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Why did you (not) choose your main musical instrument? Exploring the motivation behind the choice

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Abstract

This study aims to shed light on the motivation governing instrument choice. To collect data, we designed, piloted and administered a survey to a population of students enrolled in a music teacher education programme in Sweden. In line with previous, Anglo-centred research, we identify the instrument's timbre and parental influences as relevant motives for this decision. Uncommonly, however, taking part in a testing session is suggested to have a similarly influential effect. Accordingly, our study supports the value of offering free-to-all sessions where children may try different instruments and openly discuss them with music teachers. Further insights from our results include families exerting more influence than peers, genre preferences bearing little relevance and potential tendencies regarding the influence of gender and socio-economic background for instrument choice. In addition, we uncover several motives that counteract this decision, music provision being the main impediment to pursuing one's original preference, thereby underscoring the urgency of reducing the Swedish communal schools' waiting lists for specific instruments. Our results further suggest the presence of mediating factors, including the musician's starting age, family environment (beyond parents/guardians) and the availability of the instrument at home. This finding opens a new path in the study of instrument choice and challenges the way this topic has been traditionally researched, given that such factors could function as confounding variables in the study of instrument choice.

Keywords: Motivation; instrument; choice; music; motive

Introduction

The Swedish *musikskolor* and *kulturskolor* (“music school” and “culture school,” respectively) are typically public music schools supported by their local municipalities that offer instrument and voice tuition to students of all ages. However, for such schools in both Sweden and around the world, it is increasingly challenging to recruit students and teachers for certain musical instruments, particularly oboe and bassoon (Martinsson, 2015). The international literature on the reasons for choosing an instrument (Chen & Howard, 2004) is divided, despite the important implications this topic has for policy-makers, in assuring music provision and preserving traditions, and for teachers and parents in assisting children in their choices. These rationales, and the fact that studies on the topic are typically Anglo-centred, awaken our interest in researching the motivation behind the choice to play one's main musical instrument (i.e., the instrument in which higher skills have been acquired, according to self-judgements) in the Swedish context. Specifically, we aimed to address the following questions:

1. What are the most salient motives and counter-motives that drive the choice of main instrument (prior to selecting it in university) for pre-service music teachers within the context of a Swedish university?
2. Are there significant correlations between the choice of motives and a number of selected factors that could potentially mediate the relevance of those motives to each individual?

This population is of particular research interest as it may provide insights into the preferences of individuals who have been closely engaged with music and who, thus, are a connoisseur of other instruments besides their primary ones. Furthermore, the participants in this study (pre-service music teachers at Ingesund School of Music, University of Karlstad) are able to receive tuition in both western-classical, orchestral instruments as well as in pop-rock instruments, including classical, pop-rock, jazz or folk genres. Accordingly, the participants' varied involvements in terms of instruments and genres set the foundation for richer results.

Framework

“Motives” may be defined as the “reason[s] offered as an explanation for or cause of an individual’s behaviour” (Vandenbos, 2007, p. 281). Motives are normally identified as possible forces driving decision-making and action that arise from social and psychological mechanisms (Zelick, 2007). On the other hand, factors mediating the conscious choice of motives for pursuing an action have been defined as hypothetical dispositional variables that affect one’s choice, regardless of whether one is aware of its influence or not (Madsen, 1974). However, factors and motives have been researched both as separate constructs (e.g., Chen & Howard, 2004; Stavridis, Kaprinis & Tsigoriannis, 2015) and as indistinguishable or interchangeable variables influencing choices (e.g., Fortney, Boyle, & DeCarbo, 1993; Kuhlman, 2005). In the case of this study, we will align with the studies that distinguish between the two to allow for an in-depth examination of the topic according to the stated research questions.

