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An experimental video vignette study

## Abstract:

There is a discrepancy between a high inherent value of extracurricular musical classes and a low proportion of low-SES male participants. However, evidence on how to match out-ofschool music classes to students' preferences is lacking. Thus, we assessed the attractiveness of different versions of such classes via an experimental video vignette study featuring a 2\*2factor (setting\*music; each with high vs. low proximity to informal youth culture) betweensubjects design with N = 244 students (grade 5 to 10). We assessed the intention to participate as criterion, and gender, age, and SES (HISEI quartile) as control variables. A hierarchical regression showed a positive effect of music associated with youth culture on intention and no effect of the setting. Female (and older) students displayed higher intention than male (and younger) students. The single effect involving HISEI was a significant interaction of music and SES, which resulted from high-SES adolescents being especially motivated for classes with music associated with youth culture. Thus, in order to motivate boys and older students in particular, special consideration should be given to the appropriate design and marketing of music classes. However, music close to youth culture might be especially beneficial for adolescents with high rather than low SES.

Keywords: intention, music education, youth culture, vignette experiment, out-of-school

# 1. Out-of-school music classes – Discrepancy between value and participation

Out-of-school music classes may provide empowering, meaningful experiences for individuals and encourage them to explore the realm of musical culture. Moreover, participation in choirs, bands, or other music classes, as well as individual singing or instrumental activities are often considered to exert positive effects on domain-general and domain-specific outcomes (Mellor 2013; Colson 2012; Miranda und Claes 2009; Kokotsaki und Hallam 2007; Hetland 2000). Regardless of the objectives pursued by the providers of musical classes, a major obstacle to overcome is the fact that comparatively few adolescents actively participate in such cultural activities. To make things worse, this participation is less probable given an unfavorable sociodemographic background (Grgic und Züchner 2013; Keuchel 2013). Thus, in order to increase the number of young people benefiting from out-of-school musical classes, both access to these classes for all adolescents and the attractiveness of such classes need to be improved (Federal Ministry of Labour and Social Affairs 2017).

Representative surveys indicate that there might be a mismatch between features of typical existing out-of-school musical classes and young people's interest (Keuchel 2013; Ho 2017). As highlighted in the reciprocal feedback model of musical response (Hargreaves et al. 2005; Leblanc 1982) all responses to music are determined by the three interacting components listener, listening situation, and music (Hargreaves et al. 2006). Therefore, both setting and music need to be mutually compatible and tailored to the preferences of adolescents. Combined, this contributes to a high perceived individual musical 'fit' (North und Hargreaves 2008, S. 124).

Regarding the setting, it might be beneficial to take social and cultural contexts into account to accomplish a high perceived proximity to youths' leisure environment rather than to a school-like formal learning setting. Regarding the music, suitable genres and styles are of great importance: Playing and listening to low-brow rock/pop music is associated with informal youth culture, while playing and listening to highbrow classical music is associated not only with formal learning in school but also with a high socioeconomic status (Malcolm et al. 2003; Colley et al. 2003; van Eijck 2005; Green 2002; Bourdieu 1984). Thus, out-of-school classes with a too formal character might impede voluntary participation for adolescents in general and those from families with a low socioeconomic status (SES) in particular. To examine intentions to participate in out-of-school music classes, rather than focusing on the arbitrary and

superficial categorization of whether they are situated in vs. out of school, one should focus on the setting and the content, in this case the choice of music, as these are important factors determining the perceived overall formality and individual fit (Malcolm et al. 2003; North und Hargreaves 2008).

This is why the present experimental vignette study assessed effects of (1) the setting and (2) the music, and (3) effects of age, gender, and socioeconomic status on the intention to participate in out-of-school music classes.

# 2. The intention to participate in out-of-school music classes and its determinants

The important role of music in adolescence has been an issue of interest, particularly since in the 20<sup>th</sup> century youth culture has increasingly been taken into consideration (Ros-Morente et al. 2019). However, when it comes to the significance of music in the lives of young people, a distinction between active and passive participation must be made: While 95% of young people report listening to music, only about a quarter play an instrument themselves (Medienpädagogischer Forschungsverbund Südwest 2018; Grgic und Züchner 2013; Lamont et al. 2003). This discrepancy seems to be difficult to overcome as the wide-ranging phenomenon of music in leisure time is difficult to grasp (Mantie und Smith 2017) and little is known on what kind of out-of-school music classes are appealing to young people. However, keeping in mind that making music means cultural, social, and societal participation (Crooke 2016), efforts should be made to motivate young people to actively make music.

The participation in out-of-school music classes can be understood as a planned behavior that can therefore be predicted by the intention to participate (cf. theory of planned behavior, Ajzen 1991). The intention, in turn, can be predicted by youth's beliefs and individual needs (Hargreaves et al. 2005; Malcolm et al. 2003). Young people who already take part in instrumental lessons, a choir, or orchestra, are known to be motivated to participate in further music classes (McEwan 2006). This might be due to the importance of previous achievement-related experiences and self-efficacy beliefs, as indicated in the expectancy-value model of achievement (Eccles und Wigfield 2002). Since self-efficacy beliefs can be improved by positive experiences (Bandura 1995, 1997), there is the need to provide young people with the opportunity for such experiences, for instance in out-of-school music classes. If such classes

are designed in a way that attracts adolescents regardless of their previous musical experiences, for instance, comprising a setting and music that is in accordance with their preferences (Hargreaves et al. 2005; Malcolm et al. 2003; Woody 2020), they may catch intrinsic interest, which is also a crucial element of longterm musical involvement (McPherson und McCormick 2000).

#### 2.1 Determinants of intention to participate in out-of-school music classes

#### 2.1.1 Proximity of the setting to informal youth culture

With regard to the aforementioned need for cultural activities to fit youth's preferences and the impact of the location on the perceived degree of informality, it seems to be helpful to examine the setting more closely. As the location of leisure activities is associated and interconnected with other aspects, like the kind of fellow participants and people in charge of the class, or the appropriate clothing styles, the setting may differ in the proximity to highbrow or youth culture and consequently in the degree of perceived informality. The one extreme may be a castle or villa, as music academies would often choose as a venue for their music classes – featuring a high degree of formality in spite of being out-of-school –, with a youth center, where informal classes addressed to adolescents are often situated.

It goes without saying that youth culture is constantly multiplying and characterized by plurality and individuality (Ferchhoff 2016). Nevertheless, it can represent a certain contrast to high culture: While the highbrow cultural habitus stands for classicism, luxury, and distinction, the typical youth culture habitus is characterized by loose modern and dynamic trends. Such differences between high culture and youth culture are also reflected in individual cultural practices and aesthetic preferences for films, furniture, clothing, and sport (Bourdieu 1984). As a familiar environment is known to be preferred by students who play an instrument or sing as a leisure activity (Jaffurs 2004), choosing an informal setting relating to the adolescents' everyday life may increase their intention to participate (Malcolm et al. 2003). Furthermore, with adolescents being predominantly peer-oriented, they should be more attracted to a youth cultural setting (Kröner und Dickhäuser 2009). This could be particularly true for young people with a low SES, as these in particular perceive youth centers as a retreat and safe space (Chechak et al. 2019). Furthermore, the interconnection of setting and music works both ways: While preferences in the setting might be related to the underlying motives for engaging in music (Chamorro-Premuzic und Furnham 2007) or differences in the emotional associations of musical activities (Boal-Palheiros und Hargreaves 2001), preferences in music also strongly depend on the setting (North und Hargreaves 1996, 2000).

