

## 6 Interviews and Survey of Musicians

GAS is a phenomenon about which little is formally known apart from Wright's (2006) book and some blog posts. A theoretical understanding of GAS was gradually developed in the previous chapters based on relevant empirical data, especially on the electric guitar and the analogue and digital divide in record production. Nearly all these investigations are qualitative designs, either interview studies or analyses of online practices. As there is a lack of quantitative research in all relevant areas, we designed an online survey to study musicians and their dealings with gear.

Theoretical and qualitative research aims to achieve a better understanding of a phenomenon under investigation. Unless a systematic evaluation is taken with larger populations, the gained knowledge remains preliminary. Surveys are a recognised form of examining behaviours, practices and attitudes in the social sciences to derive descriptive data, systematic relationships and differences between groups. Usually, such surveys are designed to test hypotheses deduced from theoretical assumptions. For this survey, we have chosen a more explorative goal because our assumptions are based on a working theory of GAS. In other words, while we had specific hypotheses that were to be challenged, the survey's overarching objective was to gain a better understanding of GAS based on data from a large and diverse population of musicians. As surveys 'permit reliable and generalizable portraits of populations ... concerning cultural consumption and social exclusion' (DeNora 2004: 45), they are well suited for studying purchasing and usage behaviours around musical instruments. Carrying out such surveys online makes it possible to target 'specialist populations' (Paier 2010: 99) worldwide, which leads to larger population sizes (Bortz & Döring 2015: 260f). The Internet's perceived anonymity is also believed to capture more honest answers (Hug & Poscheschnik 2010: 123). However, despite access to specialist populations near and far, online surveys can systematically exclude groups of people (Diekmann 2009: 525–528), for example, those who do not have access to online message boards, where surveys are advertised, or those who have no interest in these communities.

The previous chapters suggested that practices and attitudes vary between players of different instruments, either because of specific affordances of the instrument or because of underlying beliefs and attitudes, such as those towards vintage gear or interest in technological innovation. This impression is consistent with previous research suggesting that there are differences in personality traits between musicians of various instruments (Bell & Cresswell 1984; Cameron et al. 2015; see also Rötter & Steinberg 2018). Therefore, the survey's main aim was to examine what roles different instrument types play concerning GAS. Another factor to consider is genre since it determines the instrument's requirements and is closely linked to its player's

musical identity. Against this backdrop, the survey was guided by the following questions:

- Which sociodemographic variables and other personal, social and musical motives play a role in instrument consumption?
- Do players of various instrument types and genres differ in their buying and collecting behaviour?
- Do musicians of electric or electronic instruments show a greater tendency towards GAS than those of acoustic instruments?
- What criteria are decisive for musicians when choosing gear?

These questions systematically address many of the previously described music- and technology-related aspects of GAS, which will provide GAS-specific insights into the collection and consumption patterns discussed before. The study's dual objective is to both test our working assumptions and develop our theory of GAS further. We do this by combining survey data with interviews conducted in preparation for the survey and open comments collected in the survey. Through such a triangulation design, 'it should be possible to increase knowledge in principle, for example, to gain knowledge at different levels, which thus goes further than would be possible with one approach' (Flick 2011: 12; our translation). According to Denzin (1978: 300), integrating different methods serves to compensate for their respective shortcomings. The chosen triangulation design does not pursue Denzin's postulate of greater validity. It rather understands triangulation as a strategy to substantiate findings by gaining further insights (Flick 2010: 311) and as a supplement to perspectives that enable a comprehensive coverage, description and explanation of the topic area (Kelle & Erzberger 2010: 304). Due to the combination of quantitative and qualitative data, this is a 'between-method triangulation', which seeks to mutually validate the insights gained with the applied methods (Flick 2010: 314). The qualitative evaluation serves as an aid to the interpretation and a source of supplementary information (Bryman 1992).

### 6.1 Interviews in Music Store

Gathering insights into the practices, opinions and attitudes of musicians in their handling of gear is crucial for gaining a better understanding of GAS. These practices can take different forms in offline and online communities. In the next chapter, online practices are covered in detail. Given the vast number of online communities, it is easy to overlook the traditional places where musicians seek advice on instrument purchases, try out gear and network with local musicians—music stores. From a methodological viewpoint, conducting interviews in a music store, unlike text-based online communication, offers advantages such as capturing more natural and

spontaneous reactions to GAS face-to-face, allowing field observations and addressing female musicians, an underrepresented group in earlier research (Herbst 2017a; Wright 2006). Our interviews were based on a semi-structured schedule that covered musical, emotional and social aspects. Twenty-four interviews with an average length of 4.35 minutes ( $SD = 2.72$ ) were conducted on 25 February 2017 in one of Germany's largest music stores. The interviews were held in German and English, as some visitors came from other European countries, mainly from the Netherlands.<sup>32</sup>

Many musicians are drawn to music stores. After work and on weekends, they flock to music retailers for a variety of reasons. Buying a pack of strings or drumsticks serves as an excuse to see 'what's new', try out gear and have a chat with other musicians and salespersons. On weekends, befriended musicians may travel to bigger music stores to enjoy a wider range of goods and the atmosphere. This social element becomes evident from the structural design of larger stores, which have lounge areas, cafés and food huts. Many well-run music stores are not designed to serve a purely musical function but act as a social hub that allows musicians to exchange experiences with gear (Cole 2018: 1056), talk about favourite artists, discuss the live scene and network with other musicians, which can lead to the formation of groups and side projects (Sargent 2009: 669). Physical message boards are a clear sign of the communicative and networking incentives of music stores. For less experienced musicians, music stores are an opportunity to get advice on the best gear for their ambitions, and more experienced and extraverted players sometimes use the store as a stage to show off their skills (Sargent 2009). Interactions of such kinds occasionally culminate in performance competitions amongst local musicians or other events such as masterclasses. Altogether, music stores are an exciting microcosmos in which many phenomena take place that encompass broader music practice. As Sargent (2009: 665) puts it, '[m]usical instrument shops are social spaces in which both shoppers and workers construct identities as serious rock musicians and insiders to rock culture'. Music stores are concerned with both the instruments they sell and the fantasies and lifestyles associated with them (Sargent 2009: 668).

In-depth knowledge about how music stores are operated is given by a small but outdated number of short essays like 'How to Choose a Music Store' (The Choral Journal 1980). These give career advice for music store managers and future salespersons (Burchuk 1977) and outline strategies for music educators to cooperate with music stores (Rejino 2002). Studies on instrumental lessons undertaken in music stores are even scarcer (Guest-Scott 2008). From a technological perspective, Pinch (2001) analyses the challenges innovative synthesiser inventors and manufacturers

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<sup>32</sup> Of course, the brevity of the interviews did not allow for an in-depth discussion of the musicians' dealings with gear, but they still contributed to our understanding by supporting or detailing our working theory of GAS. Furthermore, both interviewers being white men was not optimal for exploring the gendered nature of music stores.

like Robert Moog faced when they tried to persuade music stores to add synthesisers to their piano collection in the 1960s and 1970s. Most of the still limited literature on music stores relates to gender. Berkers and Schaap (2018) cover music stores in their interview study of metal musicians in passing. They suggest there is still a gender-specific treatment in which female musicians are frequently seen as girlfriends or family. Carson et al. (2004) dedicate a short section in their book *Girls Rock! Fifty Years of Women Making Music* on music stores, in which they discuss whether music stores were ‘friend or foe’. While the authors give many first-hand examples of sexist and belittling practices of male salespeople and male musicians towards women in these spaces, they also report on female musicians successfully competing with men due to their confidence as musical performers. To our knowledge, Sargent’s (2009) work is the only study that focuses specifically on music stores. She observes worker and customer interactions in several music instruments stores in the USA, focusing on language and space to analyse the gendered styles of such intercommunications, which proves to be consistent with the notion of gender discrimination prevalent in these stores.

On our field trip to a music store one Saturday morning, gender stereotypes became apparent. While not observing discrimination against women among the predominantly male sales staff and customers (Berkers & Schaap 2018; Sargent 2009), we did perceive the women there (Butler 1988) corresponding to gender stereotypes. Despite aiming for a balanced sample and thus deliberately addressing female customers, they were underrepresented in quantitative terms; only four out of 24 (17%) interviewees were female, which corresponds to Sargent’s (2009) interview sample of three women of ten participants. Concerning instrument choice and gender, the picture was less clear; one played the trumpet, one flute and guitar (acoustic and electric), one drums and the last one bass. The interviews suggest that they approach their gear with little ambition, which is in line with research reasoning that women are less serious and competitive in collecting (Olmstedt 1991; Webley et al. 2001) and less likely to buy musical instruments (Danziger 2004: 161). The trumpet player (33 years) visited the store out of sheer ‘instrumental necessity’ (Belk 1988; Furby 1978). She explained that her trumpet was borrowed from the church and that she had to return it. The only criteria for purchasing her first trumpet were durability, easy playability and ‘a good sound’ without specifying the desired sound any further. The reason for her visit to the store instead of going online to order the instrument was that she wanted to try it out without possibly having to return it to an online retailer, something she stated she did not know how to do. Another female bass player (22 years) visited the store with a clear purchase intention. She stressed that she did not play very actively and considered it only a hobby. After she had started taking lessons and progressed in her ‘serious leisure career’ (Stebbins 2009), she was motivated to acquire a second instrument. One criterion for the new bass was a shorter scale length because the neck of her current instrument was too long, which

is a common problem among female guitar and bass players (Carson et al. 2004: 12). Colour was the other criterion; one that was considered by just one of the many male participants in Wright's (2006: 29) study. The shape and model of the instrument made little difference to her, nor did the sound. Since she only played at home, sound nuances were not of particular interest either. Still, she would invest in a proper amplifier and effects pedals should she join a band one day and progress further in her serious leisure career (Stebbins 2009). Another female drummer (27 years) travelled with her partner from far and wide to buy sticks and took the opportunity to explore various types of instruments and drum sets.<sup>33</sup> When she tried electronic drum kits for the first time, she discovered their usefulness, especially since she was forced to sell her acoustic drum kit because of the noise it produced. However, she did at the time not own a drum set or other instruments and did not think she would be able to afford one soon. Her drum playing depended on occasional access to a kit in her school. The flute and guitar player (16 years) exhibited a less purposeful visiting behaviour. While her original intention was to buy a music stand, we met her in the guitar area of the store, where she stressed that she did not need a new guitar because she already owned a cheap acoustic and electric guitar and a ukulele. She also made it clear that she had no intention of spending her free time learning more about equipment and that one flute was enough for her. Overall, the interviews were largely in line with gender stereotypes, but due to the limited number of experiences captured, the short interview durations and the random sample, general statements cannot be made.

Many of the male visitors exhibited a strong interest in gear and associated GAS tendencies. From the interviewed musicians, one keyboard player (52 years) explained his visit to the music store with 'actually, I just want to see if there's anything new'. Several others regularly visited music stores to test instruments, preparing to make an informed acquisition as soon as their budget would allow it. A Dutch guitarist (24 years) travelled to Germany to check out gear. As he stated, 'maybe you see some cool guitar stuff that you don't even know' about. This motivation is not based on necessity but neophilia (Falk 1994): 'I think my tone is complete, but maybe there is something new or ... But it's just for fun, just to look around, and all these guitars on the wall, hahaha. Yeah, that's just [a] good feeling'. He would only buy something if he got a bargain, but his primary intention was to find out about gear, test it and do further research at home. He stressed that he always deliberated on a potential purchase for a week before deciding and declared that this systematic routine was almost like a ritual to him. The behaviour of these two musicians fits the concepts of 'desire' (Belk et al. 2003) and 'necessitation' (Braun et al. 2016). Al-

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<sup>33</sup> The fact that a female musician took her male partner with her to a music store is worth mentioning, as literature usually reports the opposite (Bayton 1998; Berkers & Schaap 2018; Sargent 2009).

though the visits do not suggest any impulsive tendencies, they clearly show an element of ‘self-seduction’ for the pleasure that discovering and contemplating potential purchases can give (Baudrillard 1983; Belk et al. 2003).

The notion of necessity is worth mentioning in the context of music stores. As the interviews suggest, many musicians spontaneously create a necessity when confronted with an unknown but exciting piece of equipment or a bargain. Ideally, gear is selected based on musical needs, but in the minds of musicians prone to GAS, new equipment sometimes motivates new artistic projects to justify gear purchases. The gear determines what music to make. As one male customer (53 years) explained, ‘[t]here are always a few gadgets that you don’t really need, but still buy’. In line with technologically deterministic thinking, one bassist (24 years) pointed out that the more gear a musician had, the more creative they could be. In the pursuit of creativity, several musicians stated that they browse print and online instrument catalogues, watch videos and search the Internet to find inspiration for new purchases (see also Wright 2006: 35, 37). The interviews suggest that the musicians deliberately create a desire that triggers the beginning of a ‘necessitation’ cycle (Braun et al. 2016). Through this perceptual process, an object changes from insignificant to essential. First, musicians try to discover items that could be ‘useful’. If the desire is strengthened by the chance of a bargain, those prone to impulsive behaviour may already buy the item without extensive testing or further research. People with a higher degree of awareness and reflexivity question the usefulness of new equipment (Braun et al. 2016; Rogers 2003) and probably only buy it if the quality exceeds that of the already owned gear or extends it in other ways. Whether the item is genuinely ‘needed’ seems less relevant. Yet, it may not be needed for the current playing, but because of its ‘instrumental power’ (Furby 1978; McClelland 1951), it might facilitate exploring new styles or sounds. Thus, it could become a need in the future when the musician joins a band or extends their stylistic repertoire. This way of thinking, consciously or unconsciously, may help the musician improve, which is consistent with consumption research that regards the purchase of objects crucial for the development of the self (Belk 1988; Belk et al. 2003; McClelland 1951; Shankar et al. 2009).

One of the more musically motivated reasons for visiting a music store is to upgrade gear to adjust it to developing skills, preferences or musical projects like a band, reflecting progress in a serious leisure career (Stebbins 2009). An interview with a guitar player (19 years) showed these motivations in his acquisition history and plans for the future:

The first one I bought was a Jackson. It was in the lower price range, about 300 euros. This is just a beginner’s guitar. After that, I got myself a Fender, to play something quieter in a better price range, which can be played better. Now I want something better to play metal on. Also, because of the band, to have a better playing feeling live, on stage, I would also go one price range higher, about 1,000 euros.

The times between upgrades may be quite long and likely vary between different instrument types. One drummer explained that with 21 years, he reached the point where the kit he got when he started at 14 had to be upgraded. Drums above the entry range are comparatively expensive, and neither can they easily be collected due to their size. A bassist (51 years) treated himself with upgrading his amplifier as a Christmas gift (see also Wright 2006: 29), and only two months later felt the need to acquire a matching bass. That is a clear case of the ‘unending ease’ that Straw (2000: 166) sees as characteristic of neophilia. Guitarists seem to be similarly prone to frequent purchases (Herbst 2017a). For players of wind instruments, using varying types can have significant effects on their playing. A saxophonist (51 years) explained that when he got an alto in addition to his tenor, he had difficulty with both, often missing the G-sharp because the alto had the older valve arrangement of instruments from the 1950s. Therefore, he sold the alto and limited himself to the tenor, which improved his playing.

