35	0.48	0.25	0
Average Fixation Duration (s)	0.26	0.24	0.25	0.29	0.27	0.21	N/A
Average First Fixation Duration (s)	0.27	0.23	0.3	0.3	0.30	0.28	N/A
K-coefficient	0.43	1.2	0.48	0.97	0.73	0.57	N/A
Average Time to First Gaze (s)	0.51	0.96	0.87	0.9	0.89	1.58	N/A
Average Gaze Time Spent (s)	0.91	0.23	0.6	0.25	0.43	0.36	0
Gazes	646	161	362	106	468	126	0
Gazes Ratio (%)	0.8	0.8	0.7	0.5	0.60	0.4	0
Avg. Revisits	0.75	0.15	0.5	0.06	0.28	0.26	0
AOI Size (%)	0.103	0.04	0.038	0.013	0.03	0.108	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.68	1.04	1.2	1.9	1.55	0.85	N/A
Average Time Spent (s)	0.75	0.41	0.5	0.36	0.43	0.68	0
Fixations	34	16	28	9	37	13	0
Fixations Ratio (%)	0.65	0.45	0.7	0.3	0.50	0.3	0
Average Fixation Duration (s)	0.29	0.22	0.25	0.22	0.24	0.31	N/A
Average First Fixation Duration (s)	0.27	0.21	0.24	0.25	0.25	0.33	N/A
K-coefficient	0.61	0.18	0.33	1.1	0.72	-0.36	N/A
Average Time to First Gaze (s)	0.59	0.83	0.99	1.46	1.23	0.54	2.73
Average Gaze Time Spent (s)	0.66	0.31	0.46	0.28	0.37	0.59	0.03
Gazes	478	204	332	125	457	180	2
Gazes Ratio (%)	0.8	0.75	0.8	0.5	0.65	0.35	0.05
Avg. Revisits	0.35	0.39	0.35	0.1	0.23	0.07	0
AOI Size (%)	0.103	0.04	0.038	0.013	0.03	0.108	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 17: Formula 1 Rolex Grande Prêmio De São Paulo 2023 - Turn 10 (SALESFORCE)

Undergraduates

Photo 17

Survey A

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.6	1.69	1.15	1.24	0.93	1.12	N/A
Average Time Spent (s)	0.89	0.4	0.65	0.37	0.68	0.31	0
Fixations	72	16	88	11	65	7	0
Fixations Ratio (%)	0.77	0.4	0.59	0.3	0.9	0.2	0
Average Fixation Duration (s)	0.31	0.28	0.30	0.31	0.29	0.25	N/A
Average First Fixation Duration (s)	0.33	0.29	0.31	0.32	0.3	0.26	N/A
K-coefficient	0.19	0.44	0.32	0.29	0.32	-0.45	N/A
Average Time to First Gaze (s)	0.57	1.64	1.11	1.37	0.44	1.02	N/A
Average Gaze Time Spent (s)	0.8	0.25	0.53	0.17	0.71	0.2	0
Gazes	934	165	1099	131	881	83	0
Gazes Ratio (%)	0.87	0.5	0.69	0.57	0.93	0.33	0
Avg. Revisits	0.8	0.1	0.45	0.04	1.07	0	0
AOI Size (%)	0.094	0.027	0.0605	0.019	0.089	0.107	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.82	1.71	1.27	1.16	0.97	0.51	N/A
Average Time Spent (s)	0.56	0.41	0.49	0.42	0.57	0.49	0
Fixations	44	11	55	8	45	11	0
Fixations Ratio (%)	0.7	0.27	0.49	0.2	0.7	0.2	0
Average Fixation Duration (s)	0.26	0.3	0.28	0.3	0.27	0.29	N/A
Average First Fixation Duration (s)	0.27	0.31	0.29	0.32	0.25	0.24	N/A
K-coefficient	0.28	0.68	0.48	0.34	0.28	0.22	N/A
Average Time to First Gaze (s)	0.87	1.32	1.10	1.19	0.55	1.16	N/A
Average Gaze Time Spent (s)	0.58	0.21	0.40	0.16	0.54	0.29	0
Gazes	618	152	770	141	661	148	0
Gazes Ratio (%)	0.8	0.53	0.67	0.63	0.9	0.4	0
Avg. Revisits	0.43	0.08	0.26	0.07	0.57	0.27	0
AOI Size (%)	0.094	0.027	0.0605	0.019	0.089	0.107	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 17

Survey A

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.83	1.91	1.37	1.56	0.9	0.6	1.59
Average Time Spent (s)	0.8	0.26	0.53	0.38	0.77	0.64	0.16
Fixations	42	6	48	4	35	4	1
Fixations Ratio (%)	0.75	0.25	0.50	0.15	0.7	0.1	0.05
Average Fixation Duration (s)	0.27	0.21	0.24	0.29	0.28	0.28	0.16
Average First Fixation Duration (s)	0.28	0.19	0.24	0.34	0.29	0.28	0.16
K-coefficient	0.06	-0.11	-0.03	0.34	0.31	0.45	2.16
Average Time to First Gaze (s)	0.79	1.62	1.21	1.89	0.46	1.24	1.58
Average Gaze Time Spent (s)	0.74	0.14	0.44	0.05	0.59	0.27	0.19
Gazes	621	58	679	21	489	73	7
Gazes Ratio (%)	0.95	0.5	0.73	0.55	0.95	0.3	0.05
Avg. Revisits	0.75	0.05	0.40	0.05	0.75	0	0
AOI Size (%)	0.094	0.027	0.0605	0.019	0.089	0.107	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Non-Virtual Ad	Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.47	1.99	1.23	1.45	0.7	1.35	1.26
Average Time Spent (s)	0.72	0.29	0.51	0.3	0.65	0.32	0.28
Fixations	43	6	49	2	33	4	3
Fixations Ratio (%)	0.85	0.25	0.55	0.1	0.7	0.15	0.1
Average Fixation Duration (s)	0.28	0.23	0.26	0.3	0.25	0.21	0.17
Average First Fixation Duration (s)	0.3	0.24	0.27	0.3	0.25	0.22	0.16
K-coefficient	0.27	-0.12	0.08	-0.42	0.29	-0.6	-0.26
Average Time to First Gaze (s)	0.47	1.44	0.96	1.66	0.54	1.5	1.32
Average Gaze Time Spent (s)	0.71	0.17	0.44	0.14	0.67	0.24	0.13
Gazes	600	75	675	49	554	43	11
Gazes Ratio (%)	0.95	0.5	0.73	0.4	0.95	0.2	0.1
Avg. Revisits	0.8	0.05	0.43	0	0.55	0	0.06
AOI Size (%)	0.094	0.027	0.0605	0.019	0.089	0.107	0.007
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 18: Formula 1 Singapore Airlines Singapore Grand Prix 2023- Turn 18 (LIQUI MOLY)

Undergraduates

Photo 18

Survey A

	Virtual Ad	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Race Info Graphic	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.64	0.8	0.9	1.49	1.20	1.39	1.43	N/A
Average Time Spent (s)	0.77	0.85	0.59	0.53	0.56	0.78	0.33	0
Fixations	69	68	27	8	35	29	13	0
Fixations Ratio (%)	0.8	0.8	0.43	0.17	0.30	0.43	0.33	0
Average Fixation Duration (s)	0.28	0.3	0.28	0.33	0.31	0.36	0.26	N/A
Average First Fixation Duration (s)	0.3	0.31	0.31	0.35	0.33	0.39	0.26	N/A
K-coefficient	-0.02	0.33	0.3	0.9	0.60	0.55	0.52	N/A
Average Time to First Gaze (s)	0.32	0.46	0.87	1.59	1.23	1.51	1.49	N/A
Average Gaze Time Spent (s)	0.9	0.76	0.45	0.21	0.33	0.59	0.34	0
Gazes	993	942	406	147	553	421	156	0
Gazes Ratio (%)	0.83	0.93	0.67	0.53	0.60	0.53	0.37	0
Avg. Revisits	0.7	0.9	0.17	0.14	0.16	0.24	0.07	0
AOI Size (%)	0.226	0.078	0.043	0.02	0.032	0.032	0.109	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Race Info Graphic	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.56	1.02	0.5	2.6	1.55	1.21	1.7	N/A
Average Time Spent (s)	0.87	0.45	0.49	0.16	0.33	0.49	0.23	0
Fixations	63	28	18	2	20	12	4	0
Fixations Ratio (%)	0.67	0.6	0.33	0.07	0.20	0.27	0.13	0
Average Fixation Duration (s)	0.27	0.29	0.26	0.16	0.21	0.34	0.23	N/A
Average First Fixation Duration (s)	0.25	0.31	0.25	0.16	0.21	0.36	0.23	N/A
K-coefficient	0.11	0.18	0.58	-0.15	0.22	-0.24	-0.34	N/A
Average Time to First Gaze (s)	0.71	0.73	0.81	1.26	1.04	1.2	1.49	2.34
Average Gaze Time Spent (s)	0.82	0.43	0.38	0.09	0.24	0.34	0.18	0.05
Gazes	941	458	271	49	320	181	67	5
Gazes Ratio (%)	0.87	0.83	0.53	0.43	0.48	0.4	0.3	0.1
Avg. Revisits	0.57	0.25	0.13	0	0.07	0.03	0	0
AOI Size (%)	0.226	0.078	0.043	0.02	0.032	0.032	0.109	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 18

Survey A

	Virtual Ad	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Race Info Graphic	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.58	0.95	1.1	1.67	1.39	1.4	2.47	N/A
Average Time Spent (s)	0.65	0.76	0.59	0.3	0.45	0.73	0.29	0
Fixations	36	42	25	7	32	16	2	0
Fixations Ratio (%)	0.7	0.8	0.6	0.25	0.43	0.3	0.1	0
Average Fixation Duration (s)	0.26	0.29	0.28	0.16	0.22	0.26	0.29	N/A
Average First Fixation Duration (s)	0.29	0.28	0.29	0.17	0.23	0.26	0.29	N/A
K-coefficient	0.06	0.57	0.46	0.06	0.26	0.73	1.12	N/A
Average Time to First Gaze (s)	0.65	0.68	1.1	1.08	1.09	1.19	1.34	N/A
Average Gaze Time Spent (s)	0.65	0.65	0.49	0.26	0.38	0.58	0.21	0
Gazes	453	583	357	106	463	214	54	0
Gazes Ratio (%)	0.8	1	0.8	0.5	0.65	0.4	0.3	0
Avg. Revisits	0.55	1	0.45	0.07	0.26	0.27	0	0
AOI Size (%)	0.226	0.078	0.043	0.02	0.032	0.032	0.109	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad	Non-Virtual Ad	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Race Info Graphic	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.36	0.96	1.25	1.51	1.38	1.56	1.75	N/A
Average Time Spent (s)	0.8	0.61	0.48	0.22	0.35	0.53	0.59	0
Fixations	49	31	23	6	29	15	5	0
Fixations Ratio (%)	0.75	0.65	0.7	0.3	0.50	0.4	0.15	0
Average Fixation Duration (s)	0.27	0.24	0.29	0.22	0.26	0.29	0.36	N/A
Average First Fixation Duration (s)	0.26	0.24	0.28	0.22	0.25	0.31	0.39	N/A
K-coefficient	-0.16	0.56	0.74	-0.01	0.37	0.77	0.88	N/A
Average Time to First Gaze (s)	0.42	0.79	1.14	1.31	1.23	1.42	1.82	2.49
Average Gaze Time Spent (s)	0.77	0.51	0.48	0.2	0.34	0.36	0.31	0.04
Gazes	609	452	308	82	390	195	83	2
Gazes Ratio (%)	0.9	1	0.7	0.45	0.58	0.6	0.3	0.05
Avg. Revisits	0.7	0.45	0.35	0	0.18	0.2	0	0
AOI Size (%)	0.226	0.078	0.043	0.02	0.032	0.032	0.109	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 19: Formula 1 Singapore Airlines Singapore Grand Prix 2023- Turn 18 (LIQUI MOLY)

Undergraduates

Photo 19

Survey A

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	N/A	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.06	1.35	1.21	N/A	1.8	1.89	1.85	0.87	0.15	0.51	1.23	N/A
Average Time Spent (s)	0.36	0.26	0.31	N/A	0.33	0.31	0.32	0.32	0.11	0.22	0.38	0
Fixations	10	4	14	N/A	3	10	13	3	1	4	14	0
Fixations Ratio (%)	0.27	0.13	0.20	N/A	0.1	0.27	0.19	0.1	0.03	0.07	0.3	0
Average Fixation Duration (s)	0.28	0.26	0.27	N/A	0.33	0.26	0.30	0.32	0.11	0.22	0.23	N/A
Average First Fixation Duration (s)	0.29	0.26	0.28	N/A	0.33	0.26	0.30	0.32	0.11	0.22	0.22	N/A
K-coefficient	0.75	0.35	0.55	N/A	0.78	0.63	0.71	0.42	-2.33	-0.96	0.5	N/A
Average Time to First Gaze (s)	1.24	1.39	1.32	N/A	2.39	1.92	2.16	1.54	1.09	1.32	1.54	N/A
Average Gaze Time Spent (s)	0.15	0.12	0.14	N/A	0.09	0.18	0.14	0.08	0.11	0.10	0.33	0
Gazes	117	67	184	N/A	30	119	149	25	46	71	162	0
Gazes Ratio (%)	0.57	0.43	0.50	N/A	0.27	0.5	0.39	0.23	0.3	0.27	0.37	0
Avg. Revisits	0.03	0	0.02	N/A	0	0.04	0.02	0	0	0.00	0.14	0
AOI Size (%)	0.018	0.007	0.013	N/A	0.004	0.012	0.008	0.001	0.002	0.002	0.109	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	N/A	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Personalized Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.07	0.88	0.98	1.1	1.27	1.02	1.15	0.46	0.94	0.70	1.74	N/A
Average Time Spent (s)	0.45	0.39	0.42	0.46	0.2	0.25	0.23	0.78	0.25	0.52	0.47	0
Fixations	14	1	15	6	3	5	8	2	2	4	12	0
Fixations Ratio (%)	0.3	0.03	0.17	0.13	0.1	0.13	0.12	0.03	0.07	0.05	0.23	0
Average Fixation Duration (s)	0.27	0.39	0.33	0.29	0.2	0.19	0.20	0.39	0.25	0.32	0.26	N/A
Average First Fixation Duration (s)	0.26	0.39	0.33	0.26	0.2	0.19	0.20	0.39	0.25	0.32	0.3	N/A
K-coefficient	-0.06	-0.14	-0.10	-0.43	0.65	0.25	0.45	-0.03	0.08	0.03	0.28	N/A
Average Time to First Gaze (s)	0.71	1.54	1.13	0.87	1.57	1.18	1.38	1.5	1.05	1.28	1.08	1.19
Average Gaze Time Spent (s)	0.43	0.17	0.30	0.28	0.08	0.12	0.10	0.1	0.1	0.10	0.33	0.15
Gazes	208	48	256	123	28	73	101	10	26	36	146	13
Gazes Ratio (%)	0.37	0.2	0.29	0.33	0.27	0.47	0.37	0.07	0.2	0.14	0.33	0.07
Avg. Revisits	0.07	0	0.04	0.05	0	0	0.00	0.1	0	0.05	0.07	0
AOI Size (%)	0.018	0.007	0.013	0.01	0.004	0.012	0.008	0.001	0.002	0.002	0.109	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 19

Survey A

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	N/A	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	0.93	N/A	0.93	N/A	2.76	1.55	2.16	0.19	0.68	0.44	1.15	N/A
Average Time Spent (s)	0.26	0	0.13	N/A	0.1	0.27	0.19	0.39	0.42	0.41	0.34	0
Fixations	5	0	5	N/A	1	4	5	1	6	7	9	0
Fixations Ratio (%)	0.25	0	0.13	N/A	0.05	0.2	0.13	0.05	0.25	0.15	0.35	0
Average Fixation Duration (s)	0.26	N/A	0.26	N/A	0.1	0.27	0.19	0.39	0.36	0.38	0.24	N/A
Average First Fixation Duration (s)	0.26	N/A	0.26	N/A	0.1	0.27	0.19	0.39	0.37	0.38	0.24	N/A
K-coefficient	-0.38	N/A	-0.38	N/A	-2.55	0.44	-1.06	0.64	0.44	0.54	-0.75	N/A
Average Time to First Gaze (s)	0.85	0.94	0.90	N/A	1.78	1.56	1.67	0.63	0.71	0.67	1.26	N/A
Average Gaze Time Spent (s)	0.2	0.05	0.13	N/A	0.07	0.09	0.08	0.09	0.14	0.12	0.33	0
Gazes	97	8	105	N/A	18	39	57	12	49	61	140	0
Gazes Ratio (%)	0.55	0.2	0.38	N/A	0.35	0.5	0.43	0.15	0.4	0.28	0.45	0
Avg. Revisits	0	0	0.00	N/A	0	0	0.00	0	0.05	0.03	0.06	0
AOI Size (%)	0.018	0.007	0.013	N/A	0.004	0.012	0.008	0.001	0.002	0.002	0.109	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	N/A	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Cumulative Virtual	Personalized Virtual Ad	Non-Virtual Ad 1	Non-Virtual Ad 2	Cumulative Non-Virtual	Racing Cars 1	Racing Cars 2	Cumulative Racing Cars	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.81	1.42	1.62	0.94	0.57	0.57	0.57	0.82	0.14	0.48	1.29	N/A
Average Time Spent (s)	0.62	0.36	0.49	1.15	0.14	0.21	0.18	0.11	0.23	0.17	0.69	0
Fixations	9	3	12	3	1	4	5	1	1	2	6	0
Fixations Ratio (%)	0.25	0.1	0.18	0.05	0.05	0.15	0.10	0.05	0.05	0.05	0.15	0
Average Fixation Duration (s)	0.31	0.27	0.29	0.38	0.14	0.16	0.15	0.11	0.23	0.17	0.37	N/A
Average First Fixation Duration (s)	0.31	0.26	0.29	0.38	0.14	0.16	0.15	0.11	0.23	0.17	0.33	N/A
K-coefficient	0.45	-0.2	0.13	1.09	-0.46	0.75	0.15	-0.8	0.5	-0.15	-0.4	N/A
Average Time to First Gaze (s)	1.28	0.78	1.03	1.2	1.89	1.24	1.57	0.58	1.3	0.94	0.99	2.35
Average Gaze Time Spent (s)	0.31	0.1	0.21	0.21	0.11	0.15	0.13	0.05	0.11	0.08	0.5	0.02
Gazes	136	25	161	73	16	50	66	8	29	37	93	1
Gazes Ratio (%)	0.5	0.3	0.40	0.4	0.15	0.35	0.25	0.2	0.3	0.25	0.2	0.05
Avg. Revisits	0.11	0.11	0.11	0.08	0	0.05	0.03	0	0	0.00	0.05	0
AOI Size (%)	0.018	0.007	0.013	0.01	0.004	0.012	0.008	0.001	0.002	0.002	0.109	0.005
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Photo 20: Formula 1 Etihad Airways Abu Dhabi Grand Prix 2023 - Before Turn 8 (LIQUI MOLY)