#### 2.1.2 Proximity of the music to informal youth culture

Representing the content of the music class, the music played and heard and the instruments being used are pivotal to the intention to participate. As participation in out-of-school music classes is dependent on whether the participants may sing and play the music they like (Green 2008), it may thus be useful to include the kind of music the potential participants prefer (Kennedy 2002; Dingle et al. 2008). Such music is characterized by easy-listening attributes and often electronical (Bonneville-Roussy und Eerola 2018; Bonneville-Roussy et al. 2017). Adolescents therefore prefer popular forms of music such as pop, dance, rock, and R&B compared to classical music (Lamont et al. 2003; North et al. 2000), which they see as the embodiment of the 'snobbish' and static adult world (Friedemann und Hoffmann 2013; Kennedy 2002).

Even when it comes to what kind of music young people want to play themselves, preferences depend on certain associations: While practicing classical music is perceived as something involving a high degree of self-discipline, playing pop music is perceived as more enjoyable (Green 2002). This might also be the reason for the association of classical music not only with highbrow culture but also with formal learning, with a focus on acquiring knowledge and practice on expert-level (Colley et al. 2003). It can therefore be contrasted with rock/pop music, as music that is close to informal youth culture (Vogt et al. 2014). Apart from these culture-related aspects, music preferences may surely also differ depending on personality traits (Litle und Zuckerman 1986; McCown et al. 1997; Rentfrow und Gosling 2003; Schwartz und Fouts 2003) and positive or negative momentary affects (Getz et al. 2012).

#### 2.1.3 Sociodemographic variables

While it would be desirable for participation in out-of-school music classes to be stronger, there are some groups that are known to be underrepresented in such classes, depending on their age, gender, or socioeconomic status.

*Age*: The interest in musical activities decreases with increasing age (Mizener 1993; Wigfield et al. 1997; Crowther und Durkin 1982). In particular, during the transition from primary to secondary education, many children seem to walk away from playing an instrument (Sloboda 2001; Fritzsche et al. 2015). In consequence, the intention to participate in informal musical activities decreases (O'Neill 2005), making adolescence a phase of life that should increasingly be addressed. Additionally, the transition from childhood to adolescence is marked by low open-earedness, i.e. a low tolerance for different music styles, which makes it even more difficult to choose the appropriate music for classes for this age group (Hargreaves 1982;

LeBlanc et al. 1996). While classical music is preferred with increasing age, contemporary music is preferred in adolescence (Bonneville-Roussy et al. 2017; Bonneville-Roussy und Eerola 2018).

*Gender:* Studies on children's cultural activities revealed strong differences in leisure activities based on gender, e.g. in leisure writing or organized sports activities (Staudenmaier 2012; Birnbaum et al. 2020). This holds true especially in the context of music making: Girls are more inclined towards singing than boys and they are also more likely to participate in musical activities (Welch et al. 2012; Penthin 2020; McPherson et al. 2015; Wigfield et al. 1997; Crowther und Durkin 1982). Regarding music preferences, Soares-Quadros Júnior (2019) and A. Colley (2008) reported that their female participants displayed a stronger affinity for styles with a more emotionally charged nature, dance music, and music close to mass culture, whereas male participants preferred heavier music styles.

*Socioeconomic Status:* A favorable home environment – including parental support as an important feature – is reported to exert an effect on musicality (North und Hargreaves 2008; Davidson et al. 1995). In the study of McPherson et al. (2015), in grades 5 to 12, only 22.4% of the musically active Australian students belonged to the lowest SES third. Thus, in accordance with Bourdieu's habitus theory (1984), several studies indicate that a higher SES may still be assumed to come with an increase of children's motivation to participate in musical activities and leisure classes (Sichivitsa 2007; Corenblum und Marshall 1998; McPherson 2009; McCarthy 1980; Albert 2006; Philipps 2003; Rau 2016). Furthermore, children with a lower SES are also less likely to play classical instruments (Wilson et al. 2020; Wießnet et al. 2018). However, while low-SES students are generally underrepresented in out-of-school music classes, their intention to participate may still not be uniformly low, but rather depend on specific features of the classes.

#### 2.2 Intention to participate – lacking evidence from experimental studies

As an empirical method to examine the effects of setting, music, and sociodemographic variables on the intention to participate in such classes, field experiments might come to mind. However, field experiments involving real musical classes are very costly, complex, and challenging to implement. Thus, it comes with little surprise that most studies on this issue are merely correlational (Elpus und Abril 2011; Sichivitsa 2004; Austin 1990). In addition, field experiments with voluntary participants suffer from a substantial drawback due to a selection bias: There are large proportions of adolescents that would never consider registering (Chechak et al. 2019). Thus, especially when aiming to assess intentions, vignette studies might provide

a good workaround (Reuveni und Werner 2015; Rettinger et al. 2004). Vignettes provide short and precise descriptions of realistic scenarios with systematic combinations of characteristics and can therefore be used as economic stimuli to assess effects on dependent variables (Aguinis und Bradley 2014; Atzmüller und Steiner 2010).

In general, vignette methodology is based on working with prototypical features instead of varying innumerable details. In our case, a location that is close to youth culture, i.e. a youth center, and music that is close to youth culture, i.e. rock/pop music can be considered prototypical features of a music class that is characterized by a high degree of informality (cf. Stern und Sommerlad 1999; Colley et al. 2003; Malcolm et al. 2003). In contrast, a class that relies on classical music and is embedded in a setting related to highbrow culture can be considered prototypical for learning opportunities with a quite formal character. This may create a halo effect in adolescents' perception. Thus, it can be assumed that adolescents fill in the slots of their out-of-school music class scheme with instantiations that are prone to informal learning for the youth culture class and prone to formal learning for highbrow class. This in turn should affect their intention to participate.

# 3. Research questions

Considering the discrepancies in participation, this study investigates the intention to participate in out-of-school music classes using the proximity of the setting and the music to youth culture as predictors, as well as age, gender, and SES as covariates. This lead to the following research questions:

1) Are the proximity of (a) the setting and (b) music to youth culture significant predictors for the intention to participate in out-of-school music classes?

We expect main effects of both setting and music on the intention to participate, with higher proximity to youth culture resulting in higher intention to participate for both variables.

2) Are there differences in (a) age, (b) gender, and (c) SES as well as (d) any interaction effects regarding the intention to participate in out-of-school music classes?

We expect higher intention to participate for younger, female, and higher SES students. Furthermore, we expect an especially high intention to participate for students with low SES in classes where music and setting are close to youth culture.

### 4. Method

#### 4.1 Participants

The N = 244 participants in this experiment were adolescents between grade five and ten (age: M = 12.96 years, SD = 1.31 years, range: 10-16 years; gender: 118 male, 122 female, 4 not declared) from 3 different secondary schools in three German federal states, two public schools in Baden-Wuerttemberg and North Rhine-Westphalia and one private school in Bremen. The schools were selected to reflect different levels of educational achievement, different regions of Germany, and public and private operators. The participants belonged to 14 different classes without any special musical profile. Regarding SES, splitting the sample into HISEI quartiles lead to the first quartile ranging below 32.50, the second one from 35.34 to 55.25, the third one from 56.00 to 72.30, and the fourth one beyond 72.83. Approval of the university's ethics committee as well as consent of the participants and parents or legal guardians was provided.

