DOI 10.20504/opus2023.29.08

Moods, Emotions, and Engagement in a Music Ensemble Course: A Mixed Method Study with Brazilian Undergraduate Students

Anderson Toni
https://orcid.org/0000-0003-0498-8813
(Federal Institute of Education, Science and Technology of Mato Grosso, IFMT / Campus Campo Novo do Parecis / Departamento de Ensino, Campo Novo do Parecis-MT)

Abstract: This study explores the self-reported perception of moods, emotions, and engagement of Brazilian undergraduate students enrolled in a music ensemble course. A mixed method approach was used through a convergent design. Sixteen Brazilian undergraduate students enrolled in a music ensemble course participated in this research. The Present Mood States List (PMSL) was used as a quantitative data collection instrument before and after 15 encounters (14 classes and a final concert). Analysis of quantitative data showed that 15 differences in the mood state values were statistically significant when considering all encounters and 22 differences were statistically significant in specific encounters. The qualitative data collection procedures were (1) the application of a questionnaire on emotions and musical engagement after each encounter and (2) a semi-structured group interview carried out after the fourteenth class. The qualitative data were grouped into four categories: didactics, music repertoire, moods, and data collection. According to the results, participants presented mostly positive mood states and emotions both before and after the encounters. In general, the students' mood states and emotions seemed to influence their musical engagement, and, at the same time, their sense of musical engagement seemed to influence the presence of positive experiences.

Keywords: Mood. Emotion. Engagement. Music Ensemble Course. Music Education.

Estados de ânimo, emoções e engajamento em uma disciplina de prática musical em conjunto: um estudo de métodos mistos com estudantes de graduação

Resumo: Este estudo explora a autopercepção de estados de ânimo, emoções e engajamento de estudantes brasileiros de graduação matriculados em uma disciplina de prática musical em conjunto. Uma abordagem de métodos mistos foi utilizada por meio de um projeto convergente. Dezesseis estudantes de graduação brasileiros matriculados em uma disciplina de prática musical em conjunto participaram desta pesquisa. A Lista de Estados de Ânimo Presentes (LEAP) foi utilizada como um instrumento de coleta de dados quantitativos no começo e no final de 15 encontros (14 aulas e uma apresentação final). A análise dos dados quantitativos mostrou que 15 diferenças foram estatisticamente significativas na comparação dos estados de ânimo quando considerados todos os encontros e 22 diferenças foram estatisticamente significativas em encontros específicos. Os procedimentos de coleta de dados qualitativos consistiram na (1) aplicação de um questionário sobre emoções e engajamento musical no final de cada encontro e em (2) uma entrevista semiestruturada em grupo realizada após a décima quarta aula. Os dados qualitativos foram agrupados em quatro categorias: didática, repertório musical, estados de ânimo e coleta de dados. De acordo com os resultados, os participantes apresentaram majoritariamente estados de ânimo positivos antes e depois dos encontros. De maneira geral, os estados de ânimo e as emoções dos estudantes nas aulas parecem ter influenciado o engajamento musical e, ao mesmo tempo, o engajamento musical parece ter influenciado a presença de experiências positivas.

Palavras-chaves: Estado de ânimo. Emoção. Engajamento. Prática musical em conjunto. Educação musical.

TONI, Anderson. Moods, Emotions, and Engagement in a Music Ensemble Course: A Mixed Method Study with Brazilian Undergraduate Students. *Opus* (Assoc. Nac. Pesqui. Pós-Grad. Música), v. 29, p. 1-19 (página inicial 1, página final 19), 2023. http://dx.doi.org/10.20504/opus2023.29.08
Recebido em 1/4/2022, aprovado em 10/4/2023, publicado em 2/11/2023

Music is a relational human action that can be qualified through the engagement in an activity of music practice, teaching, or learning filled with different affective and social experiences. According to Hallam (2010), since affective experiences have a great impact on engagement in music practice, teaching, and learning, it is necessary to investigate the perception of teachers and students on the role of emotions in music education. It is also worth mentioning that social relationships are a key aspect to qualify the engagement in musical activities (e.g., SMALL, 1998. O'NEILL, 2012, 2016. ELLIOTT; SILVERMAN, 2015). In addition, group musical activities allow a kind of experience sharing that favors a sense of mutual connection in which the affective and social experiences might be shared with others (MITHEN, 2005. LEVITIN, 2006. CROSS, 2016. SAVAGE et al., 2021. TONI; VELOSO, 2022).

