

Driving Inclusion in Motorsport: Exploring Fan Motivations and
Gendered Engagement with Formula 1 Marketing

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Introduction

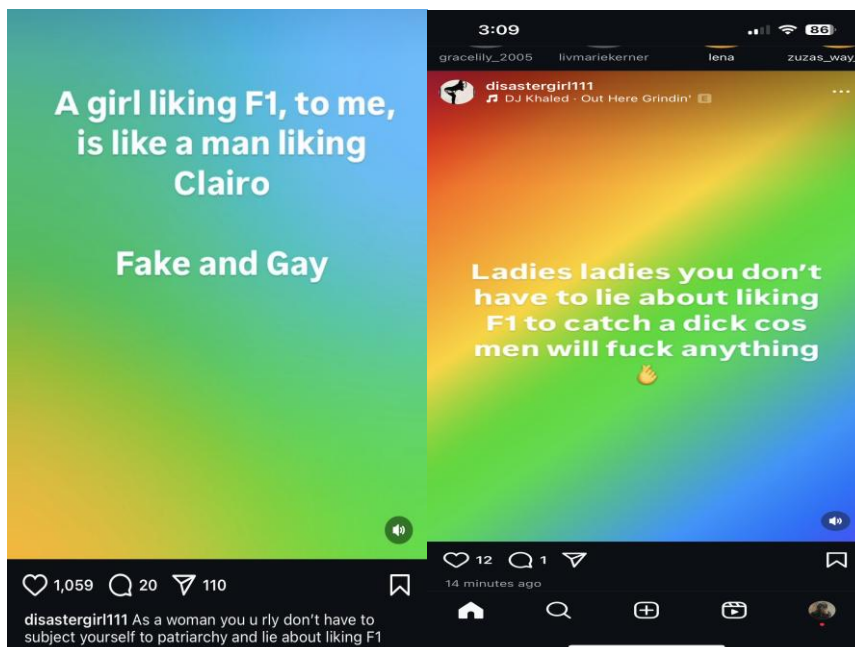
Since its inception, Formula 1 has been associated with male audiences and male culture. In part, this is likely due to the stereotypically masculine traits the sport embraces: speed, danger, and competitiveness, which create a cultural acceptance of F1 being a male space. This may have been heightened by its archaic marketing strategies. Until 2018 women were employed by Formula 1 as provocatively dressed 'grid girls', sexually objectified "decorative figures" that held driver name boards. This preserved the notion of women having a passive relationship with the sport, instead of being encouraged to get involved as fans, engineers, and drivers (Tippett, 2020). However, upon Liberty Media's acquisition of F1 in 2017 an attempt to steer away from its "pale, stale, male" (Drew, 2024) ancestry that deterred female engagement was initiated (Allen, 2021, Youssef, 2023). This successfully increased the percentage of female F1 fans to 40% in 2023, an 8% increase from 2017 (Williams, 2024, Vrajlal, 2023).

Whilst this is progress, the female market may not be fully saturated and the potential to increase the proportion of female fans to the maximum achievable level may remain, meaning this should not be seen as a stopping point. Importantly, a large female audience does not guarantee that female fans feel equally valued and engaged with F1 marketing or within community spaces. The problem statement guiding this study is the lack of understanding of the motivations, attitudes, and behaviours of female fans, which limits the development of effective and inclusive F1 marketing strategies. This research therefore aims to investigate whether there are gendered differences between the motivations of F1 fans. Thus, informing marketing strategies that could effectively grow the female fanbase, whilst being cohesive with new aims to rebrand the sport. Investing in growing and better serving this audience would welcome inclusion and long-term loyalty whilst unlocking commercial value that remains untapped, despite nearing gender parity on paper.