Several aspects have been considered as potentially influencing instrument choice; among these, the study of gender-related, stereotypical perceptions of musical instruments predominates (e.g., Bullerjahn, Heller & Hoffman, 2016; Harrison & O’Neill, 2002; Marshall & Shibazakim, 2011; O’Neill & Boultona, 1996). For example, Abeles (2009) surveyed university students in the USA to examine gender associations linked to instruments and how these have changed over a 30-year period. Despite minor deviations, Abeles’ results were coincident with studies undertaken by Abeles and Porter (1978) and by Delzell and Leppla (1992), thereby suggesting that some instruments are seen as masculine or feminine and that these associations are largely stable. More recently, Hallam et al. (2008) found that there are marked gender preferences for certain instruments (i.e., girls choosing voice, woodwinds and violin, and boys choosing pop-rock instruments, tuba, drums and trombone) and that these gender patterns are rather consistent across education phases. Furthermore, a North American experimental study found that showing primary school children pictures of boys or girls playing a certain instrument generates gender stereotypes among them (Cooper & Burns, 2021). By contrast, Wiedenfeld (2012) found that social factors are changing and that increasingly more individuals are playing “trans-gender” instruments, according to a survey of primary school students in the USA. Moreover, factors such as how an instrument sounds and how well the student manages to play it might have a greater impact on the choice of instrument than gender (Rotjan, 2017; Wiedenfeld, 2012).

The quality or “colour” of the instrument’s sound (i.e., its timbre) has been identified as another vital determinant in instrument choice (Fortney, Boyle & DeCarbo, 1993; Hudson, 2004; Rotjan, 2017). However, the use of the Instrument Timbre Preference Test (Gordon, 1984) has yielded contradictory results in this respect, as the sound individuals preferred, in many cases, did not match the sound of the instrument they had chosen to play (Kuhlman, 2005).

This inconsistency is hypothesised by Kuhlman (2005) as stemming from different reasons, such as respondents not being fully aware of their real motives or, simply, that one's instrument choice is perhaps not based on the realistic sound of the instrument. It may also be possible that the opinions of children are not taken into account when the decision is being made (or, rather, made for them) by parents or educators (Driscoll, 2009), or that the choice is more significantly influenced by whether the instrument is seen as being fun and easy to play – a relevant influential factor according to several studies (Fortney, Boyle & DeCarbo, 1993; Kuhlman, 2005; McPherson et al., 2012).

Regarding the role of others in the choice, parents' support and encouragement exert a significant influence (Chen & Howard, 2004; Fortney, Boyle & DeCarbo, 1993). However, committed parents might not equally influence all areas of students' musical development (Zdzinski, 1991). With respect to peers, having friends who are learning to play an instrument has indeed been a reason for individuals engaging with music (MacKenzie, 1991), as well as having siblings playing an instrument, having seen/heard a musical ensemble at school (McPherson et al., 2012) or having received encouragement from a teacher (Sloboda, Davidson, & Howe, 1994). Furthermore, emulating a famous musician (McPherson, 2016) may influence instrument choice, though the role of genre preferences in instrument choice has been controversial, with studies both supporting (Marshall & Shibazakim, 2011; Geringer, 1977) and disproving (Cantero & Jauset-Berrocá, 2017) its relevance.

Only a few wider-scope studies have been undertaken that take into account multiple varied aspects influencing instrument choice. Among these, Fortney, Boyle and DeCarbo (1993) surveyed middle school band students from the USA and concluded statistically significant gender differences regarding the choice of instruments. In addition, Fortney, Boyle and DeCarbo (1993) identified other intervening aspects in this choice by quantitative descriptive analyses, that is, the sound of the instrument, liking the instrument, how fun or easy it is to play, the instrument's size and shape, peers, relatives, television, teachers, the cost of the instrument and a variety of other, far less-chosen aspects. On the contrary, genre was not identified in this study. Furthermore, the methodology employed by Fortney, Boyle and DeCarbo (1993) did not allow for a conclusive assessment of the comparative influence of each aspect in the decision-making process. Likewise, no direct assessment was undertaken on the role of parents' socioeconomic status, on instrument changes or on counter-motives influencing the choice of instrument. The reduced variety of instruments played by participants (i.e., band instruments) also represents a limitation of this study. Interestingly, the authors proposed the analytical/correlational research of factors underlying instrument choices as a possibility for further research, which is among the aims of the present study.