Undergraduates

Photo 20

Survey A

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Race Info Graphic	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.2	2.24	1.81	1.75	1.38	1.34	1.08	1.27	1.79	1.17	1.23	N/A
Average Time Spent (s)	0.41	0.28	0.45	0.38	0.13	0.23	0.31	0.22	0.44	0.43	0.47	0
Fixations	4	3	5	12	2	5	3	10	13	19	8	0
Fixations Ratio (%)	0.1	0.1	0.1	0.10	0.07	0.17	0.1	0.11	0.23	0.37	0.13	0
Average Fixation Duration (s)	0.29	0.28	0.24	0.27	0.13	0.23	0.31	0.22	0.21	0.24	0.25	N/A
Average First Fixation Duration (s)	0.31	0.28	0.2	0.26	0.13	0.23	0.31	0.22	0.26	0.25	0.31	N/A
K-coefficient	1.59	0.1	0.92	0.87	-0.71	-0.41	0.55	-0.19	0.02	0.57	0.01	N/A
Average Time to First Gaze (s)	1.34	1.5	1.71	1.52	1.25	1.16	2.02	1.48	1.25	1.17	1.57	2.19
Average Gaze Time Spent (s)	0.18	0.19	0.31	0.23	0.08	0.15	0.07	0.10	0.21	0.36	0.32	0.16
Gazes	68	65	66	199	32	81	12	125	191	243	107	16
Gazes Ratio (%)	0.27	0.27	0.17	0.24	0.3	0.4	0.17	0.29	0.67	0.5	0.27	0.07
Avg. Revisits	0	0	0	0.00	0	0	0	0.00	0.1	0.1	0	0
AOI Size (%)	0.012	0.003	0.028	0.014	0.008	0.023	0.002	0.011	0.014	0.041	0.113	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Race Info Graphic	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.27	1.35	0.92	1.18	2.26	1.73	0.04	1.34	1.65	1	0.6	N/A
Average Time Spent (s)	0.22	0.38	0.41	0.34	0.22	0.46	0.4	0.36	0.33	0.57	0.17	0
Fixations	5	3	5	13	3	6	1	10	4	15	5	0
Fixations Ratio (%)	0.13	0.1	0.13	0.12	0.1	0.13	0.03	0.09	0.13	0.27	0.13	0
Average Fixation Duration (s)	0.2	0.38	0.31	0.30	0.22	0.31	0.4	0.31	0.33	0.28	0.13	N/A
Average First Fixation Duration (s)	0.2	0.38	0.31	0.30	0.22	0.27	0.4	0.30	0.33	0.3	0.11	N/A
K-coefficient	0.14	1.7	0.21	0.68	0.35	-0.88	0.09	-0.15	0.61	0.44	0.19	N/A
Average Time to First Gaze (s)	1.68	0.85	1.71	1.41	1.58	1.37	1.06	1.34	0.96	0.65	1.13	1.98
Average Gaze Time Spent (s)	0.13	0.08	0.18	0.13	0.11	0.17	0.12	0.13	0.16	0.38	0.14	0.02
Gazes	39	18	69	126	25	50	50	125	90	199	49	1
Gazes Ratio (%)	0.23	0.2	0.3	0.24	0.17	0.23	0.3	0.23	0.43	0.4	0.3	0.03
Avg. Revisits	0.03	0	0	0.01	0	0.04	0	0.01	0	0.13	0	0
AOI Size (%)	0.012	0.003	0.028	0.014	0.008	0.023	0.002	0.011	0.014	0.041	0.113	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Postgraduates

Photo 20

Survey A

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Race Info Graphic	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	2.26	1.56	1.04	1.62	0.63	1.33	N/A	0.98	1.46	0.35	0.73	N/A
Average Time Spent (s)	0.34	0.31	0.28	0.31	0.39	0.51	0	0.30	0.44	0.36	0.32	0
Fixations	1	2	6	9	1	8	0	9	17	5	3	0
Fixations Ratio (%)	0.05	0.1	0.2	0.12	0.05	0.25	0	0.10	0.5	0.15	0.15	0
Average Fixation Duration (s)	0.34	0.31	0.18	0.28	0.39	0.31	N/A	0.35	0.24	0.21	0.32	N/A
Average First Fixation Duration (s)	0.34	0.31	0.21	0.29	0.39	0.33	N/A	0.36	0.25	0.23	0.32	N/A
K-coefficient	-0.1	1.41	0.56	0.62	0.93	-0.06	N/A	0.44	0.18	-0.25	0.34	N/A
Average Time to First Gaze (s)	1.49	1.63	0.53	1.22	1.09	0.97	1.11	1.06	0.99	0.8	1.02	0.17
Average Gaze Time Spent (s)	0.16	0.07	0.25	0.16	0.04	0.2	0.08	0.11	0.35	0.14	0.23	0.03
Gazes	25	21	75	121	7	90	17	114	214	69	48	1
Gazes Ratio (%)	0.2	0.3	0.35	0.28	0.2	0.5	0.25	0.32	0.75	0.55	0.25	0.05
Avg. Revisits	0	0	0.11	0.04	0	0.23	0	0.08	0.32	0.11	0	0
AOI Size (%)	0.012	0.003	0.028	0.014	0.008	0.023	0.002	0.011	0.014	0.041	0.113	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

Survey B

	Virtual Ad 1	Virtual Ad 2	Virtual Ad 3	Cumulative Virtual	Non-Virtual Ad 1	Non-Virtual Ad 2	Non-Virtual Ad 3	Cumulative Non-Virtual	Racing Cars	Race Info Graphic	Left Hand Side Standing	F1 TV Logo
Average Time To First Fixation (s)	1.68	N/A	1.62	1.65	2.13	1.92	1.92	1.99	1.57	1.4	0.91	0.89
Average Time Spent (s)	0.27	0	0.35	0.21	0.26	0.23	0.38	0.29	0.53	0.62	0.51	0.14
Fixations	4	0	5	9	3	6	1	10	16	15	6	1
Fixations Ratio (%)	0.15	0	0.25	0.13	0.15	0.3	0.05	0.17	0.45	0.35	0.15	0.05
Average Fixation Duration (s)	0.22	N/A	0.35	0.29	0.26	0.23	0.38	0.29	0.29	0.27	0.23	0.14
Average First Fixation Duration (s)	0.21	N/A	0.35	0.28	0.26	0.23	0.38	0.29	0.32	0.29	0.26	0.14
K-coefficient	-0.01	N/A	0.38	0.19	0.14	0.63	0.06	0.28	0.93	0.27	-0.21	0
Average Time to First Gaze (s)	1.5	1.2	1.63	1.44	1.24	1.75	1.31	1.43	1.29	1.13	0.77	0.87
Average Gaze Time Spent (s)	0.16	0.1	0.29	0.18	0.12	0.2	0.05	0.12	0.35	0.49	0.39	0.15
Gazes	36	32	87	155	33	88	13	134	202	219	69	5
Gazes Ratio (%)	0.25	0.35	0.35	0.32	0.3	0.5	0.3	0.37	0.65	0.5	0.2	0.05
Avg. Revisits	0.09	0	0	0.03	0	0	0	0.00	0.15	0.22	0.05	0
AOI Size (%)	0.012	0.003	0.028	0.014	0.008	0.023	0.002	0.011	0.014	0.041	0.113	0.006
AOI Time Range (s)	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s	0s – 3s

8.2 Appendix C

In this section, the analysis of survey responses using SPSS will be presented for each question.

Question 1 - List all the brands you recall seeing in the provided photos.

Frequency Analysis Per Brand

Q1_Rolex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	53	53	53	53
	No	47	47	47	100
	Total	100	100	100	

Q1_Heineken

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	55	55	55	55
	No	45	45	45	100
	Total	100	100	100	

Q1_DHL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	48	48	48	48
	No	52	52	52	100
	Total	100	100	100	

Q1_Qatar Airways

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	55	55	55	55
	No	45	45	45	100
	Total	100	100	100	

Q1_Salesforce

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	21	21	21	21
	No	79	79	79	100
	Total	100	100	100	

Q1_Aramco

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	14	14	14	14
	No	86	86	86	100
	Total	100	100	100	

Q1_Liqui Moly

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	18	18	18	18
	No	82	82	82	100
	Total	100	100	100	

Q1_Pirelli

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	20	20	20	20
	No	80	80	80	100
	Total	100	100	100	

Q1_Lenovo

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	37	37	37	37
	No	63	63	63	100
	Total	100	100	100	

Q1_MSC Cruises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	15	15	15	15
	No	85	85	85	100
	Total	100	100	100	

Q1_Paramount+

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	12	12	12
	No	88	88	88	100
	Total	100	100	100	

Q1_Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	13	13	13	13
	No	87	87	87	100
	Total	100	100	100	

Q1_Other Brand

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		87	87	87	87
	Amstel	1	1	1	88
	BMW	1	1	1	89
	British Airlines	1	1	1	90
	Emirates	1	1	1	91
	Henkel	1	1	1	92
	Microsoft	1	1	1	93
	Oracle,Google	1	1	1	94
	Red Bull	2	2	2	96
	Shell	1	1	1	97
	Shell, RayBan, BWT	1	1	1	98
	Singapore Airlines	2	2	2	100
	Total	100	100	100	

Question 1 - List all the brands you recall seeing in the provided photos.

Frequency Analysis Per Survey ID

Q1_Rolex

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	21	70	70	70
	No	9	30	30	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	13	65	65	65
	No	7	35	35	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	11	36.7	36.7	36.7
	No	19	63.3	63.3	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	8	40	40	40
	No	12	60	60	100
	Total	20	100	100	

Q1_LiQui Moly

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	6	20	20	20
	No	24	80	80	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	6	30	30	30
	No	14	70	70	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	3	10	10	10
	No	27	90	90	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	3	15	15	15
	No	17	85	85	100
	Total	20	100	100	

Q1_Qatar Airways

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	14	46.7	46.7	46.7
	No	16	53.3	53.3	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	13	65	65	65
	No	7	35	35	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	19	63.3	63.3	63.3
	No	11	36.7	36.7	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	9	45	45	45
	No	11	55	55	100
	Total	20	100	100	

Q1_Heineken

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	20	66.7	66.7	66.7
	No	10	33.3	33.3	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	13	65	65	65
	No	7	35	35	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	13	43.3	43.3	43.3
	No	17	56.7	56.7	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	9	45	45	45
	No	11	55	55	100
	Total	20	100	100	

Q1_Pirelli

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	9	30	30	30
	No	21	70	70	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	5	25	25	25
	No	15	75	75	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	3	10	10	10
	No	27	90	90	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	3	15	15	15
	No	17	85	85	100
	Total	20	100	100	

Q1_Salesforce

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	5	16.7	16.7	16.7
	No	25	83.3	83.3	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	6	30	30	30
	No	14	70	70	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	6	20	20	20
	No	24	80	80	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	4	20	20	20
	No	16	80	80	100
	Total	20	100	100	

Q1_DHL

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	9	30	30	30
	No	21	70	70	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	8	40	40	40
	No	12	60	60	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	18	60	60	60
	No	12	40	40	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	13	65	65	65
	No	7	35	35	100
	Total	20	100	100	

Q1_Lenovo

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	10	33.3	33.3	33.3
	No	20	66.7	66.7	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	9	45	45	45
	No	11	55	55	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	11	36.7	36.7	36.7
	No	19	63.3	63.3	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	7	35	35	35
	No	13	65	65	100
	Total	20	100	100	

Q1_Aramco

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	6	20	20	20
	No	24	80	80	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	3	15	15	15
	No	17	85	85	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	1	3.3	3.3	3.3
	No	29	96.7	96.7	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	4	20	20	20
	No	16	80	80	100
	Total	20	100	100	

Q1_MSC Cruises

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	2	6.7	6.7	6.7
	No	28	93.3	93.3	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	5	25	25	25
	No	15	75	75	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	4	13.3	13.3	13.3
	No	26	86.7	86.7	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	4	20	20	20
	No	16	80	80	100
	Total	20	100	100	

Q1_Other Brand

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid		27	90	90	90
		BMW	1	3.3	3.3	93.3
		Oracle,Google	1	3.3	3.3	96.7
		Red Bull	1	3.3	3.3	100
		Total	30	100	100	
A - Postgraduate	Valid		18	90	90	90
		Emirates	1	5	5	95
		Red Bull	1	5	5	100
		Total	20	100	100	
B - Undergraduate	Valid		26	86.7	86.7	86.7
		British Airlines	1	3.3	3.3	90
		Henkel	1	3.3	3.3	93.3
		Singapore Airlines	2	6.7	6.7	100
		Total	30	100	100	
B - Postgraduate	Valid		16	80	80	80
		Amstel	1	5	5	85
		Microsoft	1	5	5	90
		Shell	1	5	5	95
		Shell, RayBan, BWT	1	5	5	100
		Total	20	100	100	

Q1_Paramount+

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	4	13.3	13.3	13.3
	No	26	86.7	86.7	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	4	20	20	20
	No	16	80	80	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	3	10	10	10
	No	27	90	90	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	1	5	5	5
	No	19	95	95	100
	Total	20	100	100	

Q1_Other

Survey ID		Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid Yes	3	10	10	10
	No	27	90	90	100
	Total	30	100	100	
A - Postgraduate	Valid Yes	2	10	10	10
	No	18	90	90	100
	Total	20	100	100	
B - Undergraduate	Valid Yes	4	13.3	13.3	13.3
	No	26	86.7	86.7	100
	Total	30	100	100	
B - Postgraduate	Valid Yes	4	20	20	20
	No	16	80	80	100
	Total	20	100	100	

Question 1 - List all the brands you recall seeing in the provided photos.

Crosstabulation: Gender * Brand

Survey ID				Q1_Rolex		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	10	6	16
			% within Gender	62.50%	37.50%	100.00%
			% within Q1_Rolex	47.60%	66.70%	53.30%
			% of Total	33.30%	20.00%	53.30%
		Male	Count	11	3	14
			% within Gender	78.60%	21.40%	100.00%
			% within Q1_Rolex	52.40%	33.30%	46.70%
			% of Total	36.70%	10.00%	46.70%
	Total		Count	21	9	30
			% within Gender	70.00%	30.00%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
A - Postgraduate	Gender	Female	Count	5	3	8
			% within Gender	62.50%	37.50%	100.00%
			% within Q1_Rolex	38.50%	42.90%	40.00%
			% of Total	25.00%	15.00%	40.00%
		Male	Count	8	4	12
			% within Gender	66.70%	33.30%	100.00%
			% within Q1_Rolex	61.50%	57.10%	60.00%
			% of Total	40.00%	20.00%	60.00%
	Total		Count	13	7	20
			% within Gender	65.00%	35.00%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%
B - Undergraduate	Gender	Female	Count	7	14	21
			% within Gender	33.30%	66.70%	100.00%
			% within Q1_Rolex	63.60%	73.70%	70.00%
			% of Total	23.30%	46.70%	70.00%
		Male	Count	4	5	9
			% within Gender	44.40%	55.60%	100.00%
			% within Q1_Rolex	36.40%	26.30%	30.00%
			% of Total	13.30%	16.70%	30.00%
	Total		Count	11	19	30
			% within Gender	36.70%	63.30%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	36.70%	63.30%	100.00%
B - Postgraduate	Gender	Female	Count	5	6	11
			% within Gender	45.50%	54.50%	100.00%
			% within Q1_Rolex	62.50%	50.00%	55.00%
			% of Total	25.00%	30.00%	55.00%
		Male	Count	3	6	9
			% within Gender	33.30%	66.70%	100.00%
			% within Q1_Rolex	37.50%	50.00%	45.00%
			% of Total	15.00%	30.00%	45.00%
	Total		Count	8	12	20
			% within Gender	40.00%	60.00%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%

Survey ID				Q1_Heineken		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	10	6	16
			% within Gender	62.50%	37.50%	100.00%
			% within Q1_Heineken	50.00%	60.00%	53.30%
			% of Total	33.30%	20.00%	53.30%
		Male	Count	10	4	14
			% within Gender	71.40%	28.60%	100.00%
			% within Q1_Heineken	50.00%	40.00%	46.70%
			% of Total	33.30%	13.30%	46.70%
	Total		Count	20	10	30
			% within Gender	66.70%	33.30%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	66.70%	33.30%	100.00%
A - Postgraduate	Gender	Female	Count	3	5	8
			% within Gender	37.50%	62.50%	100.00%
			% within Q1_Heineken	23.10%	71.40%	40.00%
			% of Total	15.00%	25.00%	40.00%
		Male	Count	10	2	12
			% within Gender	83.30%	16.70%	100.00%
			% within Q1_Heineken	76.90%	28.60%	60.00%
			% of Total	50.00%	10.00%	60.00%
	Total		Count	13	7	20
			% within Gender	65.00%	35.00%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%
B - Undergraduate	Gender	Female	Count	10	11	21
			% within Gender	47.60%	52.40%	100.00%
			% within Q1_Heineken	76.90%	64.70%	70.00%
			% of Total	33.30%	36.70%	70.00%
		Male	Count	3	6	9
			% within Gender	33.30%	66.70%	100.00%
			% within Q1_Heineken	23.10%	35.30%	30.00%
			% of Total	10.00%	20.00%	30.00%
	Total		Count	13	17	30
			% within Gender	43.30%	56.70%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	43.30%	56.70%	100.00%
B - Postgraduate	Gender	Female	Count	4	7	11
			% within Gender	36.40%	63.60%	100.00%
			% within Q1_Heineken	44.40%	63.60%	55.00%
			% of Total	20.00%	35.00%	55.00%
		Male	Count	5	4	9
			% within Gender	55.60%	44.40%	100.00%
			% within Q1_Heineken	55.60%	36.40%	45.00%
			% of Total	25.00%	20.00%	45.00%
	Total		Count	9	11	20
			% within Gender	45.00%	55.00%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%

Survey ID				Q1_DHL		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	6	10	16
			% within Gender	37.50%	62.50%	100.00%
			% within Q1_DHL	66.70%	47.60%	53.30%
			% of Total	20.00%	33.30%	53.30%
		Male	Count	3	11	14
			% within Gender	21.40%	78.60%	100.00%
			% within Q1_DHL	33.30%	52.40%	46.70%
			% of Total	10.00%	36.70%	46.70%
	Total		Count	9	21	30
			% within Gender	30.00%	70.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
A - Postgraduate	Gender	Female	Count	1	7	8
			% within Gender	12.50%	87.50%	100.00%
			% within Q1_DHL	12.50%	58.30%	40.00%
			% of Total	5.00%	35.00%	40.00%
		Male	Count	7	5	12
			% within Gender	58.30%	41.70%	100.00%
			% within Q1_DHL	87.50%	41.70%	60.00%
			% of Total	35.00%	25.00%	60.00%
	Total		Count	8	12	20
			% within Gender	40.00%	60.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
B - Undergraduate	Gender	Female	Count	13	8	21
			% within Gender	61.90%	38.10%	100.00%
			% within Q1_DHL	72.20%	66.70%	70.00%
			% of Total	43.30%	26.70%	70.00%
		Male	Count	5	4	9
			% within Gender	55.60%	44.40%	100.00%
			% within Q1_DHL	27.80%	33.30%	30.00%
			% of Total	16.70%	13.30%	30.00%
	Total		Count	18	12	30
			% within Gender	60.00%	40.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	60.00%	40.00%	100.00%
B - Postgraduate	Gender	Female	Count	8	3	11
			% within Gender	72.70%	27.30%	100.00%
			% within Q1_DHL	61.50%	42.90%	55.00%
			% of Total	40.00%	15.00%	55.00%
		Male	Count	5	4	9
			% within Gender	55.60%	44.40%	100.00%
			% within Q1_DHL	38.50%	57.10%	45.00%
			% of Total	25.00%	20.00%	45.00%
	Total		Count	13	7	20
			% within Gender	65.00%	35.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%

Survey ID				Q1_Qatar Airways		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	11	5	16
			% within Gender	68.80%	31.30%	100.00%
			% within Q1_Qatar Airways	78.60%	31.30%	53.30%
			% of Total	36.70%	16.70%	53.30%
		Male	Count	3	11	14
			% within Gender	21.40%	78.60%	100.00%
			% within Q1_Qatar Airways	21.40%	68.80%	46.70%
			% of Total	10.00%	36.70%	46.70%
	Total		Count	14	16	30
			% within Gender	46.70%	53.30%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	46.70%	53.30%	100.00%
A - Postgraduate	Gender	Female	Count	3	5	8
			% within Gender	37.50%	62.50%	100.00%
			% within Q1_Qatar Airways	23.10%	71.40%	40.00%
			% of Total	15.00%	25.00%	40.00%
		Male	Count	10	2	12
			% within Gender	83.30%	16.70%	100.00%
			% within Q1_Qatar Airways	76.90%	28.60%	60.00%
			% of Total	50.00%	10.00%	60.00%
	Total		Count	13	7	20
			% within Gender	65.00%	35.00%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%
B - Undergraduate	Gender	Female	Count	15	6	21
			% within Gender	71.40%	28.60%	100.00%
			% within Q1_Qatar Airways	78.90%	54.50%	70.00%
			% of Total	50.00%	20.00%	70.00%
		Male	Count	4	5	9
			% within Gender	44.40%	55.60%	100.00%
			% within Q1_Qatar Airways	21.10%	45.50%	30.00%
			% of Total	13.30%	16.70%	30.00%
	Total		Count	19	11	30
			% within Gender	63.30%	36.70%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
B - Postgraduate	Gender	Female	Count	5	6	11
			% within Gender	45.50%	54.50%	100.00%
			% within Q1_Qatar Airways	55.60%	54.50%	55.00%
			% of Total	25.00%	30.00%	55.00%
		Male	Count	4	5	9
			% within Gender	44.40%	55.60%	100.00%
			% within Q1_Qatar Airways	44.40%	45.50%	45.00%
			% of Total	20.00%	25.00%	45.00%
	Total		Count	9	11	20
			% within Gender	45.00%	55.00%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%