#### 4.2 Video vignettes

The present study has been aligned to the recommendations for designing and implementing experimental vignette methodology studies by Aguinis und Bradley (2014). To convey the combinations of the factors setting and music convincingly, we used videotaped vignettes, which according to Hughes and Huby (2002) provide a better foundation to model certain aspects of reality. In order to further increase the level of immersion and closely resemble the natural process of informing oneself about an out-of-school class, we have chosen a combination of fictitious advertising websites and videos. The video vignettes for the four different out-of-school music classes were therefore embedded in single-page websites containing images of the videos and short adjusted info texts. To make the advertisement more realistic, we provided a mock option to registrate for the class at the end of the website. Prior to the experiment, the material had been subjected to two cognitive lab studies each featuring four experts, covering expertise in research and practice in the fields of music education and cultural education. Each cognitive lab study was followed by a revision of the material. The differences in the factor setting were operationalized via the aspects building, furnishing, clothing, and leisure activity (cf. Appendix I). The differences in the factor music were achieved by different instruments being displayed in the video and a corresponding background music (cf. Appendix I). To avoid that the adolescents might be biased towards music related to youth culture by knowing the sample used, we chose a part of Beethoven's Symphony No. 5 in C Minor, Op. 67: IV, Allegro, for the classical music and an unknown background music for the music close to youth culture. Based on the reported differences in

music preference across gender, we intentionally avoided using a distinct emotional pop beat as well as a heavy rock sound. Instead, we chose a rather electronic beat, aimed at pleasing both genders equally (Soares-Quadros Júnior et al. 2019; Bonneville-Roussy und Eerola 2018). Additionally, both pieces of music were intended to be a-semantic, i. e. supposed to convey a light-hearted and positive atmosphere without evoking specific associations (Ansani et al. 2017). This was also supported by refraining from using songs with lyrics, as these are, though mostly neglected in research, affecting the musical preference (North und Hargreaves 2008). To enable a focus on relevant aspects and to avoid confounding variables, we used the same five actors aged ten to sixteen for all video vignettes and focused strongly on varying the videos only in the intended variables proximity of the setting and music to youth culture using a parallel cut and scene sequence for all videos. Exemplarily, the equivalent scenes of each variation are displayed in Figure 1<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> After acceptance of the manuscript, the four video vignettes, data file, syntax and output will be available on osf.io.

#### 4.3 Design and measurements

In our experiment we used a 2\*2 factorial between-subjects design with the independent variables proximity of the setting to youth culture and proximity of the music to youth culture (two levels: high culture = 0 vs. youth culture = 1). Thus, each participant was randomly assigned to one vignette and comparisons were made across participants (Atzmüller und Steiner 2010).

*Intention to participate:* To measure the intention to participate, we used six self-developed items, for example, "I would like to participate in this music class", all on a 4-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree;  $\alpha$  = .86; cf. Appendix I).

Sociodemographic variables. Additionally, the participants were asked for age (in years), gender (0 = male, 1 = female) and SES as covariates. The SES was operationalized by the highest International Socio-Economic Index (HISEI) in the family. The students named their parents' occupational title and the specific professional activities. The answers were coded according to the International Standard Classification of Occupations categories and transformed into the International Socioeconomic Index ranging from 16 to 90 (ISEI; Ganzeboom Harry B. G. und Treiman 1996). Finally, we split our sample in quartiles.

*Manipulation Check:* In order to test whether the different vignettes were also perceived differently, we included a manipulation check. Therefore, for each vignette we asked whether the adolescents perceived the location and the music of the vignettes as matching their personal youth environment. The manipulation check for the setting included four items, for example, "The location where the music class takes place is where my friends would like to be" ( $\alpha = .85$ ). The manipulation check for the music also consisted of four items, for example "The music is typical for young people of my age". All items were on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree;  $\alpha = .86$ ; (cf. Appendix II).

#### 4.4 Procedure

The manipulation of the produced vignettes and the reliability of the corresponding scales in the questionnaire needed to be tested before the actual experiment and optimized if necessary. For this purpose, we carried out the exact same research design and procedure that was planned for the actual experiment with N = 50 adolescents (age: M = 13.4 years, SD = 2.19; range: 10-17; gender: 26 male, 24 female) in advance. Regarding the reliabilities of the test scales, this

resulted in sufficient reliabilities of all scales (.72  $\leq \alpha$  . $\leq$ .92). Regarding the assessment of the proximity of the setting and music to youth culture, this resulted in a successful manipulation of the factor music, but an inconclusive result for the factor setting. This indicated the necessity of revisions of the test items: The original items might have been interpreted as referring to the evaluation of the total proximity of the music class to youth culture, rather than to the proximity of the actual location and thus the setting. Therefore, we modified the items to clearly refer to the location of the music class. The procedure of the experiment worked smoothly and could be finished in the scheduled time.

The procedure of the main study started with a short, standardized welcoming and a brief explanation of the procedure for the participants. After that, we handed a tablet and earphones to each of the participants. They then individually browsed through a website on a tablet for five minutes and afterwards watched an embedded video trailer (approximately 1:20 min.) for a fictional music class twice in a row. After that, they received a paper-and-pencil questionnaire.

#### 4.5 Data analysis

We worked with hierarchical regressions to highlight the effects of setting, music, covariates, and interactions separately. Preliminary analysis confirmed no violation of the assumptions of multiple regression: normality, linearity, independence of errors, and homoscedasticity.

Among the responses to the HISEI questions, 11% were either missing or too vague to be validly coded. Thus, multiple imputations were carried out using the package "mice" (van Buuren und Groothuis-Oudshoorn 2010) in the statistical software R version 3.6.3 (R Core Team 2019). Missing values were computed with M = 25 imputed datasets and 50 iterations (cf. Graham 2009, S. 561). Estimates and standard errors were aggregated using the package "mitml" (Grund et al. 2016).

## 5. Results

#### 5.1 Examination of the experimental conditions

*Differences between the groups:* To check the experimental conditions, we first examined mean differences between the groups in the covariates. The four experimental groups did not differ in the covariates age (F(3, 241) = 0.17, p = .92), gender (F(3, 241) = 0.75, p = .52), and HISEI quartile (F(3, 241) = 0.45, p = .72).

Manipulation check: Regarding the assessment of the proximity to youth culture within the manipulation check for the variation in the factor (1) music, an ANOVA of the four

experimental groups showed significant differences in the perception of the proximity to youth culture with F(3, 241) = 12.53, p < .001,  $\eta^2 = .14$ . The Bonferroni post-hoc test revealed that all pairwise comparisons involving vignettes constructed to represent different levels of proximity to youth culture were perceived as different regarding this proximity.

Regarding the assessment of the proximity to youth culture within the manipulation check for the factor (2) setting, there were also significant differences in the perception of proximity of the setting to youth culture with F(3, 241) = 4.82, p = .002,  $\eta^2 = .06$ . The Bonferroni test, however, revealed pairwise differences only between the experimental condition that featured proximity to youth culture in both factors setting and music, and the experimental condition featuring no proximity in both factors. In contrast, differences in the proximity to youth culture of the setting were not perceived as such, if the proximity to youth culture of the factor music did not match the proximity to youth culture of the setting. The participants therefore did not rate the vignette with a setting that was intended to be close to youth culture as such, if the music was classical.

#### 5.2 Descriptives

Correlations, means, standard deviations, and range for all relevant measures for the whole sample are presented in Table 1.