The study by Chen and Howard (2004) has also researched a broad range of aspects influencing instrument choice among university music students in Australia. In doing this, Chen and Howard (2004) researched motives and factors separately using quantitative descriptive analyses. The motives for specialising in a certain instrument were many and heterogeneous, with the most common being "liking it" and "how it sounded." Other motives were parental encouragement, the instrument's availability at home or at school, school needs, the availability of a teacher, whether a band/orchestra needed members and whether the instrument was portable. Interestingly, motives related to music genres were not adduced by the participants. Furthermore, Chen and Howard (2004) investigated the motives for instrument change, which included financial reasons, a low level of need or demand for the instrument and feeling that one had a greater talent for another instrument – results that are quite coincident with the findings of Sloboda et al. (1996). Regarding the limitations of Chen and Howard's (2004) research, studying gender differences in-depth or analysing correlations with background factors were not among their study aims. Additionally, no participant in this study seems to be specialised in pop-rock instruments such as electric guitar or electric bass.

With respect to previous research in the same context as this present study (i.e., the Nordic countries), studies in the international literature and those focused on the investigation of instrument choice are rare. This paucity notwithstanding, we found some interesting insights into this topic from Nordic studies in other areas, such as community music and pre-service teachers' concerns. For example, the participants of a sample similar to ours did not express any concern about their choice of main instrument, with one exception: singing in relation to classical music, which was seen as an "instrument" that is "almost non-existent in today's society" (Mateos-Moreno, 2022). In addition, instruments seen as more suited for accompanying dance (e.g., violin and guitar) may be prioritised within community music contexts in Sweden (Söderman & Westvall, 2017).

In conclusion, the aforementioned inconsistencies and limitations found in the scientific literature, such as the inconsistent results on the aspects affecting instrument choice, the limited scope in the selection of participants (who are mainly from the USA and do not tend to include performers of a wide range of instruments), the typical focus of previous research on a few or even a single intervening aspect, or the merely descriptive nature of conventional studies in this field, justified, in our eyes, advancing research on this issue.

Methodology

Population and sample

After sending an invitation by email to all pre-service teachers enrolled in any year of the music teaching programme offered by the University of Karlstad at the Ingesund School of Music (Sweden), the sample who agreed to participate in this study ($n = 64$) consisted of approximately 65% of the targeted population. Among the respondents, the percentage distribution was approximately 59% women, 39% men and 2% other or who did not want to disclose their gender identity. Respondents' ages ranged from 20 to 31 years, with an age range of 11 years ($M = 24.63$, $SD = 2.45$).

Respondents specified a total of 16 different instruments (including voice, orchestral instruments and pop-rock instruments) as their main instruments. The most common instruments among participants were voice ($n = 14$), piano ($n = 11$) and violin ($n = 10$). The least common instruments were bass, trombone and percussion, with only one respondent representing each of these instruments. In addition, respondents reported that they mainly listen to different types of pop music (42%), followed by classical music (22%) and rock (14%). The styles that were less reported included jazz/soul/blues (9%), folk music (9%) and electronic music (2%).

Research instrument, data collection and analysis

A short questionnaire was designed, consisting of 17 items targeting pre-selected motives and influential factors, albeit including open answers. The design and wording of the questions within the research instrument were built upon previous questionnaires and categories found in the retrieved literature as much as possible. The questions were then adapted to our respondents' characteristics (specifically their ages, education and language), and we strove for unambiguity, simplicity, brevity and intelligibility in the wording. To this end, translations were pursued with the aid of a professional language service. Our survey's items could be classified as belonging to the following main areas:

- 1) *Socio-demographic background*: Gender and current age.
- 2) *Socioeconomic background*: Retrieved by enquiring about parents' educational levels and housing (i.e., placement, rented or owned and the number of rooms) at the time of choice (as suggested by Kaiser and Langer, 2010; Siniscalco & Auriat, 2005).