Survey ID				Q1_Salesforce		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	4	12	16
			% within Gender	25.00%	75.00%	100.00%
			% within Q1_Salesforce	80.00%	48.00%	53.30%
			% of Total	13.30%	40.00%	53.30%
		Male	Count	1	13	14
			% within Gender	7.10%	92.90%	100.00%
			% within Q1_Salesforce	20.00%	52.00%	46.70%
			% of Total	3.30%	43.30%	46.70%
	Total		Count	5	25	30
			% within Gender	16.70%	83.30%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	16.70%	83.30%	100.00%
A - Postgraduate	Gender	Female	Count	2	6	8
			% within Gender	25.00%	75.00%	100.00%
			% within Q1_Salesforce	33.30%	42.90%	40.00%
			% of Total	10.00%	30.00%	40.00%
		Male	Count	4	8	12
			% within Gender	33.30%	66.70%	100.00%
			% within Q1_Salesforce	66.70%	57.10%	60.00%
			% of Total	20.00%	40.00%	60.00%
	Total		Count	6	14	20
			% within Gender	30.00%	70.00%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
B - Undergraduate	Gender	Female	Count	5	16	21
			% within Gender	23.80%	76.20%	100.00%
			% within Q1_Salesforce	83.30%	66.70%	70.00%
			% of Total	16.70%	53.30%	70.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q1_Salesforce	16.70%	33.30%	30.00%
			% of Total	3.30%	26.70%	30.00%
	Total		Count	6	24	30
			% within Gender	20.00%	80.00%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
B - Postgraduate	Gender	Female	Count	1	10	11
			% within Gender	9.10%	90.90%	100.00%
			% within Q1_Salesforce	25.00%	62.50%	55.00%
			% of Total	5.00%	50.00%	55.00%
		Male	Count	3	6	9
			% within Gender	33.30%	66.70%	100.00%
			% within Q1_Salesforce	75.00%	37.50%	45.00%
			% of Total	15.00%	30.00%	45.00%
	Total		Count	4	16	20
			% within Gender	20.00%	80.00%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%

Survey ID				Q1_Aramco		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	3	13	16
			% within Gender	18.80%	81.30%	100.00%
			% within Q1_Aramco	50.00%	54.20%	53.30%
			% of Total	10.00%	43.30%	53.30%
		Male	Count	3	11	14
			% within Gender	21.40%	78.60%	100.00%
			% within Q1_Aramco	50.00%	45.80%	46.70%
			% of Total	10.00%	36.70%	46.70%
	Total		Count	6	24	30
			% within Gender	20.00%	80.00%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
A - Postgraduate	Gender	Female	Count	0	8	8
			% within Gender	0.00%	100.00%	100.00%
			% within Q1_Aramco	0.00%	47.10%	40.00%
			% of Total	0.00%	40.00%	40.00%
		Male	Count	3	9	12
			% within Gender	25.00%	75.00%	100.00%
			% within Q1_Aramco	100.00%	52.90%	60.00%
			% of Total	15.00%	45.00%	60.00%
	Total		Count	3	17	20
			% within Gender	15.00%	85.00%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
B - Undergraduate	Gender	Female	Count	0	21	21
			% within Gender	0.00%	100.00%	100.00%
			% within Q1_Aramco	0.00%	72.40%	70.00%
			% of Total	0.00%	70.00%	70.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q1_Aramco	100.00%	27.60%	30.00%
			% of Total	3.30%	26.70%	30.00%
	Total		Count	1	29	30
			% within Gender	3.30%	96.70%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
B - Postgraduate	Gender	Female	Count	2	9	11
			% within Gender	18.20%	81.80%	100.00%
			% within Q1_Aramco	50.00%	56.30%	55.00%
			% of Total	10.00%	45.00%	55.00%
		Male	Count	2	7	9
			% within Gender	22.20%	77.80%	100.00%
			% within Q1_Aramco	50.00%	43.80%	45.00%
			% of Total	10.00%	35.00%	45.00%
	Total		Count	4	16	20
			% within Gender	20.00%	80.00%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%

Survey ID				Q1_Liqui Moly		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	4	12	16
			% within Gender	25.00%	75.00%	100.00%
			% within Q1_LiQui Moly	66.70%	50.00%	53.30%
			% of Total	13.30%	40.00%	53.30%
		Male	Count	2	12	14
			% within Gender	14.30%	85.70%	100.00%
			% within Q1_LiQui Moly	33.30%	50.00%	46.70%
			% of Total	6.70%	40.00%	46.70%
	Total		Count	6	24	30
			% within Gender	20.00%	80.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
A - Postgraduate	Gender	Female	Count	0	8	8
			% within Gender	0.00%	100.00%	100.00%
			% within Q1_LiQui Moly	0.00%	57.10%	40.00%
			% of Total	0.00%	40.00%	40.00%
		Male	Count	6	6	12
			% within Gender	50.00%	50.00%	100.00%
			% within Q1_LiQui Moly	100.00%	42.90%	60.00%
			% of Total	30.00%	30.00%	60.00%
	Total		Count	6	14	20
			% within Gender	30.00%	70.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
B - Undergraduate	Gender	Female	Count	2	19	21
			% within Gender	9.50%	90.50%	100.00%
			% within Q1_LiQui Moly	66.70%	70.40%	70.00%
			% of Total	6.70%	63.30%	70.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q1_LiQui Moly	33.30%	29.60%	30.00%
			% of Total	3.30%	26.70%	30.00%
	Total		Count	3	27	30
			% within Gender	10.00%	90.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
B - Postgraduate	Gender	Female	Count	2	9	11
			% within Gender	18.20%	81.80%	100.00%
			% within Q1_LiQui Moly	66.70%	52.90%	55.00%
			% of Total	10.00%	45.00%	55.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q1_LiQui Moly	33.30%	47.10%	45.00%
			% of Total	5.00%	40.00%	45.00%
	Total		Count	3	17	20
			% within Gender	15.00%	85.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID				Q1_Pirelli		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	4	12	16
			% within Gender	25.00%	75.00%	100.00%
			% within Q1_Pirelli	44.40%	57.10%	53.30%
			% of Total	13.30%	40.00%	53.30%
		Male	Count	5	9	14
			% within Gender	35.70%	64.30%	100.00%
			% within Q1_Pirelli	55.60%	42.90%	46.70%
			% of Total	16.70%	30.00%	46.70%
	Total		Count	9	21	30
			% within Gender	30.00%	70.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
A - Postgraduate	Gender	Female	Count	1	7	8
			% within Gender	12.50%	87.50%	100.00%
			% within Q1_Pirelli	20.00%	46.70%	40.00%
			% of Total	5.00%	35.00%	40.00%
		Male	Count	4	8	12
			% within Gender	33.30%	66.70%	100.00%
			% within Q1_Pirelli	80.00%	53.30%	60.00%
			% of Total	20.00%	40.00%	60.00%
	Total		Count	5	15	20
			% within Gender	25.00%	75.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	25.00%	75.00%	100.00%
B - Undergraduate	Gender	Female	Count	2	19	21
			% within Gender	9.50%	90.50%	100.00%
			% within Q1_Pirelli	66.70%	70.40%	70.00%
			% of Total	6.70%	63.30%	70.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q1_Pirelli	33.30%	29.60%	30.00%
			% of Total	3.30%	26.70%	30.00%
	Total		Count	3	27	30
			% within Gender	10.00%	90.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
B - Postgraduate	Gender	Female	Count	2	9	11
			% within Gender	18.20%	81.80%	100.00%
			% within Q1_Pirelli	66.70%	52.90%	55.00%
			% of Total	10.00%	45.00%	55.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q1_Pirelli	33.30%	47.10%	45.00%
			% of Total	5.00%	40.00%	45.00%
	Total		Count	3	17	20
			% within Gender	15.00%	85.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID				Q1_Lenovo		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	5	11	16
			% within Gender	31.30%	68.80%	100.00%
			% within Q1_Lenovo	50.00%	55.00%	53.30%
			% of Total	16.70%	36.70%	53.30%
		Male	Count	5	9	14
			% within Gender	35.70%	64.30%	100.00%
			% within Q1_Lenovo	50.00%	45.00%	46.70%
			% of Total	16.70%	30.00%	46.70%
	Total		Count	10	20	30
			% within Gender	33.30%	66.70%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	33.30%	66.70%	100.00%
A - Postgraduate	Gender	Female	Count	2	6	8
			% within Gender	25.00%	75.00%	100.00%
			% within Q1_Lenovo	22.20%	54.50%	40.00%
			% of Total	10.00%	30.00%	40.00%
		Male	Count	7	5	12
			% within Gender	58.30%	41.70%	100.00%
			% within Q1_Lenovo	77.80%	45.50%	60.00%
			% of Total	35.00%	25.00%	60.00%
	Total		Count	9	11	20
			% within Gender	45.00%	55.00%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
B - Undergraduate	Gender	Female	Count	7	14	21
			% within Gender	33.30%	66.70%	100.00%
			% within Q1_Lenovo	63.60%	73.70%	70.00%
			% of Total	23.30%	46.70%	70.00%
		Male	Count	4	5	9
			% within Gender	44.40%	55.60%	100.00%
			% within Q1_Lenovo	36.40%	26.30%	30.00%
			% of Total	13.30%	16.70%	30.00%
	Total		Count	11	19	30
			% within Gender	36.70%	63.30%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	36.70%	63.30%	100.00%
B - Postgraduate	Gender	Female	Count	5	6	11
			% within Gender	45.50%	54.50%	100.00%
			% within Q1_Lenovo	71.40%	46.20%	55.00%
			% of Total	25.00%	30.00%	55.00%
		Male	Count	2	7	9
			% within Gender	22.20%	77.80%	100.00%
			% within Q1_Lenovo	28.60%	53.80%	45.00%
			% of Total	10.00%	35.00%	45.00%
	Total		Count	7	13	20
			% within Gender	35.00%	65.00%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	35.00%	65.00%	100.00%

Survey ID				Q1_MSC Cruises		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	1	15	16
			% within Gender	6.30%	93.80%	100.00%
			% within Q1_MSC Cruises	50.00%	53.60%	53.30%
			% of Total	3.30%	50.00%	53.30%
		Male	Count	1	13	14
			% within Gender	7.10%	92.90%	100.00%
			% within Q1_MSC Cruises	50.00%	46.40%	46.70%
			% of Total	3.30%	43.30%	46.70%
	Total		Count	2	28	30
			% within Gender	6.70%	93.30%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
A - Postgraduate	Gender	Female	Count	0	8	8
			% within Gender	0.00%	100.00%	100.00%
			% within Q1_MSC Cruises	0.00%	53.30%	40.00%
			% of Total	0.00%	40.00%	40.00%
		Male	Count	5	7	12
			% within Gender	41.70%	58.30%	100.00%
			% within Q1_MSC Cruises	100.00%	46.70%	60.00%
			% of Total	25.00%	35.00%	60.00%
	Total		Count	5	15	20
			% within Gender	25.00%	75.00%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	25.00%	75.00%	100.00%
B - Undergraduate	Gender	Female	Count	3	18	21
			% within Gender	14.30%	85.70%	100.00%
			% within Q1_MSC Cruises	75.00%	69.20%	70.00%
			% of Total	10.00%	60.00%	70.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q1_MSC Cruises	25.00%	30.80%	30.00%
			% of Total	3.30%	26.70%	30.00%
	Total		Count	4	26	30
			% within Gender	13.30%	86.70%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
B - Postgraduate	Gender	Female	Count	2	9	11
			% within Gender	18.20%	81.80%	100.00%
			% within Q1_MSC Cruises	50.00%	56.30%	55.00%
			% of Total	10.00%	45.00%	55.00%
		Male	Count	2	7	9
			% within Gender	22.20%	77.80%	100.00%
			% within Q1_MSC Cruises	50.00%	43.80%	45.00%
			% of Total	10.00%	35.00%	45.00%
	Total		Count	4	16	20
			% within Gender	20.00%	80.00%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%

Survey ID				Q1_Paramount+		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	3	13	16
			% within Gender	18.80%	81.30%	100.00%
			% within Q1_Paramount+	75.00%	50.00%	53.30%
			% of Total	10.00%	43.30%	53.30%
		Male	Count	1	13	14
			% within Gender	7.10%	92.90%	100.00%
			% within Q1_Paramount+	25.00%	50.00%	46.70%
			% of Total	3.30%	43.30%	46.70%
	Total		Count	4	26	30
			% within Gender	13.30%	86.70%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
A - Postgraduate	Gender	Female	Count	0	8	8
			% within Gender	0.00%	100.00%	100.00%
			% within Q1_Paramount+	0.00%	50.00%	40.00%
			% of Total	0.00%	40.00%	40.00%
		Male	Count	4	8	12
			% within Gender	33.30%	66.70%	100.00%
			% within Q1_Paramount+	100.00%	50.00%	60.00%
			% of Total	20.00%	40.00%	60.00%
	Total		Count	4	16	20
			% within Gender	20.00%	80.00%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
B - Undergraduate	Gender	Female	Count	1	20	21
			% within Gender	4.80%	95.20%	100.00%
			% within Q1_Paramount+	33.30%	74.10%	70.00%
			% of Total	3.30%	66.70%	70.00%
		Male	Count	2	7	9
			% within Gender	22.20%	77.80%	100.00%
			% within Q1_Paramount+	66.70%	25.90%	30.00%
			% of Total	6.70%	23.30%	30.00%
	Total		Count	3	27	30
			% within Gender	10.00%	90.00%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
B - Postgraduate	Gender	Female	Count	0	11	11
			% within Gender	0.00%	100.00%	100.00%
			% within Q1_Paramount+	0.00%	57.90%	55.00%
			% of Total	0.00%	55.00%	55.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q1_Paramount+	100.00%	42.10%	45.00%
			% of Total	5.00%	40.00%	45.00%
	Total		Count	1	19	20
			% within Gender	5.00%	95.00%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%

Survey ID				Q1_Other		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	2	14	16
			% within Gender	12.50%	87.50%	100.00%
			% within Q1_Other	66.70%	51.90%	53.30%
			% of Total	6.70%	46.70%	53.30%
		Male	Count	1	13	14
			% within Gender	7.10%	92.90%	100.00%
			% within Q1_Other	33.30%	48.10%	46.70%
			% of Total	3.30%	43.30%	46.70%
	Total		Count	3	27	30
			% within Gender	10.00%	90.00%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
A - Postgraduate	Gender	Female	Count	1	7	8
			% within Gender	12.50%	87.50%	100.00%
			% within Q1_Other	50.00%	38.90%	40.00%
			% of Total	5.00%	35.00%	40.00%
		Male	Count	1	11	12
			% within Gender	8.30%	91.70%	100.00%
			% within Q1_Other	50.00%	61.10%	60.00%
			% of Total	5.00%	55.00%	60.00%
	Total		Count	2	18	20
			% within Gender	10.00%	90.00%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
B - Undergraduate	Gender	Female	Count	2	19	21
			% within Gender	9.50%	90.50%	100.00%
			% within Q1_Other	50.00%	73.10%	70.00%
			% of Total	6.70%	63.30%	70.00%
		Male	Count	2	7	9
			% within Gender	22.20%	77.80%	100.00%
			% within Q1_Other	50.00%	26.90%	30.00%
			% of Total	6.70%	23.30%	30.00%
	Total		Count	4	26	30
			% within Gender	13.30%	86.70%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
B - Postgraduate	Gender	Female	Count	1	10	11
			% within Gender	9.10%	90.90%	100.00%
			% within Q1_Other	25.00%	62.50%	55.00%
			% of Total	5.00%	50.00%	55.00%
		Male	Count	3	6	9
			% within Gender	33.30%	66.70%	100.00%
			% within Q1_Other	75.00%	37.50%	45.00%
			% of Total	15.00%	30.00%	45.00%
	Total		Count	4	16	20
			% within Gender	20.00%	80.00%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%

Survey ID				Q1_Other Brand											Total
					Amstel	BMW	British Airlines	Emirates	Henkel	Microsoft	Oracle,Google	Red Bull	Shell	Shell, RayBan, BWT	Singapore Airlines	
A - Undergraduate	Gender	Female	Count	14		1					0	1				16
			% within Gender	87.50%		6.30%					0.00%	6.30%				100.00%
			% within Q1_Other Brand	51.90%		100.00%					0.00%	100.00%				53.30%
			% of Total	46.70%		3.30%					0.00%	3.30%				53.30%
		Male	Count	13		0					1	0				14
			% within Gender	92.90%		0.00%					7.10%	0.00%				100.00%
			% within Q1_Other Brand	48.10%		0.00%					100.00%	0.00%				46.70%
			% of Total	43.30%		0.00%					3.30%	0.00%				46.70%
	Total		Count	27		1					1	1				30
			% within Gender	90.00%		3.30%					3.30%	3.30%				100.00%
			% within Q1_Other Brand	100.00%		100.00%					100.00%	100.00%				100.00%
			% of Total	90.00%		3.30%					3.30%	3.30%				100.00%
A - Postgraduate	Gender	Female	Count	7				0				1				8
			% within Gender	87.50%				0.00%				12.50%				100.00%
			% within Q1_Other Brand	38.90%				0.00%				100.00%				40.00%
			% of Total	35.00%				0.00%				5.00%				40.00%
		Male	Count	11				1				0				12
			% within Gender	91.70%				8.30%				0.00%				100.00%
			% within Q1_Other Brand	61.10%				100.00%				0.00%				60.00%
			% of Total	55.00%				5.00%				0.00%				60.00%
	Total		Count	18				1				1				20
			% within Gender	90.00%				5.00%				5.00%				100.00%
			% within Q1_Other Brand	100.00%				100.00%				100.00%				100.00%
			% of Total	90.00%				5.00%				5.00%				100.00%
B - Undergraduate	Gender	Female	Count	19			1		1						0	21
			% within Gender	90.50%			4.80%		4.80%						0.00%	100.00%
			% within Q1_Other Brand	73.10%			100.00%		100.00%						0.00%	70.00%
			% of Total	63.30%			3.30%		3.30%						0.00%	70.00%
		Male	Count	7			0		0						2	9
			% within Gender	77.80%			0.00%		0.00%						22.20%	100.00%
			% within Q1_Other Brand	26.90%			0.00%		0.00%						100.00%	30.00%
			% of Total	23.30%			0.00%		0.00%						6.70%	30.00%
	Total		Count	26			1		1						2	30
			% within Gender	86.70%			3.30%		3.30%						6.70%	100.00%
			% within Q1_Other Brand	100.00%			100.00%		100.00%						100.00%	100.00%
			% of Total	86.70%			3.30%		3.30%						6.70%	100.00%
B - Postgraduate	Gender	Female	Count	10	0					1			0	0		11
			% within Gender	90.90%	0.00%					9.10%			0.00%	0.00%		100.00%
			% within Q1_Other Brand	62.50%	0.00%					100.00%			0.00%	0.00%		55.00%
			% of Total	50.00%	0.00%					5.00%			0.00%	0.00%		55.00%
		Male	Count	6	1					0			1	1		9
			% within Gender	66.70%	11.10%					0.00%			11.10%	11.10%		100.00%
			% within Q1_Other Brand	37.50%	100.00%					0.00%			100.00%	100.00%		45.00%
			% of Total	30.00%	5.00%					0.00%			5.00%	5.00%		45.00%
	Total		Count	16	1					1			1	1		20
			% within Gender	80.00%	5.00%					5.00%			5.00%	5.00%		100.00%
			% within Q1_Other Brand	100.00%	100.00%					100.00%			100.00%	100.00%		100.00%
			% of Total	80.00%	5.00%					5.00%			5.00%	5.00%		100.00%

Question 1 - List all the brands you recall seeing in the provided photos.