#### [INSERT TABLE 1 HERE]

#### 5.3 Hierarchical regressions regarding the intention to participate

As displayed in Table 2, the first step of the hierarchical regression with setting and music yielded an adjusted  $R^2$  of .04, F(2, 242) = 6.14, p < .001. Setting did not explain the intention to participate, whereas music did. The second step, with age, gender, and HISEI quartile, yielded a  $\Delta R^2$  of .20, F(5, 239) = 16.11, p < .001; adjusted  $R^2$  of .24. In the third step, we added the pairwise interaction effects of independent variables and covariables. This lead to the significant regression equation F(11, 233) = 8.22, p < .001 and an adjusted  $R^2$  of .25. In this step, the effect of music vanished. However, the analysis showed a significant effect of the covariates age and gender, with girls displaying higher intention than boys and younger adolescents showing higher intention than older adolescents. Furthermore, there was a significant and large interaction effect of music and the HISEI quartile ( $\beta = .34$ ). This significant interaction effect showed that the higher the HISEI quartile was, the lower the

intention to participate for music classes with classical music and the higher the intention to participate for music classes with music associated with youth culture (cf. Figure 2).

[INSERT TABLE 2 HERE]

We therefore continued with simple effects analysis comparing the intention to participate regarding the proximity of music to youth culture at different HISEI quartiles  $(F(4, 240) = 124.30, p < .001, \eta^2 = .08, \text{ cf. Cohen et al. 2003})$ . As indicated in Figure 2, this analysis revealed that the interaction effect was mainly due to differences in the fourth HISEI quartile, while there were no significant differences in the first HISEI quartile ( $\beta = 0.12$ ,  $SE = .12 \ p = .32$ ), in the second HISEI quartile ( $\beta = 0.20, SE = .13, p = .11$ ), and in the third HISEI quartile ( $\beta = 0.28, SE = .15 \ p = .06$ ). In the fourth HISEI quartile, the participants who had seen the vignettes with classical music showed a significantly lower intention to participate (M = 1.81, SD = 0.50) compared to the group with rock/pop music (M = 2.41, SD = 0.62),  $\beta = 0.50, SE = .12 \ p < .001$ .

[INSERT FIGURE 2 HERE]

### 6. Discussion

#### 6.1 Summary of results

Results regarding setting and music: The aim of this experimental video vignette study was to explore effects of the proximity to youth culture of both setting and music on the intention to participate in out-of-school music classes for adolescents by experimentally varying two attributes of informality (Malcolm et al. 2003) and the reciprocal feedback model of musical response (Hargreaves et al. 2005; Leblanc 1982) for the first time in such a context. The manipulation check examined whether the setting and music intended to be close to informal youth culture were also perceived as such. While this was successful for the perception of the proximity of music to youth culture, it was not entirely successful regarding the perception of the proximity of the setting to youth culture. Thus, for our study, it cannot be finally decided whether the setting (building, furnishing, clothing, leisure activities) should rather be matched to highbrow or to youth cultural schemata in order to achieve maximum intention to participate among young people (research question 1a). However, regarding the music, the results have shown unequivocally that proximity to youth culture is essential for the adolescents' intention to participate (research question 1b; e.g., North et al. 2000). If one considers these results with regard to the attributes of informality, it can be assumed that for the perception of informality in out-of-school classes of any kind, the content is more important than the setting (Malcolm et al. 2003).

*Results regarding covariates age, gender, and SES*: In line with previous findings (Mizener 1993; Wigfield et al. 1997), younger students were more motivated to participate in out-of-school music classes than older students (research question 2a). Furthermore, as expected, girls were more motivated to participate (e.g., Welch et al. 2012). To increase participation rates in boys, a musical environment must be created in which boys, with their particular individual challenges in music, feel good and content (Ashley 2002; Welch et al. 2012). Thus, future studies should examine which design features motivate particularly boys to participate.

Regarding SES, it is promising that there was no main effect of HISEI quartile on intention to participate (research question 2c). However, unexpectedly, out-of-school music classes with a higher degree of informality were perceived as especially attractive by high-SES students. Thus, rather than closing the participation gap at the expense of the low-SES students, informal classes may even increase it (research question 2d). It may be assumed that the higher intention to participate of adolescents with a high SES is based on having generally easier access to out-of-school learning environments than their low-SES counterparts, given their better parental

support and financial opportunities. Additionally, the adolescents who are already participating in such activities are also known to be more motivated to participate in further activities (McEwan 2006). This is congruent with the Matthew effect known in other domains like reading (Bakermans-Kranenburg et al. 2005; Pfost et al. 2012). Thus, it is plausible that out-ofschool music classes that fit adolescents' perception of youth culture by using rock/pop music boost the intention to participate especially for adolescents with a high SES. These, in turn, might not be the students who need this boost the most. While in hindsight, this explanation seems plausible, this interaction effect should be further examined in replication studies before its implications for the design of out-of-school music classes are considered. If, however, it turns out to be replicable, new ways of lowering the entry hurdle and thus alleviating a possible Matthew effect to out-of-school music class for low-SES students should be explored. One avenue of research could be their integration in extracurricular activities in cooperation with schools, inbetween formal and informal settings.

#### 6.2 Limitations of the study and directions for future research

While our experimental manipulation regarding music worked just fine, this turned out to be more complicated for the manipulation of the setting. Even though the test items were revised in preliminary analyses to yield higher sensitivity for the detection of the manipulation, the manipulation check did not indicate a successful variation of the perceived proximity of the setting to youth culture across all experimental groups. Thus, the lacking effect of the setting for the intention to participate in our study should be interpreted with caution. Still, our findings regarding the lacking effect of setting are in line with Merkt et al. (2020) who reported that authenticity of the setting in instructional videos did not affect learning outcomes. They did not find an effect of the setting despite a succesful manipulation check. Before drawing conclusions for the design of out-of-school music classes, however, a replication should explore the following possible reasons.

First, the perception of the music could have overshadowed the perception of the setting. This could maybe be circumvented by explicitly instructing the participants to focus on the setting, or by showing them a further vignette with the opposite setting. The overshadowing might also be due to an insufficient visual contrast of the setting. Thus, in further studies, the experimental variation of the setting should be more distinctive, especially for vignettes that combine youth cultural setting with highbrow culture music or vice versa. The vignettes could provide more details, e.g. aspects of leisure time or statements of adolescents. This would require another manipulation check test. The missing effect of the setting, however, could also be due to the

fact that despite high internal consistency of the scale, the content validity of the test items of the setting manipulation check might have been too weak, in spite of having been piloted and revised.

Second, one might argue that including a control group could have extended the possibilities to evaluate the results. There are studies, also in combination with music, which use vignettes to induce certain emotions and explore their effect on moral judgement or anxiety in an intervention-like manner (Ansani et al. 2017; Marzillier und Davey 2005). In such studies, it could be useful to include a control group to assess for example pre-post-test differences without any vignette being presented. In the present study, however, the vignettes served to describe a particular situation which was needed to express the intention to participate. The test items were also designed in such a way that it would not be possible to answer them without a description of a situation. Thus, the focus was on a comparison between different situations described, instead of assessing effects of presenting vignettes in general. For future studies it would be interesting to extend the vignettes by further features and to check if the effects can be generalized on classes and programs regarding sports or other cultural activities.

Third, while sociodemographic variables, music, and perhaps setting should be taken into account for developing motivating and appealing out-of-school music classes for young people, there may be further relevant determinants like beliefs of peers and family members or beliefs regarding the perceived environmental conditions (Fritzsche et al. 2011; Penthin et al. 2017) which should be scrutinized in future studies.