One of the primary motivations for new gear was related to playing in a band. We met a newly formed metal band that visited the music store together to try out new instruments. Their guitarist stated not to have paid much attention to his equipment before joining, but now, he had to upgrade from a small practice amplifier to an adequate amplifier head and cabinet. This motivation was probably based on both sound and visual expectations in the metal genre. The band explained that they could use equipment at the youth centre where they were rehearsing, but with the prospect of live shows, they had to buy their own equipment, including extras like effects pedals, which were not essential for playing in a rehearsal room. Thus, aspirations and progress seem a driving force to invest in material continuously. Even though they appeared to be strategic about their future investments, the members’ responses suggested otherwise, having different desires, some individual, focusing on gear they cherished personally. Yet, the band as a collective showed a ‘desire for sociality’ (Belk et al. 2003: 335f), with some pressure on each band member to invest in better gear to keep up with the band’s overall progress and its aspirations or risk exclusion.

In connection with the decisive factor of bands for purchases by individual members, we met another metal band in their late thirties. That band showed a different practice of buying instruments, one that is currently not reported in any journalistic blogs on GAS, namely that of democratic decision-making on purchases within the band. Visiting the store was motivated by ‘seeing what’s on the market’ and comparing what others are playing. However, this behaviour was not ‘mimetic desire’ (Girard 1977) or ‘gear envy’ (Wright 2006: 41), but instead formed the basis for a carefully thought-out financing plan. The band stressed they were a team, like a football team, and therefore each musician had to make compromises to contribute to the group’s benefit. Their guitar player explained that although he liked instruments in the shape of a Flying V, the other band members preferred rounder shapes, so he would not buy his favourite guitar for the band but perhaps for himself to play

at home. Consequently, he would invest in more gear than was ‘necessary’, some for the band and some for playing at home. Using different equipment for different purposes resembles Wright’s (2006: 31, 40) finding that some guitarists play their precious instruments at home and cheaper alternatives on stage.

Changing musical preferences as a ‘bedroom musician’ or as a member of various ensembles also have an impact on gear requirements (Pinch & Reinecke 2009; Wright 2006: 158). As one guitar player (19 years) highlighted, ‘then there’s another genre you want to play, and then you get another guitar for it’. This statement corresponds to reasons frequently given in GAS-related literature (Kwisses 2015; Leonhardt 2015). Another guitarist (38 years) explained that in the course of a musician’s life, an instrument collection is likely to grow:

I am an amateur, not a professional, but in my amateur career, I have been in many different bands with different music. Metal, but I also had a pop band and a punk band. The equipment goes along with the music style. Ibanez is more of a pop-rock guitar, in the Joe Satriani sound style. And when you get to metal, I have a Jackson metal guitar. For pop, a Gibson Les Paul ... I’m not a collector. The twelve guitars have come through the whole career. You switch between styles. I played pop for three years. Lately, I’ve been looking for something else because it was boring. Then I switched to metal. Ibanez? Okay. Buy a Jackson; it’s kind of heavy.

We also met musicians who saw this very differently. A guitarist (49 years) who played for 31 years deliberately owned just one guitar. He started with a Gibson Deluxe that, when it turned out not to be flexible enough for him, was replaced by a more versatile Ibanez Prestige guitar with three pickups and five pickup combinations, which he played through a Line 6 Helix digital simulation amplifier. This setup, he emphasised, allowed him to play any style of his choice.

Other musicians stick to one genre, which not necessarily means that less investment is ‘necessary’. For a bassist (26 years), his musical career was marked by the fandom of Metallica, similar to what Fernandez and Lastovicka (2011) observed for guitar players. He started with a regular four-string bass, added a five-string and then bought a custom model dedicated to Metallica’s *And Justice For All* record, which has the album artwork and lyrics printed on it. Metallica’s late Clive Burton is a cherished role model for him (see also Wright 2006: 37), which is reflected in his equipment. It consists of a tribute wah-wah pedal and other gear Burton used in the 1980s, such as a bass Tube Screamer and a compressor from Boss, all of which were ‘basically the three main pedals that Clive Burton used in the eighties. And I am really happy with my sound’. This sound is only partly his own because he wants to come as close as possible to his idol, motivated by his role as the bass player in a Metallica tribute band. But this bassist still intends to create a somewhat unique sound (see also Wright 2006: 30f) that differs from the original:



I like the sound of Clive Burton. So, I adapted it to my own. When you hear me playing, you will notice it's not exactly like Clive's sound because I can never reach that because he used equipment from a different era. The newer stuff is not as rough as it used to be. It's much more refined. I just tweak the sound a little bit so that it sounds like Clive, but it is my own sound.

If money were not an issue, he would buy precisely the same instruments as Burton or even the original. The closest would be a signature bass guitar by Aria at the cost of about €6,000, designed posthumously in collaboration with Burton's father. The interviewee stressed that this bass was a long-term goal, although not being sure whether he could ever afford it. His desire is nourished by 'hope'; the instrument is difficult to acquire, but it is possible (Belk et al. 2003: 340, 343; Denegri-Knott & Molesworth 2010: 69).

Regarding GAS and collecting, the interviewed musicians covered a broad spectrum from purists to collectors. Many musicians enjoyed musical gear and acquiring items but still considered it a hobby (Wright 2006: 81). A bassist (49 years) stressed: 'It's supposed to be fun. And if there are new items, it's always nice. Then I also have the possibility to look forward to something new for a long time. That is always totally great. It's like a new addition to the family'. It would be boring if he could buy any instrument he liked, as this would devalue equipment for him. He favoured the prospect of eventually adding a new piece of gear in the future. Another guitar player (49 years) shared the joy of equipment, but more so from an interest in technology, characterising him as a 'technophile' (Coulthard & Keller 2012): 'I love the technology behind everything ... I am amazed by what you can put in a box like this, it's like a whole studio twenty years ago. That's fantastic. It's just fun to know what's around to see'. Such high interest in innovative technologies rather than vintage gear is rare amongst guitarists (Herbst 2019a, 2021).

Others had no problem stressing their fondness for gear and referred to themselves as 'gear nerds' (see also Cole 2018). A guitarist (19 years) stated, 'I don't have a lot of other things on my mind. You can't get enough and think of nothing else', and the drummer (19 years) of his band added, 'it's such a big part of life'. Age is worth mentioning in this context. One bassist (49 years) stopped playing for 25 years when he started a family, and a drummer (49 years) added in a similar vein that although he continued to make music, he did not have the money for many acquisitions because of his three children. Furthermore, the bassist's wife pointed out that he was not supposed to spend too much money on his hobby, and the wife of a 65-year-old drummer was concerned about the limited space in the basement. These exclamations are consistent with Wright's (2006: 102ff, 174) observation that significant others, by whom he means girlfriends and wives, limit spending money on musical equipment.

As discussed previously, a collection does not make its owner a collector (Belk 2001a: 66; Shuker 2010: 8). A guitarist (38 years) stressed that while he had twelve

guitars, some of them even of the same model, he owned them because of musical necessities and thus refused to be considered a ‘collector’. The simple reason for his growing collection was that he never sold or traded an instrument. For the same reason, another guitarist, despite his young age of 24 years, already owned ten guitars. Only running out of space for all his gear would prompt him to sell instruments. Yet another guitarist (46 years) emphasised that guitarists can never have enough guitars, and he was not even sure how many he possessed. Still, he did not regard himself as a collector. Only once he sold an instrument, and he regrets it to this day, so he keeps accumulating gear. Others reasoned mainly from a financial perspective. As a multi-instrumentalist (46 years) explained, gear accumulated over time because its value decreases immediately after the purchase, and therefore it made little sense to sell it. According to his argumentation, all musicians are collectors out of pure economic necessity. However, collecting did not necessarily exclude selling instruments, as another guitar player (19 years) stated. He saw himself as a collector but only kept the instruments he would actually play. This statement contradicts Wright (2006: 63) in his distinction between musicians and collectors, claiming that collectors do not or only rarely play their instruments. All these different views suggest that practices overlap, making it difficult to distinguish a collector from a non-collector. For Wright, the kind of motivation is decisive. While agreeing with this assessment, we are convinced that it as well depends on each musician’s self-image. Among musicians who behave the same way, some see themselves as collectors, while others do not. As per Wright (2006: 63), most players ‘don’t like the idea of “closet queens”’ and thus prefer smaller instrument collections, whereas our interviewees claimed to gradually expand their gear collection for musical purposes without classifying themselves as collectors. Th  berge (1997: 244) proposes that the average size of instrument collections has grown over time, and our respondents support this claim. After all, the size of a musician’s instrument collection may contribute to their reputation (Cohen 1991: 50) and, especially if they are not professionals, to their ‘serious leisure’ career (Stebbins 2009).

The criteria for choosing gear were as varied as the opinions and purposes described before. Some participants highlighted low prices and bargains, mainly offered by specialised musical instruments markets (McIntosh & Schmeichel 2004: 91; Wright 2006: 38, 40). Others were willing to pay more for an instrument if it was of appropriate quality (Wright 2006: 28). Yet others stressed that price would not equal quality. Durability, high-quality craftsmanship, playability and sound quality were other criteria at the top of the list.

In summary, despite serving mainly as a pre-study in preparation for the survey, the ethnographic field trip to a music store provided insights valuable in themselves. Practices not covered in academic (Herbst 2017a) and non-academic (Kwisses 2015; Leonhardt 2015; Power & Parker 2015; Robair 2015; Wright 2006) sources became

apparent from the interviews. For example, some bands make joint democratic decisions on gear purchases, which confirms the occasional conflicts between the rational mind and the irrational contemplations and daydreams that are highlighted in most journalistic texts on GAS. Some of the issues discussed could not be observed. None of the musicians saw acquisitions as an investment (Wright 2006: 79) but instead as a loss of money. This belief can be explained by the product offer in most regular music stores, predominantly selling new products. Only rare equipment like vintage instruments, limited editions or gear formerly owned by renowned players retain or even increase in value. As such items are not commonly sold in music stores, the visitors were neither expecting any rarities (Wright 2006: 35) nor were they on the ‘hunt’ (Wright 2006: 31, 39). Instead, the visitors saw the store as an occasion to learn about new products in the musical instruments industry, exchange ideas, compare themselves with other players and bands, and try out instruments to determine if new acquisitions could help them in their artistic development.

## 6.2 Method of the Online Survey

### *Procedure and Sample*

Following the field trip to the music store, we created a survey that was hosted on an online platform (SoSci Survey), which facilitated gathering attitudes towards gear from a much larger and international sample. The survey was advertised in fifteen English-language musicians’ forums (Appendix A) and on carefully selected musicians’ websites and Facebook pages, such as Musikmesse Frankfurt, the world’s biggest musical instruments convention. For a more balanced distribution across all instruments, music students from the University of Huddersfield ( $N = 20$ ) were asked to participate in the survey. Otherwise, no purposive sampling was carried out.

In our introductory text, we described the survey as a research project on the attitudes and practices of instrumentalists concerning their musical equipment. To not influence the response behaviour, we avoided the term ‘Gear Acquisition Syndrome’ and its abbreviation ‘GAS’. We pointed out that the project was motivated by research interests from music sociology, cultural studies and music technology and that the data would not be used for marketing purposes. The message boards were regulated by administrators as gatekeepers, which resulted in access to one of the largest drummer forums being denied because the admin feared that users would reject surveys from third parties.

The survey was active from 30 June to 16 November 2017. Participation was voluntary. Out of 940 participants, 668 (71%) completed the survey and are included in the evaluation. 94% of the sample were male, only 28 (4%) female. The participants had the option of choosing a non-binary gender or not answering at all. About 2% selected a non-binary gender ( $n = 3$ ) or preferred not to answer ( $n = 9$ ). The average age was 46.39 years ( $SD = 15.52$ , min. = 14, max. = 82). Concerning the main

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instruments, the largest groups were guitar ( $N = 204$ , 31%) and bass players ( $N = 200$ , 30%), followed by saxophonists ( $N = 95$ , 14%), trumpet players ( $N = 76$ , 11%), drummers ( $N = 59$ , 9%) and keyboardists ( $N = 34$ , 5%). Among guitarists, 55% preferred the electric over the acoustic guitar. Most participants were hobby musicians (53%). The others listed music as an additional (30%) or professional (17%) occupation. The average playing experience was 26.43 years ( $SD = 15.94$ , min. = 1, max. = 66). About two-thirds of the sample played in bands (68%), and those who did, played in 2.49 groups ( $SD = 1.86$ ). Most played in cover bands (51%) or bands with mainly original compositions (47%), but also in big bands (23%), orchestras (17%), tribute (9%) and top 40 bands (6%). Three quarters played live gigs (74%), an average of 29.59 ( $SD = 39.27$ , min. = 0, max. = 300) gigs in the twelve months before the survey. The most frequently played genre (Figure 1) was jazz (15%), followed by classic / hard / surf rock (12%) and blues / soul (11%).

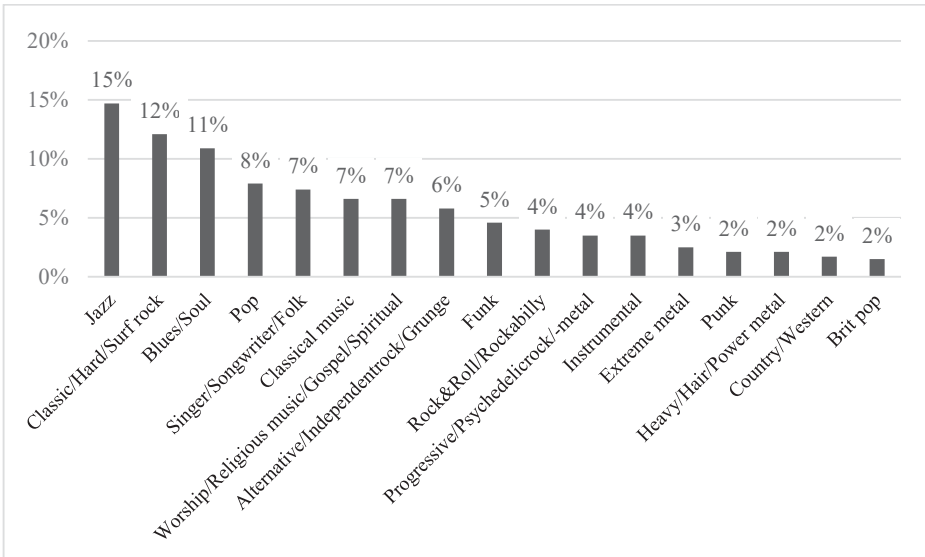


Fig. 1. Genres Played Most Frequently (Number One Choice; Considering only Genres with  $n > 5$ ;  $N = 605$ )

Since these samples were too small for evaluation, the various genres were combined into five groups informed by factor analysis (Table 6), taking aesthetic criteria into account: classical / worship / instrumental ( $n = 101$ ), jazz / blues / soul / funk ( $n = 187$ ), pop / folk / rock & roll ( $n = 127$ ), rock / alternative / punk ( $n = 130$ ) and metal / progressive / hardcore ( $n = 56$ ). Hip hop / rap and electronic music formed a separate factor but with only four respondents, this group was excluded from further genre analysis.

The majority of the sample was in a relationship, either married (59%) or unmarried with a partner (22%). 19% were single, divorced or widowed. Consequently, 81% lived with a partner or family, 12% alone and 7% lived in another cohabitation form. Most of the sample population came from Europe (52%), North America (38%) and Australia (9%). Asia (0.8%), South America (0.5%) and Africa (0.2%) formed a marginal group within the sample. Due to this uneven distribution, the location could not be considered in the analysis.