Affect is an umbrella term that encompasses different affective phenomena, such as moods, emotions, and feelings. Moods are affective experiences that tend to be less intense than emotions, do not have a fully defined motivating object, and might have a considerably longer duration when compared to other affective experiences (ENGELMANN, 1986, 2002. COLOMBETTI, 2014. JUSLIN, 2019). Emotions, on the other hand, are defined by Elliott and Silverman (2012) as a process that occurs in a certain period of time and presents a multitude of neurochemical and brain sensory systems activation - as well as bodily changes -, which are automatically and often unconsciously triggered both in body and mind as a response to events (e.g., sounds, objects, and social interaction). Emotions underlie and precede feelings, the latter occurring when individuals become aware of their own emotional states (DAMÁSIO, 1994. ELLIOTT; SILVERMAN, 2012, 2015, 2016. JUSLIN, 2016, 2019).

Several studies discuss the need to understand student engagement since some variables may point to both the indicators that qualify it as well as the motivations for starting a given activity (e.g., FREDRICKS et al., 2004. O'NEILL, 2012, 2016). In general, engagement is understood as active participation in an activity that is determined by the quality of behavioral and psychological (cognitive and emotional) dimensions of an individual's experience when performing an action (FREDRICKS et al., 2004. ROSE-KRASNOR, 2009. CHRISTENSON et al., 2012. WANG; DEGOL, 2014. FREDRICKS; HOFKENS; WANG, 2019). Three dimensions are often mentioned to understand student engagement: behavioral, cognitive, and emotional (e.g., FREDRICKS et al., 2004. ROSE-KRASNOR, 2009. CHRISTENSON et al., 2012. KAHU, 2013. FREDRICKS, 2014. FREDRICKS; RESCHLY; CHRISTENSON, 2019). The behavioral dimension is characterized by observable behavioral actions, such as participation in activities, frequency of occurrence, initiating actions, and level of attention. The cognitive dimension can be divided into (1) psychological investment in learning, such as going further than the content addressed, seeking challenges, and dealing with difficulties, and (2) cognitive strategies for learning, such as self-regulated learning and reflection on strategies and purposes. Finally, the emotional dimension presents the individuals' emotional reactions (e.g., joy, sadness, and anxiety), which are capable of characterizing engagement or disengagement in an activity, sense of belonging, social connection between individuals, and other affective and social elements.

There is a wide debate concerning the relationship between motivation and engagement (e.g., APPLETON et al., 2008. MARTIN, 2008. RESCHLY; CHRISTENSON, 2012. REEVE, 2018). One of the most prominent discussions is regarding the dynamic relationship between these two constructs: while the former concerns what moves an individual towards an action, the latter concerns active participation. When addressing the debate on the relationship between motivation and engagement, Bempechat and Shernoff (2012) discuss the influence of other people on individuals' engagement. Furthermore, the authors also

highlight that deep engagement can be related to flow experiences (cf., CSIKSZENTMIHALYI, 1990), since it involves elements such as concentration, interest, and enjoyment.

In this study, musical engagement is understood as the active participation in a musical activity that is determined by the quality of behavioral and psychological (cognitive and emotional) dimensions of an individual's experience when performing an action of music practice, teaching, or learning. The role and presence of musical engagement in different contexts of music making, listening, teaching, and learning are investigated in the literature (e.g., LAMONT, 2011, 2012. O'NEILL; SENYSHYN, 2012. BEINEKE, 2015. RICHMOND et al., 2016. JOSEPH; SOUTHCOTT, 2017. CHEN; O'NEILL, 2020. TONI, 2020. TONI; ARAÚJO, 2021, 2023). Finally, according to O'Neill (2012, 2014, 2016), engagement can be achieved through well-defined, contextualized, interesting, challenging, "real world", interactive, critical-reflexive, and autonomous activities.

The current study addresses the students' self-perceptions of affective experiences and musical engagement. In this sense, the purpose of this research is to explore the self-reported perceptions of moods, emotions, and engagement of Brazilian undergraduate students enrolled in a music ensemble course.

Method

This study was based on a mixed method approach, which is defined by Creswell and Plano Clark (2017) as a study that may involve different phases, and in which researchers collect and analyze quantitative and qualitative data that can be integrated in different ways. A mixed method approach allows multiple ways of seeing, hearing, and making sense of the social world in different study settings (GREENE, 2007. FITZPATRICK, 2016. CRESWELL; PLANO CLARK, 2017). In this research, data were collected using a convergent design, which consists of the simultaneous collection of quantitative and qualitative data during the same research phase (CRESWELL; PLANO CLARK, 2017).

