

EXPLORING SOCIOECONOMIC FACTORS FOR THE SUSTAINABILITY OF ELECTRIC GUITAR BRANDS: FOCUSING ON TRADITIONAL VALUES AND PSYCHOLOGICAL ATTACHMENT

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Abstract: *The primary objective of this study was to conduct a comprehensive quantitative analysis to investigate the factors influencing the purchase of electric guitars. Building upon prior research related to the decision-making process behind electric guitar purchases, our research took a quantitative approach to shed light on this intricate process. We designed and tested six hypotheses, utilizing structural equation modeling to analyze a dataset consisting of 433 responses collected within the electric guitar community. The results of our study have uncovered intriguing insights into the factors that drive purchase intention among electric guitar enthusiasts. Notably, two out of the six variables examined, namely 'Brand' and 'Heritage Value,' were found to exert a significant impact on consumers' intentions to purchase electric guitars. This discovery carries profound implications for the industry. It is worth highlighting that electric guitars possess inherent features that can enhance a player's skill and convenience through cutting-edge digital technology. However, our findings reveal that players place a higher emphasis on the perceived heritage value and brand identity of electric guitars, which take precedence over their functional attributes when making guitar selection decisions. This preference for cultural and emotional aspects over utilitarian features is a significant revelation. In light of the current state of the electric guitar industry, which is experiencing a decline, our research suggests that emphasizing and promoting the heritage and brand values of electric guitars could prove instrumental in retaining existing customers and attracting new ones. This strategic shift could serve to revitalize the industry and counter the challenges posed by advancements in technology. In summary, our study reaffirms the importance of cultural and emotional elements in consumers' decisions regarding electric guitar purchases, underscoring the need for industry players to adapt and focus on these aspects to remain competitive in a changing market landscape.*

Keywords: electric guitar, purchase intention, brand, heritage value, structural equation modelling.

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1. Introduction

1.1 *The current situation for the guitar industry*

The guitar manufacturing industry is one of the world's oldest, with the craft dating back centuries and including, for example, the advent of the 'Guitarra Latina', the Latin guitar used by musicians in Spain in the 1400s (Evans & Evans, 1984). At the height of its success, the industry shaped modern music and influenced thousands of artists, with over 2.5 million guitars sold annually in the US alone (NAMM, 2018).

This research paper specifically focuses on the electric guitar. Two of the most well-known manufacturers in the electric guitar industry are the American companies, Fender Musical Instruments Corporation (FMIC) and Gibson Brands, Inc (Tirman, 2016), with the 'Fender Stratocaster' and the 'Gibson Les Paul' perhaps their most famous products. In fact, the specific design of these guitars have been widely adopted by other brands, with the most recent example being PRS Guitars' attempt to make a Stratocaster-body signature model for the famous contemporary guitarist, John Mayer (Orkin, 2017). Another example is the infamous 'lawsuit-era' guitars produced by Ibanez, a guitar manufacturer that produced instruments through 'borrowing' Gibson's sexualised ads and designs in the 1960s (Brill, 2015). In fact, FMIC and Gibson have competed for the largest market share for decades (Port, 2019), with both companies largely specialising in electric guitars while adopting decidedly different approaches for their product line due to the continuously changing nature of the music landscape. While the current situation regarding the popularity of guitars has been widely debated for years, an in-depth analysis of the industry only emerged in 2018 amid Gibson's filing of bankruptcy protection (Edgecliffe-Johnson & Wells, 2018) for the first time since its inception 116 years ago. Other brands, including FMIC, have also displayed negative signs, having withdrawn their plan to enter the stock market (Spears, 2012), citing poor market conditions. This evokes the painful notion of a future without traditional musical instruments and begs a number of questions, including how the electric guitar market is perceived by contemporary electric guitarists, which factors attract them to a specific guitar/brand, and which key antecedent factors the guitar manufacturers should prioritise to sustain their business.

1.2 *Research gap*

Musical instruments are undoubtedly highly important for the development of music. However, the current musical climate favours an electronic sound that can be generated solely through computers or fully electronic instruments, without requiring the use of traditional musical instruments, and music lovers everywhere are largely unaware of the possibility that many instruments could be on the verge of disappearing. While the current music industry presents a highly interesting subject, there remains a lack of academic investigation in this area, and the difficulties instrument manufacturers are currently facing have rarely been articulated. In fact, a decline in the production of fretted instruments has been occurring for quite some time; however, even the recent news of one of the biggest guitar manufacturers in the world declaring bankruptcy has not generated as much debate as expected. Furthermore, consumers' perceptions of traditional musical instruments have not yet been comprehensively investigated, and such a pursuit could help support the industry through providing relevant insights, analytical tools, and materials to enhance business sustainability. The present paper thus focuses on identifying the gaps in the attendant research and adding to the existing literature in terms of actionable recommendations for the industry.

1.3 *Research aim and objectives*

The aim of this study was to investigate consumers' perceptions towards electric guitars and to explore the antecedent factors that could affect their purchase intentions through ensuring their satisfaction with the products. To achieve this aim, the following five objectives were developed:

1. To conduct a literature, review to identify the issues the current electric guitar market is failing to address, providing further insights into a huge yet under-researched business.
2. To investigate the potential factors that influence consumers' purchase intentions regarding electric guitars, which are reflected in the hypotheses.
3. To conduct an online survey to collect data to test the developed hypotheses.

4. To examine and evaluate the hypotheses testing outcomes.
5. To develop actionable implications and recommendations for the relevant marketers and researchers.