### *Instrument*

The survey consisted of three parts. In the first part, data on sociodemographic background and musical activities were collected: main instrument, size of the instrument collection including accessories (for example, effects pedals or mouthpieces), relationship status, living situation, musical education and professional status as well as experiences on the instrument and in bands. The second part included top-three rankings of multiple choices for the genres most frequently played on the instrument, purchase criteria for equipment and multiple selections for the type of band. The third part consisted of item batteries with 7-point Likert scales to measure attitudes. Only the anchors were labelled, signing (1) as complete disagreement and (7) as complete agreement. For questions on sociodemographic data and most of the items, participants could choose not to answer. Open answer fields allowed to comment on answers or highlight topics that were felt relevant to the study. In total, 30% of the participants (202 of 668) commented, which corresponded to approximately 8,000 words.<sup>34</sup> Such valuable qualitative data not only extends the quantitative data but also shows how seriously many participants took the survey.

Ninety items were assigned to latent dimensions based on theory and reliability analyses. The scales were optimised by stepwise exclusion. This procedure was accompanied by factor analyses, which led to combining two initially distinct dimensions, *General GAS* and *Psychic Effects*, into a comprehensive *General GAS* scale. In the end, theoretical considerations played the determining role in scale construction. 72 items were finally used to create fourteen scales with acceptable to excellent consistencies (Table 1). While most scales have between four and eight items, the *General GAS* scale stands out with seventeen items and the *Collectors* scale and *Democratic Purchases in Bands* with two items each. The latter cannot claim to represent the concept comprehensively, which goes without question. Yet in the service of exploratory research interest, it still provides meaningful insights.<sup>35</sup> Besides, most scales correlate with each other due to scale construction based on averages. That

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<sup>34</sup> The open comments are presented with all the grammatical and typographical errors their contributors made.

<sup>35</sup> Applying the Spearman-Brown coefficient to the two-item scales led to satisfactory results: *Collectors*:  $r_s = .75$ , *Democratic Purchases in Bands*:  $r_s = .77$ .

does not come as a surprise, given the theoretical premise that all scales should help explain GAS. However, it is an indication that they do not describe completely distinct phenomena. A full correlation matrix is given in Appendix D.

Tab. 1. Scales Capturing Different Attitudes Towards Musical Gear

Scale	N	Cronbach's $\alpha$	M	min.	max.	SD	Items
General GAS	613	.89	4.55	1.00	7.00	1.05	17
<i>Personal Motives</i>							
Collectors	667	.75	2.81	1.00	7.00	1.65	2
Technophilia	661	.74	3.61	1.00	6.60	1.10	5
Vintage	658	.79	3.52	1.00	7.00	1.27	5
Nostalgia	655	.70	4.21	1.00	7.00	1.43	4
Modification and Fabrication	664	.81	3.10	1.00	7.00	1.39	4
<i>Social motives</i>							
Relationships	507	.76	3.44	1.00	7.00	1.45	4
Band as GAS Motivator	449	.88	3.35	1.00	7.00	1.51	5
Democratic Purchases in Bands	457	.74	2.23	1.00	7.00	1.36	2
<i>Musical motives</i>							
Role Models	664	.68	2.34	1.00	6.00	1.08	4
Genre Requirements	665	.73	3.72	1.00	7.00	1.28	4
Expressiveness	660	.91	4.40	1.00	7.00	1.35	8
Experimentation	663	.79	4.01	1.00	7.00	1.29	5
Sound Exploring	665	.74	4.41	1.00	7.00	1.39	3

As this survey pioneered quantitative research on GAS, the instrument and scale properties are included in Appendix C for future studies. To help understand the analysis, we briefly summarise all scales.

The most important scale is *General GAS*. With an excellent internal consistency, it includes items related to the habit of thinking about equipment and researching gear online or in magazines, testing equipment in music stores, looking for deals, desiring to buy instruments, wishing for variety in one's gear collection and valuing music equipment generally. The scale *Collectors* captures views on collecting and buying gear because it is rare or unique. *Modification and Fabrication* measures interest in these practices and the attitude that most ready-made gear benefits from modification. The *Relationship* scale is only available to participants in a relationship and records the partner's influence on buying behaviour. *Vintage* not only captures a fondness for vintage gear, old-worn looks and authentic rebuilds but also gathers opinions on whether older gear sounds better and is not outdated by

technological innovations. In contrast, *Technophilia* measures interest in the latest music technology for reasons of being up-to-date, better sound or improved functionality. *Nostalgia* gathers personal memories and the appreciation of instruments the musician played in the past ('reflective nostalgia'). *Band as GAS Motivator* consists of items that address the increased likelihood of buying more gear when playing in a band because the equipment or behaviour of band members affects the desire to extend one's instrument collection. *Democratic Purchases in Bands* captures the willingness to negotiate instrument purchases with fellow band members. The *Band as GAS Motivator* and *Democratic Purchases in Bands* scales are only available to respondents who state that they currently play in one or more groups (bands/orchestras). *Role Models* tracks the musician's fondness for signature models or their favourite musicians' gear. Similarly, *Genre Requirements* measures whether genres require specific instruments, based on the assumption that musicians who play several styles could benefit from a larger instrument collection. *Expressiveness* gathers to what extent new gear helps overcome limitations and inspires. *Experimentation* is about the importance of a personal or innovative sound in connection with an instrumental technology or its unconventional use. *Sound Exploring* is the increased form of experimentalism and measures the importance of trying out and combining sounds. It also includes a comprehensive understanding of the equipment to tweak the sound according to the musician's visions.

Data analysis was conducted using univariate analyses of variance and conservative Scheffé post-hoc tests to examine differences between instruments and genres. The evaluation of the influence of personal factors and attitudes was carried out using correlation analyses, stepwise categorical regression models and *t*-tests, for which the effect size is indicated by the unbiased Hedge's *g*. For all scales, the variation between instruments, groups of genres and types of ensembles was tested. If no results are reported, there were no significant differences at the .05 level.

### 6.3 Survey Results

#### *Gear Collection*

By definition, GAS implies an inclination to buy musical gear, so that a natural consequence is the accumulation of musical instruments if purchases are not offset by selling equipment. Table 2 gives an overview of the average instrument collection.

Tab. 2. Overview of Average Instrument Collection

<b>Drums (n = 58)</b>	<b>Range</b>	<b>M</b>	<b>SD</b>	<b>Mdn</b>
Acoustic drum kits	0 – 10	2.05	1.77	2.00
Electronic drum kits	0 – 5	0.47	0.84	0.00
Cymbals	0 – 60	11.60	11.31	8.00
Add. snares	0 – 42	2.84	6.24	1.00
Add. toms & bass drums	0 – 9	0.88	1.56	0.00
Add. kick pedals	0 – 9	1.33	1.53	1.00
Pieces of percussion	0 – 60	5.17	9.36	3.00
Add. sampling pads	0 – 3	0.28	0.72	0.00
<b>Bass guitar (n = 200)</b>	<b>Range</b>	<b>M</b>	<b>SD</b>	<b>Mdn</b>
Acoustic bass guitars	0 – 4	0.44	0.70	0.00
Electric bass guitars	0 – 60	5.53	5.73	4.00
Combo amplifiers	0 – 5	1.04	0.95	1.00
Amplifier heads	0 – 8	1.75	1.34	2.00
Speaker cabinets	0 – 8	2.03	1.49	2.00
Pedals and effects	0 – 75	5.63	7.27	4.00
<b>Guitar (n = 204)</b>	<b>Range</b>	<b>M</b>	<b>SD</b>	<b>Mdn</b>
Acoustic guitars	0 – 27	3.40	3.53	2.00
Electric guitars	0 – 100	5.25	9.53	3.00
Combo amplifiers	0 – 15	2.02	2.04	2.00
Amplifier heads	0 – 35	0.90	2.99	0.00
Speaker cabinets	0 – 14	0.97	1.83	0.00
Pedals and effects	0 – 200	10.75	23.74	4.00
<b>Keyboard (n = 34)</b>	<b>Range</b>	<b>M</b>	<b>SD</b>	<b>Mdn</b>
Keyboards	0 – 12	2.50	2.76	2.00
MIDI master keyboards and pads	0 – 6	1.24	1.33	1.00
Hardware synthesisers	0 – 12	2.59	3.01	1.50
Stage pianos	0 – 3	0.44	0.66	0.00
Electric organs	0 – 1	0.32	0.48	0.00
Grand or upright pianos	0 – 1	0.32	0.48	0.00
Digital pianos	0 – 2	0.18	0.46	0.00
Keyboard amplifiers	0 – 4	0.56	0.86	0.00
Pedals and effects	0 – 12	1.38	2.51	0.00
Software applications regularly used when playing the keys	0 – 100	14.26	27.99	3.50
<b>Saxophone (n = 95)</b>	<b>Range</b>	<b>M</b>	<b>SD</b>	<b>Mdn</b>
Soprano saxophones	0 – 5	0.96	0.96	1.00
Alto saxophones	0 – 10	1.86	1.59	1.00
Tenor saxophones	0 – 12	2.01	2.05	1.00
Baritone saxophones	0 – 3	0.55	0.74	0.00
Bass saxophones	0 – 1	0.03	0.18	0.00



Other types	0 – 5	0.26	0.75	0.00
Add. necks	0 – 12	0.55	1.42	0.00
Add. mouthpieces	0 – 50	10.21	10.03	6.00
<b>Trumpet (<i>n</i> = 76)</b>	<b>Range</b>	<b><i>M</i></b>	<b><i>SD</i></b>	<b><i>Mdn</i></b>
Classical trumpets (with rotary valves)	0 – 5	0.53	1.03	0.00
Jazz trumpets (with piston valves)	0 – 45	6.21	8.58	4.00
Piccolo trumpets	0 – 6	0.83	1.03	1.00
Pocket trumpets	0 – 2	0.33	0.55	0.00
Bass trumpets	0 – 1	0.01	0.12	0.00
Other types	0 – 11	1.08	1.78	0.50
Mouthpieces	1 – 450	34.08	59.01	20.00
Mutes	0 – 300	16.79	35.06	9.50

Herbst (2017a) documents guitarists owning five electric instruments plus three amplifiers on average, and Wright (2006: 47) claims that his study's participants consider four to ten guitars the ideal size for their collection. The results of this study confirm the literature; the average guitarist owns five electric guitars and three amplifiers. Comparing the types of instruments and leaving aside amplifiers, effects and other extras, trumpet players possess the most instruments, followed by bass and guitar players, then keyboardists, drummers and saxophonists. The abbreviation GAS originally stood for 'Guitar Acquisition Syndrome' (Becker 1996). That is why special-interest books show a different emphasis on technology for the types of instruments, with electric guitarists and synthesiser players being most 'technophile' (Coulthard & Keller 2012). It was therefore our underlying expectation that guitar players would be most prone to GAS, while players of wind instruments would be least affected. Measured by the number of instruments the participants gave, trumpet players unexpectedly surpass all other instruments. Economically, trumpet players benefit from the fact that other than guitarists and bassists, they are not required to buy amplifiers and so can spend more money on instruments. However, this does not explain the considerable differences between trumpet and saxophone players. It may well be that several trumpets are needed for their many tunings, while saxophonists tend to stick to one or two favourite voices, for example, soprano and alto. In the open comments, some brass players noted that the survey did not cover all tunings and trumpet types and that some of the categorisations were confusing, especially the classification of 'classical trumpets' as trumpets with rotary valves and 'jazz trumpets' as trumpets with piston valves. Several respondents point out stylistic differences of the respective type between Europe and other parts of the world. Nevertheless, it should have been possible to assign any instrument to one of the two construction types. That also applies to instruments with different tunings for which no separate categories had been created. Additional uncertainty regards the classifica-

tion of flugelhorns and cornets, which according to the German classification, usually belong to the family of horns. It cannot be ruled out that these instruments have been entered in the field ‘other types’ or that the listing has been omitted. At this point, the survey instruments may not have allowed for fully valid results and thus need further clarification in future studies. However, the wide variety of different types of instruments and tunings within the trumpet family may explain why trumpeters own so many instruments.

Based on theoretical deliberations, another expectation was that musicians playing electronic instruments possess more equipment than musicians playing acoustic instruments. As Frith (1986) and Théberge (1997: 244f) argue, electronic instruments quickly become outdated when new sounds come into fashion, sound quality improves or functionality increases. That mainly applies to those benefitting from more modern sounds such as electronic keyboards (Weissberg 2010: 91) but probably less so to guitar and bass (Théberge 1993: 166–177; Uimonen 2016). On the other hand, vintage synthesisers are popular, too (Théberge 1997: 119), which illustrates the issue’s complexity. Furthermore, different sounds and playing feels of acoustic instruments may require more instruments than playing a digital simulation. Unlike acoustic instruments such as the piano, electronic devices, at least in the case of keyboard instruments, are significantly more owned, presumably because of their affordability and portability. Requiring less space is also an advantage, given the high average number of instruments. Several practical, musical and individual reasons must therefore be considered. In line with these theoretical considerations, the results support the assumption that musicians own more electric and electronic instruments, but not as clearly as we had expected. Musicians have more electric guitars and basses than their acoustic counterparts. Likewise, keyboards and hardware synthesisers dominate the instrument collection compared to acoustic keyboard instruments. Drummers, on the other hand, possess more acoustic than electronic kits. Among the brass instruments<sup>36</sup>, the jazz trumpet is the favourite. Woodwind players prefer tenor and alto saxophones over soprano and baritone models; bass saxophones are uncommon.

Apart from the average collection size of the different instruments, it is useful to consider the standard deviation and median, as they provide further insight into distribution and different practices within an instrument group. Although guitarists own fewer instruments than trumpet and bass players on average, their collections

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<sup>36</sup> Electronic wind instruments based on sampling and synthesis technology, such as the ‘Roland AE-10 Aerophone Digital Wind Instrument’ and the ‘Akai EWI 5000 Electronic Wind Instrument’, were not included in the questionnaire because acoustic instruments seem to be much more common among saxophone and trumpet players.

show the highest variance. The largest instrument collections belong to electric guitar players. For all other instruments except the electric bass and jazz trumpet, the maximum number of instruments and standard deviations are lower.