- 3) *Motives* (for the choice of a musical instrument): A list of relevant motives according to previous research (especially from Chen and Howard 2004; Fortney, Boyle & DeCarbo 1993; and Rotjan, 2017) was provided to respondents, in addition to a free-text alternative.
- 4) *Involved factors*: A selection of possible factors involved that may have influenced the choice according to the above literature review, including starting age for playing the instrument, current genre preferences, genres listened to or played at home while growing up, instruments played by any member of the family and by friends at the moment of choosing and whether the chosen instrument was available at home before the choice was made.

The survey was administered electronically by emailing an invitation to the targeted population; this included a link that allowed anonymous access to a web-based survey (built using the software *Survey and Report*) as well as information on the study, the conditions for participation and the contact details of the researchers. To develop this anonymous survey, we first conducted a pilot study among respondents from the same population ($n = 10$) who were requested to a) respond to the questionnaire twice over an interval of a few days (i.e., test-retest methodology) and b) provide qualitative feedback on each question and the test as a whole. The results yielded a Kappa coefficient of $\kappa = .93$ for the pilot study (Cohen, 1960). In addition, the comments made by the pilot respondents showed that the questions were generally perceived to be clear and to measure what was intended. Furthermore, two experienced independent researchers analysed the questions, made comments and provided a score, which resulted in a Kendall's coefficient of concordance of $W > .85$ ($p < .05$). As a result of the pilot study, a few improvements were made in terms of wording.

Regarding the analyses, the data were imported and analysed with the aid of SPSS. No missing data were found. The questions that included open answers were imported as plain text and thereafter coded into existing or new variables according to the consensus among the researchers and how the content matched the categories offered in the questionnaire. Although this process naturally implies a certain degree of interpretation, it is typical in quantitative surveys and evidences the benefits of multiple analytical approaches to take the complexity of intervening factors into account, as opposed to a pure positivistic "closed system" that may exclude unexpected categories (Crossan, 2003; Siniscalco & Auriat, 2005).

Results

Salient motives

The most common motive argued by participants for the selection of their main instrument was the instrument's timbre (14%), followed by parental influence (11%) and taking part in an instrument demonstration/testing session (9%). Respondents also provided other motives but with a lower percentage of frequency (see Table 1).

Counter-motives

Almost 30% of the respondents answered that the instrument they chose to master was not the one that they initially wanted to pursue. Among their arguments, the waiting lists for Swedish music schools were identified as the most influential situation counteracting their decision; entailing approximately 40% of the counter-motives. Likewise, we found varied reasons in the free-text field from 14% of the respondents; these reasons fell into one of the following categories: a) Impediments to finding a social environment, such as "I did not want to begin without any friends playing it" (5% of the respondents); b) problems related to the music school, such as not being allowed to learn two instruments at the same time, or instruments being offered at different starting ages (5%); c) parents not taking into account their child's opinion (3%); and d) other, varied

Table 1. Respondents' Motives for Choosing to Play Their Main Instrument

Why did you choose to play your main instrument?	Why did you choose to play your main instrument?	
	Per cent	Cumulative per cent
1. I liked the instrument's timbre, that is, how the instrument sounded	14,1	14,1
2. My parents encouraged me to start playing this instrument	10,9	25,0
3. I got to try the instrument during a testing session and thought it was fun	9,4	45,3
4. I had family/relatives who played the instrument	6,3	51,6
5. It felt challenging to learn this instrument	6,3	57,8
6. It was easy and went well when I tried to play it	4,7	62,5
7. I saw the instrument on TV, the Internet, social media or other media	4,7	67,2
8. The instrument fits well with my image/personality	4,7	71,9
9. I liked the teacher who taught the instrument	4,7	76,6
10. We had the instrument at home	3,1	79,7
11. My music teacher in elementary school encouraged or inspired me to start playing	3,1	82,8
12. The instrument was needed in school or another context	3,1	85,9
13. I saw someone famous as a role model musician in relation to this instrument	3,1	89,1
14. I listened a lot to music played with the instrument before the choice	3,1	92,2
15. I actually wanted to play another instrument, but it was not possible	3,1	95,3
16. My friends played the instrument	1,6	96,9
17. There was a private teacher with a vacancy for teaching this instrument	1,6	98,4
18. I chose it to be able to play in a band or orchestra	1,6	100,0

counter-motives, such as the instrument being too difficult (1%), no private teacher being available (1%) or the loudness of the instrument (1%).