2. Literature Review

2.1 Study background

2.1.1 Electric Guitars: description of the products

In the past, a guitar was a symbol of music, but not all guitars are created equal. Arguably, the two most popular guitar types are acoustic guitars—wooden guitars that come with six strings, a hollow body and a soundhole (French & Hosler, 2006)—and electric guitars. In terms of design, the two types are similar, but an electric guitar typically has a solid body and is accompanied by a ‘pickup’, a form of technology that utilises magnetic properties to convert and amplify the sound created by the vibration of the strings, with the signal subsequently transferred to a guitar amplifier (Millard, 2004).

It could be stated that electric guitars were born out of necessity following the complaints of jazz musicians who were not satisfied with the volume they were getting out of their regular acoustic guitars, often finding themselves drowned out by the other instruments in the band. In fact, the use of guitars was often abandoned during concerts since the players did not see the point of playing something so quiet (Waksman, 2001). This problem became particularly apparent during the concert hall performances of the 1880s.

The big sound created with the use of an electric guitar captivated both the guitarists and the audience, most notably in terms of the Hawaiian Swing genre, since the artists working in this genre were the first to use lap steel guitars, both for live performances and recording sessions (Millard, 2004). Since the product’s inception, numerous electric guitar brands have emerged and disappeared; however, two major brands have remained prominent throughout the decades, namely, Gibson and FMIC. As Maxwell (2003) noted, the identity of a specific musical instrument should be reconsidered and respected in the globalised era, emphasising the value of the cultural aspects of the musical instruments.

2.1.2 Decline in electric guitar manufacturing: two heroes

In fact, FMIC is an American guitar manufacturer, which was founded in 1946 by Leo Fender, with the world's first solid-body electric guitar released by the company four years after its inception (Sound Unlimited, 2019). This was the ‘Fender Telecaster’, which was a commercial success, largely due to its versatility (Duchossoir 1991). Today, FMIC currently owns 47% of the market share (DeBord 2018), has factories in the US and Mexico, and is renowned for its electric and acoustic guitars as well as its bass guitars and amplifiers. Under the FMIC banner, the company has acquired and entered partnerships with brands such as Squier which now marketed as an inexpensive version of Fender, Jackson (2017), Takamine and EVH (Fender, 2018a).

Gibson is also an American guitar manufacturer, one that was mostly known for its acoustic guitar and mandolin business before it released its first electric guitar in 1936 (Hakim, 2018), which became a popular product among jazz players. From this point on, the company’s products increased the desire to own an electric guitar throughout the music community, which ultimately pushed the industry towards a different sound. As such, Gibson's well-respected brand has not only played a large role in influencing the adoption of electric guitars but has also affected the music landscape immensely.

However, in recent times, the industry has been in a stagnant state, evidenced by the fact that the attendant US sales figures fell from \$6.6 billion in 2006 to \$5.6 billion in 2017 (IBISWorld, 2018). Furthermore, Gibson announced its bankruptcy in 2018, which served as a forewarning to the industry. George Gruhn, a long-time guitar dealer in Nashville in the US and a respected figure in the industry, stated that the guitar market has not seen much growth in recent years, and while the end is perhaps not imminent, the model is clearly not sustainable, and sooner or later it will collapse (Edgers, 2017).

2.2 *The impact of demographic factors on guitar brands*

2.2.1 **Age and gender**

In terms of the impact age and gender have on music instrument selection and practicing behaviour, there remains an imbalance within marketing campaigns, with a stereotypical emphasis on both the electric guitar player's age and their gender (Bourdage, 2010). These are detrimental approaches that have had a lasting negative influence on today's music landscape. In the UK, a large portion of the live music acts is excessively gender-imbalanced, which could lead to barriers to encouraging young musicians to enter the electric guitar sector (Larsson, 2017). In fact, in the 5–14 age group, girls are less likely to pick up an electric guitar than boys (Hume & Wells, 2014). However, as part of FMIC's extensive effort to research their demographic, the company uncovered many unexpected statistics. In a study carried out in both the US and the UK, women were found to account for approximately 50% of new guitar buyers (Fender, 2018b). This revelation was unanticipated as the company had only estimated that the number was around only 20%–30% (Margolis, 2019). This led the company to change their advertising efforts significantly, targeting and launching new products marketed towards youngsters of both genders (Addley & Beaumont-Thomas, 2018).

Mazur and Laguna (2019) noted that research shows that the relationship between the age of the consumer and the instrument type is one of the key factors that could impact the consumers' choices. Similarly, Hallam et al. (2017) emphasised how demographic factors such as age are a critical factor in consumer behaviour after conducting an empirical analysis using a dataset comprising beginners through to young entry-level music learners. With this in mind, the first research question was developed as follows:

RQ 1: The different age bands of the players have different impacts on their perceptions towards electric guitars.

2.2.2 **The length of time playing the guitar: the acquisition of new players**

The length of time the individual has been playing the guitar should be an indicator of their demands regarding the brand. From this point of view, how to acquire new players has been a critical issue for the guitar manufacturers. In short, a beginner can potentially become a committed guitar player. With this in mind, FMIC introduced their 'Fender Play' service, a subscription-based online tutorial and learning service, in an attempt to help new players and amateur fans, with the manufacturer also taking actions to change their marketing strategy to penetrate the new market (Sound Unlimited, 2019). The new market has different perspectives on electric guitars, meaning it is imperative that the marketers build different strategies to target the various different market segments.

In the UK, approximately 76% of children (aged 5–14) know how to play an instrument, and the number of child learners who are playing an electric guitar has notably increased (Hume & Wells, 2014). An original article published in *The Washington Post* (Edgers, 2017)—which prompted both analysts and the current author to further investigate the supposed decline of the guitar industry—made the assumption that consumers' interest in guitars is closely linked to their desire to become a successful and famous musician; however, according to the data from the previously noted survey by FMIC (2018b), this assumption is inaccurate.