Lit review

According to Coakley and Pike (2014), women have historically been discouraged from playing sports that diverge from Western culturally accepted norms of femininity. They point out that this was justified by 20th century pseudoscience; sports that emphasised speed, tenacity and aggression would supposedly damage female reproductive organs and in turn women would experience issues birthing and breastfeeding their children. The damage of this belief, despite later paradigm shift, can still be observed in the social stigma surrounding women competing in sports today, particularly those that require strenuous physicality and risk, such as football, or motorsport. This has led to underrepresentation of female athletes in elite sports, as well as extending to business and leadership positions: women occupy only 25% of the 76 chairperson positions on funded sport boards. (Sport + Recreation Alliance, 2025) Although gender inequality exists across athletes, leadership, and business roles, this study specifically examines female fandom in Formula 1. Research in football has underlined the importance of investigating how female fans interact with sport, highlighting that some women feel too unsafe to attend matches, which may be suppressing female interest and attendance (Pope, 2022).

Personal experience of this stigma that women are invading what is considered ‘male turf’ served as rationale for the basis of this study – for example, an initially humorous Instagram meme page (@disastergirl111) made a post claiming female interest in F1 is ‘fake and gay’ and simultaneously ‘subjecting herself to the patriarchy’ to attract men.

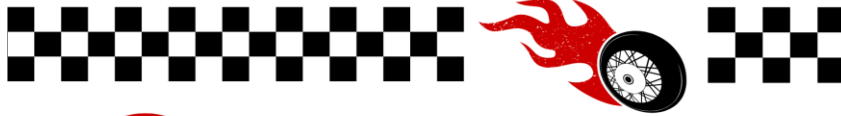


Evidently, the disheartening rhetoric that F1 is exclusively for men still permeates through modern society, with similar policing of female F1 fans being common online. Those upholding the notion that gender should constrict interests and freedoms may be discouraging

the further uptake of female fans and diminishing the current fan experience, as a 2024 study revealed that women were prevented from openly participating on team X accounts due to a fear of negative responses (Lick et al., 2024). This makes it all the more important to identify the motivational factors of female F1 fans as we can gain insight into how F1 might better utilise marketing strategies to grow and sustain this audience. There are astute limitations to F1's current marketing strategies, such as the Netflix F1 docuseries 'Drive to Survive', which featured women speaking for a pitiful 1.54% of season five's running time (Roper, 2023). Despite the show finding foundational success in encouraging a more gender-diverse fanbase due to its accessible global platform, female viewers are continuing to be alienated because of this disparity (Motorsport Network et al., 2021, Roper, 2023).

In addition to limited representation, current marketing strategies may be working off the assumption that motivations of F1 fans are uniform across gender. However, research suggests this is not the case. For example, a study of men's and women's Japanese Volleyball found that female JVL spectators were highly motivated to watch games by their interest in volleyball, whereas male spectators were motivated by the performance involved in high-level competition (Adachi et al., 2022). This highlights that there are gendered differences between motivations of men and women to support a high-level sport, meaning that women could be intrinsically motivated by an appreciation of watching racing, whilst men may be fans because of the competition and victories associated with performance. Additionally, female JVL spectators were motivated by supporting specific teams and athletes, highlighting a meaningful connection to 'idols' of the opposite gender. Therefore, it was important to use this research to identify whether different genders feel varying connections to F1 teams and drivers as this could form the basis for female-targeted advertising of the sport, for example, through utilising star drivers in promotions. However, the study by Adachi et al. used general questions that weren't specific to volleyball which may limit its applicability to the sport. The present study addressed this by including questions specifically designed around the unique aspects of F1 (engineering), ensuring stronger contextual relevance.

To examine these potential gendered differences in the context of Formula 1, this study worked with the SPEED framework proposed by Funk et al. (2009), which was used to measure motivations of spectators of Australian Rules Football, A-League Soccer, and the National Rugby League. Five aspects of motivation were measured: Socialisation, Performance, Excitement, Esteem, and Diversion (SPEED). A multiple linear regression model indicated that 75% of the variance in team commitment could be accounted for by four of five SPEED-model motivational facets, excluding performance. As such, people who experience SPEED factors when attending these sport events consider themselves more committed to the teams they are watching. This model can therefore be regarded to have strong explanatory power of motivations to watch and support a sport, so it formed the basis for the framework of this study. However, it was slightly adapted to include motivations based on the cutting-edge technology of F1 cars, as this is a unique feature of the sport that may motivate people to become fans. Accordingly, with the addition of Engineering the model used in this study is referred to as SPEEED.