Participants, Context, and Measurements

Sixteen undergraduate students enrolled in a music ensemble course in Curitiba (state of Paraná, southern Brazil) participated in this research. Participants were distributed as follows: fourteen (87.5%) music education students, one (6.25%) music composition student, and one (6.25%) geography student[1]. Regarding the participants' gender, eleven (68.8%) described themselves as cisgender men and five (31.3%) as cisgender women. They were between 17 and 28 years old (M = 20.5. SD = 3.48).

Each class lasted two hours once a week over a period of four months, totaling 15 classes and a final concert. The songs of the *Llibre Vermell de Montserrat* (The Red Book of Montserrat), a 14th century medieval manuscript found in Spain and containing songs in honor of Our Lady of Montserrat, were the central music repertoire studied during class. Vocal warm-ups and collective study, performance, and

[1] The music ensemble course was offered as part of the curriculum of an undergraduate music education program. However, two students attended the classes for reasons related to time constraints (the case of the music composition student) and the desire to enroll in an undergraduate music education program in the future (the case of the geography student).

arrangement of songs and instrumental pieces were the students' main activities. In the sixth class, a guest professor presented a brief historical contextualization of medieval music. Finally, at the end of the semester, the students performed a public musical concert.

On the first encounter, participants answered a profile questionnaire and provided informed consent to participate in the research. All the answers provided by the participants were voluntary and anonymous, and all ethical procedures were followed. Figure 1 presents an overview of the methodological procedures applied in this study.