The influence of social and family environments

Regarding the influence of family environments, a descriptive analysis revealed that a large group of respondents (80%) had one or more relatives who played the same or other musical instruments: 60% of the respondents had one or both parents who played an instrument, 40% had (at least) one sibling who played an instrument, and 20% had another relative or relatives who played an instrument. Furthermore, the answers demonstrated that 26% of the respondents chose the same instrument that someone from among their relatives played/were playing when the choice was made. In addition, almost half of the respondents (42%) already had the instrument at home. On the other hand, associative tests regarding instrument choice yielded a significant correlation with having any relative who played the instrument (G-test's $\chi^2(17) = 29.83, p = 0.02$) and with having the instrument at home at the time of making the decision (G-test's $\chi^2(18) = 29.83, p < .01$).

A similar exploration (first, descriptive; second, associative) was then pursued in relation to the influence of peers in choosing a main musical instrument. The analysis indicated that 34% of

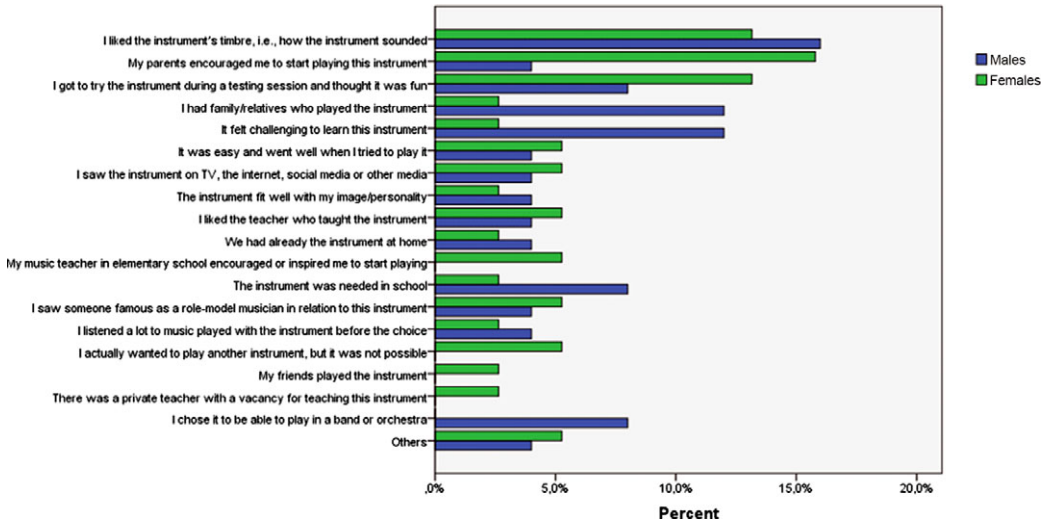


Figure 1. Gender of the respondents (percentage) and motives given for starting to play their main instrument.

respondents had someone within their social environment who played a musical instrument of any kind. In addition, we found that only 14% of the respondents had a friend who played the same instrument as the one they chose, whereas the majority of musicking friends played a different instrument. No significant correlation was indeed found regarding the influence of peers and instrument choice.

Gender

In our sample, instruments such as the violin, cello, flute, horn and voice were mostly chosen by females, while the guitar, electric guitar, drums, bass, trumpet and tuba were mostly chosen by males. However, in reference to some of the aforementioned instruments (i.e., bass, trombone and percussion), the data consisted of too few respondents for a gender gap to be positively identified. As such, it was central to our second research question to check for possible relationships between participants' genders and the motives provided. Certain motives were predominant (i.e., >50% of those who chose it) for each gender. For females: "My music teacher in elementary school encouraged or inspired me to start playing" was chosen by 100%; "There was a private teacher with a vacancy" was chosen by 100%; "My parents encouraged me to start playing this instrument" was chosen by 85%; "I got to try the instrument during a testing session and thought it was fun" was chosen by 66%; and "I liked the instrument's timbre, that is, how the instrument sounded" was chosen by 55%. On the other hand, for males: "The instrument was needed in school or another context" was chosen by 100%; "It felt challenging to learn" was chosen by 75%; and "I had family/relatives who played the instrument" was chosen by 75%. The distribution of motives between the genders is presented in full in Figure 1. Despite the differences found in the descriptive analysis, the analysis of the relationship between gender and the selection of motives provided was not statistically significant ($p > .1$).