Crosstabulation: Type of Advertisement * Brand

Survey ID				Q1_Rolex		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	21	9	30
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
	Total		Count	21	9	30
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	13	7	20
			% within Type of Advertisement	65.00%	35.00%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%
	Total		Count	13	7	20
			% within Type of Advertisement	65.00%	35.00%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	11	19	30
			% within Type of Advertisement	36.70%	63.30%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	36.70%	63.30%	100.00%
	Total		Count	11	19	30
			% within Type of Advertisement	36.70%	63.30%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	36.70%	63.30%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	8	12	20
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
	Total		Count	8	12	20
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within Q1_Rolex	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%

Survey ID				Q1_Heineken		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	20	10	30
			% within Type of Advertisement	66.70%	33.30%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	66.70%	33.30%	100.00%
	Total		Count	20	10	30
			% within Type of Advertisement	66.70%	33.30%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	66.70%	33.30%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	13	7	20
			% within Type of Advertisement	65.00%	35.00%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%
	Total		Count	13	7	20
			% within Type of Advertisement	65.00%	35.00%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	13	17	30
			% within Type of Advertisement	43.30%	56.70%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	43.30%	56.70%	100.00%
	Total		Count	13	17	30
			% within Type of Advertisement	43.30%	56.70%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	43.30%	56.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
	Total		Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within Q1_Heineken	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%

Survey ID				Q1_DHL		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	9	21	30
			% within Type of Advertisement	30.00%	70.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
	Total		Count	9	21	30
			% within Type of Advertisement	30.00%	70.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	8	12	20
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
	Total		Count	8	12	20
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	18	12	30
			% within Type of Advertisement	60.00%	40.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	60.00%	40.00%	100.00%
	Total		Count	18	12	30
			% within Type of Advertisement	60.00%	40.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	60.00%	40.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	13	7	20
			% within Type of Advertisement	65.00%	35.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%
	Total		Count	13	7	20
			% within Type of Advertisement	65.00%	35.00%	100.00%
			% within Q1_DHL	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%

Survey ID				Q1_Qatar Airways		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	14	16	30
			% within Type of Advertisement	46.70%	53.30%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	46.70%	53.30%	100.00%
	Total		Count	14	16	30
			% within Type of Advertisement	46.70%	53.30%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	46.70%	53.30%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	13	7	20
			% within Type of Advertisement	65.00%	35.00%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%
	Total		Count	13	7	20
			% within Type of Advertisement	65.00%	35.00%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	65.00%	35.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	19	11	30
			% within Type of Advertisement	63.30%	36.70%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
	Total		Count	19	11	30
			% within Type of Advertisement	63.30%	36.70%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
	Total		Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within Q1_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%

Survey ID				Q1_Salesforce		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	5	25	30
			% within Type of Advertisement	16.70%	83.30%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	16.70%	83.30%	100.00%
	Total		Count	5	25	30
			% within Type of Advertisement	16.70%	83.30%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	16.70%	83.30%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	6	14	20
			% within Type of Advertisement	30.00%	70.00%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
	Total		Count	6	14	20
			% within Type of Advertisement	30.00%	70.00%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	6	24	30
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
	Total		Count	6	24	30
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
	Total		Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Salesforce	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%

Survey ID				Q1_Aramco		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	6	24	30
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
	Total		Count	6	24	30
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
	Total		Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
	Total		Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
	Total		Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Aramco	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%

Survey ID				Q1_Liqui Moly		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	6	24	30
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
	Total		Count	6	24	30
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	6	14	20
			% within Type of Advertisement	30.00%	70.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
	Total		Count	6	14	20
			% within Type of Advertisement	30.00%	70.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
	Total		Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
	Total		Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q1_LiQui Moly	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID				Q1_Pirelli		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	9	21	30
			% within Type of Advertisement	30.00%	70.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
	Total		Count	9	21	30
			% within Type of Advertisement	30.00%	70.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	5	15	20
			% within Type of Advertisement	25.00%	75.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	25.00%	75.00%	100.00%
	Total		Count	5	15	20
			% within Type of Advertisement	25.00%	75.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	25.00%	75.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
	Total		Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
	Total		Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q1_Pirelli	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID				Q1_Lenovo		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	10	20	30
			% within Type of Advertisement	33.30%	66.70%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	33.30%	66.70%	100.00%
	Total		Count	10	20	30
			% within Type of Advertisement	33.30%	66.70%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	33.30%	66.70%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
	Total		Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	11	19	30
			% within Type of Advertisement	36.70%	63.30%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	36.70%	63.30%	100.00%
	Total		Count	11	19	30
			% within Type of Advertisement	36.70%	63.30%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	36.70%	63.30%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	7	13	20
			% within Type of Advertisement	35.00%	65.00%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	35.00%	65.00%	100.00%
	Total		Count	7	13	20
			% within Type of Advertisement	35.00%	65.00%	100.00%
			% within Q1_Lenovo	100.00%	100.00%	100.00%
			% of Total	35.00%	65.00%	100.00%

Survey ID				Q1_MSC Cruises		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
	Total		Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	5	15	20
			% within Type of Advertisement	25.00%	75.00%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	25.00%	75.00%	100.00%
	Total		Count	5	15	20
			% within Type of Advertisement	25.00%	75.00%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	25.00%	75.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	4	26	30
			% within Type of Advertisement	13.30%	86.70%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
	Total		Count	4	26	30
			% within Type of Advertisement	13.30%	86.70%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
	Total		Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_MSC Cruises	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%

Survey ID				Q1_Paramount+		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	4	26	30
			% within Type of Advertisement	13.30%	86.70%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
	Total		Count	4	26	30
			% within Type of Advertisement	13.30%	86.70%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
	Total		Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
	Total		Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
	Total		Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Q1_Paramount+	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%

Survey ID				Q1_Other		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
	Total		Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	2	18	20
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
	Total		Count	2	18	20
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	4	26	30
			% within Type of Advertisement	13.30%	86.70%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
	Total		Count	4	26	30
			% within Type of Advertisement	13.30%	86.70%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
	Total		Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q1_Other	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%

Survey ID				Q1 Other Brand	Amstel	BMW	British Airlines	Emirates	Henkel	Microsoft	Oracle,Google	Red Bull	Shell	Shell, RayBan, BWT	Singapore Airlines	Total
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	27		1					1	1				30
			% within Type of Advertisement	90.00%		3.30%					3.30%	3.30%				100.00%
			% within Q1_Other Brand	100.00%		100.00%					100.00%	100.00%				100.00%
			% of Total	90.00%		3.30%					3.30%	3.30%				100.00%
	Total		Count	27		1					1	1				30
			% within Type of Advertisement	90.00%		3.30%					3.30%	3.30%				100.00%
			% within Q1_Other Brand	100.00%		100.00%					100.00%	100.00%				100.00%
			% of Total	90.00%		3.30%					3.30%	3.30%				100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	18				1				1				20
			% within Type of Advertisement	90.00%				5.00%				5.00%				100.00%
			% within Q1_Other Brand	100.00%				100.00%				100.00%				100.00%
			% of Total	90.00%				5.00%				5.00%				100.00%
	Total		Count	18				1				1				20
			% within Type of Advertisement	90.00%				5.00%				5.00%				100.00%
			% within Q1_Other Brand	100.00%				100.00%				100.00%				100.00%
			% of Total	90.00%				5.00%				5.00%				100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	26			1		1						2	30
			% within Type of Advertisement	86.70%			3.30%		3.30%						6.70%	100.00%
			% within Q1_Other Brand	100.00%			100.00%		100.00%						100.00%	100.00%
			% of Total	86.70%			3.30%		3.30%						6.70%	100.00%
	Total		Count	26			1		1						2	30
			% within Type of Advertisement	86.70%			3.30%		3.30%						6.70%	100.00%
			% within Q1_Other Brand	100.00%			100.00%		100.00%						100.00%	100.00%
			% of Total	86.70%			3.30%		3.30%						6.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	16	1					1			1	1		20
			% within Type of Advertisement	80.00%	5.00%					5.00%			5.00%	5.00%		100.00%
			% within Q1_Other Brand	100.00%	100.00%					100.00%			100.00%	100.00%		100.00%
			% of Total	80.00%	5.00%					5.00%			5.00%	5.00%		100.00%
	Total		Count	16	1					1			1	1		20
			% within Type of Advertisement	80.00%	5.00%					5.00%			5.00%	5.00%		100.00%
			% within Q1_Other Brand	100.00%	100.00%					100.00%			100.00%	100.00%		100.00%
			% of Total	80.00%	5.00%					5.00%			5.00%	5.00%		100.00%

Question 2 - Which brand do you believe will leave a lasting impression on you based on the photos above?

Frequency Analysis Per Brand

Q2_Rolex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	25	25	25	25
	No	75	75	75	100
	Total	100	100	100	

Q2_Heineken

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	18	18	18	18
	No	82	82	82	100
	Total	100	100	100	

Q2_DHL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	15	15	15	15
	No	85	85	85	100
	Total	100	100	100	

Q2_Qatar Airways

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	15	15	15	15
	No	85	85	85	100
	Total	100	100	100	

Q2_Salesforce

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	2	2	2
	No	98	98	98	100
	Total	100	100	100	

Q2_Aramco

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3	3	3	3
	No	97	97	97	100
	Total	100	100	100	

Q2_Liqui Moly

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	1	1	1
	No	99	99	99	100
	Total	100	100	100	

Q2_Pirelli

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	2	2	2
	No	98	98	98	100
	Total	100	100	100	

Q2_Lenovo

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	11	11	11	11
	No	89	89	89	100
	Total	100	100	100	

Q2_MSC Cruises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	100	100	100	100

Q2_Paramount+

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	1	1	1
	No	99	99	99	100
	Total	100	100	100	

Q2_Other

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	4	4	4
	No	96	96	96	100
	Total	100	100	100	

Q2_Other Brand

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		96	96	96	96
	Amstel	1	1	1	97
	Google	1	1	1	98
	Red Bull	1	1	1	99
	Shell	1	1	1	100
	Total	100	100	100	

Question 2 - Which brand do you believe will leave a lasting impression on you based on the photos above?

Frequency Analysis Per Survey ID

Q2_Rolex

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes	11	36.7	36.7	36.7
		No	19	63.3	63.3	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes	6	30	30	30
		No	14	70	70	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes	6	20	20	20
		No	24	80	80	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes	2	10	10	10
		No	18	90	90	100
		Total	20	100	100	

Q2_Heineken

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes	7	23.3	23.3	23.3
		No	23	76.7	76.7	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes	4	20	20	20
		No	16	80	80	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes	5	16.7	16.7	16.7
		No	25	83.3	83.3	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes	2	10	10	10
		No	18	90	90	100
		Total	20	100	100	

Q2_DHL

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes	2	6.7	6.7	6.7
		No	28	93.3	93.3	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes	3	15	15	15
		No	17	85	85	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes	6	20	20	20
		No	24	80	80	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes	4	20	20	20
		No	16	80	80	100
		Total	20	100	100	

Q2_Qatar Airways

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes	3	10	10	10
		No	27	90	90	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes	2	10	10	10
		No	18	90	90	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes	7	23.3	23.3	23.3
		No	23	76.7	76.7	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes	3	15	15	15
		No	17	85	85	100
		Total	20	100	100	

Q2_Salesforce

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	No	30	100	100	100
A - Postgraduate	Valid	Yes	1	5	5	5
		No	19	95	95	100
		Total	20	100	100	
B - Undergraduate	Valid	No	30	100	100	100
B - Postgraduate	Valid	Yes	1	5	5	5
		No	19	95	95	100
		Total	20	100	100	

Q2_Aramco

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	No	30	100	100	100
A - Postgraduate	Valid	No	20	100	100	100
B - Undergraduate	Valid	No	30	100	100	100
B - Postgraduate	Valid	Yes	3	15	15	15
		No	17	85	85	100
		Total	20	100	100	

Q2_Liqui Moly

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	No	30	100	100	100
A - Postgraduate	Valid	Yes	1	5	5	5
		No	19	95	95	100
		Total	20	100	100	
B - Undergraduate	Valid	No	30	100	100	100
B - Postgraduate	Valid	No	20	100	100	100

Q2_Pirelli

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes	1	3.3	3.3	3.3
		No	29	96.7	96.7	100
		Total	30	100	100	
A - Postgraduate	Valid	No	20	100	100	100
B - Undergraduate	Valid	Yes	1	3.3	3.3	3.3
		No	29	96.7	96.7	100
		Total	30	100	100	
B - Postgraduate	Valid	No	20	100	100	100

Q2_Lenovo

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes	2	6.7	6.7	6.7
		No	28	93.3	93.3	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes	3	15	15	15
		No	17	85	85	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes	4	13.3	13.3	13.3
		No	26	86.7	86.7	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes	2	10	10	10
		No	18	90	90	100
		Total	20	100	100	

Q2_MSC Cruises

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	No	30	100	100	100
A - Postgraduate	Valid	No	20	100	100	100
B - Undergraduate	Valid	No	30	100	100	100
B - Postgraduate	Valid	No	20	100	100	100

Q2_Paramount+

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes	1	3.3	3.3	3.3
		No	29	96.7	96.7	100
		Total	30	100	100	
A - Postgraduate	Valid	No	20	100	100	100
B - Undergraduate	Valid	No	30	100	100	100
B - Postgraduate	Valid	No	20	100	100	100

Q2_Other

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes	1	3.3	3.3	3.3
		No	29	96.7	96.7	100
		Total	30	100	100	
A - Postgraduate	Valid	No	20	100	100	100
B - Undergraduate	Valid	No	30	100	100	100
B - Postgraduate	Valid	Yes	3	15	15	15
		No	17	85	85	100
		Total	20	100	100	

Q2_Other Brand

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid		29	96.7	96.7	96.7
		Google	1	3.3	3.3	100
		Total	30	100	100	
A - Postgraduate	Valid		20	100	100	100
B - Undergraduate	Valid		30	100	100	100
B - Postgraduate	Valid		17	85	85	85
		Amstel	1	5	5	90
		Red Bull	1	5	5	95
		Shell	1	5	5	100
		Total	20	100	100	

Question 2 - Which brand do you believe will leave a lasting impression on you based on the photos above?

Crosstabulation: Gender * Brand

Survey ID				Q2_Rolex		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	5	11	16
			% within Gender	31.30%	68.80%	100.00%
			% within Q2_Rolex	45.50%	57.90%	53.30%
			% of Total	16.70%	36.70%	53.30%
		Male	Count	6	8	14
			% within Gender	42.90%	57.10%	100.00%
			% within Q2_Rolex	54.50%	42.10%	46.70%
			% of Total	20.00%	26.70%	46.70%
	Total		Count	11	19	30
			% within Gender	36.70%	63.30%	100.00%
			% within Q2_Rolex	100.00%	100.00%	100.00%
			% of Total	36.70%	63.30%	100.00%
A - Postgraduate	Gender	Female	Count	4	4	8
			% within Gender	50.00%	50.00%	100.00%
			% within Q2_Rolex	66.70%	28.60%	40.00%
			% of Total	20.00%	20.00%	40.00%
		Male	Count	2	10	12
			% within Gender	16.70%	83.30%	100.00%
			% within Q2_Rolex	33.30%	71.40%	60.00%
			% of Total	10.00%	50.00%	60.00%
	Total		Count	6	14	20
			% within Gender	30.00%	70.00%	100.00%
			% within Q2_Rolex	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
B - Undergraduate	Gender	Female	Count	5	16	21
			% within Gender	23.80%	76.20%	100.00%
			% within Q2_Rolex	83.30%	66.70%	70.00%
			% of Total	16.70%	53.30%	70.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q2_Rolex	16.70%	33.30%	30.00%
			% of Total	3.30%	26.70%	30.00%
	Total		Count	6	24	30
			% within Gender	20.00%	80.00%	100.00%
			% within Q2_Rolex	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
B - Postgraduate	Gender	Female	Count	2	9	11
			% within Gender	18.20%	81.80%	100.00%
			% within Q2_Rolex	100.00%	50.00%	55.00%
			% of Total	10.00%	45.00%	55.00%
		Male	Count	0	9	9
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Rolex	0.00%	50.00%	45.00%
			% of Total	0.00%	45.00%	45.00%
	Total		Count	2	18	20
			% within Gender	10.00%	90.00%	100.00%
			% within Q2_Rolex	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%

Survey ID				Q2_Heineken		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	3	13	16
			% within Gender	18.80%	81.30%	100.00%
			% within Q2_Heineken	42.90%	56.50%	53.30%
			% of Total	10.00%	43.30%	53.30%
		Male	Count	4	10	14
			% within Gender	28.60%	71.40%	100.00%
			% within Q2_Heineken	57.10%	43.50%	46.70%
			% of Total	13.30%	33.30%	46.70%
	Total		Count	7	23	30
			% within Gender	23.30%	76.70%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	23.30%	76.70%	100.00%
A - Postgraduate	Gender	Female	Count	2	6	8
			% within Gender	25.00%	75.00%	100.00%
			% within Q2_Heineken	50.00%	37.50%	40.00%
			% of Total	10.00%	30.00%	40.00%
		Male	Count	2	10	12
			% within Gender	16.70%	83.30%	100.00%
			% within Q2_Heineken	50.00%	62.50%	60.00%
			% of Total	10.00%	50.00%	60.00%
	Total		Count	4	16	20
			% within Gender	20.00%	80.00%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
B - Undergraduate	Gender	Female	Count	5	16	21
			% within Gender	23.80%	76.20%	100.00%
			% within Q2_Heineken	100.00%	64.00%	70.00%
			% of Total	16.70%	53.30%	70.00%
		Male	Count	0	9	9
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Heineken	0.00%	36.00%	30.00%
			% of Total	0.00%	30.00%	30.00%
	Total		Count	5	25	30
			% within Gender	16.70%	83.30%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	16.70%	83.30%	100.00%
B - Postgraduate	Gender	Female	Count	1	10	11
			% within Gender	9.10%	90.90%	100.00%
			% within Q2_Heineken	50.00%	55.60%	55.00%
			% of Total	5.00%	50.00%	55.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q2_Heineken	50.00%	44.40%	45.00%
			% of Total	5.00%	40.00%	45.00%
	Total		Count	2	18	20
			% within Gender	10.00%	90.00%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%

Survey ID				Q2_DHL		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	1	15	16
			% within Gender	6.30%	93.80%	100.00%
			% within Q2_DHL	50.00%	53.60%	53.30%
			% of Total	3.30%	50.00%	53.30%
		Male	Count	1	13	14
			% within Gender	7.10%	92.90%	100.00%
			% within Q2_DHL	50.00%	46.40%	46.70%
			% of Total	3.30%	43.30%	46.70%
	Total		Count	2	28	30
			% within Gender	6.70%	93.30%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
A - Postgraduate	Gender	Female	Count	1	7	8
			% within Gender	12.50%	87.50%	100.00%
			% within Q2_DHL	33.30%	41.20%	40.00%
			% of Total	5.00%	35.00%	40.00%
		Male	Count	2	10	12
			% within Gender	16.70%	83.30%	100.00%
			% within Q2_DHL	66.70%	58.80%	60.00%
			% of Total	10.00%	50.00%	60.00%
	Total		Count	3	17	20
			% within Gender	15.00%	85.00%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
B - Undergraduate	Gender	Female	Count	4	17	21
			% within Gender	19.00%	81.00%	100.00%
			% within Q2_DHL	66.70%	70.80%	70.00%
			% of Total	13.30%	56.70%	70.00%
		Male	Count	2	7	9
			% within Gender	22.20%	77.80%	100.00%
			% within Q2_DHL	33.30%	29.20%	30.00%
			% of Total	6.70%	23.30%	30.00%
	Total		Count	6	24	30
			% within Gender	20.00%	80.00%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
B - Postgraduate	Gender	Female	Count	1	10	11
			% within Gender	9.10%	90.90%	100.00%
			% within Q2_DHL	25.00%	62.50%	55.00%
			% of Total	5.00%	50.00%	55.00%
		Male	Count	3	6	9
			% within Gender	33.30%	66.70%	100.00%
			% within Q2_DHL	75.00%	37.50%	45.00%
			% of Total	15.00%	30.00%	45.00%
	Total		Count	4	16	20
			% within Gender	20.00%	80.00%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%