Zhang et al. (2018) noted that a variety of musical expertise criteria have been used to define musicians, with the years of music training and music lessons the two most commonly used criteria. The authors also confirmed that a general consensus is that a musician has had at least six years of musical experience, with this acknowledged as the 'six-year rule' among the music researchers. Therefore, the second research question was developed as follows:

RQ 2: The different lengths of time that the individual has been playing the guitar have different impacts on their perceptions towards electric guitars.

2.2.3 The number of electric guitars owned

Another proxy variable that could have an impact on music players is the number of instruments and gadgets owned (White, 2016). An et al. (2020) discussed the millennials' behaviour in terms of being willing to purchase relevant products and services, presenting the relationships among the behavioural antecedent factors that lead to music activities. Cavicchi (2014) also traced the attendant research to reveal musicians' perceptions and behaviours, while Obiegbu et al. (2019) analysed the 'fandom behaviour' in a digitalised era. The behaviour of possessing the instrument and other hobby-related gadgets and equipment is crucial, and from this perspective, the number of electric guitars owned can be a mediating variable for evaluating the players' perceptions and attitudes (Vrooman et al., 2018).

Fukui (2019) outlined the trend of the co-creation of music instruments, especially in the digital music domain, noting that professional musicians are liable to seek a better quality of instrument and are willing to pay more for them since they tend to prioritise the instruments' quality of sound and playability. He also suggested that they are also prepared to purchase several instruments to determine the best instrument for each performance and each event. Similarly, Akashi (2017) discussed the musicians' purchase behaviour from the creative industries' point of view, emphasising the necessity for the businesses to deepen the understanding of the needs of the consumers (players). To attract core music fans, the suppliers should focus on the co-creation process to enhance consumer purchase intentions. Interestingly, both Fukui (2019) and Akashi (2017) noted how the more serious the musicians become, the greater number of instruments they are willing to purchase. Therefore, the third question was developed as follows:

RQ 3: The number of owned electric guitars has different impacts on individual perceptions towards electric guitars.

2.3 Conceptualisation and development of measurements

2.3.1 Brand

Consumer behaviour has attracted the interest of many scholars, and this also applies to the electric guitar industry (Papageorgiou, 2015; Sjödin & Törn, 2006). More specifically, as Gerken et al. (2018) insisted, electric guitar players are often brand bonded. Moreover, as Millard (2004) discussed, electric guitar manufacturers are attempting to integrate the creative energies in technology, arts and science with the cultures of the people, knowing that this could help ground the brand. Santos et al. (2016) also noted that the brand value of the products and the companies is the basis for attracting customers to the products. This perception of marketing strategies was supported by both Choudhury and Kaushal (2019) and Hartmann and Ostberg (2018). As Sjödin and Törn (2006) noted, the proposed effects of the brand image on consumers' processing and evaluation is crucial, emphasising the importance of building marketing strategies to sustain loyal consumers. The academic discussions have been concentrated around the key topic of brand and consumers' decision making (Veloutsou & Guzman, 2017). Waksman (2001) also suggested that promoting a closer and intimate brand contact could help sustain the electric guitar businesses.

Elsewhere, Gallo et al. (2019) suggested that in terms of TV games, TV, books, and sport and outdoor-related products, consumers are liable to experiment and check before deciding whether or not to buy the product, which is not the case for office products and home appliances. Interestingly, music instruments fall in the middle range, which implies that consumers do not necessarily experiment in advance, perhaps because the brand value and heritage value are the main factors in the attendant decision-making process.

Meanwhile, the second-hand instrument market is thriving, partly due to the guitar demographic's mindset of not wishing to go beyond one or two choices. In short, with more than three choices, the players interest will likely wane (Parker, 2016). It is clear that guitar players perceive their favourite brand and their affection towards the products as being linked to a sense of belonging. The first hypothesis was thus developed as follows:

H1: Brand has a significant impact on guitar purchase intentions.

2.3.2 Vintage value

Guitars manufactured by large, reputable brands such as Gibson, FMIC, PRS, etc. are more likely to retain their value over time and, in some cases, could enjoy an increase in value. Most consumer products, such as cars, are items that people generally make an effort to ensure that they look as new as possible; however, the opposite is the case for guitars and other fretted instruments. It is important to understand that people ‘hear with their eyes’ (Hall 2018) because guitars can be interpreted as personal, sentimental or even historical objects. Consumers generally do not mind, and in some cases, actually prefer the distressed appearance of a heavily used guitar to a brand-new one, implying that guitars have intangible values such as character and personality.

Gibson, FMIC and most other brands have noted this trend—which dates back to the 1990s—and have employed a new process in their custom shops, referred to as ‘relic-ing’. This technique has proven to be highly popular, with the luthiers in these custom shops artificially aging brand-new guitars to create the appearance of a vintage guitar. In fact, while the appeal of a vintage guitar has largely been determined through sexualised ads, ‘aged’ guitars are also regarded as having a better sound than brand-new ones. Fender’s custom shop luthier, John Page, likened this to the appeal of a worn pair of jeans, stating that they are ‘more comfortable, and not only do they look cooler, they feel better’ (Calore, 2010, p. 1). Based on the above findings, the second hypothesis was developed as follows:

H2: Vintage value has a significant impact on guitar purchase intentions.

2.3.3 Heritage value in the digitalised music sector

Both Santos et al. (2016) and Rindell et al. (2015) suggested that the heritage value of companies must be carefully examined in terms of embedding it within the consumers’ perception. Contemporary technology has enabled music production to be more accessible for the aspiring young, inexperienced artists and musicians who no longer require studios, bands or even physical instruments (Walzer, 2016). The advancement in technology has allowed for replacing the traditional expensive and complicated methods with computer software, with the sound of physical instruments digitally sampled and synthesised. The Berlin-based company, Soundcloud, is a thriving free online music sharing platform with a current userbase of 175 million (McIntyre 2018), which largely consists of independent new artists and music creators. The most popular genres on the platform do not focus on physical instruments, while nostalgic factors linked to heritage can be observed (Bennett & Janssen, 2015). The case of Soundcloud indicates two different directions: facilitating the modernisation of the cultural areas of many influential new artists and influencing a culture shift in consumer demands and industry trends.