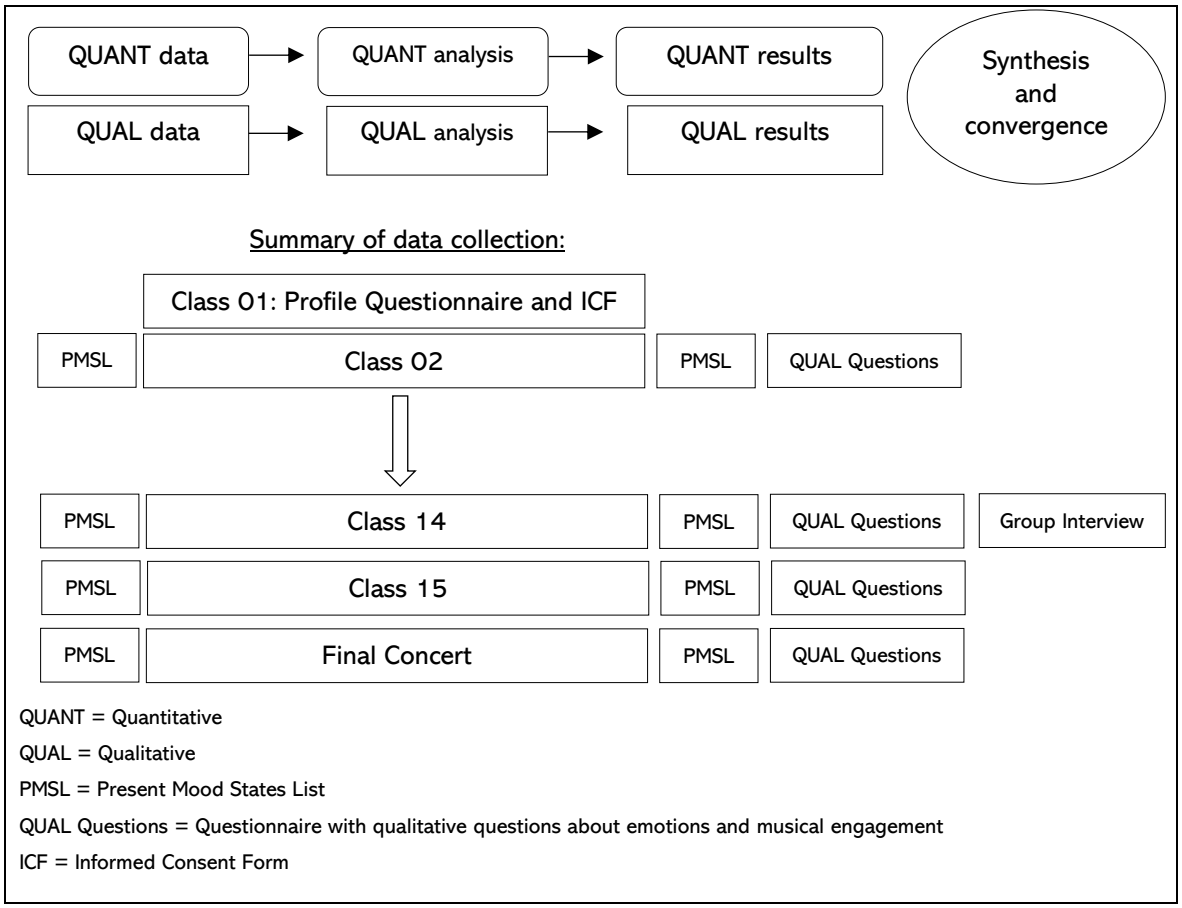


Fig. 1: Overview of the methodological procedures applied in this research.

Quantitative Data Collection – PMSL (Present Mood States List)

Measures and Materials. The Present Mood States List (PMSL)[2] was developed by Engelmann (1986, 2002) to measure the moods of individuals. It is a data collection instrument developed in the Brazilian context, and it uses Brazilian Portuguese expressions to name different mood states. The printed questionnaires presented to the participants contained 40 mood expressions with a scale ranging from 0 to 10.

[2] In Portuguese: Lista de Estados de Ânimo Presentes – LEAP.

Procedures. Participants were instructed to individually answer the PMSL before and after each of the 14 classes and the final concert. The verbal instructions provided were as follows:

> (1) I ask you all to sit, take a pen, and wait for my instructions to individually fill out the questionnaire.
> (2) I will read the initial guidelines in the questionnaire: "Below, you will find a list of expressions capable of identifying your feelings. Use the list to indicate your feelings or moods at the moment you are reading the words. (a) Work quickly. Your first reaction is the best one. (b) Mark an X to quantify from 0 to 10 how much of each of the mood states below you are feeling".
> (3) Be sure to answer the questions on the back of the sheet [instruction for completing the qualitative questions at the end of each encounter].

Analysis. Descriptive and inferential statistical analyses were performed to investigate the occurrence and the differences of mood state values before and after the encounters. However, because the study population was a small group of students, the data related to some mood state values did not approximate a normal distribution. Consequently, the Wilcoxon signed-rank test was used to compare the differences in each mood state before and after all the encounters (general comparisons), and in each encounter individually. Statistical differences were considered significant when the calculated *p* values were below 0.05.

Qualitative Data Collection – QUAL Questions

Measures and Materials. The printed version of the PMSL questionnaire presented at the end of each encounter contained five qualitative questions on its back. The first qualitative question presented the categories "yes" and "no", and asked if something changed the participants' feelings or emotions during the encounter. These categories helped to group the answers to the second question, which asked them what happened during the encounter that may have changed or not their feelings or emotions. The third question also presented the categories "yes" and "no" and asked whether the participants felt musically engaged during that specific encounter. The participants who answered "yes" were asked, in the fourth question, to describe why they felt engaged. Those who answered "no" were asked, in the fifth question, why they did not feel engaged.

Procedures. Since the qualitative questions were presented at the end of each encounter along with the PMSL printed questionnaire, the applied procedures were the same as the ones described in the quantitative data collection subsection. In addition, before answering the qualitative questions, the participants read the following statement: "Considering class presentation, classmates, music repertoire, and your personal circumstances, answer the following questions".

Analysis. To analyze the data obtained from the qualitative questions, a content analysis procedure was applied in three steps: (1) pre-analysis; (2) exploration of the material; and (3) treatment and interpretation (BARDIN, 2016). The participants' answers were transcribed and grouped into three main categories: didactics, music repertoire, and moods. The categories emerged from the collected material, data interpretation, and literature review. The frequency of answers was considered for counting purposes and there was no recurrence of the same answer in different categories. NVivo qualitative data analysis software was used for coding and categorizing the qualitative questions answers.

Qualitative Data Collection – Group Interview

Measures and Materials. A printed interview script and a sound recorder were used for data collection in the group interview. The script contained 21 topics related to the study's objective and theoretical framework. The questions were organized to propose a sequence of themes regarding students' moods, emotions, and engagement.