Survey ID				Q2_Qatar Airways		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	3	13	16
			% within Gender	18.80%	81.30%	100.00%
			% within Q2_Qatar Airways	100.00%	48.10%	53.30%
			% of Total	10.00%	43.30%	53.30%
		Male	Count	0	14	14
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Qatar Airways	0.00%	51.90%	46.70%
			% of Total	0.00%	46.70%	46.70%
	Total		Count	3	27	30
			% within Gender	10.00%	90.00%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
A - Postgraduate	Gender	Female	Count	1	7	8
			% within Gender	12.50%	87.50%	100.00%
			% within Q2_Qatar Airways	50.00%	38.90%	40.00%
			% of Total	5.00%	35.00%	40.00%
		Male	Count	1	11	12
			% within Gender	8.30%	91.70%	100.00%
			% within Q2_Qatar Airways	50.00%	61.10%	60.00%
			% of Total	5.00%	55.00%	60.00%
	Total		Count	2	18	20
			% within Gender	10.00%	90.00%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
B - Undergraduate	Gender	Female	Count	5	16	21
			% within Gender	23.80%	76.20%	100.00%
			% within Q2_Qatar Airways	71.40%	69.60%	70.00%
			% of Total	16.70%	53.30%	70.00%
		Male	Count	2	7	9
			% within Gender	22.20%	77.80%	100.00%
			% within Q2_Qatar Airways	28.60%	30.40%	30.00%
			% of Total	6.70%	23.30%	30.00%
	Total		Count	7	23	30
			% within Gender	23.30%	76.70%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	23.30%	76.70%	100.00%
B - Postgraduate	Gender	Female	Count	2	9	11
			% within Gender	18.20%	81.80%	100.00%
			% within Q2_Qatar Airways	66.70%	52.90%	55.00%
			% of Total	10.00%	45.00%	55.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q2_Qatar Airways	33.30%	47.10%	45.00%
			% of Total	5.00%	40.00%	45.00%
	Total		Count	3	17	20
			% within Gender	15.00%	85.00%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID				Q2_Salesforce	Total
				Yes	No	
A - Undergraduate	Gender	Female	Count		16	16
			% within Gender		100.00%	100.00%
			% within Q2_Salesforce		53.30%	53.30%
			% of Total		53.30%	53.30%
		Male	Count		14	14
			% within Gender		100.00%	100.00%
			% within Q2_Salesforce		46.70%	46.70%
			% of Total		46.70%	46.70%
	Total		Count		30	30
			% within Gender		100.00%	100.00%
			% within Q2_Salesforce		100.00%	100.00%
			% of Total		100.00%	100.00%
A - Postgraduate	Gender	Female	Count	0	8	8
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Salesforce	0.00%	42.10%	40.00%
			% of Total	0.00%	40.00%	40.00%
		Male	Count	1	11	12
			% within Gender	8.30%	91.70%	100.00%
			% within Q2_Salesforce	100.00%	57.90%	60.00%
			% of Total	5.00%	55.00%	60.00%
	Total		Count	1	19	20
			% within Gender	5.00%	95.00%	100.00%
			% within Q2_Salesforce	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
B - Undergraduate	Gender	Female	Count		21	21
			% within Gender		100.00%	100.00%
			% within Q2_Salesforce		70.00%	70.00%
			% of Total		70.00%	70.00%
		Male	Count		9	9
			% within Gender		100.00%	100.00%
			% within Q2_Salesforce		30.00%	30.00%
			% of Total		30.00%	30.00%
	Total		Count		30	30
			% within Gender		100.00%	100.00%
			% within Q2_Salesforce		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Gender	Female	Count	0	11	11
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Salesforce	0.00%	57.90%	55.00%
			% of Total	0.00%	55.00%	55.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q2_Salesforce	100.00%	42.10%	45.00%
			% of Total	5.00%	40.00%	45.00%
	Total		Count	1	19	20
			% within Gender	5.00%	95.00%	100.00%
			% within Q2_Salesforce	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%

Survey ID				Q2_Aramco	Total
				Yes	No	
A - Undergraduate	Gender	Female	Count		16	16
			% within Gender		100.00%	100.00%
			% within Q2_Aramco		53.30%	53.30%
			% of Total		53.30%	53.30%
		Male	Count		14	14
			% within Gender		100.00%	100.00%
			% within Q2_Aramco		46.70%	46.70%
			% of Total		46.70%	46.70%
	Total		Count		30	30
			% within Gender		100.00%	100.00%
			% within Q2_Aramco		100.00%	100.00%
			% of Total		100.00%	100.00%
A - Postgraduate	Gender	Female	Count		8	8
			% within Gender		100.00%	100.00%
			% within Q2_Aramco		40.00%	40.00%
			% of Total		40.00%	40.00%
		Male	Count		12	12
			% within Gender		100.00%	100.00%
			% within Q2_Aramco		60.00%	60.00%
			% of Total		60.00%	60.00%
	Total		Count		20	20
			% within Gender		100.00%	100.00%
			% within Q2_Aramco		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Gender	Female	Count		21	21
			% within Gender		100.00%	100.00%
			% within Q2_Aramco		70.00%	70.00%
			% of Total		70.00%	70.00%
		Male	Count		9	9
			% within Gender		100.00%	100.00%
			% within Q2_Aramco		30.00%	30.00%
			% of Total		30.00%	30.00%
	Total		Count		30	30
			% within Gender		100.00%	100.00%
			% within Q2_Aramco		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Gender	Female	Count	2	9	11
			% within Gender	18.20%	81.80%	100.00%
			% within Q2_Aramco	66.70%	52.90%	55.00%
			% of Total	10.00%	45.00%	55.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q2_Aramco	33.30%	47.10%	45.00%
			% of Total	5.00%	40.00%	45.00%
	Total		Count	3	17	20
			% within Gender	15.00%	85.00%	100.00%
			% within Q2_Aramco	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID				Q2_Liqui Moly	Total
				Yes	No	
A - Undergraduate	Gender	Female	Count		16	16
			% within Gender		100.00%	100.00%
			% within Q2_Liqui Moly		53.30%	53.30%
			% of Total		53.30%	53.30%
		Male	Count		14	14
			% within Gender		100.00%	100.00%
			% within Q2_Liqui Moly		46.70%	46.70%
			% of Total		46.70%	46.70%
	Total		Count		30	30
			% within Gender		100.00%	100.00%
			% within Q2_Liqui Moly		100.00%	100.00%
			% of Total		100.00%	100.00%
A - Postgraduate	Gender	Female	Count	0	8	8
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Liqui Moly	0.00%	42.10%	40.00%
			% of Total	0.00%	40.00%	40.00%
		Male	Count	1	11	12
			% within Gender	8.30%	91.70%	100.00%
			% within Q2_Liqui Moly	100.00%	57.90%	60.00%
			% of Total	5.00%	55.00%	60.00%
	Total		Count	1	19	20
			% within Gender	5.00%	95.00%	100.00%
			% within Q2_Liqui Moly	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
B - Undergraduate	Gender	Female	Count		21	21
			% within Gender		100.00%	100.00%
			% within Q2_Liqui Moly		70.00%	70.00%
			% of Total		70.00%	70.00%
		Male	Count		9	9
			% within Gender		100.00%	100.00%
			% within Q2_Liqui Moly		30.00%	30.00%
			% of Total		30.00%	30.00%
	Total		Count		30	30
			% within Gender		100.00%	100.00%
			% within Q2_Liqui Moly		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Gender	Female	Count		11	11
			% within Gender		100.00%	100.00%
			% within Q2_Liqui Moly		55.00%	55.00%
			% of Total		55.00%	55.00%
		Male	Count		9	9
			% within Gender		100.00%	100.00%
			% within Q2_Liqui Moly		45.00%	45.00%
			% of Total		45.00%	45.00%
	Total		Count		20	20
			% within Gender		100.00%	100.00%
			% within Q2_Liqui Moly		100.00%	100.00%
			% of Total		100.00%	100.00%

Survey ID				Q2_Pirelli	Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	0	16	16
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Pirelli	0.00%	55.20%	53.30%
			% of Total	0.00%	53.30%	53.30%
		Male	Count	1	13	14
			% within Gender	7.10%	92.90%	100.00%
			% within Q2_Pirelli	100.00%	44.80%	46.70%
			% of Total	3.30%	43.30%	46.70%
	Total		Count	1	29	30
			% within Gender	3.30%	96.70%	100.00%
			% within Q2_Pirelli	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
A - Postgraduate	Gender	Female	Count		8	8
			% within Gender		100.00%	100.00%
			% within Q2_Pirelli		40.00%	40.00%
			% of Total		40.00%	40.00%
		Male	Count		12	12
			% within Gender		100.00%	100.00%
			% within Q2_Pirelli		60.00%	60.00%
			% of Total		60.00%	60.00%
	Total		Count		20	20
			% within Gender		100.00%	100.00%
			% within Q2_Pirelli		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Gender	Female	Count	0	21	21
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Pirelli	0.00%	72.40%	70.00%
			% of Total	0.00%	70.00%	70.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Q2_Pirelli	100.00%	27.60%	30.00%
			% of Total	3.30%	26.70%	30.00%
	Total		Count	1	29	30
			% within Gender	3.30%	96.70%	100.00%
			% within Q2_Pirelli	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
B - Postgraduate	Gender	Female	Count		11	11
			% within Gender		100.00%	100.00%
			% within Q2_Pirelli		55.00%	55.00%
			% of Total		55.00%	55.00%
		Male	Count		9	9
			% within Gender		100.00%	100.00%
			% within Q2_Pirelli		45.00%	45.00%
			% of Total		45.00%	45.00%
	Total		Count		20	20
			% within Gender		100.00%	100.00%
			% within Q2_Pirelli		100.00%	100.00%
			% of Total		100.00%	100.00%

Survey ID				Q2_Lenovo		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	1	15	16
			% within Gender	6.30%	93.80%	100.00%
			% within Q2_Lenovo	50.00%	53.60%	53.30%
			% of Total	3.30%	50.00%	53.30%
		Male	Count	1	13	14
			% within Gender	7.10%	92.90%	100.00%
			% within Q2_Lenovo	50.00%	46.40%	46.70%
			% of Total	3.30%	43.30%	46.70%
	Total		Count	2	28	30
			% within Gender	6.70%	93.30%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
A - Postgraduate	Gender	Female	Count	0	8	8
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Lenovo	0.00%	47.10%	40.00%
			% of Total	0.00%	40.00%	40.00%
		Male	Count	3	9	12
			% within Gender	25.00%	75.00%	100.00%
			% within Q2_Lenovo	100.00%	52.90%	60.00%
			% of Total	15.00%	45.00%	60.00%
	Total		Count	3	17	20
			% within Gender	15.00%	85.00%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
B - Undergraduate	Gender	Female	Count	1	20	21
			% within Gender	4.80%	95.20%	100.00%
			% within Q2_Lenovo	25.00%	76.90%	70.00%
			% of Total	3.30%	66.70%	70.00%
		Male	Count	3	6	9
			% within Gender	33.30%	66.70%	100.00%
			% within Q2_Lenovo	75.00%	23.10%	30.00%
			% of Total	10.00%	20.00%	30.00%
	Total		Count	4	26	30
			% within Gender	13.30%	86.70%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
B - Postgraduate	Gender	Female	Count	2	9	11
			% within Gender	18.20%	81.80%	100.00%
			% within Q2_Lenovo	100.00%	50.00%	55.00%
			% of Total	10.00%	45.00%	55.00%
		Male	Count	0	9	9
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Lenovo	0.00%	50.00%	45.00%
			% of Total	0.00%	45.00%	45.00%
	Total		Count	2	18	20
			% within Gender	10.00%	90.00%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%

Survey ID				Q2_MSC Cruises	Total
				No	
A - Undergraduate	Gender	Female	Count	16	16
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	53.30%	53.30%
			% of Total	53.30%	53.30%
		Male	Count	14	14
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	46.70%	46.70%
			% of Total	46.70%	46.70%
	Total		Count	30	30
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%
A - Postgraduate	Gender	Female	Count	8	8
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	40.00%	40.00%
			% of Total	40.00%	40.00%
		Male	Count	12	12
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	60.00%	60.00%
			% of Total	60.00%	60.00%
	Total		Count	20	20
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%
B - Undergraduate	Gender	Female	Count	21	21
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	70.00%	70.00%
			% of Total	70.00%	70.00%
		Male	Count	9	9
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	30.00%	30.00%
			% of Total	30.00%	30.00%
	Total		Count	30	30
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%
B - Postgraduate	Gender	Female	Count	11	11
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	55.00%	55.00%
			% of Total	55.00%	55.00%
		Male	Count	9	9
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	45.00%	45.00%
			% of Total	45.00%	45.00%
	Total		Count	20	20
			% within Gender	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%

Survey ID				Q2_Paramount+		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	1	15	16
			% within Gender	6.30%	93.80%	100.00%
			% within Q2_Paramount+	100.00%	51.70%	53.30%
			% of Total	3.30%	50.00%	53.30%
		Male	Count	0	14	14
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Paramount+	0.00%	48.30%	46.70%
			% of Total	0.00%	46.70%	46.70%
	Total		Count	1	29	30
			% within Gender	3.30%	96.70%	100.00%
			% within Q2_Paramount+	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
A - Postgraduate	Gender	Female	Count		8	8
			% within Gender		100.00%	100.00%
			% within Q2_Paramount+		40.00%	40.00%
			% of Total		40.00%	40.00%
		Male	Count		12	12
			% within Gender		100.00%	100.00%
			% within Q2_Paramount+		60.00%	60.00%
			% of Total		60.00%	60.00%
	Total		Count		20	20
			% within Gender		100.00%	100.00%
			% within Q2_Paramount+		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Gender	Female	Count		21	21
			% within Gender		100.00%	100.00%
			% within Q2_Paramount+		70.00%	70.00%
			% of Total		70.00%	70.00%
		Male	Count		9	9
			% within Gender		100.00%	100.00%
			% within Q2_Paramount+		30.00%	30.00%
			% of Total		30.00%	30.00%
	Total		Count		30	30
			% within Gender		100.00%	100.00%
			% within Q2_Paramount+		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Gender	Female	Count		11	11
			% within Gender		100.00%	100.00%
			% within Q2_Paramount+		55.00%	55.00%
			% of Total		55.00%	55.00%
		Male	Count		9	9
			% within Gender		100.00%	100.00%
			% within Q2_Paramount+		45.00%	45.00%
			% of Total		45.00%	45.00%
	Total		Count		20	20
			% within Gender		100.00%	100.00%
			% within Q2_Paramount+		100.00%	100.00%
			% of Total		100.00%	100.00%

Survey ID				Q2_Other		Total
				Yes	No	
A - Undergraduate	Gender	Female	Count	0	16	16
			% within Gender	0.00%	100.00%	100.00%
			% within Q2_Other	0.00%	55.20%	53.30%
			% of Total	0.00%	53.30%	53.30%
		Male	Count	1	13	14
			% within Gender	7.10%	92.90%	100.00%
			% within Q2_Other	100.00%	44.80%	46.70%
			% of Total	3.30%	43.30%	46.70%
	Total		Count	1	29	30
			% within Gender	3.30%	96.70%	100.00%
			% within Q2_Other	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
A - Postgraduate	Gender	Female	Count		8	8
			% within Gender		100.00%	100.00%
			% within Q2_Other		40.00%	40.00%
			% of Total		40.00%	40.00%
		Male	Count		12	12
			% within Gender		100.00%	100.00%
			% within Q2_Other		60.00%	60.00%
			% of Total		60.00%	60.00%
	Total		Count		20	20
			% within Gender		100.00%	100.00%
			% within Q2_Other		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Gender	Female	Count		21	21
			% within Gender		100.00%	100.00%
			% within Q2_Other		70.00%	70.00%
			% of Total		70.00%	70.00%
		Male	Count		9	9
			% within Gender		100.00%	100.00%
			% within Q2_Other		30.00%	30.00%
			% of Total		30.00%	30.00%
	Total		Count		30	30
			% within Gender		100.00%	100.00%
			% within Q2_Other		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Gender	Female	Count	1	10	11
			% within Gender	9.10%	90.90%	100.00%
			% within Q2_Other	33.30%	58.80%	55.00%
			% of Total	5.00%	50.00%	55.00%
		Male	Count	2	7	9
			% within Gender	22.20%	77.80%	100.00%
			% within Q2_Other	66.70%	41.20%	45.00%
			% of Total	10.00%	35.00%	45.00%
	Total		Count	3	17	20
			% within Gender	15.00%	85.00%	100.00%
			% within Q2_Other	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID				Q2_Other Brand				Total
					Amstel	Google	Red Bull	Shell	
A - Undergraduate	Gender	Female	Count	16		0			16
			% within Gender	100.00%		0.00%			100.00%
			% within Q2_Other Brand	55.20%		0.00%			53.30%
			% of Total	53.30%		0.00%			53.30%
		Male	Count	13		1			14
			% within Gender	92.90%		7.10%			100.00%
			% within Q2_Other Brand	44.80%		100.00%			46.70%
			% of Total	43.30%		3.30%			46.70%
	Total		Count	29		1			30
			% within Gender	96.70%		3.30%			100.00%
			% within Q2_Other Brand	100.00%		100.00%			100.00%
			% of Total	96.70%		3.30%			100.00%
A - Postgraduate	Gender	Female	Count	8					8
			% within Gender	100.00%					100.00%
			% within Q2_Other Brand	40.00%					40.00%
			% of Total	40.00%					40.00%
		Male	Count	12					12
			% within Gender	100.00%					100.00%
			% within Q2_Other Brand	60.00%					60.00%
			% of Total	60.00%					60.00%
	Total		Count	20					20
			% within Gender	100.00%					100.00%
			% within Q2_Other Brand	100.00%					100.00%
			% of Total	100.00%					100.00%
B - Undergraduate	Gender	Female	Count	21					21
			% within Gender	100.00%					100.00%
			% within Q2_Other Brand	70.00%					70.00%
			% of Total	70.00%					70.00%
		Male	Count	9					9
			% within Gender	100.00%					100.00%
			% within Q2_Other Brand	30.00%					30.00%
			% of Total	30.00%					30.00%
	Total		Count	30					30
			% within Gender	100.00%					100.00%
			% within Q2_Other Brand	100.00%					100.00%
			% of Total	100.00%					100.00%
B - Postgraduate	Gender	Female	Count	10	0		1	0	11
			% within Gender	90.90%	0.00%		9.10%	0.00%	100.00%
			% within Q2_Other Brand	58.80%	0.00%		100.00%	0.00%	55.00%
			% of Total	50.00%	0.00%		5.00%	0.00%	55.00%
		Male	Count	7	1		0	1	9
			% within Gender	77.80%	11.10%		0.00%	11.10%	100.00%
			% within Q2_Other Brand	41.20%	100.00%		0.00%	100.00%	45.00%
			% of Total	35.00%	5.00%		0.00%	5.00%	45.00%
	Total		Count	17	1		1	1	20
			% within Gender	85.00%	5.00%		5.00%	5.00%	100.00%
			% within Q2_Other Brand	100.00%	100.00%		100.00%	100.00%	100.00%
			% of Total	85.00%	5.00%		5.00%	5.00%	100.00%

Question 2 - Which brand do you believe will leave a lasting impression on you based on the photos above?