Genre

A descriptive analysis showed that the respondents who had families who enjoyed pop music gave the most varied motives for their choice, with the most predominant being: "My parents encouraged me to start playing this instrument" (16% of the motives chosen); "I liked the instrument's

timbre, that is, how the instrument sounded” (13%); and “I got to try the instrument during a testing session and thought it was fun” (9.67%).

Rock, as the preferred genre within the family environment, was related to the second most varied motives involved in instrument choice. For these respondents, the motive “I liked the instrument’s timbre, that is, how the instrument sounded” was the most prominent (17%). In addition, genres such as folk music, disco and religious music were only related to one different motive each. A statistical analysis using chi-square statistics, taking into account the genres commonly listened to at home (while the choice took place) as well as currently preferred genres in relation to the motives leading to instrument choice, did not show significant correlations ($p > .1$).

Starting age

Given that the ages at which participants began to play the instrument ($M = 10.69$; $SD = 4.30$) had a very broad range (3–25 years old), it was deemed impossible to run a meaningful statistical comparison with other variables based solely on the starting age due to an excessive number of categories with too few respondents in each (Agresti, 2019). As a result, we opted to undertake theory-based stratification on this variable. Although many different stratifications were possible, the classic Piagetian stages of cognitive development (Piaget, 1936/1952) were chosen: sensorimotor (0–2 years), pre-operational (2–6 years), concrete operational (7–11 years) and formal operational (12 years old to adulthood). In addition, we included the category of 18 years old and above, as 18 years is the current age of the majority, which has obvious implications in terms of independence. This resulted in a five-level stratification of ages. We then pursued graphical and statistical analyses. The motives that dominated the choice of main instrument for the older ages were “I listened to a lot of music played in the instrument before the choice” ($M = 3.50$), “The instrument fits well with my image/personality” ($M = 3.33$), “It felt challenging to learn” ($M = 3.00$), “the instrument was needed in school or another context” ($M = 3.00$) and “I chose it to be able to play in a band or orchestra” ($M = 3.00$). On the other hand, the motives that dominated the choices for the younger ages were “I saw the instrument on TV, the Internet, social media or other media” ($M = 1.66$) and “My parents encouraged me to start playing this instrument” ($M = 1.85$). The remainder of the motives were most commonly associated with the middle range of starting ages ($2 \leq M < 3$). In addition, the statistical analysis showed that there were significant differences in the motives identified depending on the age at which the choice had been made (Kruskal–Wallis’ $\chi^2 = 52.20$, $p < 0.01$).

Socioeconomic background

Items were analysed jointly as a subscale, including parents’ educational levels and parents’ housing situation, resulting in a socioeconomic score assigned to each respondent. Theory-based stratification was pursued by partitioning the range of the variable into three equal parts according to the classic division of classes in sociology: upper, middle and lower/working class (Duignan, 2019). A graphical representation demonstrated almost no differences among the respondents in terms of their motives based on their socioeconomic background. Nevertheless, certain trends were apparent: two motives (“My friends played the instrument” and “I chose it to be able to play in a band or in an orchestra”) were more consistently chosen by respondents from the highest socioeconomic backgrounds, whereas one (“I saw the instrument on TV, Internet, social media or other media”) was more commonly associated with those from the lowest socioeconomic background. However, robust statistical analysis showed no significant differences among socioeconomic groups in relation to motives (Kruskal–Wallis’ $\chi^2 (18) = 17.92$, $p > .1$).