Procedures. A 30-minute interview with 12 students was conducted at the end of the fourteenth class. The chairs in the room were arranged in a circle so that everyone could observe each other. The participants were informed of the interview recording, and they provided their consent. Since a semi-structured group interview was conducted, the researcher had, in addition to the interview script, materials for taking notes of impressions that could possibly raise new questions during the data collection process.

Analysis. A content analysis procedure was also used to analyze the data collected in the group interview (BARDIN, 2016). The participants' answers were transcribed and grouped into four main categories: didactics, music repertoire, moods, and data collection. The categories also emerged from the collected material, data interpretation, and literature review. The frequency of answers was considered for counting purposes and there was no recurrence of the same answer in different categories. The recording unit chosen for the interview was the theme. Therefore, the frequency of answers was counted according to how many times the same theme recurred during the group interview at different moments. NVivo qualitative data analysis software was used for coding and categorizing the transcription of the group interview.

Results

Quantitative Results – PMSL (Present Mood States List)

	Most Recurrent Mood States	*M*	Least Recurrent Mood States	*M*
Before the Encounters	I am hopeful	5.74	I feel envious	0.19
	I feel calm	5.72	I feel disgusted	0.25
	I feel happy	5.56	I feel humiliated	0.29
	I miss somebody	5.52	I make light of someone	0.41
	I am interested	5.39	I feel angry	0.43
	I feel admiration for someone	4.93	I just got frightened	0.56
	I like somebody	4.17		
	I am tired	4.13		
	I feel a desire	3.97		
	I am sleepy	3.93		
After the Encounters	I feel happy	6.64	I feel disgusted	0.11
	I feel calm	6.10	I feel humiliated	0.17
	I am interested	6.04	I feel envious	0.23
	I feel admiration for someone	5.88	I make light of someone	0.36
	I am hungry	5.36	I feel angry	0.49
	I am hopeful	5.35	I just got frightened	0.52
	I miss somebody	5.14		
	I like somebody	4.30		
	I am tired	4.26		
	I feel proud	3.92		

Table 1: The most and the least recurrent mood states before and after all the encounters (*M* = Sum of the mean value of each mood state before and after all the encounters).

Table 1 presents the most and least recurrent mood states before and after all the encounters. In general, participants presented mostly positive mood states both before and after each encounter. Some of the most recurrent mood states were "I am hopeful", "I feel calm", "I feel happy", and "I am interested". The least recurrent mood states were generally associated with negative expressions, such as "I feel envious" and "I feel disgusted".

Table 2 presents the general comparisons of mood state values before and after all the encounters. The Wilcoxon signed-rank test showed statistically significant differences in 15 mood state values. In general, six mood states associated with positive expressions presented a value increase ("I feel happy", "I am interested", "I feel admiration for someone", "I feel proud", "I feel relieved", and "I am surprised"). Three mood states associated with physiological expressions also presented value increases ("I am hungry", "I am thirsty", and "I am warm"). Finally, six mood states associated with negative or mixed expressions presented a value decrease ("I am reflecting", "I feel an obligation", "I am being careful", "I am afraid", "I am fed up", and "I find something strange").

Mood States	Before the Encounters		After the Encounters		Wilcoxon signed-rank test
	M	*SD*	*M*	*SD*	
I feel happy	5.56	0.96	6.64	0.74	Z = -2.812 **
I am interested	5.39	1.21	6.04	0.92	Z = -2.045 *
I feel admiration for someone	4.93	0.98	5.88	0.82	Z = -3.181 ***
I feel proud	2.51	0.91	3.92	1.37	Z = -3.351 ***
I feel relieved	2.40	0.87	3.77	1.30	Z = -3.237 ***
I am surprised	1.70	1.33	2.68	1.56	Z = -2.045 *
I am hungry	3.70	1.13	5.36	0.80	Z = -3.408 ***
I am thirsty	2.61	0.69	3.49	0.79	Z = -2.442 *
I am warm	2.51	1.90	3.22	1.86	Z = -2.542 *
I am reflecting	3.36	0.90	2.81	0.54	Z = -2.045 *
I feel an obligation	3.32	1.32	2.45	0.83	Z = -3.039 **
I am being careful	3.19	1.10	2.58	0.54	Z = -2.101 *
I am afraid	1.69	0.92	1.02	0.59	Z = -1.988 *
I am fed up	1.59	0.70	0.83	0.65	Z = -3.237 ***
I find something strange	1.56	1.06	0.78	0.44	Z = -2.840 **

Table 2: General comparisons of mood state values before and after all the encounters
(*M* = Sum of mean values of each mood state before and after all the encounters.
SD = Standard Deviation. * $p < .05$. ** $p < .01$. *** $p < .001$).