Overall, the median indicates moderate instrument collections with sometimes even 0.00, meaning that only a minority possesses the equipment within the instrument group. In most cases, the median is slightly below the mean, suggesting a right-skewed distribution. Slightly above the average it is only for guitar amplifier heads ( $M = 1.75$ ,  $Mdn = 2.00$ ), soprano saxophones ( $M = 0.96$ ,  $Mdn = 1.00$ ) and piccolo trumpets ( $M = 0.83$ ,  $Mdn = 1.00$ ). Between mean and median, the greatest deviations exist for smaller and more affordable items, such as guitar pedals and effects ( $M = 10.75$ ,  $Mdn = 4.00$ ), software applications used when playing the keys ( $M = 14.26$ ,  $Mdn = 3.50$ ), mouthpieces for saxophones ( $M = 10.21$ ,  $Mdn = 6.00$ ) and trumpets ( $M = 34.08$ ,  $Mdn = 20.00$ ) as well as mutes for trumpets ( $M = 16.79$ ,  $Mdn = 9.50$ ). This additional gear is popular with all instrumentalists. The highest numbers are mouthpieces for all wind instruments and mutes for trumpets. As a saxophonist notes in the open comments, given that he ‘hardly ever need[s] amplification or other electronics, the gear that [he] acquire[s] is limited to new instruments and accessories to instruments’. Since wind players do not require many essential items, they can concentrate on modifying their instruments with new mouthpieces. More generally, pedals and effects are also popular, although more so for the guitar than for bass. Compared to instruments and effects, far fewer amplifiers are owned. For a group of keyboardists, software applications are an essential part of their setup; in contrast, pedals, hardware effects and amplifiers are less relevant. Drummers invest mainly in cymbals and percussion (for example, cowbell and mallets). Additional snare drums are less common, but the maximum number and high standard deviation demonstrate a large variance in this respect. Acquiring extra gear may have musical reasons to personalise or extend the sonic repertoire (Jones 1992: 91; Théberge 1993: 278). Yet such additional equipment is also an affordable alternative to most instruments and therefore suitable as ‘discretionary purchase’ (Danziger 2004: 6f) to satisfy the ‘GAS attack’ (Wright 2006: 22) in the short term. Such accessories can be understood as ‘indulgences’, as small luxury items that provide emotional satisfaction but are not so costly that one feels bad about the expense. It can give the buyer a ‘strong emotional gratification that consumers gain from their discretionary purchases [which] is the reward that reinforces continued purchases of things desired, but not needed’ (Danziger 2004: 22). Moreover, as is often the case with hobbies, the act of researching and buying objects can be just as fulfilling as their actual use (Danziger 2004: 84).

Absolute figures on the ownership of different pieces of gear are limited in their explanatory power, as these items cannot be easily compared with each other due to their distinct sizes, prices and characteristics. In other words, how many guitar effect pedals are worth an additional bass drum? To enable cross-instrument comparisons,

we use z-scores, which bring instrument ownership to a comparable scale. When transforming the ownership of items into z-scores, the average value for each item is set to zero (for example, 2.01 tenor saxophones), and a new scale is adapted on which one scale point corresponds to one standard deviation (for example, 2.05 tenor saxophones). By calculating the means of each instrumentalist's collection on this new score, we can determine how equipment ownership is distributed in the sample concerning above-average or below-average instrument collections.

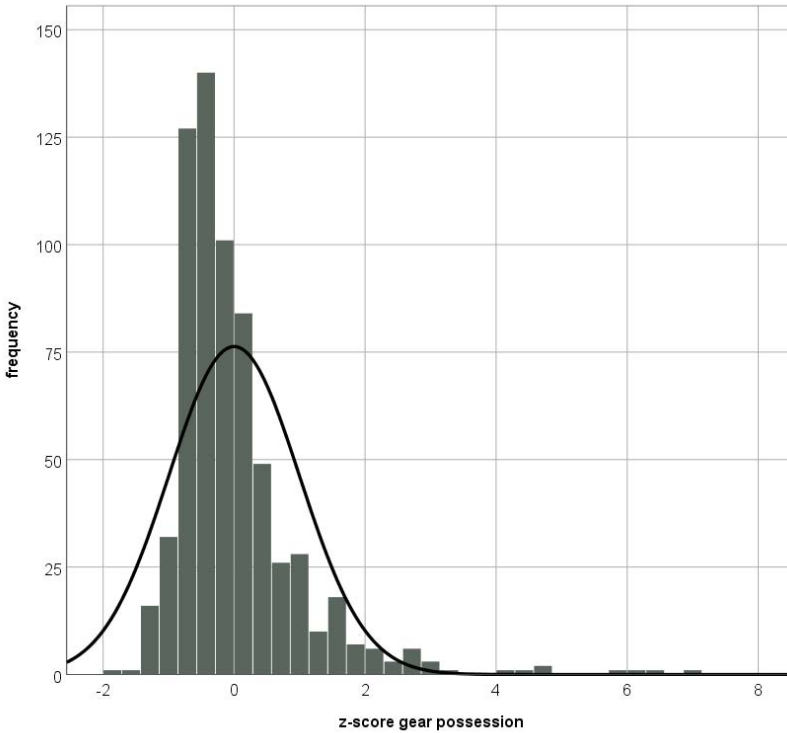


Fig. 2. Z-Standardised Gear Possession Across All Instruments ( $N = 667$ )

Categorising all instrument collections after z-standardisation in up to average ( $\leq 0$ ) and above average ( $> 0$ ) shows that both groups are not sized equally. About one third (37%) has an above-average number of instruments. Also, the standardised size of the instrument collections does not follow a normal distribution. Regardless of the instrument type, a small group has significantly more gear, resulting in a right-skewed distribution (Figure 2) with scores up to almost seven times the standard deviation. That indicates a substantially higher number of instruments or pieces of gear, considering that one standard deviation represents about ten guitars or two

drum kits. The high standard deviations and the distributions suggest two fundamentally different approaches to dealing with gear. The instruments owned by the majority of participants correspond closely to the standardised average, yet not with a normal distribution but with a tendency towards a smaller collection. It remains open whether this main group can be further differentiated. The second group has considerably more instruments, differing from the average by four to seven times the standard deviation.

When testing the standardised number of items for explanatory factors, there are no significant differences between the various genres, relationship statuses and living situations. Consistent with common stereotypes, male respondents ( $M = 0.02$ ,  $SD = 1.01$ ) show higher values and a much higher variance than female respondents ( $M = -0.45$ ,  $SD = 0.49$ ),  $t(38.31) = -4.68$ ,  $p < .001$ , Hedges'  $g = 0.47$ .<sup>37</sup> Regarding the different types of bands, musicians playing in cover or top 40 bands own significantly more equipment ( $M = 0.17$ ,  $SD = 1.02$ ) than those who do not ( $M = -0.03$ ,  $SD = 0.97$ ),  $t(455) = -2.12$ ,  $p < .05$ , Hedges'  $g = 0.20$ . The same applies to players in tribute bands ( $M = 0.46$ ,  $SD = 1.34$ ) compared to the others ( $M = 0.03$ ,  $SD = 0.95$ ),  $t(45.26) = -2.02$ ,  $p < .05$ , Hedges'  $g = 0.43$ . Hobby musicians ( $M = -0.11$ ,  $SD = 0.95$ ) have significantly less musical equipment than professionals ( $M = 0.19$ ,  $SD = 1.07$ ),  $F(2, 664) = 5.34$ ,  $p < .01$ ,  $\eta^2 = .02$ , although with a small effect.

A regression analysis taking into account sociodemographic data, factors related to musical practice as well as musical and personal motives reveals medium to strong effects,  $F(5, 600) = 32.57$ ,  $p < .001$ ,  $\text{adj. } R^2 = .21$ . Older participants and men appear to have significantly more equipment when the two variables are tested in a separate model. However, these differences are no longer significant in the overall regression model when taking all variables above into account. Since age and playing experience correlate strongly ( $r = .654$ ), it is not surprising that only one variable contributes to the explanation of variance. The findings still suggest that playing experience ( $\beta = .14$ ,  $p < .01$ ) is a suitable predictor for a large instrument collection, which is consistent with Herbst's (2017a) study, according to which the acquisition of gear is a side-effect of an extensive playing history.

Regarding personal and musical motives, the only significant predictors are *Collecting* musical gear ( $\beta = .38$ ,  $p < .001$ ) and *Nostalgia* ( $\beta = .11$ ,  $p < .01$ ). The distinction between collectors and players supports Wright (2006: 63) in that in *Nostalgia* and *Collecting*, we have two scales with personal motives giving the best predictive power for a large instrument collection and showing that musical motives play no

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<sup>37</sup> Despite deviating from the normal distribution, parametric test procedures are chosen here and in the following with ANOVA and  $t$ -test. Due to the large sample size, they are considered robust to a violation of the normal distribution (Glass et al. 1972; Rasch et al. 2006: 102).

central role. Unlike restorative *nostalgia* acknowledging heroes of the past, the reflective form (Boym 2001: 10) describing the musicians' appreciation of their previously owned instruments can be observed here. Due to different subsamples, social attitudes were not included in the regression analyses. Anyhow, there were no correlations with the standardised number of items.

Having children does not significantly impact gear collections as might have been expected; households with children generally show a higher number of purchases (Danziger 2004: 161), but seemingly not on musical instruments. There are smaller and more manageable instruments for children that require, in the course of young musicians' developments, new models that correspond to their abilities and body characteristics. It is not clear from the data whether participants included their children's instruments in their answers. Although the accumulated gear size increases, nothing indicates a peak in the 30s and 40s, which is the time frame most players have children learning an instrument. The data neither give clear evidence that parenthood limits the time, motivation and money for musical activities. As to that, some of the open comments are revealing because they suggest that musicians take breaks from their hobby due to family or work commitments, sometimes for several decades. One participant expresses:

I like many musicians have taken time out during our lives to get 'real jobs' and have come back to playing after raising families. That put me like many others is a very different taste and economic grouping than when I was younger and trying to make it. I feel that this differentiation between musicians who have never stopped, i.e. consistent players over many years and those who have stopped have very different gear buying habits.

Statistically, however, the data do not provide sufficient evidence that children significantly affect instrument collection size.

### *Criteria for Choosing and Buying Instruments*

The participants ranked the three most important criteria when buying instruments. Regardless of any personal variables, three criteria stand out (Figure 3). By far, 'sound quality' is considered the most important feature of an instrument, followed by 'playability and feel' and 'workmanship'. Price and appearance are only relevant if the main criteria are met.

This result indicates that musical aspects and the instrument's quality are most influential on the purchase decision and that extra-musical factors do not play a decisive role. Other factors like role models, authenticity and trends are negligible, as is the suitability for individual genres. The result supports neither Théberge's (1993: 166) notion of musical instruments as a 'loaded symbolic terrain' with 'romantic notions of authenticity and personal expression' nor the theory of restorative nostalgia, which is concerned with glorified instruments and their famous players (Boym

2001: 10; Uimonen 2016). Nor can Cohen's (1991: 135) claim be confirmed that musicians value instruments because of their visual qualities and brand. Furthermore, neither reviews nor price (Jones 1992: 89) plays a significant role. The results, however, are consistent with Wright's (2006: 46) finding that the price of an instrument is not the decisive factor in a purchase decision if it is worth its money. It can be concluded that musical motives are the ultimately determining ones, even though social or personal factors may influence the motivation for dealing with musical instruments and acquiring gear.

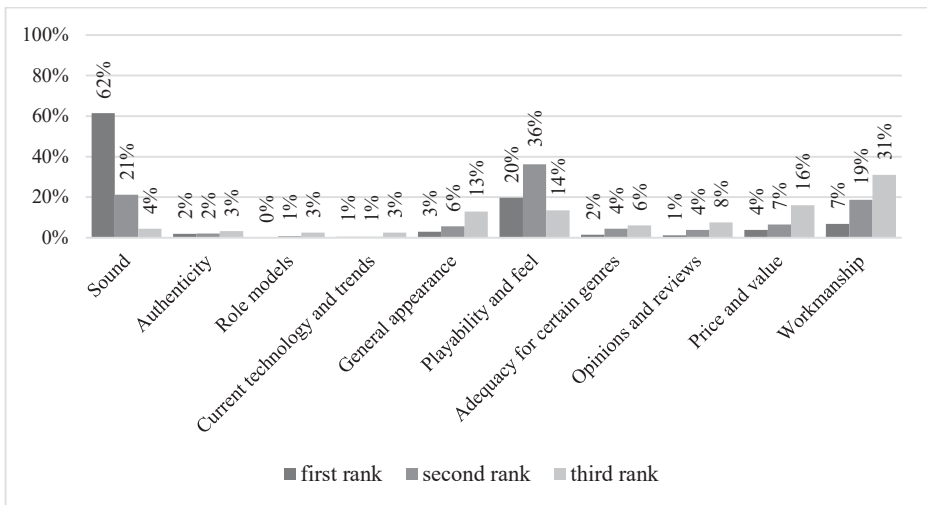


Fig. 3. Criteria when Choosing Instruments ( $N = 668$ )

The open comments deepen our understanding of the quantitative data. Participants name several reasons for and against buying, which extend some of the key criteria and the personal, social and musical motives discussed below, and reveal varying opinions and practices. Despite the relatively low importance of the price of gear, several participants stress that exclusive deals (Wright 2006: 40) tempt them to acquire gear that they might not need. Some indicate that they buy equipment when it 'is too good a deal to pass up', either because it is a catch or because they are curious about the item. Other participants work part-time or as a side-line to have money for instruments. Some work at a music store, which 'entices' them to buy gear because of staff discounts and being surrounded by instruments. Much of the money they earn is immediately spent on music equipment. Likewise, money earned from gigs and repairing fellow musicians' gear is spent on an instrument collection.

The open comments are also informative as to why musicians refrain from spending money on new acquisitions. Apart from obvious financial constraints,

partly related to the responsibility of providing for a family, some musicians prefer trading gear to change it without having to invest. Similarly, some only buy if a device is broken or outdated (Théberge 1997: 244). Others explain that their living and storage space limits the size of their equipment collection. A minimal number of musicians point out that the lack of music stores within commuting distance makes it difficult for them to try out gear, which prevents them from buying. Online stores would be an alternative, but these are not mentioned in the comments. Other reasons for the reluctance to buy are more musically motivated. Several participants highlight to have found the perfect equipment after substantial experimenting with gear, buying, selling and trading it, so nothing new will be needed. In other words, they obtained the setup that provides the best ‘use-value’ for their needs (Cole 2018). Others explain it similarly by stressing that they value versatile equipment that can cover all their stylistic needs. A prerequisite for such instruments meeting all musical needs for many years is high quality and durability, as several musicians point out in their comments: ‘I’ve had the same gear for over 30 years. Still going because I bought quality in the first place’. Finding such equipment requires research, testing and comparing instruments, as a trumpeter suggests:

I am extremely selective in choosing the Instruments and Accessories that I purchase, doing much advance research and play testing many of the same Brands and Models in order to make the best purchase possible. This often, but not always results in purchasing the very high end of the Instrument and/or Accessory. I try to be considerate of the need and longevity of the need. My oldest Trumpet was the first new Professional Trumpet that I bought in 1972 with the assistance of my College Trumpet Teacher. I still perform with this horn from time to time, depending on the type of situation. My other horns range from 1976 (2), 1984 (1), 2016 (1). I also own a pocket Trumpet of unknown Vintage (at least 60 years old). All of my Trumpets were made to fit specific needs and are regularly played in a performance of some type.

The help of more experienced players in finding the best gear that fits a personal style is in line with Gay (1998), who examined the learning processes of New York rock musicians in terms of playing and gear.

### *Gear Acquisition Syndrome*

The size of gear collection and the buying criteria only provide clues to the attitudes and motives underlying musical gear consumption. These factors were captured by a series of scales, where the participants rated their personal, social and musical motives. A more comprehensive Gear Acquisition Syndrome scale was applied to determine how susceptible the individual instrument groups are to this phenomenon.