Crosstabulation: Type of Advertisement * Brand

Survey ID				Q2_Rolex	
				Yes	No
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	11	19
			% within Type of Advertisement	36.70%	63.30%
			% within Q2_Rolex	100.00%	100.00%
			% of Total	36.70%	63.30%
		Total	Count	11	19
			% within Type of Advertisement	36.70%	63.30%
			% within Q2_Rolex	100.00%	100.00%
			% of Total	36.70%	63.30%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	6	14
			% within Type of Advertisement	30.00%	70.00%
			% within Q2_Rolex	100.00%	100.00%
			% of Total	30.00%	70.00%
		Total	Count	6	14
			% within Type of Advertisement	30.00%	70.00%
			% within Q2_Rolex	100.00%	100.00%
			% of Total	30.00%	70.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	6	24
			% within Type of Advertisement	20.00%	80.00%
			% within Q2_Rolex	100.00%	100.00%
			% of Total	20.00%	80.00%
		Total	Count	6	24
			% within Type of Advertisement	20.00%	80.00%
			% within Q2_Rolex	100.00%	100.00%
			% of Total	20.00%	80.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	2	18
			% within Type of Advertisement	10.00%	90.00%
			% within Q2_Rolex	100.00%	100.00%
			% of Total	10.00%	90.00%
		Total	Count	2	18
			% within Type of Advertisement	10.00%	90.00%
			% within Q2_Rolex	100.00%	100.00%
			% of Total	10.00%	90.00%

Survey ID				Q2_Heineken		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	7	23	30
			% within Type of Advertisement	23.30%	76.70%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	23.30%	76.70%	100.00%
		Total	Count	7	23	30
			% within Type of Advertisement	23.30%	76.70%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	23.30%	76.70%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
		Total	Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	5	25	30
			% within Type of Advertisement	16.70%	83.30%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	16.70%	83.30%	100.00%
		Total	Count	5	25	30
			% within Type of Advertisement	16.70%	83.30%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	16.70%	83.30%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	2	18	20
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
		Total	Count	2	18	20
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q2_Heineken	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%

Survey ID				Q2_DHL		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
		Total	Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
		Total	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	6	24	30
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
		Total	Count	6	24	30
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
		Total	Count	4	16	20
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Q2_DHL	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%

Survey ID				Q2_Qatar Airways		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
		Total	Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	2	18	20
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
		Total	Count	2	18	20
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	7	23	30
			% within Type of Advertisement	23.30%	76.70%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	23.30%	76.70%	100.00%
		Total	Count	7	23	30
			% within Type of Advertisement	23.30%	76.70%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	23.30%	76.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
		Total	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q2_Qatar Airways	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID				Q2_Salesforce		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Salesforce		100.00%	100.00%
			% of Total		100.00%	100.00%
		Total	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Salesforce		100.00%	100.00%
			% of Total		100.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Q2_Salesforce	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
		Total	Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Q2_Salesforce	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Salesforce		100.00%	100.00%
			% of Total		100.00%	100.00%
		Total	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Salesforce		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Q2_Salesforce	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
		Total	Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Q2_Salesforce	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%

Survey ID				Q2_Aramco		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Aramco		100.00%	100.00%
			% of Total		100.00%	100.00%
		Total	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Aramco		100.00%	100.00%
			% of Total		100.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Aramco		100.00%	100.00%
			% of Total		100.00%	100.00%
		Total	Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Aramco		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Aramco		100.00%	100.00%
			% of Total		100.00%	100.00%
		Total	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Aramco		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q2_Aramco	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
		Total	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q2_Aramco	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID				Q2_Liqui Moly		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Liqui Moly		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Liqui Moly		100.00%	100.00%
			% of Total		100.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Q2_Liqui Moly	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
	Total		Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Q2_Liqui Moly	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Liqui Moly		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Liqui Moly		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Liqui Moly		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Liqui Moly		100.00%	100.00%
			% of Total		100.00%	100.00%

Survey ID				Q2_Pirelli		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Q2_Pirelli	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
	Total		Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Q2_Pirelli	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Pirelli		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Pirelli		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Q2_Pirelli	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
	Total		Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Q2_Pirelli	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Pirelli		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Pirelli		100.00%	100.00%
			% of Total		100.00%	100.00%

Survey ID				Q2_Lenovo		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
	Total		Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
	Total		Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	4	26	30
			% within Type of Advertisement	13.30%	86.70%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
	Total		Count	4	26	30
			% within Type of Advertisement	13.30%	86.70%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	13.30%	86.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	2	18	20
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
	Total		Count	2	18	20
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Q2_Lenovo	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%

Survey ID				Q2_MSC Cruises	Total
				No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	30	30
			% within Type of Advertisement	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%
	Total		Count	30	30
			% within Type of Advertisement	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	20	20
			% within Type of Advertisement	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%
	Total		Count	20	20
			% within Type of Advertisement	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	30	30
			% within Type of Advertisement	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%
	Total		Count	30	30
			% within Type of Advertisement	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	20	20
			% within Type of Advertisement	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%
	Total		Count	20	20
			% within Type of Advertisement	100.00%	100.00%
			% within Q2_MSC Cruises	100.00%	100.00%
			% of Total	100.00%	100.00%

Survey ID				Q2_Paramount+		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Q2_Paramount+	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
	Total		Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Q2_Paramount+	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Paramount+		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Paramount+		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Paramount+		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Paramount+		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Paramount+		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Paramount+		100.00%	100.00%
			% of Total		100.00%	100.00%

Survey ID				Q2_Other		Total
				Yes	No	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Q2_Other	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
	Total		Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Q2_Other	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Other		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Other		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Other		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Q2_Other		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q2_Other	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
	Total		Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Q2_Other	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID			Q2_Other Brand				Total
				Amstel	Google	Red Bull	Shell	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	29		1		30
			% within Type of Advertisement	96.70%		3.30%		100.00%
			% within Q2_Other Brand	100.00%		100.00%		100.00%
			% of Total	96.70%		3.30%		100.00%
		Total	Count	29		1		30
			% within Type of Advertisement	96.70%		3.30%		100.00%
			% within Q2_Other Brand	100.00%		100.00%		100.00%
			% of Total	96.70%		3.30%		100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	20				20
			% within Type of Advertisement	100.00%				100.00%
			% within Q2_Other Brand	100.00%				100.00%
			% of Total	100.00%				100.00%
		Total	Count	20				20
			% within Type of Advertisement	100.00%				100.00%
			% within Q2_Other Brand	100.00%				100.00%
			% of Total	100.00%				100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	30				30
			% within Type of Advertisement	100.00%				100.00%
			% within Q2_Other Brand	100.00%				100.00%
			% of Total	100.00%				100.00%
		Total	Count	30				30
			% within Type of Advertisement	100.00%				100.00%
			% within Q2_Other Brand	100.00%				100.00%
			% of Total	100.00%				100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	17	1		1	20
			% within Type of Advertisement	85.00%	5.00%		5.00%	100.00%
			% within Q2_Other Brand	100.00%	100.00%	100.00%	100.00%	100.00%
			% of Total	85.00%	5.00%	5.00%	5.00%	100.00%
		Total	Count	17	1	1	1	20
			% within Type of Advertisement	85.00%	5.00%	5.00%	5.00%	100.00%
			% within Q2_Other Brand	100.00%	100.00%	100.00%	100.00%	100.00%
			% of Total	85.00%	5.00%	5.00%	5.00%	100.00%

Question 3 - Based on your answer in Question 2, where did you see the selected brand on the Formula 1 track?

Frequency Analysis Per Track Location

Q3_Advertisement Placement

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Trackside	53	53	53	53
	Track Infrastructure	47	47	47	100
	Total	100	100	100	

Question 3 - Based on your answer in Question 2, where did you see the selected brand on the Formula 1 track?

Frequency Analysis Per Survey ID

Q3_Advertisement Placement

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Trackside	16	53.3	53.3	53.3
		Track Infrastructure	14	46.7	46.7	100
		Total	30	100	100	
A - Postgraduate	Valid	Trackside	9	45	45	45
		Track Infrastructure	11	55	55	100
		Total	20	100	100	
B - Undergraduate	Valid	Trackside	20	66.7	66.7	66.7
		Track Infrastructure	10	33.3	33.3	100
		Total	30	100	100	
B - Postgraduate	Valid	Trackside	8	40	40	40
		Track Infrastructure	12	60	60	100
		Total	20	100	100	

Question 3 - Based on your answer in Question 2, where did you see the selected brand on the Formula 1 track?

Crosstabulation: Gender * Brand

Survey ID				Q3_Advertisement_Placement		Total
				Trackside	Track Infrastructure	
A - Undergraduate	Gender	Female	Count	9	7	16
			% within Gender	56.30%	43.80%	100.00%
			% within Q3_Advertisement_Placement	56.30%	50.00%	53.30%
			% of Total	30.00%	23.30%	53.30%
		Male	Count	7	7	14
			% within Gender	50.00%	50.00%	100.00%
			% within Q3_Advertisement_Placement	43.80%	50.00%	46.70%
			% of Total	23.30%	23.30%	46.70%
	Total		Count	16	14	30
			% within Gender	53.30%	46.70%	100.00%
			% within Q3_Advertisement_Placement	100.00%	100.00%	100.00%
			% of Total	53.30%	46.70%	100.00%
A - Postgraduate	Gender	Female	Count	5	3	8
			% within Gender	62.50%	37.50%	100.00%
			% within Q3_Advertisement_Placement	55.60%	27.30%	40.00%
			% of Total	25.00%	15.00%	40.00%
		Male	Count	4	8	12
			% within Gender	33.30%	66.70%	100.00%
			% within Q3_Advertisement_Placement	44.40%	72.70%	60.00%
			% of Total	20.00%	40.00%	60.00%
	Total		Count	9	11	20
			% within Gender	45.00%	55.00%	100.00%
			% within Q3_Advertisement_Placement	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
B - Undergraduate	Gender	Female	Count	13	8	21
			% within Gender	61.90%	38.10%	100.00%
			% within Q3_Advertisement_Placement	65.00%	80.00%	70.00%
			% of Total	43.30%	26.70%	70.00%
		Male	Count	7	2	9
			% within Gender	77.80%	22.20%	100.00%
			% within Q3_Advertisement_Placement	35.00%	20.00%	30.00%
			% of Total	23.30%	6.70%	30.00%
	Total		Count	20	10	30
			% within Gender	66.70%	33.30%	100.00%
			% within Q3_Advertisement_Placement	100.00%	100.00%	100.00%
			% of Total	66.70%	33.30%	100.00%
B - Postgraduate	Gender	Female	Count	5	6	11
			% within Gender	45.50%	54.50%	100.00%
			% within Q3_Advertisement_Placement	62.50%	50.00%	55.00%
			% of Total	25.00%	30.00%	55.00%
		Male	Count	3	6	9
			% within Gender	33.30%	66.70%	100.00%
			% within Q3_Advertisement_Placement	37.50%	50.00%	45.00%
			% of Total	15.00%	30.00%	45.00%
	Total		Count	8	12	20
			% within Gender	40.00%	60.00%	100.00%
			% within Q3_Advertisement_Placement	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%

Question 3 - Based on your answer in Question 2, where did you see the selected brand on the Formula 1 track?

Crosstabulation: Type of Advertisement * Brand

Survey ID				Q3_Advertisement Placement		Total
				Trackside	Track Infrastructure	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	16	14	30
			% within Type of Advertisement	53.30%	46.70%	100.00%
			% within Q3_Advertisement Placement	100.00%	100.00%	100.00%
			% of Total	53.30%	46.70%	100.00%
	Total		Count	16	14	30
			% within Type of Advertisement	53.30%	46.70%	100.00%
			% within Q3_Advertisement Placement	100.00%	100.00%	100.00%
			% of Total	53.30%	46.70%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within Q3_Advertisement Placement	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
	Total		Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within Q3_Advertisement Placement	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	20	10	30
			% within Type of Advertisement	66.70%	33.30%	100.00%
			% within Q3_Advertisement Placement	100.00%	100.00%	100.00%
			% of Total	66.70%	33.30%	100.00%
	Total		Count	20	10	30
			% within Type of Advertisement	66.70%	33.30%	100.00%
			% within Q3_Advertisement Placement	100.00%	100.00%	100.00%
			% of Total	66.70%	33.30%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	8	12	20
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within Q3_Advertisement Placement	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
	Total		Count	8	12	20
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within Q3_Advertisement Placement	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%

Question 4 – Aided Brand Recall Assessment: Advertisement Recognition Task

Frequency Analysis Per Brand

Liqui Moly

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	63	63	63	63
	No, I do not recall seeing this brand advertised	37	37	37	100
	Total	100	100	100	

Qatar Airways

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	87	87	87	87
	No, I do not recall seeing this brand advertised	13	13	13	100
	Total	100	100	100	

Salesforce

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	66	66	66	66
	No, I do not recall seeing this brand advertised	34	34	34	100
	Total	100	100	100	

ABB

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	3	3	3	3
	No, I do not recall seeing this brand advertised	97	97	97	100
	Total	100	100	100	

Heineken

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	84	84	84	84
	No, I do not recall seeing this brand advertised	16	16	16	100
	Total	100	100	100	

Paramount+

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	33	33	33	33
	No, I do not recall seeing this brand advertised	67	67	67	100
	Total	100	100	100	

Julius Bär

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	3	3	3	3
	No, I do not recall seeing this brand advertised	97	97	97	100
	Total	100	100	100	

Lenovo

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	76	76	76	76
	No, I do not recall seeing this brand advertised	24	24	24	100
	Total	100	100	100	

Panasonic

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	5	5	5	5
	No, I do not recall seeing this brand advertised	95	95	95	100
	Total	100	100	100	

Pirelli

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	71	71	71	71
	No, I do not recall seeing this brand advertised	29	29	29	100
	Total	100	100	100	

MSC Cruises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	51	51	51	51
	No, I do not recall seeing this brand advertised	49	49	49	100
	Total	100	100	100	

DHL

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	87	87	87	87
	No, I do not recall seeing this brand advertised	13	13	13	100
	Total	100	100	100	

Rolex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	79	79	79	79
	No, I do not recall seeing this brand advertised	21	21	21	100
	Total	100	100	100	

Aramco

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	36	36	36	36
	No, I do not recall seeing this brand advertised	64	64	64	100
	Total	100	100	100	

Workable

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, I do recall seeing this brand advertised	7	7	7	7
	No, I do not recall seeing this brand advertised	93	93	93	100
	Total	100	100	100	

Question 4 – Aided Brand Recall Assessment: Advertisement Recognition Task

Frequency Analysis Per Survey ID

Liqui Moly

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	19	63.3	63.3	63.3
		No, I do not recall seeing this brand advertised	11	36.7	36.7	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	15	75	75	75
		No, I do not recall seeing this brand advertised	5	25	25	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	19	63.3	63.3	63.3
		No, I do not recall seeing this brand advertised	11	36.7	36.7	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	10	50	50	50
		No, I do not recall seeing this brand advertised	10	50	50	100
		Total	20	100	100	

Qatar Airways

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	27	90	90	90
		No, I do not recall seeing this brand advertised	3	10	10	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	17	85	85	85
		No, I do not recall seeing this brand advertised	3	15	15	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	27	90	90	90
		No, I do not recall seeing this brand advertised	3	10	10	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	16	80	80	80
		No, I do not recall seeing this brand advertised	4	20	20	100
		Total	20	100	100	

Salesforce

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	18	60	60	60
		No, I do not recall seeing this brand advertised	12	40	40	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	14	70	70	70
		No, I do not recall seeing this brand advertised	6	30	30	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	23	76.7	76.7	76.7
		No, I do not recall seeing this brand advertised	7	23.3	23.3	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	11	55	55	55
		No, I do not recall seeing this brand advertised	9	45	45	100
		Total	20	100	100	

ABB

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	No, I do not recall seeing this brand advertised	30	100	100	100
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	1	5	5	5
		No, I do not recall seeing this brand advertised	19	95	95	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	1	3.3	3.3	3.3
		No, I do not recall seeing this brand advertised	29	96.7	96.7	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	1	5	5	5
		No, I do not recall seeing this brand advertised	19	95	95	100
		Total	20	100	100	

Heineken

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	28	93.3	93.3	93.3
		No, I do not recall seeing this brand advertised	2	6.7	6.7	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	15	75	75	75
		No, I do not recall seeing this brand advertised	5	25	25	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	26	86.7	86.7	86.7
		No, I do not recall seeing this brand advertised	4	13.3	13.3	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	15	75	75	75
		No, I do not recall seeing this brand advertised	5	25	25	100
		Total	20	100	100	

Paramount+

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	12	40	40	40
		No, I do not recall seeing this brand advertised	18	60	60	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	9	45	45	45
		No, I do not recall seeing this brand advertised	11	55	55	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	9	30	30	30
		No, I do not recall seeing this brand advertised	21	70	70	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	3	15	15	15
		No, I do not recall seeing this brand advertised	17	85	85	100
		Total	20	100	100	

Julius Bär

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	2	6.7	6.7	6.7
		No, I do not recall seeing this brand advertised	28	93.3	93.3	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	1	5	5	5
		No, I do not recall seeing this brand advertised	19	95	95	100
		Total	20	100	100	
B - Undergraduate	Valid	No, I do not recall seeing this brand advertised	30	100	100	100
B - Postgraduate	Valid	No, I do not recall seeing this brand advertised	20	100	100	100

Lenovo

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	25	83.3	83.3	83.3
		No, I do not recall seeing this brand advertised	5	16.7	16.7	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	16	80	80	80
		No, I do not recall seeing this brand advertised	4	20	20	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	21	70	70	70
		No, I do not recall seeing this brand advertised	9	30	30	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	14	70	70	70
		No, I do not recall seeing this brand advertised	6	30	30	100
		Total	20	100	100	

Panasonic

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	2	6.7	6.7	6.7
		No, I do not recall seeing this brand advertised	28	93.3	93.3	100
		Total	30	100	100	
A - Postgraduate	Valid	No, I do not recall seeing this brand advertised	20	100	100	100
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	2	6.7	6.7	6.7
		No, I do not recall seeing this brand advertised	28	93.3	93.3	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	1	5	5	5
		No, I do not recall seeing this brand advertised	19	95	95	100
		Total	20	100	100	

Pirelli

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	24	80	80	80
		No, I do not recall seeing this brand advertised	6	20	20	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	14	70	70	70
		No, I do not recall seeing this brand advertised	6	30	30	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	19	63.3	63.3	63.3
		No, I do not recall seeing this brand advertised	11	36.7	36.7	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	14	70	70	70
		No, I do not recall seeing this brand advertised	6	30	30	100
		Total	20	100	100	

MSC Cruises

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	19	63.3	63.3	63.3
		No, I do not recall seeing this brand advertised	11	36.7	36.7	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	9	45	45	45
		No, I do not recall seeing this brand advertised	11	55	55	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	15	50	50	50
		No, I do not recall seeing this brand advertised	15	50	50	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	8	40	40	40
		No, I do not recall seeing this brand advertised	12	60	60	100
		Total	20	100	100	

DHL

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	26	86.7	86.7	86.7
		No, I do not recall seeing this brand advertised	4	13.3	13.3	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	14	70	70	70
		No, I do not recall seeing this brand advertised	6	30	30	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	28	93.3	93.3	93.3
		No, I do not recall seeing this brand advertised	2	6.7	6.7	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	19	95	95	95
		No, I do not recall seeing this brand advertised	1	5	5	100
		Total	20	100	100	

Rolex

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	26	86.7	86.7	86.7
		No, I do not recall seeing this brand advertised	4	13.3	13.3	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	18	90	90	90
		No, I do not recall seeing this brand advertised	2	10	10	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	21	70	70	70
		No, I do not recall seeing this brand advertised	9	30	30	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	14	70	70	70
		No, I do not recall seeing this brand advertised	6	30	30	100
		Total	20	100	100	

Aramco

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	17	56.7	56.7	56.7
		No, I do not recall seeing this brand advertised	13	43.3	43.3	100
		Total	30	100	100	
A - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	8	40	40	40
		No, I do not recall seeing this brand advertised	12	60	60	100
		Total	20	100	100	
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	6	20	20	20
		No, I do not recall seeing this brand advertised	24	80	80	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	5	25	25	25
		No, I do not recall seeing this brand advertised	15	75	75	100
		Total	20	100	100	

Workable

Survey ID			Frequency	Percent	Valid Percent	Cumulative Percent
A - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	3	10	10	10
		No, I do not recall seeing this brand advertised	27	90	90	100
		Total	30	100	100	
A - Postgraduate	Valid	No, I do not recall seeing this brand advertised	20	100	100	100
B - Undergraduate	Valid	Yes, I do recall seeing this brand advertised	1	3.3	3.3	3.3
		No, I do not recall seeing this brand advertised	29	96.7	96.7	100
		Total	30	100	100	
B - Postgraduate	Valid	Yes, I do recall seeing this brand advertised	3	15	15	15
		No, I do not recall seeing this brand advertised	17	85	85	100
		Total	20	100	100	