# 7. Conclusion

This study showed that younger adolescents and girls are generally more inclined to participate in out-of-school music classes. Moreover, classes based on music close to youth culture music are generally more attractive to adolescents than classes based on classical music. Furthermore, it turned out that it is the adolescents with a high SES that showed a particularly high intention to participate in classes which include music close to youth culture. Video vignette studies turned out to be a promising way of scrutinizing determinants of intention to participate. They may also be used in future studies on how to motivate boys, older adolescents, and especially those with low SES to participate in out-of-school music classes as a valuable form of cultural education.

#### Literaturverzeichnis

- Aguinis, Herman; Bradley, Kyle J. (2014): Best practice recommendations for designing and implementing experimental vignette methodology studies. In: Organizational Research Methods 17 (4), S. 351–371. DOI: 10.1177/1094428114547952.
- Ajzen, Icek (1991): The theory of planned behavior. In: *Organizational behavior and human decision process* 50, S. 179–211, zuletzt geprüft am 02.04.2019.
- Albert, Daniel J. (2006): Socioeconomic status and instrumental music: What does the research say about the relationship and its implications? In: Update: Applications of Research in Music Education 25 (1), S. 39–45. DOI: 10.1177/87551233060250010105.
- Ansani, Alessandro; D'Errico, Francesca; Poggi, Isabella (2017): "It Sounds Wrong..." Does Music Affect Moral Judgement? In: Oswaldo Gervasi (Hg.): Computational science and its applications - ICCSA 2017. 17th international conference, Trieste, Italy, July 3-6, 2017 : proceedings. Cham, 2017. ICCSA. Cham: SPRINGER (Lecture notes in computer science, 10409), S. 753–760. Online verfügbar unter https://doi.org/10.1007/978-3-319-62407-5 57.
- Ashley, Martin (2002): Singing, gender and health: Perspectives from boys singing in a church choir. In: *Health Education* 102 (4), S. 180–187. DOI: 10.1108/09654280210434255.
- Atzmüller, Christiane; Steiner, Peter M. (2010): Experimental vignette studies in survey research. In: *Methodology* 6 (3), S. 128–138. DOI: 10.1027/1614-2241/a000014.
- Austin, James R. (1990): The relationship of music self-esteem to degree of participation in school and out-of-school music activities among upper-elementary students. In: *Contributions to Music Education* (17), S. 20–31. Online verfügbar unter www.jstor.org/stable/24127467.
- Bakermans-Kranenburg, Marian J.; van IJzendoorn, Marinus H.; Bradley, Robert H. (2005): Those who have, receive: The Matthew effect in early childhood intervention in the home Environment. In: *Review of Educational Research* 75 (1), S. 1–26. DOI: 10.3102/00346543075001001.
- Bandura, Albert (1995): Exercise of personal and collective efficacy in changing societies. In: Albert Bandura (Hg.): Self-Efficacy in Changing Societies. Cambridge: Cambridge Univ. Press, S. 1–45.
- Bandura, Albert (1997): Self-efficacy. The exercise of control. 13. printing. New York, NY: Freeman.

- Birnbaum, Lisa; Schüller, Elisabeth Maria; Kröner, Stephan (2020): Who likes to engage in writing? – Children's beliefs regarding (intrinsic value of) leisure writing. In: *Educational Psychology* 40 (7), S. 856–874. DOI: 10.1080/01443410.2020.1777941.
- Boal-Palheiros, Graça M.; Hargreaves, David J. (2001): Listening to music at home and at school. In: *Brit. J. Music. Ed.* 18 (02). DOI: 10.1017/S0265051701000213.
- Bonneville-Roussy, Arielle; Eerola, Tuomas (2018): Age trends in musical preferences in adulthood: 3. Perceived musical attributes as intrinsic determinants of preferences. In: *Musicae Scientiae* 22 (3), S. 394–414. DOI: 10.1177/1029864917718606.
- Bonneville-Roussy, Arielle; Stillwell, David; Kosinski, Michal; Rust, John (2017): Age trends in musical preferences in adulthood: 1. Conceptualization and empirical investigation. In: *Musicae Scientiae* 21 (4), S. 369–389. DOI: 10.1177/1029864917691571.
- Bourdieu, Pierre (1984): Distinction. A social critique of the judgement of taste. Cambridge, MA: Harvard University Press.
- Chamorro-Premuzic, Tomas; Furnham, Adrian (2007): Personality and music: can traits explain how people use music in everyday life? In: *British journal of psychology* 98 (Pt 2), S. 175–185. DOI: 10.1348/000712606X111177.
- Chechak, Derek J.; Dunlop, Judith M.; Holosko, Michael J. (2019): Evaluating Youth Drop-In Programs: The Utility of Process Evaluation Methods. In: *1* 34 (1). DOI: 10.3138/cjpe.42976.
- Cohen, Jacob; Cohen, Patricia; West, Stephan G.; Aiken, Leona S. (2003): Applied multiple regression/correlation analysis for the behavioral sciences. 3rd ed. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Colley, Ann (2008): Young People's Musical Taste: Relationship With Gender and Gender-Related Traits 1. In: *Journal of Applied Social Psychology* 38 (8), S. 2039–2055. DOI: 10.1111/j.1559-1816.2008.00379.x.
- Colley, Helen; Hodkinson, Phil; Malcom, Janice (2003): Informality and formality in learning: A report for the Learning and Skills Research Centre. University of Leeds. Leeds, zuletzt geprüft am 13.01.2020.
- Colson, John F. (2012): Conducting and rehearsing the instrumental music ensemble. Scenarios, priorities, strategies, essentials, and repertoire. Lanham, Md: Scarecrow Press.

- Corenblum, Barry; Marshall, Eric (1998): The band played on: Predicting students' intentions to continue studying music. In: *Journal of Research in Music Education* 46 (1), S. 128–140. DOI: 10.2307/3345765.
- Crooke, Alexander H. D. (2016): Extrinsic versus intrinsic benefits: Challenging categories used to define the value of music in schools. In: *Voices: A World Forum for Music Therapy* 16 (2), S. 1–14. DOI: 10.15845/voices.v16i2.875.
- Crowther, R. D.; Durkin, K. (1982): Sex- and Age-Related Differences in the Musical Behaviour, Interests and Attitudes Towards Music of 232 Secondary School Students. In: *Educational Studies* 8 (2), S. 131–139. DOI: 10.1080/0305569820080206.
- Davidson, Jane W.; Sloboda, J. A.; Howe, M. J. A. (1995): The Role of Parents and Teachers in the Success and Failure of Instrumental Learners. In: *Bulletin of the Council for Research in Music Education* (127), S. 40–44. Online verfügbar unter http://www.jstor.org/stable/40318764.
- Dingle, Genevieve A.; Gleadhill, Libby; Baker, Felicity A. (2008): Can music therapy engage patients in group cognitive behaviour therapy for substance abuse treatment? In: *Drug and alcohol review* 27 (2), S. 190–196. DOI: 10.1080/09595230701829371.
- Eccles, Jacquelynne S.; Wigfield, Allan (2002): Motivational beliefs, values, and goals. In: *Annual review of psychology* 53 (1), S. 109–132. DOI: 10.1146/annurev.psych.53.100901.135153.
- Elpus, Kenneth; Abril, Carlos R. (2011): High School Music Ensemble Students in the United States. In: *Journal of Research in Music Education* 59 (2), S. 128–145. DOI: 10.1177/0022429411405207.
- Federal Ministry of Labour and Social Affairs (2017): Life Situations in Germany. The German Federal Government's 5th Report on Poverty and Wealth. Executive Summary. Online verfügbar unter https://www.armuts-undreichtumsbericht.de/SharedDocs/Downloads/Service/Studien/the-german-federalgovernments-5th-report-on-poverty-and-wealth.pdf? blob=publicationFile&v=2.
- Ferchhoff, Wilfried (2016): Jugendkulturen. In: Albert Scherr (Hg.): Soziologische Basics. Eine Einführung für pädagogische und soziale Berufe. Wiesbaden: Springer Fachmedien, S. 157–168.
- Friedemann, Sebastian; Hoffmann, Dagmar (2013): Musik im Kontext der Bearbeitung von Entwicklungsaufgaben des Jugendalters. In: Robert Heyer (Hg.): Handbuch Jugend Musik

- Sozialisation. Wiesbaden: Springer Fachmedien, S. 371–393. Online verfügbar unter https://doi.org/10.1007/978-3-531-18912-3 11.