Tab. 3. Differences Between Instruments

Scale	<i>M</i> scale ( <i>SD</i> )	Instruments						ANOVA		
		Drums	Bass	Guitar	Keys	Sax	Trpt	<i>F</i>	<i>p</i>	$\eta^2$
General GAS	4.55 (1.05)	4.39	4.54	4.77 <sup>1</sup>	4.65	4.11 <sup>1</sup>	4.54	5.11	<.001	.04
<i>Personal motives</i>										
Collectors	2.81 (1.65)	2.60	2.82	2.90	2.90	2.39	3.17	2.30	<.05	.02
Technophilia	3.61 (1.10)	3.82	3.56	3.49 <sup>1</sup>	4.18 <sup>1,2</sup>	3.36 <sup>2,3</sup>	3.94 <sup>3</sup>	5.35	<.001	.04
Vintage	3.52 (1.27)	3.44	3.47	3.63	3.40	3.47	3.51	n.s.		
Nostalgia	4.21 (1.43)	4.30	4.00 <sup>1</sup>	4.52 <sup>1</sup>	4.44	3.99	4.02	3.74	<.01	.03
Modification and Fabrication	3.10 (1.39)	3.05	3.17 <sup>1</sup>	3.36 <sup>2</sup>	2.76	2.56 <sup>1,2</sup>	3.12	4.97	<.001	.04
<i>Social motives</i>										
Relationships	3.44 (1.45)	3.41	3.51	3.52	3.26	3.42	3.19	n.s.		
Band as GAS Motivator	3.35 (1.51)	3.50 <sup>1</sup>	3.63 <sup>2,3</sup>	3.94 <sup>4,5</sup>	3.33	2.51 <sup>1,2,4</sup>	2.85 <sup>3,5</sup>	11.45	<.001	.11
Democratic Purchases in Bands	2.23 (1.36)	2.27	2.12	2.69 <sup>1</sup>	2.30	1.90 <sup>1</sup>	2.19	3.40	<.01	.04
<i>Musical motives</i>										
Role Models	2.34 (1.08)	2.43	2.26	2.54 <sup>1</sup>	2.32	2.09 <sup>1</sup>	2.26	2.86	<.05	.02
Genre Requirements	3.72 (1.28)	3.78	3.59	3.91 <sup>1</sup>	4.28 <sup>2</sup>	3.16 <sup>1,2,3</sup>	3.97 <sup>3</sup>	7.11	<.001	.05
Expressiveness	4.40 (1.35)	4.28	4.21 <sup>1</sup>	4.89 <sup>1,2,3</sup>	4.81 <sup>4</sup>	3.89 <sup>2,4</sup>	4.13 <sup>3</sup>	10.61	<.001	.08
Experimentation	4.01 (1.29)	3.93	3.89	4.20	4.39	3.86	3.91	2.23	<.05	.02
Sound Exploring	4.41 (1.39)	4.56	4.33	4.56	4.87	4.16	4.21	2.41	<.05	.02

Note: Measured on 7-point Likert scales (1–7); <sup>1,2,3...</sup> significant differences between instruments (Scheffé post-hoc test,  $p < .05$ )

The results show that GAS is not an unknown phenomenon for most participants because the *General GAS* scale received the highest agreement of all fourteen scales (Table 3). That is confirmed by the open comments where the term ‘GAS’ is widely used, often accompanied by statements such as ‘GAS is great’ or ‘gear is great’. Consistent with Belk’s (1988) concept of the ‘extended self’, several musicians point out that their equipment is part of them and that they would hesitate to sell it. There were also comments demonstrating a strong sense of ‘neophilia’ (Falk 1994). One guitarist highlights being ‘good for a new guitar, bass, amp etc. once a year’ and another explains that being unmarried and in a well-paid job allows him to buy instruments whenever he ‘fancies’ a purchase. Yet other musicians see GAS or collecting gear critically. Some emphasise that they regularly ‘clear out’ and sell or trade items due to lack of use. Their motives are either to invest in less but higher quality equipment or to reduce the collection size. As one player puts it, ‘I recently came to realize that too much gear might stress me. Why not just have a minimum gear and practice with it? I am considering to reduce my gear significantly’. That too much equipment can create stress is hardly covered in the literature on GAS or collecting; on the contrary, most texts focus on the emotional trouble caused by the urge to acquire frequently.<sup>38</sup> Nevertheless, the fact that the scale *General GAS* (Table 3) finds the highest agreement of all scales suggests that it is the label that some reject rather than the practices and interest in gear it represents.

Similar to the differences between the gear collection sizes of the various types of instruments discussed earlier, we expected that instrumentalists would systematically differ in their attitudes towards GAS. The data (Table 3) confirm only minimal but significant differences between two instruments. Among saxophone players, the tendency towards GAS is significantly less pronounced than among guitar players. It confirms our expectation that guitarists are most prone to GAS, ranking highest on the *General GAS* scale, followed by keyboardists, bassists and trumpet players. Drummers and saxophone players have the lowest values. An unexpected result is that trumpeters have a higher GAS score than drummers. Still, it is consistent with the result of trumpet players having the largest instrument collection of all instrumentalists.

Comparing the grouped genres (Table 4) shows that musicians from the metal / progressive / hardcore genres have the highest values and differ significantly from those of the jazz / blues / soul / funk and pop / folk / rock & roll genres. This result is likely due to the typical metal band line-up with often two guitarists and one keyboard player, with both instruments exhibiting the highest values on the *General GAS* scale among the instrumentalists (Table 3).

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<sup>38</sup> Distress is a common phenomenon amongst hoarders (Nordsletten et al. 2013). It is not known how widespread hoarding is amongst musicians, especially given the high price tags of music equipment that usually do not allow spontaneous compulsive purchases.

Tab. 4. Differences Between Genres

Scale	<i>M</i> scale ( <i>SD</i> )	Genres groups					ANOVA		
		Classical	Jazz	Pop	Rock	Metal	<i>F</i>	<i>p</i>	$\eta^2$
General GAS	4.57 (1.03)	4.68	4.39 <sup>1</sup>	4.36 <sup>2</sup>	4.70	5.09 <sup>1,2</sup>	6.84	<.001	.05
<i>Personal motives</i>									
Collectors	2.80 (1.65)	2.96	2.77	2.54	2.94	2.91		n.s.	
Technophilia	3.61 (1.09)	3.95 <sup>1,2</sup>	3.55	3.47 <sup>1</sup>	3.45 <sup>2</sup>	3.84	4.48	<.01	.03
Vintage	3.56 (1.27)	3.39	3.50	3.56	3.86	3.38	2.66	<.05	.02
Nostalgia	4.25 (1.42)	4.21	4.12	4.05	4.55	4.49	2.89	<.05	.02
Modification and Fabrication	3.10 (1.37)	3.17	2.93	2.99	3.20	3.52	2.48	<.05	.02
<i>Social motives</i>									
Relationships	3.44 (1.43)	3.57	3.48	3.21	3.51	3.45		n.s.	
Band as GAS Motivator	3.37 (1.52)	3.22 <sup>1</sup>	2.80 <sup>2,3,4</sup>	3.44 <sup>2,5</sup>	3.87 <sup>3</sup>	4.58 <sup>1,4,5</sup>	14.30	<.001	.13
Democratic Purchases in Bands	2.25 (1.36)	2.44	1.94 <sup>1</sup>	2.24	2.30	2.89 <sup>1</sup>	4.35	<.01	.04
<i>Musical motives</i>									
Role Models	2.36 (1.07)	2.36	2.13 <sup>1</sup>	2.34 <sup>2</sup>	2.48	2.88 <sup>1,2</sup>	6.03	<.001	.04
Genre Requirements	3.73 (1.27)	3.86	3.66	3.57	3.71	4.08		n.s.	
Expressiveness	4.41 (1.34)	4.62 <sup>1</sup>	4.09 <sup>1,2</sup>	4.34 <sup>3</sup>	4.40 <sup>4</sup>	5.23 <sup>2,3,4</sup>	9.16	<.001	.06
Experimentation	3.98 (1.23)	4.15 <sup>1</sup>	3.96 <sup>2</sup>	3.59 <sup>1,3</sup>	3.93 <sup>4</sup>	4.74 <sup>2,3,4</sup>	9.63	<.001	.06
Sound Exploring	4.40 (1.35)	4.50 <sup>1</sup>	4.16 <sup>2</sup>	4.30 <sup>3</sup>	4.37 <sup>4</sup>	5.28 <sup>1,2,3,4</sup>	7.95	<.001	.05

Note: Measured on 7-point Likert scales (1–7); <sup>1,2,3,...</sup> significant differences between instruments (Scheffé post-hoc test,  $p < .05$ )

No significant variation exists between the two genders, level of professionalism, musical education and living situations. The relationship status makes a significant

difference. Participants without a partner ( $M = 4.80, SD = 1.07$ ) show a greater tendency towards GAS than participants with partner ( $M = 4.51, SD = 1.02$ ),  $t(587) = 2.71, p < .01$ , Hedges'  $g = 0.28$ .

Comparing the *General GAS* scale with the possession of music equipment reveals an interesting result: a largely opposing development in GAS and collection size across the lifespan. On average, older and more experienced players own more gear but are psychologically least prone to GAS. However, while GAS decreases with age, the instrument collection grows until reaching its peak in the fifties, after which it begins to decline again (Figure 4).

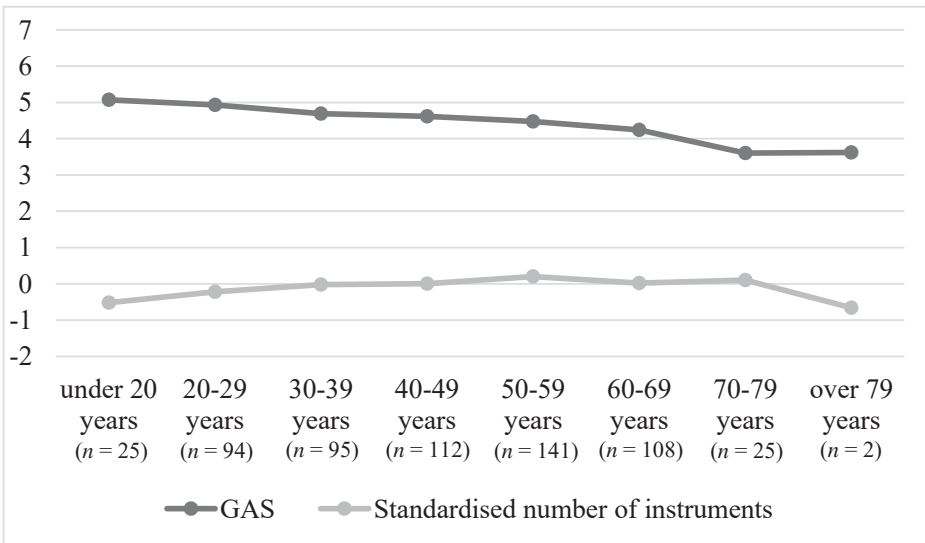


Fig. 4. Development of GAS and Ownership over Lifetime

Since the survey was designed as a cross-sectional study, insights into developmental processes are limited. In the open comments, some participants mention that their answers were based on their current practices. Yet their responses would have been different in earlier phases of their lives, which accords with consumption research arguing that material purchases and possessions reflect developments in life (Belk 1988; Belk et al. 2003; McClelland 1951; Shankar et al. 2009). The data indicate that the urge to buy new gear decreases as the collection increases. These results convey a more differentiated understanding than what Wright (2006: 45) suggests:

With no glaring differences in the average responses of each group, the differences are not likely a function of age ... The younger guys are out there trying to start a family and keep the bills paid. The thirty-somethings have their families started, but the bills stack up as the kids get older ... The forty-somethings are dealing with other major life and career changes and are so disgusted with work that they focus

on early retirements and days of nothing but guitar playing. My group of old geezers may have empty nests and paid-up mortgages, but we're also living on fixed incomes. So, I suppose, about all of us are in the same boat, finance-wise and GAS-wise.

Several explanations can be given. Once the personally relevant models are in possession, there may be little need for further instruments or to buy the same model again (Straw 2000: 156f). In a musical context, the question remains how different a potential new instrument would have to be to justify its acquisition. Another explanation as to why experienced players are psychologically less affected by GAS is natural saturation. Older and more experienced players likely buy equipment based on a conscious decision, less driven by the feeling that this piece of gear is crucial for their musical development and success (Kwisses 2015; Leonhardt 2015). Some open comments support this explanation. Experienced musicians may have come to realise that changing equipment does not contribute much to progress as a player (Kwisses 2015; Leonhardt 2015). Younger musicians, on the other hand, may explore various gear more extensively and change it frequently until they have found what works best for them, or they keep hoping that new gear will make the difference. Especially in later phases of life, living conditions may require downsizing equipment or replacing instruments to account for ageing processes. In this context, the open comments indicate different and even contradictory practices. One guitar player states, 'as I grow older I tend to buy smaller, louder, lighter amps and cabs due to back and shoulder problems'. In a similar vein, another musician stresses to 'replace heavy old gear with lighter, more compact equipment'. Several more seasoned musicians are reflecting that gear becomes less desirable with increasing age:

I'm less interested in gear as I get older—it's not as exciting as when your younger, technology is new and changing all the time. Things have stabilised a lot more now, so there is a lot of 'more of the same' gear about, nice though some of it is. It's only gear though, and ultimately, it's not as important as your process, and the enjoyment and music you make from it.

This comment suggests that even though equipment and the latest technology is exciting for developing musicians, it is less important than making music. Another participant, a former professional musician about to retire, stresses that he will not buy any more equipment. Although he will continue to play, he will 'use much less of the gear and concentrate more on the music'. Nevertheless, he emphasises that he was interested in learning about gear in the past, which had inspired him in his compositions. But other musicians of older age have taken a very different approach to gear in their practice. Many have stopped making music or reduced it in certain phases of their lives but enjoy it again later on in retirement. For example, a bassist notes that in the 1980s, he was content with just two instruments, but today he likes to experiment with gear, explaining: 'I'm getting older and don't know how long

I've got left in terms of playing. Better try out some different stuff'. However, he stresses that he does not want to buy new gear and finances his exploration through regular trading and gigs.

A regression analysis reveals clear predictors for GAS,  $F(9, 524) = 40.50, p < .001$ , adj.  $R^2 = .40$ . The *General GAS* scale is closely linked to five of the attitudinal scales relating to personal and musical motives, which suggests that they are characteristic of the phenomenon: *Collectors* ( $\beta = .31, p < .001$ ), *Expressiveness* ( $\beta = .25, p < .001$ ), *Technophilia* ( $\beta = .12, p < .001$ ), *Nostalgia* ( $\beta = .12, p < .01$ ) and *Role Models* ( $\beta = .12, p < .01$ ). Concurring with the challenges of separating GAS from collecting, a strong inclination to *Collecting* is the most important predictor, despite several comments indicating that participants who enjoy gear do not wish to be seen as collectors. *Expressiveness* shows the second-strongest correlation with the *General GAS* scale in the regression model. Also significant are *Technophilia* and *Role Models*, which emphasises that GAS is closely linked to various personal and musical motives and therefore may not be reduced to the mere accumulation of instruments or the pursuit of completeness of a collection. As with the z-standardised instrument ownership, there is a significant connection with the *Nostalgia* scale, but it is relatively weak. Regarding musical practice, the urge to acquire extra gear decreases with increasing playing experience ( $\beta = -.16, p < .001$ ). From a sociodemographic perspective, the connections are not entirely clear: with increasing age, GAS is likely to decrease, men seem to be more affected than women, and musicians playing acoustic instruments seem less affected. Again, all these predictors do not load significantly if factors related to musical practice and personal and musical motivations are considered.