Table 3 presents the specific comparisons of mood state values before and after each encounter. The Wilcoxon signed-rank test showed statistically significant differences in 22 mood state values. Classes three, four, seven, nine, and eleven presented one statistically significant value increase that was associated with the following mood states: "I am surprised", "I feel happy", and "I am thirsty". Classes 12 and 13 presented one statistically significant value decrease that was associated with the mood state "I am cold". Class two presented two statistically significant differences in the following mood states: "I feel proud" (value increase) and "I am reflecting" (value decrease). Class six presented two statistically significant value increases ("I feel happy" and "I feel relieved") and two statistically significant value decreases ("I find something strange" and "I am afraid"). Finally, the final concert presented six statistically significant value increases ("I feel calm", "I feel relieved", "I feel proud", "I am hungry", "I am thirsty", and "I am surprised"), and three statistically significant value decreases ("I feel an obligation", "I am hopeful", and "I am afraid").

Class	Mood States	Before		After		Wilcoxon signed-rank test
		M	*SD*	*M*	*SD*	
02 *N* = 16	I feel proud	3.44	2.94	6.20	3.03	Z = -2.231 *
	I am reflecting	6.12	3.46	2.73	3.01	Z = -2.910 **
03 *N* = 14	I am surprised	1.07	2.43	3.57	3.18	Z = -2.019 *
04 *N* = 13	I feel happy	4.92	2.99	7.38	2.87	Z = -2.091 *
06 *N* = 13	I feel happy	3.54	3.31	6.72	2.45	Z = -2.513 *
	I feel relieved	1.08	2.14	5.88	3.23	Z = -2.871 **
	I find something strange	4.46	3.93	1.09	1.61	Z = -2.608 **
	I am afraid	3.77	4.23	0.35	1.10	Z = -2.314 *
07 *N* = 14	I am surprised	1.14	1.66	4.00	4.49	Z = -2.138 *
09 *N* = 12	I am surprised	1.58	2.87	4.24	4.30	Z = -2.379 *
11 *N* = 12	I am thirsty	1.67	2.10	4.25	2.80	Z = -2.195 *
12 *N* = 10	I am cold	2.81	3.26	0.20	0.63	Z = -2.117 *
13 *N* = 14	I am cold	1.93	2.89	0	0	Z = -2.536 *
Final Concert *N* = 14	I feel calm	5.21	3.45	8.00	2.48	Z = -2.536 *
	I feel relieved	3.07	3.77	6.71	3.58	Z = -2.001 *
	I feel proud	3.93	3.81	6.79	3.19	Z = -2.069 *
	I am hungry	3.57	2.90	5.86	3.08	Z = -1.995 *
	I am thirsty	1.57	2.62	4.71	3.52	Z = -2.552 *
	I am surprised	0.91	1.80	4.00	3.68	Z = -2.120 *
	I feel an obligation	5.14	3.96	2.14	2.85	Z = -2.145 *
	I am hopeful	6.71	2.84	3.57	4.03	Z = -2.311 *
	I am afraid	3.21	3.98	0.43	1.16	Z = -2.442 *

Table 3: Specific comparisons of mood state values before and after each encounter (*M* = Mean. *SD* = Standard Deviation. *N* = Number of participants. * $p < .05$. ** $p < .01$. *** $p < .001$).

Qualitative Results – QUAL Questions and Group Interview

Table 4 presents the synthesis and convergence of the qualitative results obtained through the qualitative questionnaire (emotions and musical engagement) and the group interview. The subcategories that converged are highlighted in bold.