Most of the sales statistics and reports pertaining to the guitar industry only take into account the sales of newly manufactured guitars. However, used guitars are a substantial part of the overall market (Gruhn, 2014). Planned obsolescence is a strategy employed by manufacturers of durable goods from multiple industries, designing the products such that their useful life is limited and soon become obsolete (Agrawal et al., 2016). Unlike other consumer products, such as phones and computers, which are produced with such factors in mind, guitars are products built to last and the used/second-hand guitar market implies an increased demand for heritage. Therefore, the third hypothesis was developed as follows:

H3: Heritage value has a significant impact on guitar purchase intentions.

2.3.4 The positioning of guitars in the music industry

During a discussion about the current music climate, a former CEO of FMIC acknowledged that the guitar industry is approaching an unfavourable condition (Hakim, 2018). The electric guitar is an instrument associated with music genres (e.g., rock music) that are experiencing a decrease in mainstream popularity (Savage, 2018). Another indication of the decline is how the US 100 best-selling albums of 2017 included only 18 guitar-based bands (Hann, 2018).

The famous Beatle, Paul McCartney, stated ‘now, it’s more electronic music and kids listen differently. They don’t have guitar heroes as you and I did’ (*Washington Post*, 2017). One of determining factors in the success of the instrument was the wave of guitar players that had a significant influence on the cultures and audiences of the past, and the number of influential players has undoubtedly declined significantly.

Parry et al. (2012) noted the possibility of the co-production between manufacturers and consumers, while Goh et al. (2013) discussed the fan communities in terms of a co-production platform for strengthening the perceived resonance between them in view of sustaining the industry. Elsewhere, Sanitnarathorn (2018) found that fans are now more willing to support their favourite business based on the supportive intention as a co-production process. As the music industry continues to face the difficulties discussed above, the consumers' perceptions of the businesses' position in the music industry is likely to be one of the key driving forces behind the consumers' behaviour (Bennett, 2018; Cerqueira, 2018).

As Schembri and Firat (2018) suggested, the niche research areas for music, culture and heritage have been neglected within the research, and examining the impact of the consumers' perceptions regarding the electric guitar sector is undoubtedly a valuable pursuit. Therefore, the fourth hypothesis was developed as follows:

H4: Guitar positioning in the music community has a significant impact on guitar purchase intentions.

2.3.5 Sexualised advertising

The list of the most prominent electric guitarists in history includes very few females. In addition, the musical genres in which the electric guitar is favoured are mostly male-dominated, leading to the assumption that the electric guitar is a male-only instrument (Waksman, 2001). To date, most guitar advertising has been designed to appeal specifically to the male guitar player demographic, with female models on the covers of guitar magazines particularly targeting a male audience (De Gallier, 2018). The industry's underlying underappreciation of the musicianship of women is certainly a barrier to their purchasing of musical instruments (Bourdage, 2010). In the UK for example, an excessive gender imbalance in the live music scene continues to ensue (Larsson, 2017).

As discussed by Whipple & McManamon (2002), the use of male and female icons in commercials has long occupied a strand of communication research between advertising and consumers. Indeed, marketing strategies that cater to market segments, strike a chord with consumers, evoke emotions in persuasive appeals and engage consumers remain an important research topic today (Kemp et al., 2013). Putrevu (2008) explored this argument further, using sex appeals, advertising appeals, and LaTour & Henthorne (1994), in their classic and excellent study, suggested that attention should be paid to the ethical aspects of advertising using sex appeals.

Today, due to the demand for gender-free and the growing need for acceptance of diversity, research on consumer reactions in the communication of brand messages is further extending the horizons of consideration (Shoenberger et al., 2021), and the focus of research on male and female sexual appeals alone. This is a relatively decreasing trend. Interestingly, however, in the electric guitar market, electric guitars still belong to men, and there are still ongoing attempts to place female sexual appeal at the heart of messages in order to appeal to the primary male customer.

In light of recent market trends, one of the leading players in the electric guitar sector, FMIC, has made significant changes to its advertising activities and has launched new products targeted at young women (Addley & Beaumont-Thomas, 2018). As noted, modern technology has made music production more accessible to aspiring young inexperienced music lovers, eliminating the need for studios, bands and physical instruments (Walzer, 2016). The rise of these technologies and the increased accessibility may attract interested new customers beyond the demographics of individual consumers and, in the process, could contribute to the growth of the next generation of female players, dispelling the stereotypical view of the instrument being a male-oriented instrument.

However, the sexualised advertising that still dominates the market may have some influence on buyers' decisions. The fifth hypothesis was thus formulated as follows:

H5: Sexualised advertisements have a significant impact on guitar purchase intentions.

2.3.6 Playability

As an instrument, playability is clearly one of the key attributes that attracts and retains the players (Yazawa et al. 2013). As Caldersmith (1995) discussed, the tone qualities of the new musical instruments have relationships with both the guitar response envelope and human sound perceptions, meaning it is challenging to assess the playability

of the instrument purely based on the scientific data and statistical variables, while the players naturally wish to play the guitar to deliver pleasing tone qualities based on the optimal playing dynamics (Caldersmith, 1995). However, this attribute is based on the experience of each musician, and the perceptions and evaluations must be differentiated. As such, the guitar companies have largely aimed at producing better guitars that can provide better playing experiences (Dresdner & Headman 1995).