Discussion

The results of our study, in connection with the stated research questions, allowed for the identification and ordering of motives and counter-motives in choosing a main musical instrument. Furthermore, our findings revealed the existence of underlying factors that mediate the choice of motives in the context of the surveyed sample. Regarding the motives for the choice, instrument timbre was the most common one argued by participants, followed by parental influence. This was unsurprising given the findings of other studies in the field of instrument choice (Chen & Howard, 2004; Fortney, Boyle, & DeCarbo, 1993; Rotjan, 2017; Hudson, 2004; Wiedenfeld, 2012). However, Kuhlman (2005) found that the sound that musicians prefer in sound tests does not correspond in many cases to their choice of main instrument. Combining the results of our study with others present in previous research, we hypothesise a possible explanation for this: 30% of the respondents for the present study and 25% in the case of Chen and Howard (2004) did not choose the instrument they actually would have preferred as their main instrument, which may lead to those discrepancies between timbre preferences and the choice of main instrument. Furthermore, the third most commonly selected motive for instrument choice by the participants in the present study, that is, taking part in a testing session, is uncommon in previous research. This can be explained by the specific characteristics of the Swedish music educational system, as free-to-all testing sessions for multiple instruments are a common tradition in Swedish communal music schools; in these sessions, children get to try different instruments and discuss them with music teachers. Therefore, our study supported the fact that this is a very relevant practice that should be continued to allow for a “conscious” instrument choice.

Regarding our exploration of counter-motives hindering instrument choice, the most frequent one, that is, the provision at communal music schools, is also uncommon in previous research. For example, respondents often cited a waiting list for that instrument, tuition being allowed for only one instrument or the starting age for particular instruments as issues affecting their choice. On the other hand, other (less) relevant counter-motives for the surveyed sample are shared with the findings of previous research, such as parents not taking their children’s preferences into account (Driscoll, 2009) or the social environment as regards the role of family, relatives and peers (e.g., Fortney, Boyle, & DeCarbo, 1993; Rotjan, 2017). Regarding those aspects, some conclusions could be drawn about whether family or peers are more influential in instrument choice. Indeed, only one respondent stated that the choice was guided by having a friend playing the same instrument. Moreover, no significant correlation was found between having a friend(s) playing the same instrument and the choice of motive. In contrast, having a relative playing the instrument and having the instrument already at home were significant factors affecting the choice of motives for the surveyed sample. We can, therefore, conclude that, at least according to the respondents in this study, family exerts significantly more influence on choice than peers. As a possible explanation for the minor role of peers in instrument choice, we hypothesise that it may stem from the fact that, in order to play in a band with friends, one usually needs to play an instrument that is not already taken.

Our exploration of gender may equally add new insights into the extant literature on instrument choice, as the inspection of gender-associated motives supports the introduction of a new debate: Beyond masculine/feminine stereotypes assigned to instruments, which have been a major topic in studies on instrument choice (e.g., Abeles, 2009; Hallam et al., 2008), are there also cultural gender expectations that influence the motives dictating choice? In other words, is it possible that certain instrument choices are gender-driven, even if the actual instruments chosen are different? Despite observing the clear predominance of a gender for certain instruments and including gender as a possible motive for choice in the questionnaire, no one within our sample marked this reason as a determinant, neither was it suggested by any respondent in the survey’s free-text fields. Therefore, if gender did play a role in respondents’ choices, it was doubtless not something that they were aware of, thus resulting from an underlying cultural influence instead. Regarding

this issue, while gender was not found to be a statistically significant mediator in the stated choice of motives, a descriptive analysis of the results in this study is compatible with a tendency towards gender-dominated motives. Accordingly, females more commonly cited emotional-related motives, while males more commonly cited motives relating to the challenges of particular instruments. It is also plausible that current gender equality in Nordic countries influenced the results of this study, as well as the reduced number of respondents or the prevalence of certain instruments in the sample (e.g., voice), and, thus, for other samples, these potential gender differences could be statistically significant in terms of the motives for instrument choice.