Unsurprisingly, all scales measuring attitudes related to musical equipment correlate with the *General GAS* scale. Most correlations are of low or medium strength (Appendix B). The strongest correlations exist with the *Band as GAS Motivator* ( $r = .51, p < .001$ ) and the *Expressiveness* ( $r = .49, p < .001$ ) scale, the weakest with *Democratic Purchases in Bands* ( $r = .21, p < .001$ ). These results indicate that the player's personal development as a musician is a strong motivation for an interest in gear and that this interest is likely to be amplified when the musician plays in a band. The scale capturing the importance of the *Band as GAS Motivator* stems from the interviews conducted in a music store. Most of the musicians who visited the store with their bandmates either planned to buy gear that day or discussed what they wanted to acquire in the future. The survey results show that this practice is significantly less pronounced amongst wind players than drummers, bassists and guitarists. An explanation is that in a smaller band formation of drums, bass, guitars and possibly keyboards, each member's individual contribution to the overall sound of the group is more substantial so that negotiating personal tones makes sense. This interpretation is supported by the results of the *Democratic Purchases in Bands* scale. Although this practice finds hardly any agreement, guitarists differ from saxophone

players (Table 3). It can be assumed that in guitar-oriented bands with at least two guitarists, the instruments and amplifiers of each player are discussed to ensure complementary sounds (Herbst 2017b).

The kind of band or ensemble the interviewees play in needs to be considered too. Musicians in a band playing mainly original compositions are significantly more affected by GAS ( $M = 4.61$ ,  $SD = 1.07$ ) than those who only play in other types of ensembles ( $M = 4.39$ ,  $SD = 1.03$ ),  $t(421) = -2.09$ ,  $p < .05$ , Hedges'  $g = 0.20$  (multiple answers were possible). The same applies to musicians who play in tribute bands ( $M = 4.85$ ,  $SD = 0.98$ ) compared to those in other types of ensembles ( $M = 4.46$ ,  $SD = 1.06$ ),  $t(421) = -2.19$ ,  $p < .05$ , Hedges'  $g = 0.37$ , which corresponds to them owning a significant higher number of instruments and gear. Interestingly, there are no significant differences in terms of membership in big bands or orchestras. The results suggest that membership in various types of ensembles is associated with different attitudes towards acquiring musical equipment. Such aspects of buying musical gear will be explored in more detail in the following sections on personal, social and musical motives.

### *Personal Motives*

As the predictors for GAS suggest, varying personal motivations might influence the handling of instruments (Table 3). The results confirm our assumption that GAS is not the same as collecting. Despite the strong agreement on practices characteristic of GAS, most participants do not consider themselves *Collectors*. Whereas the analysis of variance indicates significant differences, the conservative post-hoc test does not do so between instruments nor between the groups of genres or various types of bands. Some musicians do not wish to be associated with GAS, yet the connotations of collecting are even more negative. This view is reflected in the fact that this scale is rated by far the lowest among the personal motives. A musician explains accordingly: 'Despite owning a lot of stuff I don't consider myself a collector in the traditional sense and rarely feel like I have GAS or I absolutely have to have something. I never feel like I need to have a piece of gear because it is "the newest" or it is trendy'. Another professional guitarist expresses: 'I have an assortment of instruments, but do not consider myself to be a collector. Though I have participated in an online guitar forum for 15 years, and have learned a great deal about both production and custom instruments, I do not think I have ever had G.(uitar) A.(cquisition) S.(yndrom)'. He emphasises that all purchases were musically necessary because the equipment helped him to develop as a player and served the specific purpose for which the instrument was purchased. Both the quantitative results and comments suggest that GAS and collecting are distinct practices of which musicians have a different understanding, deeply intertwined with the values they associate with them. While the label 'GAS head' divides the musicians, with some rejecting it and others

consciously defining themselves as such, collecting has predominantly negative connotations.

The open comments show that many musicians have a well-thought-out view about their use of gear. They acknowledge that there 'is no correlation between the amount of gear one owns and the quality of their gear to how well they play'. Although these musicians reject the notion of being affected by GAS, they stress that they enjoy acquiring new gear. This finding concurs with relevant research (Belk et al. 2003; Campbell 1987), claiming consumption to have life-affirming and pleasurable effects. Consequently, the quantitative data demonstrate that interest in the latest technological innovations and instruments (*Technophilia*) is relatively common. Keyboardists are significantly more interested in newer technologies than guitarists and saxophonists. Surprisingly, saxophonists differ significantly from trumpeters, with the latter having a greater affinity for new technologies. A plausible reason lies in the trumpeters' ideal of persistently playing in high registers, which can be observed in both the playing literature and in terms of musical role models (Haas 2011). When the playing technique reaches its limits, the instrument becomes a decisive factor. Hence the interest in technological innovation in the construction of instruments could be explained by the desired sound ideal and the high technical demands on playing. With trumpets, mouthpieces above all represent the haptic interface between the physical feeling of playing and musical expression, which corresponds to the high average number of mouthpieces reported by trumpeters in the survey (Table 2) and the comment of one trumpeter: 'I'm NEVER satisfied with a mouthpiece and am CONSTANTLY experimenting'. However, there must be more to the trumpeters' pronounced interest in instrument technology than this hypothetical explanation suggests. In order to clarify their affinity for technology, further qualitative research is necessary.

Bassists do not differ from players of other instruments regarding *Technophilia*, and their agreement with the scale is similar to that of guitarists. Both instruments are amongst those for which there is a generally keen interest in vintage equipment. Surprising is that keyboard players also value analogue synthesisers, as we expected them to be more open to technological innovation. The results confirm our assumption, at least for the guitar and synthesiser. Only very few comments explicitly reject technological innovation but stress they are 'not interested in trends'. In rock / alternative / punk as well as pop / folk / rock & roll, musicians score lowest on *Technophilia* and differ significantly from the ones playing classical / worship / instrumental music (Table 4). Regarding types of ensembles, musicians in orchestras rank significantly higher ( $M = 3.95$ ,  $SD = 1.10$ ) than the others ( $M = 3.58$ ,  $SD = 1.07$ ),  $t(450) = -2.72$ ,  $p < .01$ , Hedges'  $g = 0.34$ . These two results may come as a surprise but can be explained by the high number of trumpeters in the subsamples. The *Vintage* scale captures the opposite of *Technophilia*. The results of both scales are not entirely conclusive (Table 3). Keyboardists and guitarists correspond to the assumption that



they differ in their interest in technological innovation, but on the other hand, they have the same attitudes towards vintage equipment. Statistically speaking, none of the instruments differs in their preference for or against vintage instruments. Several reasons can account for this, for example, personal attitudes independent of the played instrument type or influence of musical preferences. Each instrument has evolved, and there are likely to be proponents of both older and newer technologies and the music traditionally played on them.

Many musicians tend to share a *nostalgic* view of the gear they once played (Boym 2001; Davis 1979) with little difference between instrument types, as the high average rating of the respective scale suggests (Table 3). Why guitarists are significantly more nostalgic than bass players is unclear, especially since their ratings of all scales in the ‘personal motives’ category are remarkably similar. The open comments are neither conclusive in this respect. One drummer stresses that he wants to keep his first kit for symbolic reasons, while a trumpeter explains just to have inquired about the same kind of instrument he played 26 years ago when he was an instrumentalist and ensemble leader in the US Navy. These reasons correspond to the relevance of ‘reflective nostalgia’ (Boym 2001: 49f) for musicians when dealing with instruments.

*Modifying and fabricating* instruments, practices that Walter Becker (1996) described in his introductory of the Gear Acquisition Syndrome as even more ‘dangerous’ than acquisition, are not too popular amongst the musicians in this study (Table 3). Statistically, the differences between the instruments are rather small. Guitar players modify their gear the most, followed by bass players, which can be explained by the broad consumer market for replacement pickups and assembly kits. Guitarists likely differ from bassists because their motivations for modifications (Herbst 2017c, 2019b) concern instruments rather than amplifiers. Many guitars in the lower and middle price range contain relatively cheap pickups that are not well suited for distorted sounds (Herbst 2016: 86ff). The saxophone, on the other hand, differs significantly from the guitar and bass, with much fewer modification options on the instrument.

The practice of modifying and fabricating is difficult to distinguish. In their open comments, some guitar and bass players state that they build their instruments either from scratch or with special assembly kits. For these instruments, there are also kits for building amplifiers and effects pedals. Modifying or building other instruments such as keyboards, drums and wind instruments is much more challenging if not impossible. A drummer points out that modifying ‘the electronic parts of a set [is] far easier and doable than modifications of the drumset or hardware and the wearing parts (drumsticks, drum heads, cymbals, drum hoops) [and that they] get treated differently than more permanent parts. But they are equally important to the sound’. This statement indicates that analogue and electric gear is different when it comes to modifications. Interpreting the results requires taking into account what might be

understood as a modification for individual instruments. As the same drummer highlights, dampening the drumheads or changing the drum hoops could be regarded as modifications or just maintenance and minor adjustment. Again, the options to refurbish and modify vary for each of the instruments examined in this study.

The differences in personal motives regarding genre are not significant (Table 4), whereas they are for musicians playing in a band with mainly original compositions compared to all other kinds of bands. These differences derive from: an interest in *Vintage* instruments ( $M = 3.81, SD = 1.32$  vs  $M = 3.34, SD = 1.25, t(449) = -3.94, p < .001, \text{Hedges' } g = 0.37$ ), *Nostalgia* ( $M = 4.36, SD = 1.36$  vs  $M = 4.05, SD = 1.46, t(449) = -2.30, p < .05, \text{Hedges' } g = 0.22$ ) and *Modification and Fabrication* ( $M = 3.39, SD = 1.45$  vs  $M = 2.86, SD = 1.34, t(452) = -4.08, p < .001, \text{Hedges' } g = 0.38$ ). A possible explanation is that players in bands with original compositions do not need to have overly versatile equipment and therefore can specialise, as, for instance, modifying their instruments for a specific aesthetic or using less flexible vintage gear. Furthermore, members of tribute bands show a more pronounced interest in *Vintage* instruments ( $M = 4.17, SD = 1.39$  vs  $M = 3.50, SD = 1.28, t(449) = -3.10, p < .01, \text{Hedges' } g = 0.51$ ), which may be fostered by valuing a long-established artist.

### *Social Motives*

Pursuing a hobby and spending money on it is always influenced by the social environment. Being in a relationship and having a family can limit the time and money available for the hobby or serious leisure activity (Stebbins 2009). In connection with age and GAS over a lifetime, some of the open comments already demonstrated that the musician's social life could impact their buying behaviour and playing practices. Of the three scales in the category of social motives (Table 3), *Relationships*, which records the perceived influence of relationships on purchasing behaviour, finds the most agreement. In addition, respondents with a partner have significantly lower scores on the *General GAS* scale than those without. This indicates that being in a relationship and maybe even having a family seems to counteract GAS. However, neither the relationship status nor the agreement with the *Relationship* scale shows a correlation with the standardised number of items possessed. From the comments quoted before, we know that some musicians spend less time on their hobby for several years or even stop for decades to fulfil their family obligations, which is in line with general findings in music psychology (Gembris 2018: 236f). But this does not seem to be reflected in the amount of equipment possessed either. Hence quantitative and qualitative data do not paint a wholly consistent picture. Since we recruited the participants on online message boards, we can safely assume that the ones partaking in the survey are actively engaged in making music, whereas those taking a break did not participate. Consequently, the quantitative data are distorted and only allow the assumption that relationships and family have a stronger impact on a musician's practices (Wright 2006: 102ff) than the quantitative data suggest.

Journalistic sources on GAS only vaguely cover social factors such as new gear of bandmates or friends triggering a musician's urge to improve their equipment, also known as 'mimetic desire' (Girard 1977) or 'gear envy'. The survey filled some gaps in that it contributed to understanding how social factors may influence the urge to buy equipment. Although *Band as a Motivator for GAS* receives only mixed approval, significant differences exist between the instruments (Table 3), genres (Table 4) and types of groups. Saxophone players are less impacted by their bandmates than drummers, bassists and guitarists are. Similarly, trumpet players are less affected than bassists and guitarists. One possible explanation concerns the types of music and band formations that are characteristic of the respective instruments. For players of the two wind instruments, membership in a band may spark less desire to spend time and money on gear than for drummers, guitarists, bassists and keyboardists. These differences could come from wind instrumentalists who tend to play in larger ensembles in which several musicians play the same voice. It is therefore not to be expected that different wind instruments will affect the sound of the entire ensemble. In contrast, the sound of small four- or five-piece bands in a broadly defined pop formation depends on each player's sonic signature. Usually, only one drummer, one bassist, one keyboardist and one or two guitarists play in such bands, each role thus contributing considerably to the sound. The average agreement on this scale is highest among the guitarists, which may be due to a tendency for guitar players to respond to gear changes of the other guitarist, which can trigger a chain of continuous adjustments. Given this background, it is not surprising that jazz / blues / soul / funk score lowest and differ significantly from all other genres but classical / worship / instrumental. Metal / progressive / hardcore score highest and differ from all other genres, except for rock / alternative / punk, with a medium to strong effect size (Table 4). Significant differences between the types of groups support this assumption. For example, the scale is rated highest for musicians in bands with mainly original compositions ( $M = 3.69$ ,  $SD = 1.51$  vs  $M = 3.05$ ,  $SD = 1.45$ ,  $t(447) = -4.57$ ,  $p < .001$ , Hedges'  $g = 0.43$ ), which are probably bands consisting of guitar, bass, drums and keyboards rather than wind-focused ensembles. Lower ratings received members in big bands ( $M = 2.77$ ,  $SD = 1.45$  vs  $M = 3.52$ ,  $SD = 1.49$ ,  $t(447) = 4.51$ ,  $p < .001$ , Hedges'  $g = 0.51$ ) and orchestras ( $M = 3.04$ ,  $SD = 1.55$  vs  $M = 3.42$ ,  $SD = 1.50$ ,  $t(447) = 1.99$ ,  $p < .05$ , Hedges'  $g = 0.25$ ). Another indication for this interpretation of differences between the standard 'pop instruments' and the wind instruments is given by the scale *Democratic Purchases in Bands*. Even though the respective scale finds the least agreement of all, guitar and saxophone players differ significantly (Table 3). Guitar players are more likely to give other band members a say. Consequently, musicians playing metal / progressive / hardcore score significantly higher than those playing jazz / blues / soul / funk. However, there are exceptions to this line of reasoning. A tenor saxophone player points out that he changed his preferred mouthpiece for the first time in thirty years because otherwise, he would overpower

the lead alto saxophone in his jazz group. In his previous ensembles, there was no such problem, suggesting that even within a larger ensemble, individual playing styles may require fellow bandmates to adjust their equipment. In general, however, *Democratic Purchases* play a more significant role in bands with mainly original compositions ( $M = 2.46$ ,  $SD = 1.48$  vs  $M = 2.03$ ,  $SD = 1.21$ ,  $t(415.47) = -3.38$ ,  $p < .001$ , Hedges'  $g = 0.32$ ). Musicians playing in cover or top 40 bands seem to be less affected than those in other types of groups ( $M = 2.09$ ,  $SD = 1.25$  vs  $M = 2.38$ ,  $SD = 1.45$ ,  $t(435.83) = 2.29$ ,  $p < .05$ , Hedges'  $g = 0.22$ ), as cover artists most likely need highly versatile equipment.