- Fritzsche, Eva S.; Kröner, Stephan; Pfeiffer, Wolfgang (2011): Chorknaben und andere Gymnasiasten Determinanten musikalischer Aktivitäten an Gymnasien mit unterschiedlichen Schulprofilen. In: *Journal for educational research online* 3 (2), S. 94–118. Online verfügbar unter https://www.pedocs.de/volltexte/2012/5624/pdf/JERO\_2011\_2\_Fritzsche\_Kroener\_Pfeiffe r Chorknaben und andere Gymnasiasten D A.pdf.
- Fritzsche, Eva S.; Pfeiffer, Wolfgang; Kröner, Stephan (2015): Musical elite gymnasia as learning environments and settings for personality development in secondary students? The case of musical self-concept. In: *Psychological Test and Assessment Modeling* (57), S. 236–261. Online verfügbar unter http://www.psychologie-aktuell.com/fileadmin/download/ptam/2-2015 20150624/07 Fritzsche.pdf.
- Ganzeboom Harry B. G.; Treiman, Donald J. (1996): Internationally comparable measures of occupational status for the 1988 international standard classification of occupations. In: *Social Science Research* 25 (3), S. 201–239. DOI: 10.1006/ssre.1996.0010.
- Getz, Laura M.; Chamorro-Premuzic, Tomas; Roy, Michael M.; Devroop, Karendra (2012): The relationship between affect, uses of music, and music preferences in a sample of South African adolescents. In: *Psychology of Music* 40 (2), S. 164–178. DOI: 10.1177/0305735610381818.
- Graham, John W. (2009): Missing data analysis: Making it work in the real world. In: *Annual review of psychology* 60, S. 549–576. DOI: 10.1146/annurev.psych.58.110405.085530.
- Green, Lucy (2002): How popular musicians learn. A way ahead for music education. Abingdon, Oxon, New York, NY: Routledge (Ashgate popular and folk music series).
- Green, Lucy (2008): Music, informal learning and the school: A new classroom pedagogy. Cornwall: Ashgate, zuletzt geprüft am 10.03.2020.
- Grgic, Mariana; Züchner, Ivo (2013): Musikalische Aktivitäten von Kindern und Jugendlichen. In: *Z Erziehungswiss* 16 (3), S. 123–141. DOI: 10.1007/s11618-013-0427-8.
- Grund, Simon; Lüdtke, Oliver; Robitzsch, Alexander (2016): Pooling ANOVA results from multiply imputed datasets. In: *Methodology* 12 (3), S. 75–88. DOI: 10.1027/1614-2241/a000111.
- Hargreaves, David J. (1982): The development of aesthetic reactions to music. In: *Psychology of Music* 1982, S. 51–54.

- Hargreaves, David J.; MacDonald, Raymond; Miell, Dorothy (2005): How do people communicate using music? In: Dorothy Miell, Raymond A. R. MacDonald und David J. Hargreaves (Hg.): Musical communication. Oxford: Oxford Univ. Press, S. 1–26.
- Hargreaves, David J.; North, Adrian C.; Tarrant, Mark (2006): Musical Preference and Taste in Childhood and Adolescence. In: Gary E. McPherson (Hg.): The child as musician. A handbook of musical development. Oxford: Oxford University Press, S. 135–154.
- Hetland, Lois (2000): Learning to make music enhances spatial reasoning. In: *Journal of Aesthetic Education* 34 (3/4), S. 179. DOI: 10.2307/3333643.
- Ho, Wai-Chung (2017): Secondary school students' preferences for popular music and perceptions of popular music learned in school music education in Mainland China. In: *Research Studies in Music Education* 39 (1), S. 19–37. DOI: 10.1177/1321103X17700688.
- Hughes, Rhidian; Huby, Meg (2002): The application of vignettes in social and nursing research. In: *Journal of advanced nursing* 37 (4), S. 382–386. DOI: 10.1046/j.1365-2648.2002.02100.x.
- Jaffurs, Sheri E. (2004): The impact of informal music learning practices in the classroom, or how I learned how to teach from a garage band. In: *International Journal of Music Education* 22 (3), S. 189–200. DOI: 10.1177/0255761404047401.
- Kennedy, Mary A. (2002): 'It's cool because we like to sing': Junior high school boys' experience of choral music as an elective. In: *Research Studies in Music Education* 18 (1), S. 26–37. DOI: 10.1177/1321103X020180010401.
- Keuchel, Susanne (2013): Jugend und Kultur Zwischen Eminem, Picasso und Xavier Naidoo ... In: *Z Erziehungswiss* 16 (3), S. 99–122. DOI: 10.1007/s11618-013-0431-z.
- Kokotsaki, Dimitra; Hallam, Susan (2007): Higher education music students' perceptions of the benefits of participative music making. In: *Music Education Research* 9 (1), S. 93–109.
  DOI: 10.1080/14613800601127577.
- Kröner, Stephan; Dickhäuser, Oliver (2009): Die Rolle von Eltern, Peers und intrinsischem Wert f
  ür die rezeptive hochkulturelle Praxis von Gymnasiasten der Sekundarstufe II. In: Zeitschrift f
  ür Pädagogische Psychologie 23 (1), S. 53–63. DOI: 10.1024/1010-0652.23.1.53.
- Lamont, Alexandra; Hargreaves, David J.; Marshall, Nigel A.; Tarrant, Mark (2003): Young people's music in and out of school. In: *Brit. J. Music. Ed.* 20 (3), S. 229–241. DOI: 10.1017/S0265051703005412.