- S** **Socialisation**
Engaging with F1 to connect with other fans through discussion and shared experiences.
- P** **Performance**
Motivation is driven by the skill of drivers and the strategy of races.
- E** **Engineering**
Enjoyment of F1 is based on a love of cars and cutting-edge car technology.
- E** **Excitement**
Motivation to experience the thrill, drama, and energy of races and rivalries.
- E** **Esteem**
Feeling pride or personal achievement when a favourite team or driver wins.
- D** **Diversion**
Using F1 as a way to escape daily routine and take a mental break.

This SPEEED surveying model was used to explore what draws people to support F1 and identify differences between motivations of male and female fans. Subsequently, recommendations were made to F1 on how they can overcome the limitations of current marketing strategies like DTS and both attract female fans and engage them meaningfully. These findings will be shared with F1, meaning this research could have positive societal impacts as, if strategies are implemented based on motivational findings discussed, women may be able to find belonging in a community that they have previously felt shut out from. Furthermore, employment roles in F1 are currently overwhelmingly male, as evidenced by the fact that women make up only 13% of Mercedes-AMG PETRONAS's technical workforce (Wolkin, 2023). In concordance with gender-diversification of the F1 fandom, we may see an increase in the number of women pursuing careers in the sport.

Moreover, as of 2025 there has unfortunately been only five female drivers in F1. Longterm, gaining and affirming women as F1 fans could lead to this benchmark being surpassed as

women that feel respected and enthused by the sport may encourage their daughters into the grassroots of formula racing, karting. Sullivan et al (2001). found that parents' leisure activities strongly influence their children's cultural participation, suggesting that women who feel valued as F1 fans may, in turn, encourage their daughters to develop similar affiliations with the sport. Currently only 13% of global karting participation comes from female drivers, highlighting persistent gender disparities in motorsport. Consequently, it is understandable that so few women reach the top stages of motorsport. From a Social Identity Theory perspective (Tajfel et al., 1979), women and girls who feel valued within the F1 community will be more likely to internalise the group identity, which can motivate participation in grassroots racing. Therefore, ensuring that women and girls feel accepted and inspired within the F1 sphere could develop a more diverse next generation of Formula 1 racers.

Method

To investigate the motivations of Formula 1 fans, this study employed a quantitative research design, recruiting participants to complete a survey distributed at the 2025 British Grand Prix, by direct email invitation or by posts on Instagram. This study targeted self-identified F1 fans in the UK. No incentives were offered for completing the survey, and ethical standards were adhered to: this study was entirely voluntary and anonymous. Eligibility criteria required participants to be 18 years or older and to identify as at least moderate, active fans of F1.

The established SPEED framework used by Funk et al. (2009) investigated five facets of fan motivation (Socialisation, Performance, Excitement, Esteem, and Diversion). Upon evaluation it became apparent that whilst all five of these facets were suitable for this study it was necessary to include 'Engineering' as a sixth motivational aspect because the technical complexity of cutting-edge car technology is a central quality of F1 that can not be omitted. Therefore, the SPEED framework was adapted to SPEEED. Each element of SPEEED consisted of two items. Participants rated their agreement with each statement, for example, 'Watching F1 gives me the opportunity to bond with others', using a 0-100 slider scale, where 0 represented 'strongly disagree' and 100 represented 'strongly agree'.

The original framework survey questions were used to identify motivations of Australian Rules Football, A-League Soccer, and National Rugby League fans, so modifications were made to adapt the questions to the specific context of F1. For example, questions referencing 'games' were revised to reflect F1-specific terms such as 'races'. It was also necessary to rework the 'Performance' section, as the terms used i.e. 'gracefulness', 'elegance', were not particularly relevant to F1. The questions instead addressed 'race strategy' and 'high-level skill of drivers' as factors that may motivate fans.