Lanier Jr and Rader (2018) discussed the impact of the tone of the musical instrument on the consumers' consumption behaviour. As Bradley and Cornish (2018) stated in relation to their US patent, the invention of the guitar pick was directed at playability and enhancing the tone through allowing for 'easy gripping' while performing. Overall, the playability and expressiveness of guitars are key attributes and should be considered as antecedent factors for the players' purchase intentions (Herbst, 2017a, 2017b, 2019a, 2019b). Based on these findings, the sixth hypothesis was developed as follows:

H6: Playability has a significant impact on the guitar purchase intentions.

2.4 Analytical model with hypotheses

The existing literature was reviewed to identify key themes related to purchasing behaviour in the electric guitar market and to subsequently develop hypotheses and a scaled analytical model (Figure 1). Here, quality, price and the pleasure of ownership were used as factors for guitar players' purchase intentions.

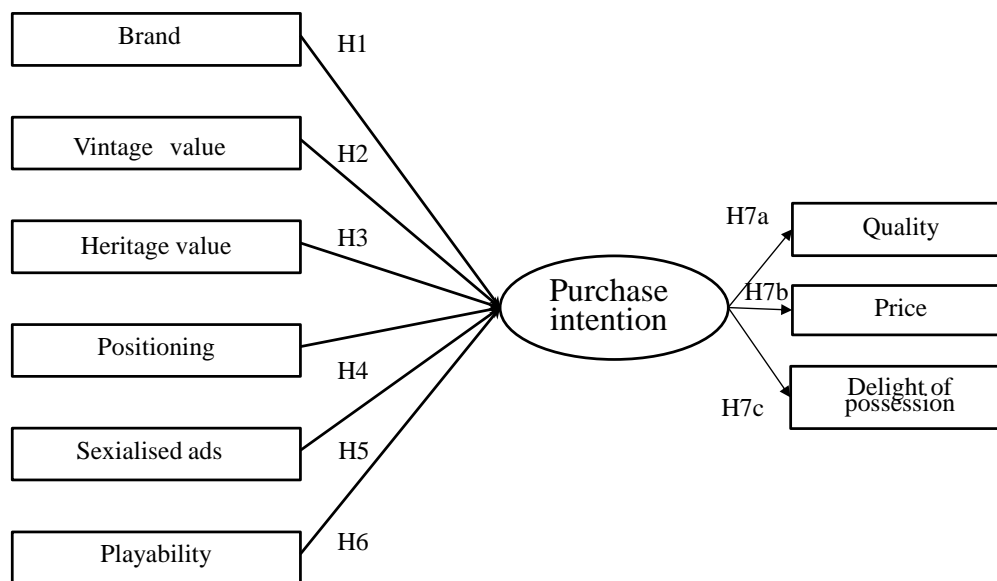


Figure 1. The analytical model

Source: Authors' own work.

3. Methodology

3.1 Research method and survey design

While the topic of music and musical instruments is perhaps largely based on behaviours and experiences, since the researchers were seeking meaningful, causative relationships among the variables and significant differences among the consumer clusters, a quantitative method was applied (Feilzer, 2009), which involved the collection of empirical numerical data.

As such, a survey-based strategy was deemed to be the most suitable approach (Bryman & Bell, 2011). The survey was designed in line with the hypotheses and was released through online forums related to guitars and other musical instruments, with the attendant communities including highly enthusiastic potential respondents that are interested in answering survey questions honestly and accurately.

3.2 The targeted audience and the data collection

Here, a probability sampling method was adopted, specifically, the stratified sampling method, wherein the population is divided into specific subgroups (strata) that share similar traits and characteristics, with random samples then drawn from each subgroup (Saunders et al., 2007). The benefits of this method compared to simple random sampling include how the accuracy of the results can be improved with less sampling error.

The survey targeted any individual who currently owns, previously owned or is planning to own a guitar(s). There were no limitations in terms of background, origin, age or gender. In accordance with the stratified sampling method, a survey was designed and distributed on Reddit, a popular and active website that consists of various discussion forums, web content, and reviews. More specifically, on the Reddit site, there exist various ‘subreddits’, which are essentially subgroups formed around a particular topic. Here, the survey was published on the following relevant subgroup pages using the web-based survey system:

- ‘Guitar’ (<https://www.reddit.com/r/Guitar/>),
- ‘Guitars’ (<https://www.reddit.com/r/Guitars/>),
- ‘GuitarPedals’ (<https://www.reddit.com/r/guitarpedals/>),
- ‘SampleSize’ (<https://www.reddit.com/r/SampleSize/>),
- ‘Musictheory’ (<https://www.reddit.com/r/musictheory/>)
- ‘Audioengineering’ (<https://www.reddit.com/r/audioengineering/>)
- ‘WeAreTheMusicMakers’ (<https://www.reddit.com/r/WeAreTheMusicMakers/>)

Following the pilot test involving three volunteers, the questionnaire was modified in terms of confusing wording and/or ambiguous questions. The survey was prepared and presented in a simple and easy to comprehend manner with the aim of obtaining accurate data.

3.3 Data analysis

A total of 466 samples were collected and, following a cleaning process, a total of 433 datasets were finalised for analysis. The obtained datasets were analysed using SPSS ver.26 for descriptive analysis and for subsequent hypothesis testing, while Amos ver.26 was used to qualify the nine observed variables before being analysed using the structural equation modelling (SEM) method.

4. Findings and Discussion

Following the preliminary analysis, consumer behaviour and the perceptions towards electric guitars were examined based on statistical methods. This was comprised of two study approaches: a statistical analysis based on different demographic factors (age, the length of time playing the guitar, and the number of owned guitars) and research based on the SEM method to test the hypotheses developed following the literature review.