At first sight, the survey results seem to contradict the open comments somewhat. While the quantitative results show a rather unexpected low influence of bands on the musicians' gear behaviours, many open comments suggest the opposite. An in-depth analysis of the open comments indicates that many respondents disagree with the assumption underlying the *Band as GAS Motivator* scale that bands create an urge to buy new equipment. These comments suggest that belonging to a band may indeed lead to purchases which, however, are motivated by an actual need to maintain or advance their (leisure) career (Stebbins 2009) rather than by 'gear envy' (Belk et al. 2003; Girard 1977). One drummer highlights that he invests in gear to make his setup work during live performances: 'Most new equipment I purchase is to keep my kit sounding good for gigs (new heads, sticks) to replace broken items (cymbals etc.) or to make gigging easier (memory locks, hardware, drum rug and trolley)'. Another musician points out that the stylistic diversity of the bands he plays in requires him to have a variety of equipment:

Generally I buy gear when I need a specific piece for a job. I do a lot of live work as well as studio and pit bands, so I need to have gear to cover a multitude of styles/sounds. There are some gigs which allow me the flexibility to use whatever gear I want (e.g. church music director), while others require specific sounds (e.g. pit bands & studio work).

This line of reasoning can be found in several comments. Some musicians stress not only to buy gear according to their band's requirements but also to modify it.

When buying gear in connection to bands, another consideration concerns whether it will be played live or in the studio. As one participant explains:

for example my live gear is completely separate from my practice gear. This is so that I can have my practice gear always set up and my live gear is always in the same place ready to load in the car. It's about time saving and ease of use as well as the comfort of never arriving at a [gig] finding you forget to pack something because it is still set up in the practice room.

One of the guitarists highlights having different amplifiers for various types of venues, which has nothing to do with the acoustics (Bennett 2017: 175ff) but access to

the stage. If access is easy, he uses the better sounding valve amplifier and otherwise, he settles for a lighter but sonically worse transistor option.

### *Musical Motives*

In addition to personal and social factors, we expected musical motives to foster an interest in gear. With their considerable importance for musicians at all career stages (Green 2002), role models can indirectly influence the kind of gear a musician chooses, or unique signature models can get them closer to the valued artist's sound and music. This interest in gear is reflected in books like *Rolling Stones Gear: All the Stones' Instruments from Stage to Studio* (Babiuk & Prevost 2014), *Beatles Gear: All the Fab Four's Instruments from Stage to Studio* (Babiuk 2016) and *Grateful Dead Gear: All the Band's Instruments, Sound Systems and Recording Sessions From 1965-1995* (Jackson 2006), all of which glorify the gear of rock bands from the 1960s and 1970s. According to the blurbs, such books promise to reveal the 'origins and secrets of the Grateful Dead's magical sound', created by 'cutting edge of technological innovation and experimentation' (Jackson 2006). Babiuk (2016) claims to accurately document the development of the Fab Four 'from cheap early instruments to the pick of 1960s technology' in 'an easy-to-read narrative, fully illustrated with many previously unseen photographs, a cache of rare memorabilia, and a unique collection of specially photographed instruments used by the Beatles'. Similarly, Babiuk and Prevost (2014) aim to provide an alternative band story of the Rolling Stones 'but with a new twist: their history as told through what instruments were used during their recording sessions and tour dates' by studying '[e]very song recorded by the band, including all demos and outtakes ... with input from people who were involved with the band throughout their career'.

Although research and special-interest books clearly indicate that musicians are affected by *Role Models* when choosing gear, the survey results do not at all support such an assumption. The respective scale is rated second lowest of all (Table 3), and it neither proves relevant across all instruments and genres. Once more, guitar and saxophone players differ significantly from each other, with guitarists showing more interest in the gear of their idols. While the overall low relevance of role models is surprising, the result that guitarists are interested in the sounds of renowned artists corresponds with special-interest books. In *Gear Secrets of the Guitar Legends: How to Sound Like Your Favorite Players*, Prown and Sharkey (2003) teach guitarists 'what equipment their favourite players use, and more importantly, how to sound just like them' by drawing on artist interviews and 'featuring rig diagrams, amplifier settings, and sound tips', making the book the 'bible for rock guitar tone'. Similarly, in *100 Great Guitarists and the Gear That Made Them Famous*, Rubin (2018) focuses on revealing the 'magic behind the masters'. These two books show the deterministic belief in the connection between the gear of 'legendary' artists and their playing, which newer players wish to adapt. There are even several books dedicated

to just one player. In *Jimi Hendrix Gear: The Guitars, Amps and Effects That Revolutionized Rock 'n' Roll*, Heatley and Shapiro (2009) examine

all of Hendrix's equipment, providing a nuts-and-bolts analysis of each of his guitars (including serial number, history, provenance), choice of amps, and his singular use of revolutionary effects, from wah-wahs to overdrives to bizarre pedals like the Fuzzface. A practical reference book like no other, this volume gives the proper guidance and tools to any guitarist who wants to emulate and learn from the greatest guitar player of all time.

This book is not only a useful resource for those who want to emulate their role model but also for collectors, as little-known facts like serial numbers are disclosed. In *Zappa's Gear: The Unique Guitars, Amplifiers, Effects Units, Keyboards and Studio Equipment*, Ekers (2020) 'offers an unprecedented inside look at the machinery behind the legendary music' of Frank Zappa, primarily focusing on his guitar equipment. What is striking about these books is the role gear plays in connection with musical legacy. In *Paul Kossoff: All Right Now: The Guitars, the Gear, the Music*, in which James (2017) honours the late founding guitarist of the rock band Free, Kossoff, whose equipment is covered in more detail than the music or his life. The gear's relevance is reflected in the title. About the other instruments considered in this study, few special-interest books, if any at all, exist devoting entirely or predominantly to a renowned player's equipment, which supports the results that guitarists seem to have a closer connection to esteemed players and their gear than other musicians. The open comments reflect that; every single one writing about being influenced by role models is a guitarist.

Two further criteria, genre and type of band, have only a weak impact. Metal / progressive / hardcore score highest, differing significantly from pop / folk / rock & roll and rock / alternative / punk (Table 4). Musicians playing in bands with mainly original compositions ( $M = 2.54$ ,  $SD = 1.09$ ) show a much stronger orientation towards *Role Models* ( $M = 2.09$ ,  $SD = 0.98$ ,  $t(429.10) = -4.53$ ,  $p < .001$ , Hedges'  $g = 0.43$ ). Interestingly, musicians playing in tribute bands do not differ from those playing in other types of ensembles. It might be that these musicians ignored the two related items on the scale, 1) a change in the equipment due to shifting music preferences and 2) a change in the equipment of the role model. In many cases, tribute bands are characterised by an enduring passion for particular musicians or bands. If role models were active in past times, there are no current changes in the equipment used.

Contrary to the generally low importance of role models for most musicians, other musical motives such as *Expressiveness* are more prevalent amongst the survey participants (Table 3). The scale ranks third among all scales, showing that many participants see their gear choice closely linked to expressiveness. They expect that deliberate acquisition of equipment helps them to overcome limitations, improve their sound and inspire their playing, also known as 'facilitation' (Hartmann 2016).

Two instruments are particularly prone to this facilitating effect, the guitar and the keyboard, both of which vary significantly from the saxophone. In this respect, the guitar also differs from the bass and trumpet. This result confirms the expectation that keyboard and guitar players rely heavily on the right sound of their instrument and benefit from its positive effects on playability and expression.

However, despite the high average approval of the *Expressiveness* scale, the open comments present fundamentally different opinions amongst the participants. For some musicians, gear and new acquisitions are deeply linked to their musical development. As a guitarist explains:

Sometimes if you are lucky, a new guitar, if it is of sufficient quality, will ‘teach’ you how to play it. I’ve learned an enormous amount from a particular guitar. It almost insists that it be played in certain ways. All instruments do this for one reason or another. Some are just better teachers with more musically profound lessons to learn.

This quote suggests that instruments can fulfil functions like teachers or more experienced mentors. Unfortunately, the guitarist does not explain the reasoning behind this theory, but it likely concerns the fact that instruments or other gear can expose problems in playing technique. For example, distortion masks sloppy synchronisation between the guitarist’s fretting and picking hand and reduces the dynamic range, making playing easier but less expressive (Herbst 2017c, 2019b). That is the reason why with increasing skill, many electric guitarists gradually ‘purify’ their amplification chain by replacing digital or transistor-based practice amps with valve amplifiers. For keyboardists, new instruments may motivate their players to experiment with sound design or expressive modulation while playing. Drummers may develop more dexterity and control by adding new pieces to their kit. Wind players may benefit from experimenting with mouthpieces or new instruments, which might be models from another period when the music was traditionally played on them. What all instrumentalists have in common is that they benefit from acquisitions that motivate them to learn new styles.

The scale *Expressiveness* captures the assumption of gear to be inspiring, which the high level of agreement supports. Several open comments allow further insight. One guitarist notes:

The relationship between the artist and the instrument is a complex one and varies a lot from player to player—some just see instruments as tools and others have to have their favourite axe or they just can’t play as well... I think for all musicians having a good sound is inspiring and if it doesn’t sound good then you probably won’t play as well. Some instruments are just special—I’ve tried a lot of guitars and saxes but only a few of them had that certain ‘something’—that indefinable quality that makes it feel almost alive. Some instruments are so good they almost play themselves and you realise the amount of struggle involved in playing lesser

instruments. This is what makes us keep searching for ‘the one’. At it’s best a musical instrument is the perfect combination of form and function.

Consistent with the guitar as the instrument whose players rate expressiveness highly, surpassed only by keyboardists, it is mostly guitarists who emphasise the instrument’s inspirational value in their comments.

The one thing your survey doesn’t tap is a guitarists affection for and fascination with guitars. I really need only one guitar to play everything that I play, but I am interested in how different guitars play and sound. I have ladder braced and x braced guitars because they each have distinct qualities—neither sounds better. Some of my guitars were expensive, some not so much. I have one \$300 guitar that has a beautiful quality and I get tremendous pleasure from it partly because it reminds me how price and build don’t guarantee anything.

This guitarist brings up the important point that inspirational gear does not need to be expensive. It must be comfortable and functional and support its player’s sonic visions and personal styles, which is underlined in several other comments.

In this context, a much larger number of comments stress that the role of gear should not be overemphasised, as it had little influence on music. Some stress that it is the musicians themselves and not their equipment that limits what is possible. A skilled player will always be convincing, as one participant depicts in detail:

Gear is important, but not the holy grail. Charlie Parker sounded great on a plastic sax, Jimmy Page rocked on an el-cheapo Danelectro, James Jamerson had an old beat up, warped neck, almost unplayable bass by the standards of the day. To me the gear is third in importance. First: Your musicality and what you do with the gear is most important. The nuances, ornaments, dynamics, phrasing, choice of notes, intonation, timing, fx, etc., and how you use them to create something that is expressive enough to connect with the audience. Second: Technique—it’s not an end in itself but it allows you to express what you feel inside. IMO [in my opinion] the music should never serve the technique, but you should use your chops to serve the music. Example: Saxophonist Stan Getz had monster chops, but you rarely hear them, all you hear is music. Third: Gear—the gear has to be decent and capable of doing what you ask of it. But there is a point of diminishing returns where X amount of additional dollars gives you less and less benefit for each X you add. Extra expense for things like signatures, road worn, etc., IMHO [in my humble opinion] are a waste of money. When I bought my last guitar I found a model I liked, and had the factory install the pickups that I wanted. That cost \$20 extra. When I bought my last sax, I found a model I liked and had them put nickel plating on it because my hands and brass don’t like each other. Neither the guitar nor the sax were top-of-the-line, but they were excellent instruments that got to my point of diminishing returns. I’ll probably keep them until they wear out or I can no longer play. I think if people spent as much time working on expression as obsessing about new gear, we’d all be playing better music.



Many comments concur with this belief. It is the music that counts, and equipment is just a means to that end (Cole 2018). From those who pursue music as a hobby, several stress it is the enjoyment of playing that motivates them, not the gear they use.

Before, we discussed the comment of a musician who stated that new gear helped him grow musically. Many other musicians contest this claim, as they do not see a connection between their playing and equipment. One states, ‘I place my technique ahead of my gear. That is, I believe my musical expressiveness comes from how I play, not from the bass, amp and effects I use. Rhythm, harmony and listening are what will make me a better musician’. These musicians consider gear less relevant than practising, and yet others see no correlation at all between the quantity of their equipment and the quality of their playing. For those who hold this opinion, making music is all about practising while gear would even bear the risk of hampering musical development (Cole 2018). This opinion is consistent with the views of composers who work with manifestos that limit their resources in the hope of being more creative (Herbert 2005). As the experimental guitar and electronic artist Christian Fennesz (2014) in an interview expresses:

I think that the main problem with the world today is that we have too many options and I really try to downsize mine as much as I can because otherwise it is just too confusing. I could try out a new plugin every two hours but it doesn’t lead me anywhere, so over the years I have got a few tools that work for me and that’s it now. I just don’t want to use more stuff anymore it’s just too much. Many options is the biggest problem with technology today.

Yet, some musicians highlight that if gear is old or unsuitable for the purpose, it can indeed be limiting and hindering musical development and creativity. However, with growing skilfulness, new equipment does not help musician to improve much further. To ensure that gear does not become an obstacle to musical intentions, many players, regardless of instrument, stress to be looking for versatility when acquiring new equipment.

The scale *Sound Exploring* measures how crucial it is to try out and combine sounds and to get a comprehensive understanding of the equipment to tweak the tone according to the musician’s vision. It is therefore slightly different from the *Expressiveness* scale, which gathers the extent to which new gear helps to inspire and overcome limitations. The two scales correlate with medium strength ( $r = .38; p < .001$ ). Both scales find an equally high level of agreement, irrespective of the type of instrument (Table 3). The general approval shows that most players invest a lot of time to understand how their instrument produces the best possible sound. On the one hand, musicians inspired by their gear could benefit from having a good understanding of their equipment. On the other hand, some musicians may not like to tweak their equipment and would rather change it before getting the most out of it, also known as ‘flipping’ (Cole 2018: 1059ff). Just as Théberge (1993: 248) observes two

types of keyboard players, those who like to customise and those who select ready-made preset sounds, musicians of other instruments may prefer to either tweak their sound or hope to get the sound they want immediately, and if not, they would look for other gear. *Sound Exploring* also corresponds to *Modification and Fabrication* of equipment ( $r = .42$ ;  $p < .001$ ). In this respect, the open comments suggest that there may not be a black and white distinction but that habits depend on a player's expertise. Some musicians explain that they did much exploring of sound settings and combining gear, but less and less so when they found out what combinations of equipment, settings and sounds worked best for them. Therefore, the exploring and tweaking of sounds may be a distinct learning phase that, even though frequently occurring in the life of a musician, would not characterise their behaviour in general.

The scale *Experimentation* deals with a similar intention of musicians, the importance of a personal or innovative sound in connection with an instrumental technology or its unconventional application. In this, it shows a similar conceptualisation to the scales *Expressiveness* and *Sound Exploring* and thus correlates relatively strongly with both (*Expressiveness*:  $r = .54$ ;  $p < .001$ ; *Sound Exploring*:  $r = .52$ ;  $p < .001$ ), though each has an individual focus that refers to distinct artistic practices. The category of musical motives (Table 3) shows the three scales *Experimentation*, *Expressiveness* and *Sound Exploring* ranking highest. Interpreting this result suggests that many musicians need to acquire new gear to experiment and tweak it to find a sound that corresponds to their aesthetic idea and playing style. Compared to the lower approval of the scales *Role Models* and *Genre Requirements*, the results suggest that a personal sound of good quality ranks higher than orientation towards external factors. This supposed attitude seems to be familiar with all instrumentalists because the Scheffé post-hoc test again identified no significant differences between instruments for the two scales *Experimentation* and *Sound Exploring*. That may come as a surprise since some instruments like guitar, bass and keyboards can be tweaked and customised more substantially than the wind instruments. On the other hand, wind instruments make it relatively easy to adjust the sound by replacing mouthpieces, which seems to be a widespread practice, especially among trumpeters.