- Leblanc, A. (1982): An Interactive Theory of Music Preference. In: *Journal of Music Therapy* 19 (1), S. 28–45. DOI: 10.1093/jmt/19.1.28.
- LeBlanc, Albert; Sims, Wendy L.; Siivola, Carolyn; Obert, Mary (1996): Music Style Preferences of Different Age Listeners. In: *Journal of Research in Music Education* 44 (1), S. 49–59. DOI: 10.2307/3345413.
- Litle, Patrick; Zuckerman, Marvin (1986): Sensation seeking and music preferences. In: *Personality and Individual Differences* 7 (4), S. 575–578. DOI: 10.1016/0191-8869(86)90136-4.
- Malcolm, Janice; Hodkinson, Phil; Colley, Helen (2003): The interrelationships between informal and formal learning. In: *Journal of Workplace Learning* 15 (7/8), S. 313–318. DOI: 10.1108/13665620310504783.
- Mantie, Roger; Smith, Gareth Dylan (2017): Grasping the jellyfish of music making and leisure.In: Roger Mantie und Gareth Dylan Smith (Hg.): The Oxford handbook of music making and leisure. Oxford: Oxford University Press (1), 223–240.
- Marzillier, S.; Davey, G. (2005): Anxiety and disgust: Evidence for a unidirectional relationship. In: *Cognition and Emotion* 19 (5), S. 729–750. DOI: 10.1080/02699930441000436.
- McCarthy, James F. (1980): Individualized instruction, student achievement, and dropout in an urban elementary instrumental music program. In: *Journal of Research in Music Education* 28 (1), S. 59–69. DOI: 10.2307/3345053.
- McCown, William; Keiser, Ross; Mulhearn, Shea; Williamson, David (1997): The role of personality and gender in preference for exaggerated bass in music. In: *Personality and Individual Differences* 23 (4), S. 543–547. DOI: 10.1016/S0191-8869(97)00085-8.
- McEwan, Robert W. (2006): Student motivation to participate in an elective classroom music curriculum: A case study of the multi-dimensional aspects of participation and motivation. Doctoral dissertation. University of Tasmania, Tasmania.
- McPherson, Gary E. (2009): The role of parents in children's musical development. In: *Psychology of Music* 37 (1), S. 91–110. DOI: 10.1177/0305735607086049.
- McPherson, Gary E.; McCormick, John (2000): The Contribution of Motivational Factors to Instrumental Performance in a Music Examination. In: *Research Studies in Music Education* 15 (1), S. 31–39. DOI: 10.1177/1321103X0001500105.

- McPherson, Gary E.; Osborne, Margaret S.; Barrett, Margaret S.; Davidson, Jane W.; Faulkner, Robert (2015): Motivation to study music in Australian schools: The impact of music learning, gender, and socio-economic status. In: *Research Studies in Music Education* 37 (2), S. 141–160. DOI: 10.1177/1321103X15600914.
- Medienpädagogischer Forschungsverbund Südwest (Hg.) (2018): JIM-Studie 2018: Jugend, Information, Medien. Basisuntersuchung zum Medienumgang 12- bis 19-Jähriger, zuletzt geprüft am 21.02.2020.
- Mellor, Liz (2013): An investigation of singing, health and well-being as a group process. In: *Brit. J. Music. Ed.* 30 (2), S. 177–205. DOI: 10.1017/S0265051712000563.
- Merkt, Martin; Lux, Sabrina; Hoogerheide, Vincent; van Gog, Tamara; Schwan, Stephan (2020): A change of scenery: Does the setting of an instructional video affect learning? In: *Journal of Educational Psychology* 112 (6), S. 1273–1283. DOI: 10.1037/edu0000414.
- Miranda, Dave; Claes, Michel (2009): Music listening, coping, peer affiliation and depression in adolescence. In: *Psychology of Music* 37 (2), S. 215–233. DOI: 10.1177/0305735608097245.
- Mizener, Charlotte P. (1993): Attitudes of children toward singing and choir participation and assessed singing skill. In: *Journal of Research in Music Education* 41 (3), S. 233. DOI: 10.2307/3345327.
- North, Adrian C.; Hargreaves, David J. (1996): Situational influences on reported musical preference. In: *Psychomusicology: A Journal of Research in Music Cognition* 15 (1-2), S. 30–45. DOI: 10.1037/h0094081.
- North, Adrian C.; Hargreaves, David J. (2000): Musical Preferences during and after Relaxation and Exercise. In: *The American Journal of Psychology* 113 (1), S. 43. DOI: 10.2307/1423460.
- North, Adrian C.; Hargreaves, David J. (2008): The social and applied psychology of music. Oxford: Oxford Univ. Press.
- North, Adrian C.; Hargreaves, David J.; O'Neill, S. A. (2000): The importance of music to adolescents. In: *The British journal of educational psychology* 70 (2), S. 255–272. DOI: 10.1348/000709900158083.
- O'Neill, S. A. (2005): Youth music engagement in diverse contexts. In: Joseph L. Mahoney, Larson W. Reed und Jacquelynne S. Eccles (Hg.): Organized activities as contexts of development: Extracurricular activities, after-school and community programs. Mahwah, NJ [u.a.]: Erlbaum, S. 255–274, zuletzt geprüft am 06.04.2020.

- Penthin, Marcus (2020): Determinanten musikalischer Freizeitaktivitäten im Grundschulalter. Unpublished doctoral dissertation. Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen-Nürnberg.
- Penthin, Marcus; Fritzsche, Eva S.; Kröner, Stephan (2017): Bereichsspezifische Determinanten außerschulischer musikalischer Aktivitäten von Grundschulkindern. In: *Beiträge empirischer Musikpädgaogik* 8, S. 1–30, zuletzt geprüft am 12.03.2019.
- Pfost, Maximilian; Dörfler, Tobias; Artelt, Cordula (2012): Reading competence development of poor readers in a German elementary school sample: An empirical examination of the matthew effect model. In: *Journal of Research in Reading* 35 (4), S. 411–426. DOI: 10.1111/j.1467-9817.2010.01478.x.
- Philipps, Scott L. (2003): Contributing factors to music attitude in sixth-, seventh-, and eighthgrade students. Doctoral dissertation. University of Iowa, Iowa.
- R Core Team (2019): R: A language and environment for statistical computing. Vienna, Austria: R Foundation for Statistical Computing. Online verfügbar unter https://www.R-project.org/.
- Rau, Anna (2016): Nichtformale und informelle Lerngelegenheiten im Zusammenspiel mit familiären Sozialisationsmerkmalen und leistungsrelevanten Einstellungen. Doctoral dissertation. Universität Hamburg, Hamburg, zuletzt geprüft am 17.04.2020.
- Rentfrow, Peter J.; Gosling, Samuel D. (2003): The do re mi's of everyday life: the structure and personality correlates of music preferences. In: *Journal of Personality and Social Psychology* 84 (6), S. 1236–1256. DOI: 10.1037/0022-3514.84.6.1236.
- Rettinger, David A.; Jordan, Augustus E.; Peschiera, Francisco (2004): Evaluating the Motivation of Other Students to Cheat: A Vignette Experiment. In: *Research in Higher Education* 45 (8), S. 873–890. DOI: 10.1007/s11162-004-5952-0.
- Reuveni, Yehudit; Werner, Perla (2015): Factors Associated with Teenagers' Willingness to Volunteer with Elderly Persons: Application of the Theory of Planned Behavior (TPB). In: *Educational Gerontology* 41 (9), S. 623–634. DOI: 10.1080/03601277.2015.1029768.
- Ros-Morente, Agnès; Oriola-Requena, Salvador; Gustems-Carnicer, Josep; Filella Guiu, Gemma (2019): Beyond music: Emotional skills and its development in young adults in choirs and bands. In: *International Journal of Music Education* 37 (4), S. 536–546. DOI: 10.1177/0255761419853634.