4.1 Data profile descriptive statistics

One of the key topics that emerged from the literature review was how to sustain the electric guitar manufacturing industry by attracting new potential customers. In this process, it is crucial that the manufacturers understand customer perceptions according to each customer segment. To date, no research has focused on the relationship between player demographics and player perceptions in the field of electric guitars. As part of a trial analysis, the influence of the age of the consumer was examined, with Table 1 presenting the results of the descriptive analysis.

Table 1. Data profile for analysis

| Factors | N | Mean | Std. Deviation |
|-------------------------------------|-----|------|----------------|
| Guitar Positioning in music society | 433 | 3.86 | 1.22 |
| Value of vintage | 433 | 3.40 | 1.31 |
| Brand bonding | 433 | 3.46 | 1.25 |
| Playability | 433 | 4.82 | 0.58 |
| Heritage the brand-history | 433 | 2.69 | 1.46 |
| Sexulised ads | 433 | 4.50 | 0.85 |

Source: Authors' own work.

Meanwhile, Table 2 shows the statistical data corresponding to the age segments, while Table 3 shows the non-parametric test results in terms of significant age-specific differences among the six factors adopted for the hypotheses.

Table 2. Statistical differences among the age groups

| Attributes | Count | Guitar positioning in music society | | Value of vintage | | Heritage the brand, history | | Brand bonding | | Playability | | Sexulised ads | |
|-------------|-------|-------------------------------------|---------|------------------|---------|-----------------------------|---------|---------------|---------|-------------|---------|---------------|---------|
| | | Mean | STD Dev | Mean | STD Dev | Mean | STD Dev | Mean | STD Dev | Mean | STD Dev | Mean | STD Dev |
| 18-24 | 186 | 3.9 | 1.26 | 3.3 | 1.29 | 2.5 | 1.43 | 3.5 | 1.22 | 4.7 | 0.67 | 4.5 | 0.78 |
| 25-34 | 129 | 3.8 | 1.16 | 3.5 | 1.31 | 2.8 | 1.40 | 3.5 | 1.24 | 4.9 | 0.41 | 4.5 | 0.78 |
| 35 or above | 118 | 3.8 | 1.23 | 3.4 | 1.35 | 2.9 | 1.41 | 3.3 | 1.36 | 4.9 | 0.37 | 4.5 | 0.93 |
| Total | 433 | 3.9 | 1.22 | 3.4 | 1.31 | 2.7 | 1.42 | 3.4 | 1.27 | 4.8 | 0.53 | 4.5 | 0.82 |

Source: Authors' own work.

The Kruskal–Wallis test, which is one of the ANOVA methods for independent-samples, was used to overview the dataset (Richardson & John, 2018). As shown in Table 3, two of the six variables, 'playability' and 'heritage value', exhibited statistical differences among the age groups.

Table 3. Results of the Kruskal–Wallis test for the six variables

| Age | Guitar positioning in music society | Value of vintage | Brand bonding | Playability | Heritage the brand, history | Sexulised ads |
|-------------|-------------------------------------|------------------|---------------|-------------|-----------------------------|---------------|
| Chi-Square | 3.613 | 1.183 | 1.976 | 6.210 | 6.246 | .195 |
| df | 2 | 2 | 2 | 2 | 2 | 2 |
| Asymp. Sig. | .164 | .554 | .372 | .045 | .044 | .907 |

Source: Authors' own work.

The intermediate calculation leading to the outcome of the Kruskal-Wallis Test is demonstrated in Table 4.

Table 4. Intermediate calculation of the statistics

| Statistical differences among age groups | | N | Mean Rank |
|--|-------------|-----|-----------|
| Guitar positioning in music society | 18-24 | 186 | 229.13 |
| | 25-34 | 129 | 204.18 |
| | 35 or above | 118 | 211.90 |
| | Total | 433 | |
| Vintage value | 18-24 | 186 | 210.91 |
| | 25-34 | 129 | 226.11 |
| | 35 or above | 118 | 216.64 |
| | Total | 433 | |
| Brand | 18-24 | 186 | 221.70 |
| | 25-34 | 129 | 222.49 |
| | 35 or above | 118 | 203.59 |
| | Total | 433 | |
| Playability | 18-24 | 186 | 206.73 |

Table 4 (cont.). Intermediate calculation of the statistics

| Statistical differences among age groups | | N | Mean Rank |
|--|-------------|-----|-----------|
| | 25-34 | 129 | 221.37 |
| | 35 or above | 118 | 228.42 |
| | Total | 433 | |
| Heritage value | 18-24 | 186 | 201.79 |
| | 25-34 | 129 | 220.46 |
| | 35 or above | 118 | 237.19 |
| | Total | 433 | |
| Sexualised ads | 18-24 | 186 | 219.50 |
| | 25-34 | 129 | 214.32 |
| | 35 or above | 118 | 215.98 |
| | Total | 433 | |

Source: Authors' own work.

4.2 Correlation analysis of key variables

Table 5 shows the correlation results for the six key variables related to guitar purchase intentions.