The "didactics" category presents two subcategories that converged in the three qualitative databases: the way the classes were carried out and practical experiences of music making and listening. The subcategories regarding the autonomy felt by students when learning a task and the presence of a different professor in the sixth class are recurrent in both the qualitative questions about emotions and the group interview. Other two subcategories are present only in the qualitative questions about musical engagement:

Categories	QUAL Questions – Emotions			QUAL Questions – Musical Engagement			Group Interview		
Didactics	**I felt better for the way the class was carried out**	26	60 / 42.3%	**I felt more engaged for the way the class was carried out**	46	109 / 53.7%	**I felt better for the way the class was carried out**	8	20 / 42.5%
	To play a musical instrument and to make music in a practical way as something positive	26		**I participated in the class in a practical way / To play a musical instrument**	42		**Musical engagement in practical experiences of music making and listening**	4	
	Sense of achievement / Autonomy	4					**Freedom to create / Autonomy**	3	
	The presence of a different professor	4					**The presence of a different professor**	3	
				Improvement in technical skills	19				
				Learning a new musical instrument	2		Emotions felt in class provided musical engagement	2	
Music repertoire	**Positive emotions experienced with the music repertoire**	18	59 / 41.5%			44 / 21.7%	**Positive emotions experienced with the music repertoire**	4	13 / 27.7%
	Positive emotions when performing well	28					**Positive emotions when performing well**	1	
				Interest in the music repertoire	38		**Interest in the music repertoire**	6	
	Negative emotions when not performing well or before a performance	13		Learning a new musical piece	6		Visual imagery	1	
							Expression of emotions when performing / Metaphors	1	
Moods	**Mix of positive and negative moods**	4	22 / 15.5%			46 / 22.7%	**Mix of positive and negative moods**	2	12 / 25.6%
				Sense of belonging to the group	35		**Sense of belonging to the group**	5	
	Expression of positive moods	11					External influences on emotions and musical engagement	3	
	Mood improvement	7		Other moods	11		Possible indicators of flow experience	2	
Data collection	-			-			Reports about the data collection instruments	2	2 / 4.2%
Not reported	1			4			-		
Total	142			203			47		

Table 4: Synthesis and convergence of the qualitative results (QUAL questions and group interview).

improvement in technical skills and learning a new instrument. Finally, one subcategory is present only in the group interview: emotions felt during the encounter provided musical engagement. Respectively, some of the students' answers regarding these subcategories are as follows:

> (1) The light way of teaching made me forget about everything that was not [part of] the class.
> (2) In this class, I feel happier because it is dynamic and I get to play an instrument.
> (3) I think it is the fact that we have freedom, you know? We had the medieval music repertoire, but we also had, in all the classes, freedom to create something. And it was really cool because we thought we had to create something related to medieval music, but, at the same time, we were free.
> (4) The professor's presence surprised me. / I think the only different class was the one when that professor came.
> (5) I am musically engaged because I am studying and progressing.
> (6) I felt engaged because I was playing percussion, which is not my instrument.
> (7) I do not know about the others, but I felt happy to come to the classes and make music. I felt more engaged. I felt interested in playing, and then it got better. It is different from coming in and just playing, you know?

The "music repertoire" category presents two subcategories that converged in the qualitative questions about emotions and in the group interview: positive emotions experienced with the music repertoire and positive emotions when performing well. The results from the qualitative questions about musical engagement and the group interview revealed the interest in the music repertoire as a common subcategory. The qualitative questions about emotions present another subcategory on its own: negative emotions when not performing well or before a performance. The qualitative questions about musical engagement also present another independent subcategory, which is learning a new musical piece. Finally, two subcategories are present only in the group interview: visual imagery and expression of emotions when performing (answers related to the use of metaphors). Respectively, some of the students' answers regarding these subcategories are as follows:

> (1) The emotions varied according to the music. Like, for example, I don't know... *Polorum Regina* kind of gives me a feeling of calm, like… of peace, whereas *Summer is Icumen in* is more like a song which gives joy... euphoria.
> (2) Realizing that everything is working out and the fact that I performed as I would have liked to.
> (3) Unexpectedly, I loved the medieval music repertoire and I also feel like improving myself.
> (4) I felt distressed before playing the musical piece.
> (5) We worked on something new, which is very interesting.
> (6) It is as if we were back at that time.
> (7) I think, like I said, each song has a kind of... *Stella Splendens* seems to me like a kind of war song, like... I don't know, I try to express an emotion according to the song, you know? It is hard for me to try to express emotions. I get very focused on technical skills, and... when the way it should be done is shown, I just go and do it. When an idea is presented, I need to express that idea, I have to build it.