However, there are differences with medium effect size between the genres. Musicians playing metal / progressive / hardcore score highest, differing significantly not only from all other genres on the scale *Sound Exploring* but also on *Expressiveness* and *Experimentation*, except for classical / worship / instrumental (Table 4). Against our assumptions, musicians playing classical / worship / instrumental music achieve the second highest scores on all three scales, demonstrating an interest in sound and its creative affordances. Here again, the kind of bands plays a significant role with musicians in bands playing mainly original compositions differing from others on all three scales: *Expressiveness* ( $M = 4.64$ ,  $SD = 1.32$  vs  $M = 4.11$ ,  $SD = 1.34$ ,  $t(451) = -4.27$ ,  $p < .001$ , Hedges'  $g = 0.40$ ), *Experimentation* ( $M = 4.45$ ,  $SD = 1.21$  vs  $M = 3.61$ ,  $SD = 1.18$ ,  $t(451) = -4.47$ ,  $p < .001$ , Hedges'  $g = 0.70$ ), *Sound*

*Exploring* ( $M = 4.78$ ,  $SD = 1.29$  vs  $M = 4.12$ ,  $SD = 1.37$ ,  $t(454) = -5.33$ ,  $p < .001$ , Hedges'  $g = 0.50$ ). In contrast, members of big bands score lower on the *Expressiveness* scale ( $M = 3.99$ ,  $SD = 1.44$  vs  $M = 4.47$ ,  $SD = 1.31$ ,  $t(451) = 3.16$ ,  $p < .01$ , Hedges'  $g = 0.35$ ). Regarding *Experimentation*, members of cover or top 40 bands score lower than members playing in other types of groups ( $M = 3.85$ ,  $SD = 1.21$  vs  $M = 4.17$ ,  $SD = 1.30$ ,  $t(451) = 2.71$ ,  $p < .01$ , Hedges'  $g = 0.26$ ). These results are hardly surprising. While musicians in cover and top 40 bands generally try to get as close as possible to the copied artist, bands who write and perform original music normally want to create something new. Such novelty includes compositions but extends to the sonic domain, where uniqueness is usually viewed positively (Théberge 1997: 191).

Research in popular music studies (Cutler 1995; Herbst 2017a, b; Jones 1992; Théberge 1997) indicates that the right equipment can support playing and that there are gear conventions in genres. A glance at online discussion boards or music magazines confirms that instruments are advertised for specific genres. Even subgenres of the same genre may require different instruments, amplifiers and accessories. However, the results do not fully confirm this. The participants hardly agree that playing specific *Genres* require specialised equipment, which corresponds to the negligible relevance of genre-specific criteria when buying gear. Nevertheless, there are differences between instruments; guitar, keyboard and trumpet players see significantly more need for genre-specific equipment than saxophonists. This discrepancy might result from different instrument models, amplifiers and accessories. Not all instrumentalists may need special equipment to conform to genre conventions to the same extent as guitarists. The open comments support the impression of differences between instruments. A saxophonist points out that 'certain mouthpieces are best for certain genres, but the saxophone itself can be used for any genre'. In this respect, saxophonists would not require specialised equipment for different genres, though stylistically versatile players could benefit from genre-appropriate mouthpieces. Guitarists, however, must consider their choice of instrument and amplification for various genres, as one player hints at: 'I play three different styles, finger-picking, slide and lap steel, and I have several instruments for each'. Here styles are equated with different instruments, which, although being a rare example, still shows that even electric guitar models can be better suited for specific genres. As to that, a guitarist states:

For every musician I know the main goal is to achieve the desired sound within the band the gear is bought and modded for. For hardcore with a strong focus on recognizable fastly played riffs for example, the fitting gear becomes a necessity. A git with a blues focus, bass heavy elements put through a Vox amp won't do even though the sound itself is awesome. So gear is bought for the particular Project, not for the ego enlargement.

However, the quantitative data do not support, as theoretically could be assumed, the highly genre-specific gear requirements. Once more only musicians playing in bands with original compositions ( $M = 3.90$ ,  $SD = 1.28$ ) differ from those playing in other types of groups ( $M = 3.63$ ,  $SD = 1.26$ ,  $t(453) = -2.28$ ,  $p < .05$ , Hedges'  $g = 0.21$ ). For cover and top 40 bands, the results suggest that equipment with versatile sound possibilities is as important as the instruments that are optimally tailored to sound requirements of specific genres.

Another reason why genre might play a relatively minor role in the participants' eyes is that the aim of having an individual sound may compete with genre conformity. As Théberge (1997: 191) argues, 'a concentration on the "right" sounds for a given musical context can shift the musician's attention away from other, more familiar levels of musical form, such as melody, rhythm, and harmony', hence from the structural conventions of genres. A 'unique and personal "sound"' (Théberge 1997: 191) is valued more highly. The results show that the two scales, *Sound Exploring* and *Expressiveness*, are the two highest-rated scales right after *General GAS*, supporting Théberge's claim. It is a clear indicator against the 'push-and-play or plug-and-play' mentality, according to which 'people ... do not want to get very involved in the technical aspect of recording and music making, but ... do want to perform or to create music' (Jones 1992: 85f).

All in all, the differences between genres and instruments are smaller than we had expected as per the theoretical considerations we made throughout this book. The respective findings are only partly consistent with previous empirical research suggesting distinct personality traits of musicians of diverse instruments types (Bell & Cresswell 1984; Cameron et al. 2015; see also Rötter & Steinberg 2018). The quantitative data may not be conclusive here, but some open comments give hints that different instruments require different practices. A multi-instrumentalist expressed it this way:

I play sax and keyboard in a few different bands and situations. Although I said my main instrument was sax, I found I answered the gear questions thinking more about keyboards. I own 5 vintage saxes that I play and I'm not planning on buying more. Keyboards and other electronic gear, on the other hand, are constantly being upgraded.

497 of the 668 participants, almost three quarters (74%) of the sample, play more than one instrument. This number includes vocals and other instruments not considered in the survey. One might assume that multi-instrumentalists differ from mono-instrumentalists in their views and practices, as they are part of different instrumental traditions. However, the only scale with significant differences is *Vintage*. Multi-instrumentalists ( $M = 3.58$ ,  $SD = 1.27$ ) appreciate vintage instruments more than mono-instrumentalists ( $M = 3.33$ ,  $SD = 1.25$ ),  $t(656) = -2.22$ ,  $p < .05$ , with a small effect, Hedges'  $g = 0.20$ . There is no discernible theoretical reason as to why this is

the case. Neither do differences exist between mono- and multi-instrumentalists in the number of instruments possessed. Yet it should be noted that the questionnaire only asked for instruments and items of the category to which the respondents committed themselves with their main instrument. Since many respondents state to play and presumably own other instruments, the full extent of the instrument collections likely exceeds the reported number, which makes it even more impressive. Other differences between mono- and multi-instrumentalists did not occur, which indicates that multi-instrumentalists have not blurred the differentiation between the types of instruments. It thus appears that more general, overarching attitudes impact the musicians' views and behaviours that cannot be related directly to the instrument. If anything, it is more likely to involve a preference for acoustic or electric models, with players of the latter being more prone to GAS.

### *Gender*

The survey sample was highly uneven in terms of gender, as only 4% ( $n = 28$ ) were women. This low rate is consistent with Herbst's (2017a) study of guitar players, in which even fewer participants were female (2%). Unfortunately, no statistics are available on the gender distribution in online communities of musicians, leaving it open to speculation as to whether women were not motivated by the topic to participate in the survey or whether this number reflects an accurate representation of women in these communities. Traditionally, the drums and the electric guitar, in particular, have been male-dominated, but this seems to be changing as recent developments point to a slow move towards a more balanced proportion, at least for guitar players. Hence, we expect that the female musicians across all instruments in the sample population are under-represented, not even coming close to the actual ratio. Altogether, the number of women in our sample is too small to test gender differences reliably. However, the regression analyses presented earlier indicate only marginal differences in dealing with equipment between men and women. Further research with a more balanced gender ratio is required.

## **6.4 Discussion**

GAS is an unexplored phenomenon in music and many other fields and professions. The purpose of this survey was to challenge our working theory and to extend it based on various sources of qualitative and quantitative data. The results and findings raise as many new questions as they answer others, which fits the research design.

Chapters 4 and 5 have shown how close a person's identity is connected to collecting and consumption. Our expectation that sociodemographic factors would play a role in terms of equipment use and attitudes towards it was statistically only partially confirmed. The data suggest that professionals and experienced players tend to

have more extensive equipment collections. The same could be observed for older musicians and men, but these predictors were not significant in the regression analysis. However, the affinity for *Collecting* and maintaining a *Nostalgic* relationship with music contributes to a higher number of owned equipment as well.

GAS has been measured and put into context in several explicit and implicit ways. The scale capturing GAS found the highest agreement of all fourteen scales, suggesting that most participants are impacted in one way or another. Some musicians seem to regard GAS as part of their musical identity, while others are merely interested in music technology. These technophile musicians refuse to be classified as GAS-afflicted because of negative connotations. They justify their interest in equipment and its acquisition with musical necessity and reject the label GAS because they equate it with interest in gear for gear's sake. Negative connotations are even more ascribed to collecting, so most participants do not want to be regarded as collectors. GAS and collection sizes correlate, but GAS decreases with age, while instrument collections grow until the fifties and only then begin to decline. One possible explanation is that older musicians are more interested in music than in gear, either generally or because they have experimented substantially in their younger years and found out what gear they wish to play. Non-musical career development, retirement and family responsibilities are other reasons for GAS to decline. What contributes to GAS is shown by the statistical analyses: being a *Collector*, the belief that gear helps with musicality (*Expressiveness*), an interest in music technology (*Technophilia*), holding a nostalgic view about instruments (*Nostalgia*), being inspired by a *Role Model*. Factors that lower GAS were extensive playing experience, higher age and a preference for acoustic instruments, the latter two not significant in the regression analysis. These findings are largely consistent with the various blog posts on GAS and the theoretical considerations in chapters 2 and 3.

Concerning gender, a nuanced interpretation is necessary, not least because of the gender imbalance in the sample populations of the pre-study and the survey. The survey suggests that men tend to own more equipment and achieve higher scores on the *General GAS* scale and thus appear to be more susceptible to GAS than women. Some men feel restricted in their buying behaviour when they are in a relationship. Otherwise, male and female musicians did not differ in terms of attitudes and criteria for selecting musical instruments in a buying situation.

In addition to these overarching sociodemographic factors, we were interested in personal, social and musical motives related to gear practices. Personal motives hardly determine a strong interest in music technology for the sake of technology (*Technophilia*) or *Vintage* gear. *Nostalgia* is much more relevant, which is supported and further illustrated by some of the open comments. What we did not anticipate was that social motives are, on the whole, of relatively minor significance. Unreferenced in the literature on GAS but observed in the music store, the practice of *democratically deciding on purchases in bands* seems to be uncommon. Some of the

musical motives we expected to be relevant were not. The influence of *Role Models* is minimal, and neither are *Genre Requirements* important. Academic literature and special-interest books suggest that specific genres and styles benefit from certain instruments and gear, and so do the musicians who play them. This expectation has only partially been confirmed. Nearly all musicians rejected the *Genre Requirements* scale, which measured the need to select instruments based on the requirements of specific genres. However, we identified minor but significant differences in attitudes towards music equipment and susceptibility to GAS between different groups of genres. Musicians in particular of the genres metal / progressive / hardcore are more affected by GAS and have higher scores on the scales covering personal, social and musical motives towards music equipment. Except for the scales *Band as GAS Motivator* and musical motives such as *Expressiveness*, *Experimentation* and *Sound Exploring*, the differences turned out to be smaller than expected. Especially musicians of the genres classical / worship / instrumental exhibited higher values on some dimensions than we presumed ahead of the investigation. Because subsamples were too small to allow for further statements at the level of individual genres, the genres were combined into groups. Further studies that specifically focus on selected genres could generate additional insights in this context. The quite low relevance of genre conformity and role models might be explained by the relatively high average age of 46 years and the playing experience of 26 years. People are emotionally attached to music most strongly in adolescence and early adulthood (North & Hargreaves 1999; Schäfer & Sedlmeier 2018). As we have seen in the music store, young metal bands ‘lived’ the genre with all its expectations and clichés. The older metal bands we observed and interviewed showed no such signs. Another finding was that 82% played four or more genres, while the remaining 18% of the survey population played less than three. Due to this stylistic versatility and openness, which goes hand in hand with older age and higher playing experience, it is unlikely that musicians will want to conform completely to each of the genres they play. We can therefore assume that performing a larger number of styles does not typically lead to a more extensive instrument collection, as we have argued in chapter 2, but when it does, then most likely by younger musicians.

The criteria decisive for choosing an instrument are similarly mature. Essential is, without a doubt, ‘sound quality’, ‘playability and feel’ and ‘workmanship’. Price and appearance play a minor role, but only if the main criteria are met. In line with previous results, other factors such as role models, genre suitability, authenticity and current trends are quite insignificant.

Our observations, experience as musicians and music lecturers, besides the literature on music technology and popular music, suggest that players of different instruments have diverging attitudes and practices regarding musical equipment. Yet the survey did not give definite answers, thus meeting our expectations only partly.

The size of gear collections is somewhat arbitrary to allow for a thorough comparison between instruments. Neither did the scales provide us with the clear distinctions we had expected. While nine of the fourteen scales showed significant differences between instruments in the post-hoc test, these were often only between two or three of the instruments, and in all cases but one, *Band as GAS Motivator*, had small effect sizes. On the other hand, many open comments supported the notion that the characteristics of each instrument afford different practices and correlate in various ways with the underlying attitudes towards gear.

Further evidence of this differentiation can be found in comments on the survey design. Some multi-instrumentalists emphasised that their answers concerned their primary instrument and would have turned out differently if they had been for another instrument. It is impossible to say whether the size of their gear collection and their attitudes towards them would have been impacted. Comparing the attitudes between mono- and multi-instrumentalists only revealed a minor significant difference regarding interest in *Vintage* instruments. Nevertheless, we must keep in mind that some questions may have been more relevant for a group of instruments than for another. Participants also pointed out that some questions were guitar-related, such as gear settings, which has no direct counterpart in the wind instruments.

Since sampling took place on online message boards for musicians, it can be assumed that the survey captured a specific group of participants. Most were from Europe and North America, predominantly male and likely to have an above-average interest in musical instruments. Many might have sensed that the study was on GAS, preventing them from participating, with the consequence that musicians without pronounced interest in gear might be underrepresented in the sample. Insights into developments over the lifespan are limited due to the cross-sectional design of the study. Another uncertain factor concerns the truthfulness of the answers due to participants anticipating the survey's topic. We do not assume that the respondents deliberately gave wrong answers, but the ambiguous thinking we found in the qualitative interviews and extensive instrument collections could infer *perceived* reality. Furthermore, the sub-samples of the instruments did not equal in size; keyboardists and drummers were less represented than guitarists and bassists. As a final minor limitation, the results may have been influenced by a tendency towards higher alpha errors due to the calculation of several analyses of variance.