Table 5. Correlation results for the six variables

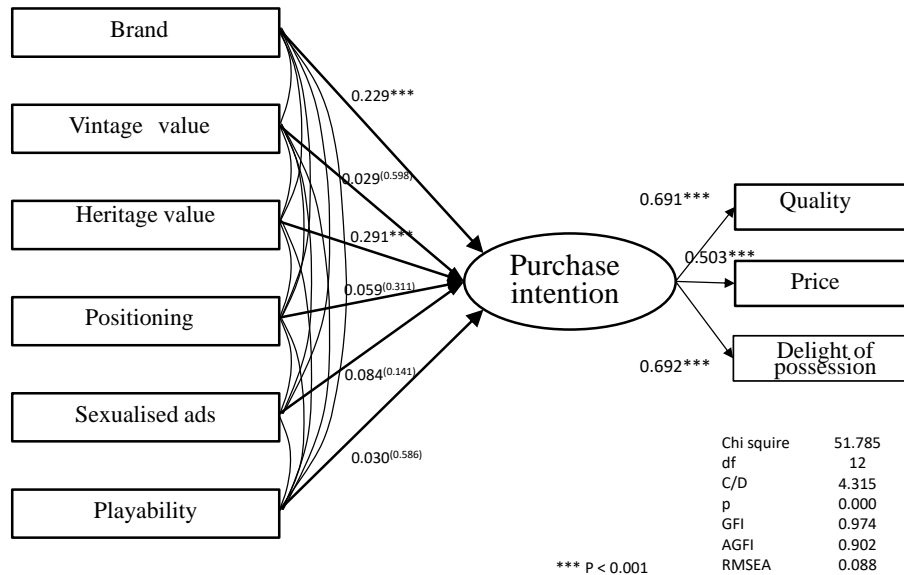
| | | Guitar positioning in music society | Value of vintage | Brand bonding | Playability | Heritage the brand, history | Sexualised ads |
|--|---------------------|-------------------------------------|------------------|---------------|-------------|-----------------------------|----------------|
| Guitar positioning in music society | Pearson Correlation | 1 | | | | | |
| | Sig. (2-tailed) | | | | | | |
| Value of vintage | Pearson Correlation | .142** | 1 | | | | |
| | Sig. (2-tailed) | 0.003 | | | | | |
| Brand bonding | Pearson Correlation | -0.053 | -0.019 | 1 | | | |
| | Sig. (2-tailed) | 0.267 | 0.697 | | | | |
| Playability | Pearson Correlation | 0.025 | -0.017 | 0.093 | 1 | | |
| | Sig. (2-tailed) | 0.601 | 0.722 | 0.054 | | | |
| Heritage the brand, history | Pearson Correlation | .119* | 0.022 | -.265** | 0.077 | 1 | |
| | Sig. (2-tailed) | 0.013 | 0.648 | 0.000 | 0.110 | | |
| Sexualised ads | Pearson Correlation | 0.018 | -.147** | -0.024 | .157** | .169** | 1 |
| | Sig. (2-tailed) | 0.703 | 0.002 | 0.622 | 0.001 | 0.000 | |
| **. Correlation is significant at the 0.01 level (2-tailed). | | | | | | | |
| *. Correlation is significant at the 0.05 level (2-tailed). | | | | | | | |

Source: Authors' own work.

As Table 5 shows the proposed six variables were deemed to be eligible for use in the subsequent SEM analysis. The highest correlation (0.265; $p < 0.001$) was between 'brand' and 'heritage value', the second highest (0.169; $p < 0.001$) was between 'sexualised ads' and 'heritage value', and the third highest (0.147; $p < 0.001$) was between 'vintage value' and 'sexualised ads', which indicates that the proposed key variables were largely independent of each other, thus lacking multi-correlation relationships (Yamamoto & Onodera, 1999).

4.3 The SEM analysis

The dataset was subjected to SEM analysis, with the results shown in Figure 2. Here, the aim was to identify significant relationships among the relevant factors that may influence guitar purchase intentions. The SEM demonstrated a good fit ratio, with a χ^2 /degrees of freedom ratio of 4.315 ($\chi^2 = 51.785$, $df = 12$), thus meeting the recommended level of 5.0 (Hair et al., 1998). In terms of the other factors in the fitting tests, the GFI (0.974) and AGFI (0.902) values were higher than the recommended level of >0.90, while the RMSEA (0.088) values also met the recommended level <0.10 (Hair et al., 1998). Thus, the results of the substantive model were subsequently examined in detail.



Source: Authors' own work.

Figure 2. The SEM analysis results

As Figure 2 shows, out of three latent variables, 'heritage value' had the most significant impact on guitar purchase intentions (0.291; $p < 0.001$), while 'brand' also had a significant effect (0.229; $p < 0.001$). However, 'positioning', 'vintage value', 'playability' and 'sexualised ads' did not have a significant effect on purchase intentions.

As shown in Figure 2, six of the latent factors were mutually related. This could indicate that customers' purchase intentions are holistically influenced by a compound of various values. The path coefficients are summarised in Table 6.

Table 6. The SEM path coefficients

| To | | From | Estimate | S.E. | C.R. | P | Standardized path coefficient |
|-----------------------|------|--------------------|----------|-------|-------|-------|-------------------------------|
| Purchase intention | <--- | Brand | 0.086 | 0.022 | 3.910 | *** | 0.229 |
| Purchase intention | <--- | Vintage value | 0.011 | 0.020 | 0.528 | 0.598 | 0.029 |
| Purchase intention | <--- | Heritage value | 0.093 | 0.019 | 4.799 | *** | 0.291 |
| Purchase intention | <--- | Positioning | 0.021 | 0.021 | 1.013 | 0.311 | 0.056 |
| Purchase intention | <--- | Sexualised ads | 0.046 | 0.031 | 1.472 | 0.141 | 0.084 |
| Purchase intention | <--- | Playability | 0.024 | 0.045 | 0.545 | 0.586 | 0.030 |
| Quality | <--- | Purchase intention | 1.000 | | | | 0.691 |
| Price | <--- | Purchase intention | 0.795 | 0.104 | 7.638 | *** | 0.503 |
| Delight of possession | <--- | Purchase intention | 1.095 | 0.130 | 8.415 | *** | 0.692 |

Source: Authors' own work.

In addition, the whole path coefficients including the covariance relationships of each latent factor is also presented in Table 7.