Question 4 – Aided Brand Recall Assessment: Advertisement Recognition Task

Crosstabulation: Gender * Brand

Survey ID			Liqui Moly		Total
			Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	12	4	16
			% within Gender	75.00%	25.00%	100.00%
			% within Liqui Moly	63.20%	36.40%	53.30%
			% of Total	40.00%	13.30%	53.30%
		Male	Count	7	7	14
			% within Gender	50.00%	50.00%	100.00%
			% within Liqui Moly	36.80%	63.60%	46.70%
			% of Total	23.30%	23.30%	46.70%
	Total		Count	19	11	30
			% within Gender	63.30%	36.70%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
A - Postgraduate	Gender	Female	Count	5	3	8
			% within Gender	62.50%	37.50%	100.00%
			% within Liqui Moly	33.30%	60.00%	40.00%
			% of Total	25.00%	15.00%	40.00%
		Male	Count	10	2	12
			% within Gender	83.30%	16.70%	100.00%
			% within Liqui Moly	66.70%	40.00%	60.00%
			% of Total	50.00%	10.00%	60.00%
	Total		Count	15	5	20
			% within Gender	75.00%	25.00%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	75.00%	25.00%	100.00%
B - Undergraduate	Gender	Female	Count	12	9	21
			% within Gender	57.10%	42.90%	100.00%
			% within Liqui Moly	63.20%	81.80%	70.00%
			% of Total	40.00%	30.00%	70.00%
		Male	Count	7	2	9
			% within Gender	77.80%	22.20%	100.00%
			% within Liqui Moly	36.80%	18.20%	30.00%
			% of Total	23.30%	6.70%	30.00%
	Total		Count	19	11	30
			% within Gender	63.30%	36.70%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
B - Postgraduate	Gender	Female	Count	6	5	11
			% within Gender	54.50%	45.50%	100.00%
			% within Liqui Moly	60.00%	50.00%	55.00%
			% of Total	30.00%	25.00%	55.00%
		Male	Count	4	5	9
			% within Gender	44.40%	55.60%	100.00%
			% within Liqui Moly	40.00%	50.00%	45.00%
			% of Total	20.00%	25.00%	45.00%
	Total		Count	10	10	20
			% within Gender	50.00%	50.00%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	50.00%	50.00%	100.00%

Survey ID			Qatar Airways		Total
			Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	16	0	16
			% within Gender	100.00%	0.00%	100.00%
			% within Qatar Airways	59.30%	0.00%	53.30%
			% of Total	53.30%	0.00%	53.30%
		Male	Count	11	3	14
			% within Gender	78.60%	21.40%	100.00%
			% within Qatar Airways	40.70%	100.00%	46.70%
			% of Total	36.70%	10.00%	46.70%
	Total		Count	27	3	30
			% within Gender	90.00%	10.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	90.00%	10.00%	100.00%
A - Postgraduate	Gender	Female	Count	6	2	8
			% within Gender	75.00%	25.00%	100.00%
			% within Qatar Airways	35.30%	66.70%	40.00%
			% of Total	30.00%	10.00%	40.00%
		Male	Count	11	1	12
			% within Gender	91.70%	8.30%	100.00%
			% within Qatar Airways	64.70%	33.30%	60.00%
			% of Total	55.00%	5.00%	60.00%
	Total		Count	17	3	20
			% within Gender	85.00%	15.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	85.00%	15.00%	100.00%
B - Undergraduate	Gender	Female	Count	19	2	21
			% within Gender	90.50%	9.50%	100.00%
			% within Qatar Airways	70.40%	66.70%	70.00%
			% of Total	63.30%	6.70%	70.00%
		Male	Count	8	1	9
			% within Gender	88.90%	11.10%	100.00%
			% within Qatar Airways	29.60%	33.30%	30.00%
			% of Total	26.70%	3.30%	30.00%
	Total		Count	27	3	30
			% within Gender	90.00%	10.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	90.00%	10.00%	100.00%
B - Postgraduate	Gender	Female	Count	10	1	11
			% within Gender	90.90%	9.10%	100.00%
			% within Qatar Airways	62.50%	25.00%	55.00%
			% of Total	50.00%	5.00%	55.00%
		Male	Count	6	3	9
			% within Gender	66.70%	33.30%	100.00%
			% within Qatar Airways	37.50%	75.00%	45.00%
			% of Total	30.00%	15.00%	45.00%
	Total		Count	16	4	20
			% within Gender	80.00%	20.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	80.00%	20.00%	100.00%

Survey ID			Salesforce		Total
			Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	9	7	16
			% within Gender	56.30%	43.80%	100.00%
			% within Salesforce	50.00%	58.30%	53.30%
			% of Total	30.00%	23.30%	53.30%
		Male	Count	9	5	14
			% within Gender	64.30%	35.70%	100.00%
			% within Salesforce	50.00%	41.70%	46.70%
			% of Total	30.00%	16.70%	46.70%
	Total		Count	18	12	30
			% within Gender	60.00%	40.00%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	60.00%	40.00%	100.00%
A - Postgraduate	Gender	Female	Count	4	4	8
			% within Gender	50.00%	50.00%	100.00%
			% within Salesforce	28.60%	66.70%	40.00%
			% of Total	20.00%	20.00%	40.00%
		Male	Count	10	2	12
			% within Gender	83.30%	16.70%	100.00%
			% within Salesforce	71.40%	33.30%	60.00%
			% of Total	50.00%	10.00%	60.00%
	Total		Count	14	6	20
			% within Gender	70.00%	30.00%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
B - Undergraduate	Gender	Female	Count	16	5	21
			% within Gender	76.20%	23.80%	100.00%
			% within Salesforce	69.60%	71.40%	70.00%
			% of Total	53.30%	16.70%	70.00%
		Male	Count	7	2	9
			% within Gender	77.80%	22.20%	100.00%
			% within Salesforce	30.40%	28.60%	30.00%
			% of Total	23.30%	6.70%	30.00%
	Total		Count	23	7	30
			% within Gender	76.70%	23.30%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	76.70%	23.30%	100.00%
B - Postgraduate	Gender	Female	Count	6	5	11
			% within Gender	54.50%	45.50%	100.00%
			% within Salesforce	54.50%	55.60%	55.00%
			% of Total	30.00%	25.00%	55.00%
		Male	Count	5	4	9
			% within Gender	55.60%	44.40%	100.00%
			% within Salesforce	45.50%	44.40%	45.00%
			% of Total	25.00%	20.00%	45.00%
	Total		Count	11	9	20
			% within Gender	55.00%	45.00%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	55.00%	45.00%	100.00%

Survey ID			ABB		Total
			Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	16	16
			% within Gender	100.00%	100.00%
			% within ABB	53.30%	53.30%
			% of Total	53.30%	53.30%
		Male	Count	14	14
			% within Gender	100.00%	100.00%
			% within ABB	46.70%	46.70%
			% of Total	46.70%	46.70%
	Total		Count	30	30
			% within Gender	100.00%	100.00%
			% within ABB	100.00%	100.00%
			% of Total	100.00%	100.00%
A - Postgraduate	Gender	Female	Count	1	7	8
			% within Gender	12.50%	87.50%	100.00%
			% within ABB	100.00%	36.80%	40.00%
			% of Total	5.00%	35.00%	40.00%
		Male	Count	0	12	12
			% within Gender	0.00%	100.00%	100.00%
			% within ABB	0.00%	63.20%	60.00%
			% of Total	0.00%	60.00%	60.00%
	Total		Count	1	19	20
			% within Gender	5.00%	95.00%	100.00%
			% within ABB	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
B - Undergraduate	Gender	Female	Count	0	21	21
			% within Gender	0.00%	100.00%	100.00%
			% within ABB	0.00%	72.40%	70.00%
			% of Total	0.00%	70.00%	70.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within ABB	100.00%	27.60%	30.00%
			% of Total	3.30%	26.70%	30.00%
	Total		Count	1	29	30
			% within Gender	3.30%	96.70%	100.00%
			% within ABB	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
B - Postgraduate	Gender	Female	Count	1	10	11
			% within Gender	9.10%	90.90%	100.00%
			% within ABB	100.00%	52.60%	55.00%
			% of Total	5.00%	50.00%	55.00%
		Male	Count	0	9	9
			% within Gender	0.00%	100.00%	100.00%
			% within ABB	0.00%	47.40%	45.00%
			% of Total	0.00%	45.00%	45.00%
	Total		Count	1	19	20
			% within Gender	5.00%	95.00%	100.00%
			% within ABB	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%

Survey ID			Heineken		Total
			Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	15	1	16
			% within Gender	93.80%	6.30%	100.00%
			% within Heineken	53.60%	50.00%	53.30%
			% of Total	50.00%	3.30%	53.30%
		Male	Count	13	1	14
			% within Gender	92.90%	7.10%	100.00%
			% within Heineken	46.40%	50.00%	46.70%
			% of Total	43.30%	3.30%	46.70%
	Total		Count	28	2	30
			% within Gender	93.30%	6.70%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	93.30%	6.70%	100.00%
A - Postgraduate	Gender	Female	Count	4	4	8
			% within Gender	50.00%	50.00%	100.00%
			% within Heineken	26.70%	80.00%	40.00%
			% of Total	20.00%	20.00%	40.00%
		Male	Count	11	1	12
			% within Gender	91.70%	8.30%	100.00%
			% within Heineken	73.30%	20.00%	60.00%
			% of Total	55.00%	5.00%	60.00%
	Total		Count	15	5	20
			% within Gender	75.00%	25.00%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	75.00%	25.00%	100.00%
B - Undergraduate	Gender	Female	Count	18	3	21
			% within Gender	85.70%	14.30%	100.00%
			% within Heineken	69.20%	75.00%	70.00%
			% of Total	60.00%	10.00%	70.00%
		Male	Count	8	1	9
			% within Gender	88.90%	11.10%	100.00%
			% within Heineken	30.80%	25.00%	30.00%
			% of Total	26.70%	3.30%	30.00%
	Total		Count	26	4	30
			% within Gender	86.70%	13.30%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	86.70%	13.30%	100.00%
B - Postgraduate	Gender	Female	Count	8	3	11
			% within Gender	72.70%	27.30%	100.00%
			% within Heineken	53.30%	60.00%	55.00%
			% of Total	40.00%	15.00%	55.00%
		Male	Count	7	2	9
			% within Gender	77.80%	22.20%	100.00%
			% within Heineken	46.70%	40.00%	45.00%
			% of Total	35.00%	10.00%	45.00%
	Total		Count	15	5	20
			% within Gender	75.00%	25.00%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	75.00%	25.00%	100.00%

Survey ID			Paramount+		Total
			Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	7	9	16
			% within Gender	43.80%	56.30%	100.00%
			% within Paramount+	58.30%	50.00%	53.30%
			% of Total	23.30%	30.00%	53.30%
		Male	Count	5	9	14
			% within Gender	35.70%	64.30%	100.00%
			% within Paramount+	41.70%	50.00%	46.70%
			% of Total	16.70%	30.00%	46.70%
	Total		Count	12	18	30
			% within Gender	40.00%	60.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
A - Postgraduate	Gender	Female	Count	1	7	8
			% within Gender	12.50%	87.50%	100.00%
			% within Paramount+	11.10%	63.60%	40.00%
			% of Total	5.00%	35.00%	40.00%
		Male	Count	8	4	12
			% within Gender	66.70%	33.30%	100.00%
			% within Paramount+	88.90%	36.40%	60.00%
			% of Total	40.00%	20.00%	60.00%
	Total		Count	9	11	20
			% within Gender	45.00%	55.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
B - Undergraduate	Gender	Female	Count	6	15	21
			% within Gender	28.60%	71.40%	100.00%
			% within Paramount+	66.70%	71.40%	70.00%
			% of Total	20.00%	50.00%	70.00%
		Male	Count	3	6	9
			% within Gender	33.30%	66.70%	100.00%
			% within Paramount+	33.30%	28.60%	30.00%
			% of Total	10.00%	20.00%	30.00%
	Total		Count	9	21	30
			% within Gender	30.00%	70.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
B - Postgraduate	Gender	Female	Count	0	11	11
			% within Gender	0.00%	100.00%	100.00%
			% within Paramount+	0.00%	64.70%	55.00%
			% of Total	0.00%	55.00%	55.00%
		Male	Count	3	6	9
			% within Gender	33.30%	66.70%	100.00%
			% within Paramount+	100.00%	35.30%	45.00%
			% of Total	15.00%	30.00%	45.00%
	Total		Count	3	17	20
			% within Gender	15.00%	85.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID			Julius Bär		Total
			Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	1	15	16
			% within Gender	6.30%	93.80%	100.00%
			% within Julius Bär	50.00%	53.60%	53.30%
			% of Total	3.30%	50.00%	53.30%
		Male	Count	1	13	14
			% within Gender	7.10%	92.90%	100.00%
			% within Julius Bär	50.00%	46.40%	46.70%
			% of Total	3.30%	43.30%	46.70%
	Total		Count	2	28	30
			% within Gender	6.70%	93.30%	100.00%
			% within Julius Bär	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
A - Postgraduate	Gender	Female	Count	1	7	8
			% within Gender	12.50%	87.50%	100.00%
			% within Julius Bär	100.00%	36.80%	40.00%
			% of Total	5.00%	35.00%	40.00%
		Male	Count	0	12	12
			% within Gender	0.00%	100.00%	100.00%
			% within Julius Bär	0.00%	63.20%	60.00%
			% of Total	0.00%	60.00%	60.00%
	Total		Count	1	19	20
			% within Gender	5.00%	95.00%	100.00%
			% within Julius Bär	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
B - Undergraduate	Gender	Female	Count		21	21
			% within Gender		100.00%	100.00%
			% within Julius Bär		70.00%	70.00%
			% of Total		70.00%	70.00%
		Male	Count		9	9
			% within Gender		100.00%	100.00%
			% within Julius Bär		30.00%	30.00%
			% of Total		30.00%	30.00%
	Total		Count		30	30
			% within Gender		100.00%	100.00%
			% within Julius Bär		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Gender	Female	Count		11	11
			% within Gender		100.00%	100.00%
			% within Julius Bär		55.00%	55.00%
			% of Total		55.00%	55.00%
		Male	Count		9	9
			% within Gender		100.00%	100.00%
			% within Julius Bär		45.00%	45.00%
			% of Total		45.00%	45.00%
	Total		Count		20	20
			% within Gender		100.00%	100.00%
			% within Julius Bär		100.00%	100.00%
			% of Total		100.00%	100.00%

Survey ID			Lenovo		Total
			Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	14	2	16
			% within Gender	87.50%	12.50%	100.00%
			% within Lenovo	56.00%	40.00%	53.30%
			% of Total	46.70%	6.70%	53.30%
		Male	Count	11	3	14
			% within Gender	78.60%	21.40%	100.00%
			% within Lenovo	44.00%	60.00%	46.70%
			% of Total	36.70%	10.00%	46.70%
	Total		Count	25	5	30
			% within Gender	83.30%	16.70%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	83.30%	16.70%	100.00%
A - Postgraduate	Gender	Female	Count	4	4	8
			% within Gender	50.00%	50.00%	100.00%
			% within Lenovo	25.00%	100.00%	40.00%
			% of Total	20.00%	20.00%	40.00%
		Male	Count	12	0	12
			% within Gender	100.00%	0.00%	100.00%
			% within Lenovo	75.00%	0.00%	60.00%
			% of Total	60.00%	0.00%	60.00%
	Total		Count	16	4	20
			% within Gender	80.00%	20.00%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	80.00%	20.00%	100.00%
B - Undergraduate	Gender	Female	Count	14	7	21
			% within Gender	66.70%	33.30%	100.00%
			% within Lenovo	66.70%	77.80%	70.00%
			% of Total	46.70%	23.30%	70.00%
		Male	Count	7	2	9
			% within Gender	77.80%	22.20%	100.00%
			% within Lenovo	33.30%	22.20%	30.00%
			% of Total	23.30%	6.70%	30.00%
	Total		Count	21	9	30
			% within Gender	70.00%	30.00%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
B - Postgraduate	Gender	Female	Count	8	3	11
			% within Gender	72.70%	27.30%	100.00%
			% within Lenovo	57.10%	50.00%	55.00%
			% of Total	40.00%	15.00%	55.00%
		Male	Count	6	3	9
			% within Gender	66.70%	33.30%	100.00%
			% within Lenovo	42.90%	50.00%	45.00%
			% of Total	30.00%	15.00%	45.00%
	Total		Count	14	6	20
			% within Gender	70.00%	30.00%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%

Survey ID				Panasonic		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	2	14	16
			% within Gender	12.50%	87.50%	100.00%
			% within Panasonic	100.00%	50.00%	53.30%
			% of Total	6.70%	46.70%	53.30%
		Male	Count	0	14	14
			% within Gender	0.00%	100.00%	100.00%
			% within Panasonic	0.00%	50.00%	46.70%
			% of Total	0.00%	46.70%	46.70%
		Total	Count	2	28	30
			% within Gender	6.70%	93.30%	100.00%
			% within Panasonic	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
A - Postgraduate	Gender	Female	Count		8	8
			% within Gender		100.00%	100.00%
			% within Panasonic		40.00%	40.00%
			% of Total		40.00%	40.00%
		Male	Count		12	12
			% within Gender		100.00%	100.00%
			% within Panasonic		60.00%	60.00%
			% of Total		60.00%	60.00%
		Total	Count		20	20
			% within Gender		100.00%	100.00%
			% within Panasonic		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Gender	Female	Count	1	20	21
			% within Gender	4.80%	95.20%	100.00%
			% within Panasonic	50.00%	71.40%	70.00%
			% of Total	3.30%	66.70%	70.00%
		Male	Count	1	8	9
			% within Gender	11.10%	88.90%	100.00%
			% within Panasonic	50.00%	28.60%	30.00%
			% of Total	3.30%	26.70%	30.00%
		Total	Count	2	28	30
			% within Gender	6.70%	93.30%	100.00%
			% within Panasonic	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
B - Postgraduate	Gender	Female	Count	1	10	11
			% within Gender	9.10%	90.90%	100.00%
			% within Panasonic	100.00%	52.60%	55.00%
			% of Total	5.00%	50.00%	55.00%
		Male	Count	0	9	9
			% within Gender	0.00%	100.00%	100.00%
			% within Panasonic	0.00%	47.40%	45.00%
			% of Total	0.00%	45.00%	45.00%
		Total	Count	1	19	20
			% within Gender	5.00%	95.00%	100.00%
			% within Panasonic	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%

Survey ID				Pirelli		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	11	5	16
			% within Gender	68.80%	31.30%	100.00%
			% within Pirelli	45.80%	83.30%	53.30%
			% of Total	36.70%	16.70%	53.30%
		Male	Count	13	1	14
			% within Gender	92.90%	7.10%	100.00%
			% within Pirelli	54.20%	16.70%	46.70%
			% of Total	43.30%	3.30%	46.70%
		Total	Count	24	6	30
			% within Gender	80.00%	20.00%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	80.00%	20.00%	100.00%
A - Postgraduate	Gender	Female	Count	5	3	8
			% within Gender	62.50%	37.50%	100.00%
			% within Pirelli	35.70%	50.00%	40.00%
			% of Total	25.00%	15.00%	40.00%
		Male	Count	9	3	12
			% within Gender	75.00%	25.00%	100.00%
			% within Pirelli	64.30%	50.00%	60.00%
			% of Total	45.00%	15.00%	60.00%
		Total	Count	14	6	20
			% within Gender	70.00%	30.00%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
B - Undergraduate	Gender	Female	Count	13	8	21
			% within Gender	61.90%	38.10%	100.00%
			% within Pirelli	68.40%	72.70%	70.00%
			% of Total	43.30%	26.70%	70.00%
		Male	Count	6	3	9
			% within Gender	66.70%	33.30%	100.00%
			% within Pirelli	31.60%	27.30%	30.00%
			% of Total	20.00%	10.00%	30.00%
		Total	Count	19	11	30
			% within Gender	63.30%	36.70%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
B - Postgraduate	Gender	Female	Count	8	3	11
			% within Gender	72.70%	27.30%	100.00%
			% within Pirelli	57.10%	50.00%	55.00%
			% of Total	40.00%	15.00%	55.00%
		Male	Count	6	3	9
			% within Gender	66.70%	33.30%	100.00%
			% within Pirelli	42.90%	50.00%	45.00%
			% of Total	30.00%	15.00%	45.00%
		Total	Count	14	6	20
			% within Gender	70.00%	30.00%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%