- Schwartz, Kelly D.; Fouts, Gregory T. (2003): Music Preferences, Personality Style, and Developmental Issues of Adolescents. In: *Journal of Youth and Adolescence* 32 (3), S. 205– 213. DOI: 10.1023/A:1022547520656.
- Sichivitsa, Veronica O. (2004): Music Motivation. A Study of Fourth, Fifth and Sixth Graders' Intentions to Persist in Music. In: *Contributions to Music Education* 31 (2), S. 27–41. Online verfügbar unter https://www.jstor.org/stable/24126991.
- Sichivitsa, Veronica O. (2007): The influences of parents, teachers, peers and other factors on students' motivation in music. In: *Research Studies in Music Education* 29 (1), S. 55–68. DOI: 10.1177/1321103X07087568.
- Sloboda, John (2001): Emotion, Functionality and the everyday experience of music: Where does music education fit? In: *Music Education Research* 3 (2), S. 243–253. DOI: 10.1080/14613800120089287.
- Soares-Quadros Júnior, João Fortunato; Lorenzo, Oswaldo; Herrera, Lucía; Araújo Santos, Naiara Sales (2019): Gender and religion as factors of individual differences in musical preference. In: *Musicae Scientiae* 23 (4), S. 525–539. DOI: 10.1177/1029864918774834.
- Staudenmaier, Regina (2012): Sportliche Aktivitäten von Grundschulkindern. Entwicklung von Skalen vor dem Hintergrund der Theorie des geplanten Verhaltens. Doctoral dissertation. Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen-Nürnberg.
- Stern, Elliot; Sommerlad, Elizabeth (1999): Workplace learning, culture and performance. London: Institute of Personnel and Development (Issues in people management).
- van Buuren, Stef; Groothuis-Oudshoorn, Karin (2010): MICE: Multivariate imputation by chained equations in R. In: *Journal of Statistical Software*, S. 1–68, zuletzt geprüft am 16.11.2020.
- van Eijck, K. (2005): No More Need for Snobbism: Highbrow Cultural Participation in a Taste Democracy. In: *European Sociological Review* 21 (5), S. 513–528. DOI: 10.1093/esr/jci038.
- Vogt, Jürgen; Heß, Frauke; Brenk, Markus (Hg.) (2014): (Grund-)Begriffe musikpädagogischen Nachdenkens. Entstehung, Bedeutung, Gebrauch. Sitzungsbericht 2013 der Wissenschaftlichen Sozietät Musikpädagogik. Berlin: Lit Verlag.
- Welch, Graham F.; Saunders, Jo; Papageorgi, Ioulia; Himonides, Evangelos (2012): Sex, gender and singing development: Making a positive difference to boys' singing through a national programme in England. In: Scott D. Harrison, Graham F. Welch und Adam Adler (Hg.): Perspectives on males and singing. Dordrecht: Springer Netherlands, S. 27–44.

- Wießnet, Verena; Penthin, Marcus; Fritzsche, Eva S.; Kröner, Stephan (2018): Nicht jedes Kind spielt (irgend-)ein Instrument. In: 1 9, S. 1–12. Online verfügbar unter https://www.bem.info/index.php/ojs/article/download/166/314.
- Wigfield, Allan; Eccles, Jacquelynne S.; Yoon, Kwang Suk; Harold, Rena D.; Arbreton, Amy J. A.; Freedman-Doan, Carol; Blumenfeld, Phyllis C. (1997): Change in children's competence beliefs and subjective task values across the elementary school years: A 3-year study. In: *Journal of Educational Psychology* 89 (3), S. 451–469. DOI: 10.1037/0022-0663.89.3.451.
- Wilson, Alastair; Hunter, Katie; Moscardini, Lio (2020): Widening the gap? The challenges for equitable music education in Scotland. In: *Support for Learning* 35 (4), S. 473–492. DOI: 10.1111/1467-9604.12328.
- Woody, Robert H. (2020): Music education students' intrinsic and extrinsic motivation: A quantitative analysis of personal narratives. In: *Psychology of Music*, 030573562094422.
  DOI: 10.1177/0305735620944224.

# Appendix I

Differentiation of the Setting and Music in the Video Vignettes

		High Culture	Youth Culture		
Setting					
Е	Building	Castle with triumphal arch	Typical youth center with		
		architecture, alliance emblem,	graffiti and an overgrown		
		and columns	concrete wall		
F	Furnishing	Soft colors, targeted lighting,	Bright colors, random light		
		and parquet flooring	sources, and carpeting		
C	Clothing	Greyscale, stylish	Colorful, casual		
L	Leisure Activity	Tennis	Table football		
Maria					
Music	<b>Y 1 Y</b>				
l	Jsed Instruments	Cello, clarinet, djembe, flute,	Keyboard, electric bass,		
		drum, violin, classical guitar,	electric guitar, amplifier,		
		recorder, violin	saxophone		
Е	Background	Cheerful classical music	Electronic pop beat		
N	Ausic				

# Appendix II

# Items on intention to participate

	Strongly	Disagree	Agree	Strongly
	disagree			agree
I would like to participate in this music class.				
I think this class is so great that I would also recommend it to my friends.				
I would skip other scheduled activities for this music class.				
I would rather be at home than at this music class.				
I can hardly imagine anything more boring than being at this music class.				
I would rather go to sports or visit friends than to be at the music class.				

# Items on the manipulation check of the setting

	Strongly	Disagree	Agree	Strongly
	disagree			agree
I would like to spend time at the location where the music class takes place.				
My friends would like to spend time at the location where the music class takes place.				
Young people my age would like to spend time at the location where the music class takes place.				
The location where the music class takes place is typical for young people my age.				

Items on the manipulation check of the music

	Strongly	Disagree	Agree	Strongly
	disagree			agree
I would like to listen to and play this music.				
My friends would like to listen and play this music.				
Young people my age would like to listen to and play this music.				
The music is typical for young people my age.				

#### Figure 1 Variation of one Scene in Each Video Vignette



	M	SD	Range	1	2	3	4	5
1 Setting	.49	.50	0-1					
2 Music	.50	.50	0-1	.00 (.06)				
3 Age	12.95	1.31	10-16	.00 (.06)	.03 (.06)			
4 Gender	.51	.50	0-1	.08 (.06)	.02 (.06)	.00 (.06)		
5 HISEI Quartile	1.51	1.11	0-3	.02 (.06)	05 (.07)	04 (.07)	.07 (.06)	
6 Intention	2.06	.63	1-4	.02 (.06)	.22*(.05)	22*(.08)	.40*(.04)	.04 (.06)

Table 1 Pearson Correlations (with Standard Errors), Means, (Standard Deviations), and Range for all Variables and HISEI Quartile

*Note*. \* *p* < .05.

	Intention to participate				
Determinants	$R^2$	β (SE)			
Step 1	.04 [.01; .10]				
Independent variables					
Setting		.02 (.06)			
Music		.22* (.06)			
Step 2	.24 [.15; .34]				
Independent variables					
Setting		01 (.06)			
Music		.22* (.06)			
Covariates					
Age		22*(.06)			
Gender		.40* (.06)			
HISEI Quartile		.02 (.06)			
Step 3	.25 [.16; .35]				
Independent variables					
Setting		10 (.58)			
Music		.50 (.58)			
Covariates					
Age		21* (.10)			
Gender		.39* (.10)			
HISEI Quartile		18 (.10)			
Interactions					
Setting * Age		.06 (.60)			
Setting * Gender		.02 (.10)			
Setting * HISEI Quartile		.03 (.11)			
Music * Age		50 (.58)			
Music * Gender		03 (.10)			
Music * HISEI Quartile		.34* (.12)			

Table 2 Hierarchical Multiple Regression Analyses Predicting Intention to Participate

*Note.* \*p < .05. *Missing values were estimated via* m = 25 *multivariate imputations by chained* 

equations with mice

## Figure 2



Line Diagram of the Mean Intention to Participate Across HISEI Quartile and Music