As well as SPEEED motivational variables, attachment points to teams and drivers were examined in order to determine the extent of emotional connections, as this may increase fan-esteem and motivate viewers to continue watching the sport (Nakazawa et al., 2014, as cited in Adachi et al., 2022). Therefore, questions such as 'I feel invested in my favourite team's

success' were asked using slider-scale questions. The survey also included multiple choice demographic, behavioural, and attitudinal questions. Demographic variables collected included gender, age, and occupation. Behavioural questions asked how long participants had been fans, and how they engage with F1 content, whilst attitudinal questions explored whether they feel valued by F1 and reflected in its branding. These variables were used to describe the sample and understand differences in fan experiences which can inform marketing decisions.

Findings

The survey was conducted to identify male and female F1 fan motivations. A total of 68 respondents completed the survey, and the sample included 61.8% female and 38.2% male respondents. About 45.6% of the whole sample were aged 18-24 years old, and 48.5% were in full time employment, with 25% of respondents being students. The most common length of time respondents had been part of the fandom was 3-5 years, at 30.9%, whilst the next most common was more than 20 years at 27.9%. Whilst not statistically significant, the most common response for this question among women was 3-5 years (38.1%), whereas among men it was 20+ years (38.5%).

Across the eight options regarding how participants engage with F1, men and women showed broadly similar response patterns; Chi-square tests revealed no significant differences for seven of the eight options ($p > .05$). However, a statistically significant relationship was observed between gender and the use of F1's official social media (e.g. Instagram, YouTube, X) $X^2(1, N = 68) = 3.90, p = .048$. The majority of respondents (57.4%) revealed that they engage with F1 in this way, with 66.7% of that group being women. Additionally, the majority of respondents (54.4%) stated that they interact with driver or team social media accounts, and as expected, almost all engage with F1 through watching live race broadcasts (92.6%). When asked if they listen to and watch F1-related podcasts or YouTube videos, responses were almost identical between men and women, with 33.3% of women and 34.6% of men selecting this option. A chi-square test confirmed no significant difference between the groups, $X^2(1, N = 68) = .012, p = .914$.

Independent samples t-tests were conducted to examine gender differences across motivational and attitudinal facets. Effect sizes were reported using Cohen's d and Hedge's g where Levene's test indicated unequal variances. No statistically significant gender differences across the six motivational facets were revealed. However, effect size estimates reveal that, despite this, some facets showed small to moderate gender differences. For example, Excitement demonstrated a moderate effect ($d = .445$), and Esteem and Diversion were in the small to moderate range ($d = .329$ and $d = .365$) with women reporting slightly higher scores than men. Effect size estimates suggest small gender differences regarding how well participants believe F1 engages women, and whether they feel reflected in F1 marketing (Cohen's $d = .276$, Hedge's $g = -.468$). When asked whether they feel valued as fans, a larger,

small-to-moderate difference (Hedge's $g = -.468$) was demonstrated between groups, though this was not statistically significant.

Discussion

This sample was skewed towards younger age groups and predominantly female, which may partly reflect the recruitment method as the survey was largely distributed online where younger people are particularly active. It could also reflect the recent growth of F1's popularity amongst women which is supported by the fact that women were most likely to report being fans for 3-5 years, compared to men who were more likely to have supported the sport for over 20 years. This aligns with F1's historically male-dominated culture – men may have been introduced to the sport at a young age through family members. A cultural shift is highlighted here and reveals that F1's recent diversity initiatives have likely been effective. However, the underrepresentation of older fans, male fans, and long-term female fans could limit the generalisability of results.

Overall, the engagement patterns of male and female fans were largely consistent, with no significant differences being identified in seven of the eight engagement options. This indicates that gender alone may not strongly determine how fans interact with F1. Therefore, this research challenges the findings of Adachi et al., (2022), whose study of the Japanese Volleyball League suggested men and women are motivated to watch high level sport for differing reasons. This indicates that whilst motivations to watch volleyball in Japan appear to be shaped by gender, for British F1 fans gender is less relevant. Additionally, it could suggest that the SPEED framework by Funk et al. (2009), which the SPEEED method of this study was chiefly based on, is an ineffective way of measuring motivations of F1 fans, meaning an alternate model may be more suited to this context and should be considered for future research.