Survey ID				MSC Cruises		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	9	7	16
			% within Gender	56.30%	43.80%	100.00%
			% within MSC Cruises	47.40%	63.60%	53.30%
			% of Total	30.00%	23.30%	53.30%
		Male	Count	10	4	14
			% within Gender	71.40%	28.60%	100.00%
			% within MSC Cruises	52.60%	36.40%	46.70%
			% of Total	33.30%	13.30%	46.70%
		Total	Count	19	11	30
			% within Gender	63.30%	36.70%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
A - Postgraduate	Gender	Female	Count	1	7	8
			% within Gender	12.50%	87.50%	100.00%
			% within MSC Cruises	11.10%	63.60%	40.00%
			% of Total	5.00%	35.00%	40.00%
		Male	Count	8	4	12
			% within Gender	66.70%	33.30%	100.00%
			% within MSC Cruises	88.90%	36.40%	60.00%
			% of Total	40.00%	20.00%	60.00%
		Total	Count	9	11	20
			% within Gender	45.00%	55.00%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
B - Undergraduate	Gender	Female	Count	10	11	21
			% within Gender	47.60%	52.40%	100.00%
			% within MSC Cruises	66.70%	73.30%	70.00%
			% of Total	33.30%	36.70%	70.00%
		Male	Count	5	4	9
			% within Gender	55.60%	44.40%	100.00%
			% within MSC Cruises	33.30%	26.70%	30.00%
			% of Total	16.70%	13.30%	30.00%
		Total	Count	15	15	30
			% within Gender	50.00%	50.00%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	50.00%	50.00%	100.00%
B - Postgraduate	Gender	Female	Count	4	7	11
			% within Gender	36.40%	63.60%	100.00%
			% within MSC Cruises	50.00%	58.30%	55.00%
			% of Total	20.00%	35.00%	55.00%
		Male	Count	4	5	9
			% within Gender	44.40%	55.60%	100.00%
			% within MSC Cruises	50.00%	41.70%	45.00%
			% of Total	20.00%	25.00%	45.00%
		Total	Count	8	12	20
			% within Gender	40.00%	60.00%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%

Survey ID				DHL		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	14	2	16
			% within Gender	87.50%	12.50%	100.00%
			% within DHL	53.80%	50.00%	53.30%
			% of Total	46.70%	6.70%	53.30%
		Male	Count	12	2	14
			% within Gender	85.70%	14.30%	100.00%
			% within DHL	46.20%	50.00%	46.70%
			% of Total	40.00%	6.70%	46.70%
		Total	Count	26	4	30
			% within Gender	86.70%	13.30%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	86.70%	13.30%	100.00%
A - Postgraduate	Gender	Female	Count	5	3	8
			% within Gender	62.50%	37.50%	100.00%
			% within DHL	35.70%	50.00%	40.00%
			% of Total	25.00%	15.00%	40.00%
		Male	Count	9	3	12
			% within Gender	75.00%	25.00%	100.00%
			% within DHL	64.30%	50.00%	60.00%
			% of Total	45.00%	15.00%	60.00%
		Total	Count	14	6	20
			% within Gender	70.00%	30.00%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
B - Undergraduate	Gender	Female	Count	19	2	21
			% within Gender	90.50%	9.50%	100.00%
			% within DHL	67.90%	100.00%	70.00%
			% of Total	63.30%	6.70%	70.00%
		Male	Count	9	0	9
			% within Gender	100.00%	0.00%	100.00%
			% within DHL	32.10%	0.00%	30.00%
			% of Total	30.00%	0.00%	30.00%
		Total	Count	28	2	30
			% within Gender	93.30%	6.70%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	93.30%	6.70%	100.00%
B - Postgraduate	Gender	Female	Count	11	0	11
			% within Gender	100.00%	0.00%	100.00%
			% within DHL	57.90%	0.00%	55.00%
			% of Total	55.00%	0.00%	55.00%
		Male	Count	8	1	9
			% within Gender	88.90%	11.10%	100.00%
			% within DHL	42.10%	100.00%	45.00%
			% of Total	40.00%	5.00%	45.00%
		Total	Count	19	1	20
			% within Gender	95.00%	5.00%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	95.00%	5.00%	100.00%

Survey ID			Rolex		Total
			Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	12	4	16
			% within Gender	75.00%	25.00%	100.00%
			% within Rolex	46.20%	100.00%	53.30%
			% of Total	40.00%	13.30%	53.30%
		Male	Count	14	0	14
			% within Gender	100.00%	0.00%	100.00%
			% within Rolex	53.80%	0.00%	46.70%
			% of Total	46.70%	0.00%	46.70%
	Total		Count	26	4	30
			% within Gender	86.70%	13.30%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	86.70%	13.30%	100.00%
A - Postgraduate	Gender	Female	Count	7	1	8
			% within Gender	87.50%	12.50%	100.00%
			% within Rolex	38.90%	50.00%	40.00%
			% of Total	35.00%	5.00%	40.00%
		Male	Count	11	1	12
			% within Gender	91.70%	8.30%	100.00%
			% within Rolex	61.10%	50.00%	60.00%
			% of Total	55.00%	5.00%	60.00%
	Total		Count	18	2	20
			% within Gender	90.00%	10.00%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	90.00%	10.00%	100.00%
B - Undergraduate	Gender	Female	Count	12	9	21
			% within Gender	57.10%	42.90%	100.00%
			% within Rolex	57.10%	100.00%	70.00%
			% of Total	40.00%	30.00%	70.00%
		Male	Count	9	0	9
			% within Gender	100.00%	0.00%	100.00%
			% within Rolex	42.90%	0.00%	30.00%
			% of Total	30.00%	0.00%	30.00%
	Total		Count	21	9	30
			% within Gender	70.00%	30.00%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
B - Postgraduate	Gender	Female	Count	7	4	11
			% within Gender	63.60%	36.40%	100.00%
			% within Rolex	50.00%	66.70%	55.00%
			% of Total	35.00%	20.00%	55.00%
		Male	Count	7	2	9
			% within Gender	77.80%	22.20%	100.00%
			% within Rolex	50.00%	33.30%	45.00%
			% of Total	35.00%	10.00%	45.00%
	Total		Count	14	6	20
			% within Gender	70.00%	30.00%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%

Survey ID			Aramco		Total
			Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	9	7	16
			% within Gender	56.30%	43.80%	100.00%
			% within Aramco	52.90%	53.80%	53.30%
			% of Total	30.00%	23.30%	53.30%
		Male	Count	8	6	14
			% within Gender	57.10%	42.90%	100.00%
			% within Aramco	47.10%	46.20%	46.70%
			% of Total	26.70%	20.00%	46.70%
	Total		Count	17	13	30
			% within Gender	56.70%	43.30%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	56.70%	43.30%	100.00%
A - Postgraduate	Gender	Female	Count	2	6	8
			% within Gender	25.00%	75.00%	100.00%
			% within Aramco	25.00%	50.00%	40.00%
			% of Total	10.00%	30.00%	40.00%
		Male	Count	6	6	12
			% within Gender	50.00%	50.00%	100.00%
			% within Aramco	75.00%	50.00%	60.00%
			% of Total	30.00%	30.00%	60.00%
	Total		Count	8	12	20
			% within Gender	40.00%	60.00%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
B - Undergraduate	Gender	Female	Count	3	18	21
			% within Gender	14.30%	85.70%	100.00%
			% within Aramco	50.00%	75.00%	70.00%
			% of Total	10.00%	60.00%	70.00%
		Male	Count	3	6	9
			% within Gender	33.30%	66.70%	100.00%
			% within Aramco	50.00%	25.00%	30.00%
			% of Total	10.00%	20.00%	30.00%
	Total		Count	6	24	30
			% within Gender	20.00%	80.00%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
B - Postgraduate	Gender	Female	Count	2	9	11
			% within Gender	18.20%	81.80%	100.00%
			% within Aramco	40.00%	60.00%	55.00%
			% of Total	10.00%	45.00%	55.00%
		Male	Count	3	6	9
			% within Gender	33.30%	66.70%	100.00%
			% within Aramco	60.00%	40.00%	45.00%
			% of Total	15.00%	30.00%	45.00%
	Total		Count	5	15	20
			% within Gender	25.00%	75.00%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	25.00%	75.00%	100.00%

Survey ID			Workable		Total
			Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Gender	Female	Count	2	14	16
			% within Gender	12.50%	87.50%	100.00%
			% within Workable	66.70%	51.90%	53.30%
			% of Total	6.70%	46.70%	53.30%
		Male	Count	1	13	14
			% within Gender	7.10%	92.90%	100.00%
			% within Workable	33.30%	48.10%	46.70%
			% of Total	3.30%	43.30%	46.70%
	Total		Count	3	27	30
			% within Gender	10.00%	90.00%	100.00%
			% within Workable	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
A - Postgraduate	Gender	Female	Count		8	8
			% within Gender		100.00%	100.00%
			% within Workable		40.00%	40.00%
			% of Total		40.00%	40.00%
		Male	Count		12	12
			% within Gender		100.00%	100.00%
			% within Workable		60.00%	60.00%
			% of Total		60.00%	60.00%
	Total		Count		20	20
			% within Gender		100.00%	100.00%
			% within Workable		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Gender	Female	Count	1	20	21
			% within Gender	4.80%	95.20%	100.00%
			% within Workable	100.00%	69.00%	70.00%
			% of Total	3.30%	66.70%	70.00%
		Male	Count	0	9	9
			% within Gender	0.00%	100.00%	100.00%
			% within Workable	0.00%	31.00%	30.00%
			% of Total	0.00%	30.00%	30.00%
	Total		Count	1	29	30
			% within Gender	3.30%	96.70%	100.00%
			% within Workable	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
B - Postgraduate	Gender	Female	Count	1	10	11
			% within Gender	9.10%	90.90%	100.00%
			% within Workable	33.30%	58.80%	55.00%
			% of Total	5.00%	50.00%	55.00%
		Male	Count	2	7	9
			% within Gender	22.20%	77.80%	100.00%
			% within Workable	66.70%	41.20%	45.00%
			% of Total	10.00%	35.00%	45.00%
	Total		Count	3	17	20
			% within Gender	15.00%	85.00%	100.00%
			% within Workable	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Question 4 – Aided Brand Recall Assessment: Advertisement Recognition Task

Crosstabulation: Type of Advertisement * Brand

Survey ID				Liqui Moly		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	19	11	30
			% within Type of Advertisement	63.30%	36.70%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
	Total		Count	19	11	30
			% within Type of Advertisement	63.30%	36.70%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	15	5	20
			% within Type of Advertisement	75.00%	25.00%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	75.00%	25.00%	100.00%
	Total		Count	15	5	20
			% within Type of Advertisement	75.00%	25.00%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	75.00%	25.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	19	11	30
			% within Type of Advertisement	63.30%	36.70%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
	Total		Count	19	11	30
			% within Type of Advertisement	63.30%	36.70%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	10	10	20
			% within Type of Advertisement	50.00%	50.00%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	50.00%	50.00%	100.00%
	Total		Count	10	10	20
			% within Type of Advertisement	50.00%	50.00%	100.00%
			% within Liqui Moly	100.00%	100.00%	100.00%
			% of Total	50.00%	50.00%	100.00%

Survey ID				Qatar Airways		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	27	3	30
			% within Type of Advertisement	90.00%	10.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	90.00%	10.00%	100.00%
	Total		Count	27	3	30
			% within Type of Advertisement	90.00%	10.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	90.00%	10.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	17	3	20
			% within Type of Advertisement	85.00%	15.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	85.00%	15.00%	100.00%
	Total		Count	17	3	20
			% within Type of Advertisement	85.00%	15.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	85.00%	15.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	27	3	30
			% within Type of Advertisement	90.00%	10.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	90.00%	10.00%	100.00%
	Total		Count	27	3	30
			% within Type of Advertisement	90.00%	10.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	90.00%	10.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	16	4	20
			% within Type of Advertisement	80.00%	20.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	80.00%	20.00%	100.00%
	Total		Count	16	4	20
			% within Type of Advertisement	80.00%	20.00%	100.00%
			% within Qatar Airways	100.00%	100.00%	100.00%
			% of Total	80.00%	20.00%	100.00%

Survey ID				Salesforce		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	18	12	30
			% within Type of Advertisement	60.00%	40.00%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	60.00%	40.00%	100.00%
	Total		Count	18	12	30
			% within Type of Advertisement	60.00%	40.00%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	60.00%	40.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
	Total		Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	23	7	30
			% within Type of Advertisement	76.70%	23.30%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	76.70%	23.30%	100.00%
	Total		Count	23	7	30
			% within Type of Advertisement	76.70%	23.30%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	76.70%	23.30%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	11	9	20
			% within Type of Advertisement	55.00%	45.00%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	55.00%	45.00%	100.00%
	Total		Count	11	9	20
			% within Type of Advertisement	55.00%	45.00%	100.00%
			% within Salesforce	100.00%	100.00%	100.00%
			% of Total	55.00%	45.00%	100.00%

Survey ID				ABB		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within ABB		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within ABB		100.00%	100.00%
			% of Total		100.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within ABB	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
	Total		Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within ABB	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within ABB	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
	Total		Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within ABB	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within ABB	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
	Total		Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within ABB	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%

Survey ID				Heineken		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	28	2	30
			% within Type of Advertisement	93.30%	6.70%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	93.30%	6.70%	100.00%
	Total		Count	28	2	30
			% within Type of Advertisement	93.30%	6.70%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	93.30%	6.70%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	15	5	20
			% within Type of Advertisement	75.00%	25.00%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	75.00%	25.00%	100.00%
	Total		Count	15	5	20
			% within Type of Advertisement	75.00%	25.00%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	75.00%	25.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	26	4	30
			% within Type of Advertisement	86.70%	13.30%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	86.70%	13.30%	100.00%
	Total		Count	26	4	30
			% within Type of Advertisement	86.70%	13.30%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	86.70%	13.30%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	15	5	20
			% within Type of Advertisement	75.00%	25.00%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	75.00%	25.00%	100.00%
	Total		Count	15	5	20
			% within Type of Advertisement	75.00%	25.00%	100.00%
			% within Heineken	100.00%	100.00%	100.00%
			% of Total	75.00%	25.00%	100.00%

Survey ID				Paramount+		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	12	18	30
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
	Total		Count	12	18	30
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
	Total		Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	9	21	30
			% within Type of Advertisement	30.00%	70.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
	Total		Count	9	21	30
			% within Type of Advertisement	30.00%	70.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	30.00%	70.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
	Total		Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Paramount+	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

Survey ID				Julius Bär		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Julius Bär	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
	Total		Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Julius Bär	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Julius Bär	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
	Total		Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Julius Bär	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Julius Bär		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		30	30
			% within Type of Advertisement		100.00%	100.00%
			% within Julius Bär		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Julius Bär		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Julius Bär		100.00%	100.00%
			% of Total		100.00%	100.00%

Survey ID				Lenovo		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	25	5	30
			% within Type of Advertisement	83.30%	16.70%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	83.30%	16.70%	100.00%
	Total		Count	25	5	30
			% within Type of Advertisement	83.30%	16.70%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	83.30%	16.70%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	16	4	20
			% within Type of Advertisement	80.00%	20.00%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	80.00%	20.00%	100.00%
	Total		Count	16	4	20
			% within Type of Advertisement	80.00%	20.00%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	80.00%	20.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	21	9	30
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
	Total		Count	21	9	30
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
	Total		Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Lenovo	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%

Survey ID				Panasonic		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Panasonic	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
	Total		Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Panasonic	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Panasonic		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Panasonic		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Panasonic	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
	Total		Count	2	28	30
			% within Type of Advertisement	6.70%	93.30%	100.00%
			% within Panasonic	100.00%	100.00%	100.00%
			% of Total	6.70%	93.30%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Panasonic	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%
	Total		Count	1	19	20
			% within Type of Advertisement	5.00%	95.00%	100.00%
			% within Panasonic	100.00%	100.00%	100.00%
			% of Total	5.00%	95.00%	100.00%

Survey ID				Pirelli		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	24	6	30
			% within Type of Advertisement	80.00%	20.00%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	80.00%	20.00%	100.00%
	Total		Count	24	6	30
			% within Type of Advertisement	80.00%	20.00%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	80.00%	20.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
	Total		Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	19	11	30
			% within Type of Advertisement	63.30%	36.70%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
	Total		Count	19	11	30
			% within Type of Advertisement	63.30%	36.70%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
	Total		Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Pirelli	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%

Survey ID				MSC Cruises		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	19	11	30
			% within Type of Advertisement	63.30%	36.70%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
	Total		Count	19	11	30
			% within Type of Advertisement	63.30%	36.70%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	63.30%	36.70%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
	Total		Count	9	11	20
			% within Type of Advertisement	45.00%	55.00%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	45.00%	55.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	15	15	30
			% within Type of Advertisement	50.00%	50.00%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	50.00%	50.00%	100.00%
	Total		Count	15	15	30
			% within Type of Advertisement	50.00%	50.00%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	50.00%	50.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	8	12	20
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
	Total		Count	8	12	20
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within MSC Cruises	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%

Survey ID				DHL		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	26	4	30
			% within Type of Advertisement	86.70%	13.30%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	86.70%	13.30%	100.00%
	Total		Count	26	4	30
			% within Type of Advertisement	86.70%	13.30%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	86.70%	13.30%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
	Total		Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	28	2	30
			% within Type of Advertisement	93.30%	6.70%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	93.30%	6.70%	100.00%
	Total		Count	28	2	30
			% within Type of Advertisement	93.30%	6.70%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	93.30%	6.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	19	1	20
			% within Type of Advertisement	95.00%	5.00%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	95.00%	5.00%	100.00%
	Total		Count	19	1	20
			% within Type of Advertisement	95.00%	5.00%	100.00%
			% within DHL	100.00%	100.00%	100.00%
			% of Total	95.00%	5.00%	100.00%

Survey ID				Rolex		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	26	4	30
			% within Type of Advertisement	86.70%	13.30%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	86.70%	13.30%	100.00%
	Total		Count	26	4	30
			% within Type of Advertisement	86.70%	13.30%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	86.70%	13.30%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	18	2	20
			% within Type of Advertisement	90.00%	10.00%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	90.00%	10.00%	100.00%
	Total		Count	18	2	20
			% within Type of Advertisement	90.00%	10.00%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	90.00%	10.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	21	9	30
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
	Total		Count	21	9	30
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%
	Total		Count	14	6	20
			% within Type of Advertisement	70.00%	30.00%	100.00%
			% within Rolex	100.00%	100.00%	100.00%
			% of Total	70.00%	30.00%	100.00%

Survey ID				Aramco		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	17	13	30
			% within Type of Advertisement	56.70%	43.30%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	56.70%	43.30%	100.00%
	Total		Count	17	13	30
			% within Type of Advertisement	56.70%	43.30%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	56.70%	43.30%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count	8	12	20
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
	Total		Count	8	12	20
			% within Type of Advertisement	40.00%	60.00%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	40.00%	60.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	6	24	30
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
	Total		Count	6	24	30
			% within Type of Advertisement	20.00%	80.00%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	20.00%	80.00%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	5	15	20
			% within Type of Advertisement	25.00%	75.00%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	25.00%	75.00%	100.00%
	Total		Count	5	15	20
			% within Type of Advertisement	25.00%	75.00%	100.00%
			% within Aramco	100.00%	100.00%	100.00%
			% of Total	25.00%	75.00%	100.00%

Survey ID				Workable		Total
				Yes, I do recall seeing this brand advertised	No, I do not recall seeing this brand advertised	
A - Undergraduate	Type of Advertisement	Non - Personalized Advertisement	Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Workable	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
	Total		Count	3	27	30
			% within Type of Advertisement	10.00%	90.00%	100.00%
			% within Workable	100.00%	100.00%	100.00%
			% of Total	10.00%	90.00%	100.00%
A - Postgraduate	Type of Advertisement	Non - Personalized Advertisement	Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Workable		100.00%	100.00%
			% of Total		100.00%	100.00%
	Total		Count		20	20
			% within Type of Advertisement		100.00%	100.00%
			% within Workable		100.00%	100.00%
			% of Total		100.00%	100.00%
B - Undergraduate	Type of Advertisement	Personalized Advertisement	Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Workable	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
	Total		Count	1	29	30
			% within Type of Advertisement	3.30%	96.70%	100.00%
			% within Workable	100.00%	100.00%	100.00%
			% of Total	3.30%	96.70%	100.00%
B - Postgraduate	Type of Advertisement	Personalized Advertisement	Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Workable	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%
	Total		Count	3	17	20
			% within Type of Advertisement	15.00%	85.00%	100.00%
			% within Workable	100.00%	100.00%	100.00%
			% of Total	15.00%	85.00%	100.00%

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