With regard to the role of musical genres in instrument choice, our results did not show any significant influence: none of the respondents indicated that this was a motive for their choice of instrument, and no significant correlations were found with their choice of motives. This outcome contradicts the role of this factor found by Marshall and Shibazakim (2011) and Geringer (1977) and thus aligns our study with that of Cantero and Jauset-Berrocal (2017), whose results similarly indicated that the significance of this factor was marginal. We hypothesise that the reason for this discrepancy between studies may rest in our focus on the choice of main instrument and, particularly, the varied starting ages of participants among different studies. In support of this last hypothesis, the role of age was clearly significant in our results. Indeed, regarding the role of age, our study suggests that choice at an early age is commonly externally mediated, that is, affected by motives such as parents' instrumental preferences and TV/Internet/social media. In contrast, choice at an older age seems more commonly internally mediated by, for example, identifying the instrument as a challenge or choosing according to one's self-image. This result links to the study by Zdzinski (1991), who found that the role of parents has a different meaning for people of different ages in relation to musical aptitude and achievement. Furthermore, as a consequence of the statistically significant role of age in mediating the choice of motives, our findings suggest that studies on instrumental choices may be biased if they do not take into account the role of starting age as a confounding variable.

When it comes to the role of socioeconomic background, this was not found to be a counter-motive in our results, nor did it exert a significant influence on the choice of motives. This partially contradicts Fortney, Boyle and DeCarbo's (1993) study, where the cost of playing an instrument was an influencing factor in instrument selection. One explanation for this contradiction may rely on the socioeconomic factor being very sample-dependent. As such, students enrolled at a prestigious Nordic university may not be analogous to other less-wealthy populations. On the other hand, even if the socioeconomic background did not exert a statistically significant influence according to our results, a descriptive analysis is compatible with a trend: motives related to social acceptance may be more relevant to respondents from upper classes, while motives related to the influence of TV and social media may be more significant for those belonging to working classes. However, the absence of statistical significance prevents further conclusions on these hypothetical trends.

Finally, as regards the limitations of this study, it is possible that the remembered and actual motives of respondents do not always match. Having university students as the population for exploring this subject (which is the case for other studies as well, e.g., Fortney, Boyle, & DeCarbo, 1993; and Chen & Howard, 2004) is, of course, a risk to validity. However, the fact that many findings from this study align with other studies in identifying relevant motives (such as the study by Rotjan (2017) with children as the sample population) may be evidence of concurrent validity. Furthermore, at least one of the factors explored, that is, gender preferences, was shown to be present and stable from an early age (Harrison & O'Neill, 2002; Marshall & Shibazakim, 2011; Bullerjahn, Heller & Hoffman, 2016). On the other hand, the reduced number of participants and the attributes of the sample may have favoured certain results in ways that are impossible to foresee.

Further research may replicate our study with different populations, especially in terms of age and location, to test the stability of our results. Particularly, the non-statistically significant

influences of gender and socioeconomic status, which conversely exhibited tendencies according to descriptive analyses, may be the focus for future studies aimed at confirming or disregarding their statistical significances with other samples. Finally, future studies may address the role of other, additional variables as hypothetical mediators in instrument choice.

Conclusions and implications

This study suggests the dominant role of timbre and parental influences in instrument choice, while genre preferences and having peers who played the same instrument were almost negligible for the surveyed sample. Likewise, our results support the benefits of offering free-to-all testing sessions for multiple instruments toward fostering a “conscious” choice. Interestingly, we found that a substantial number of individuals did not choose the instrument they actually loved the most. The exploration of motives hindering the choice revealed the relevance of extrinsic impediments due to provision in Swedish communal music schools, such as long waiting lists and not being allowed to receive tuition on several instruments simultaneously. Moreover, this study has uncovered the role of age as an underlying factor that mediates the relevance of motives implied in the decision: while at an early age, the choice is externally dominated by, for example, parental preferences and TV; at an older age, it is internally dominated by, for example, one’s self-image. Equally, having the instrument at home and having any relative who played the instrument mediates the choice of motives, according to our study. Furthermore, this research warrants the need for further study of other mediating factors, such as socioeconomic background and gender. Our findings of the aforementioned factors have serious implications as they challenge the validity of the studies in the field that are focused on one factor alone or on the relationship between a factor(s) and the choice to play a particular instrument, without taking into account the role of other factors as possible confounding variables.

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