Table 7. The SEM path coefficients including the covariance relationships

| To | | From | Standardized path-coefficient | p |
|-----------------------|------|--------------------|-------------------------------|-------|
| Purchase intention | <--- | Brand | 0.229 | *** |
| Purchase intention | <--- | Vintage value | 0.029 | 0.598 |
| Purchase intention | <--- | Heritage value | 0.291 | *** |
| Purchase intention | <--- | Positioning | 0.056 | 0.311 |
| Purchase intention | <--- | Sexualised ads | 0.084 | 0.141 |
| Purchase intention | <--- | Playability | 0.030 | 0.586 |
| Quality | <--- | Purchase intention | 0.691 | *** |
| Price | <--- | Purchase intention | 0.503 | *** |
| Delight of possession | <--- | Purchase intention | 0.692 | *** |
| Brand | <--> | Playability | 0.093 | 0.055 |
| Brand | <--> | Heritage value | 0.265 | *** |
| Brand | <--> | Sexualised ads | 0.024 | 0.622 |
| Vintage value | <--> | Brand | 0.019 | 0.697 |
| Vintage value | <--> | Playability | 0.017 | 0.722 |
| Vintage value | <--> | Heritage value | 0.022 | 0.647 |
| Vintage value | <--> | Sexualised ads | 0.147 | ** |
| Heritage value | <--> | Sexualised ads | 0.169 | *** |
| Positioning | <--> | Vintage value | 0.142 | ** |
| Positioning | <--> | Brand | 0.053 | 0.267 |
| Positioning | <--> | Playability | 0.025 | 0.600 |
| Positioning | <--> | Heritage value | 0.119 | * |
| Positioning | <--> | Sexualised ads | 0.018 | 0.702 |
| Playability | <--> | Heritage value | 0.077 | 0.111 |
| Playability | <--> | Sexualised ads | 0.157 | ** |

Source: Authors' own work.

4.4 Discussion

From the outcome of the SEM analysis, it was found that only two factors out of the six had a significant impact on the purchase intention of guitarists, namely, brand bonding and heritage value. Meanwhile, six combinations of two variables exhibited covariances between the pairs, with vintage value (positioning, sexualised ads) and heritage value (positioning, brand, playability, sexualised ads) having significant relationships. These findings imply that all of the proposed factors were well correlated and were well balanced in the electric guitar players' perceptions. As Hollebeek et al. (2021) discussed, scholars have investigated customer engagement to conceptualising the relationships between consumers and brand of targeted products or services. In line with the accumulated research, specifically, the research outcome suggested that the heritage value of the electric guitar is clearly perceived by the consumers, which indicates that in the technological era, as a technology-based product, the electric guitar should be marketed with an emphasis on the heritage value. This supports the findings of Cooper et al. (2015), who found that corporate heritage brands are symbols of the past, present and future, representing fascinating and valuable sources of information on how brands can survive. This finding is also backed up by the findings presented by Iglesias et al. (2019), who emphasised the importance of considering the roles of brand heritage and brand image in building robust brand equity.

The digital revolution has significantly affected how people choose to spend their leisure time, creating new hobbies, interests, and artistic outlets. In the past, musical instruments were considered to be a popular past-time activity and, as the resounding culture of 'rock and roll' coincided with the golden age of television, these two activities were almost complementary in an era before instructions and tutorials became widely available online. In short, people relied on playing along to televised performances to learn their instrument. These findings are in

line with the findings obtained by Cavicchi (2014) and Obiegbu et al. (2019), who discussed how brand equity and brand value should be investigated in relation to the impact of digitalisation.

Within the context of our digitalised world, the finding that the heritage value of instruments has the most significant impact on consumers' perception indicates that contemporary businesses must adopt a flexible view based on a combination of tradition and modernity. Overall, this research revealed that the heritage value is a significant driving force behind attracting musicians.

5. Conclusion

5.1 Contributions

The declining popularity of electric guitars is clearly evidenced by the annual statistics pertaining to industry sales and profits. However, despite the concerns expressed by the guitarist community, this decline has not been widely reported and there is a significant lack of academic literature dedicated to this issue. The first opportunity to explore the health of the various electric guitar brands came with the declaration of bankruptcy of one of the most established brands, Gibson. An original paper on the decline compiled by Edgers (2017) and published prior to Gibson's bankruptcy, was highly illuminating, with many observations and figures included to support the author's opinions and predictions. Based on these findings, this paper presented an exploratory study focused on the views of electric guitar players on the declining popularity of the industry, with the aim of exploring the key factors that have contributed to this decline over a long period of time.

This paper presents one of the few studies that examines the attitudes of electric guitar players. The results indicated that unique heritage values should be at the heart of the marketing strategies aimed at attracting new customers and satisfying the existing ones. As essentially technology-based instruments, electric guitars are destined to be more innovative and based on more advanced technology. However, the heritage value is clearly appreciated by the players, and manufacturers must seek a balanced approach that successfully blends heritage and modernity.

5.2 Limitations and further research opportunities

The study was based on questionnaire data obtained via a survey conducted with the help of the electric guitar community. In future research, the analytical model and measurement scale should be refined, with the model upgraded by considering preceding elements based on the latest research findings. It is also planned to conduct the analysis again using a larger dataset and more balanced data sampling in view of developing more robust recommendations for both marketers and researchers. This will involve conducting a comparative study of sector-specific purchase decisions based on specific player attributes.

Furthermore, two directions of future research development are envisaged. First, the model of branding and player choice regarding musical instruments, including electric guitars, will not only be elaborated but will also be developed and applied to research related to other musical instrument sectors. Second, qualitative analysis will be added to the analytical methods, with the aim of closely identifying the deeper layers of player awareness and creating a basis for contributing to more precise and effective marketing strategies.

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