Furthermore, it was found that a near-identical split of men and women watch live races and listen to podcasts, further suggesting that most methods of participation within the F1 fandom are not gendered. However, a significant difference was observed in women's greater interaction with F1's official social media accounts. Therefore, F1 should recognise and utilise the fact that digital platforms may be a particularly effective method of attracting and retaining female fans. Additionally, the high levels of engagement from both men and women with driver/team accounts underlines the central role social media could play in further connecting both genders to the sport. This is consistent with expectations as Netflix's *Drive to Survive* may have attracted fans interested in behind-the-scenes access and personality-driven content, or it may indicate a broader social shift away from highly procured celebrity content e.g. glossy, edited promo videos.

Independent samples t-tests revealed no statistically significant gender differences across the motivational and attitudinal facets tested, revealing that men and women may watch F1 for similar reasons and hold similar attitudes towards the extent that they feel valued by F1 and

reflected in its branding. However, effect size estimates highlight subtle trends, with women reporting higher scores for Excitement, Esteem, and Diversion facets, demonstrating that they may experience stronger emotional and social motivations than men to be fans of F1.

Small gender differences emerged through effect size estimates in two attitudinal areas: men reported a slightly higher perception of how well F1 engages women through marketing and reported feeling less reflected in these materials. In concordance, a small-to-moderate difference was observed in the extent to which participants felt valued as fans, with men reporting lower levels of perceived value than women. Therefore, men may recognise inclusive efforts towards women but do not identify with the messages themselves. Whilst these differences are not large, they underline the importance of ensuring that marketing strategies resonate with all genders without alienating some groups.

Conclusion

This study examined gender differences in the motivations and engagement patterns of Formula 1 fans. Overall, the findings demonstrate that men and women engage with the sport in broadly similar ways, suggesting that fandom in F1 might, in fact, be largely shared across genders rather than strongly divided by them. Dennis de Munck, Head of Employer Branding and University Partnerships at Ferrari, described in interview that Ferrari works from this same standpoint and does not produce content that is tailored for different genders. Instead, they believe in an inclusive 'one Ferrari' approach. This includes spotlighting the training and development of female Ferrari Driver Academy drivers such as Maya Weug in the same manner as her male counterparts. The findings of this study support this approach.

However, subtle trends of effect size estimates demonstrate that women may experience slightly stronger emotional and social motivations to be F1 fans in comparison to men. Women also viewed F1's female-engagement efforts as less successful than men did, yet felt more represented in F1's marketing. Men also reported feeling less valued as fans. Although modest, these trends highlight that current marketing strategies could unfortunately be lacking in making fans feel represented and valued. These effects could become more pronounced in future research using larger samples, as this study was limited by its small sample size and majority online distribution method which skewed the sample towards younger fans. More diverse populations would clarify if these patterns are consistent across the wider F1 community.

More decisively however, the survey identified a statistically significant gender difference, with women engaging with official F1 social media more than men, indicating that these channels should be a focus for possible future initiatives to target female fan engagement. De Munck also noted that social media is a cost-effective way for teams to connect fans with a sport that is so financially demanding to attend in person; this research further highlights the ever-rising importance of this marketing tool for targeting *both* men and women as a high proportion of fans reported interacting with F1-related social media accounts and podcasts.

This should be utilised to value fan contributions as these findings also highlight recognition as a more important consideration for strengthening fan relationships than initially thought. This could be done through spotlighting fan artwork on official pages, posting polls for race predictions, or online giveaways of F1 Paddock Club tickets. So, this study finds that whilst motivations of F1 fans may not be strongly determined by gender, marketing strategies that appreciate fan support could be vital for sustaining and growing the global appeal of Formula 1.

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