The "moods" category presents one subcategory that converged in the qualitative questions about emotions and in the group interview that is related to the mix of positive and negative moods. The sense of belonging to the group is a subcategory recurrent in the qualitative questions about musical engagement and in the group interview. The qualitative questions about emotions present another two subcategories: expression of positive moods and mood improvement. The qualitative questions about musical engagement also present another subcategory, which is the expression of other moods. Finally, two subcategories are present only in the group interview: external influences on emotions and musical

engagement, and possible indicators of flow experience. Respectively, some of the students' answers regarding these subcategories are as follows:

> (1) I am sad because it is over. For me, I think it was my favorite class. I was working and playing, but I was very happy and relaxed. I was enjoying what I was doing.
> (2) I guess it is also related to the team, right? The bond between everybody is really cool.
> (3) People around me were happy and it was contagious.
> (4) The musical synchronization and my participation in the music ensemble course always improve my mood.
> (5) I felt engaged by the musical passion that I have for making music.
> (6) Maybe fatigue got in the way sometimes, but nothing stopped us from doing it, right?
> (7) We did not keep asking ourselves: "What time is it? What time is it?", you know? The classes went by quickly.

The last category, "data collection", covers the students' positive experiences regarding the data collection instruments used in this study. One subcategory is present in the group interview: reports about the data collection instruments. An example of students' answers regarding this subcategory is as follows:

> (1) It was fun filling out the list… Because we better knew ourselves, we were getting to know ourselves.

Discussion

Convergence of Results and General Discussion

This study contributes to understand the self-reported perception of moods, emotions, and engagement of Brazilian undergraduate students enrolled in a music ensemble course. In general, the quantitative and qualitative results converged, which indicates the predominance of positive experiences. In the literature, other studies and discussions also address the dominance of positive emotions in individuals' reports of strong experiences regarding listening to and performing music (e.g., CSIKSZENTMIHALYI, 1990. GABRIELSSON, 2010, 2011. LAMONT, 2011, 2012. ELLIOTT; SILVERMAN, 2015). In addition, affective experiences are crucial to qualify engagement, which makes it an important aspect of the emotional engagement also in musical activity (e.g., O'NEILL, 2012. ELLIOTT; SILVERMAN, 2015. RYAN et al., 2019. LEUNG; CHEUNG, 2020. TONI; ARAÚJO, 2023).

In addition to the statistically significant differences when comparing mood state values before and after the encounters, it is worth acknowledging the experiences which remained at high or low values. One of the most recurrent mood states that appeared before and after the encounters was "I am interested", as well as other positive experiences. Interest, in turn, is an expression generally used to refer to and qualify students' motivation and engagement in an activity (e.g., ROSE-KRASNOR, 2009. CHRISTENSON et al., 2012. RESCHLY; CHRISTENSON, 2012. O'NEILL, 2012. BEINEKE, 2015. RICHMOND et al., 2016). According to O'Neill (2012, 2016), interest is an important aspect of student engagement since maintaining the quality of a musical activity requires educators to come up with collaborative musical processes of practice, teaching, and learning in each educational setting.

Six mood states associated with positive expressions presented a statistically significant value increase in the general comparisons of mood states before and after the encounters. The qualitative results

also indicated positive emotional reports related to interpersonal experiences, music repertoire, making music in a practical way, mood improvement, and teaching and learning processes. In addition, the students' perceptions of their own progress in the music repertoire studied and in their musical skills were reported. These positive experiences are recurrent in the literature addressing teacher influence, interesting classes, social approval and group identification, and emotional experiences in music making, listening, teaching, and learning (e.g., NORTH; HARGREAVES, 2008. HALLAM, 2010. FREDRICKS, 2011. PIANTA et al., 2012. O'NEILL, 2016. ELLIOTT; SILVERMAN, 2015. BEINEKE, 2015. TONI; ARAÚJO, 2021, 2023).

Three mood states associated with physiological expressions presented a statistically significant value increase in the general comparisons of mood states before and after the encounters. Some of the possible influences on the value increase of these mood states are the weather and environmental conditions of the classroom, the duration and intensity of music practice, and the fact that the classes ended in the late afternoon. The qualitative results, in turn, also indicated external influences on the students' self-reported emotions and mood states. These external influences may also have implications in the presence of other mood states, such as "I miss somebody". Since body and mind act together and cannot be considered separately, music practice is related not only to musical material, but also to the environment and its related situations. According to Elliott and Silverman (2015: 74), "musical encounters cannot be adequately conceived without considering listening and making music in relation to places, spaces, actions, and interactions in which and for which they are made and experienced".

Six mood states associated with negative or mixed expressions presented a statistically significant value decrease in the general comparisons of mood states before and after the encounters. Considering these results, it is important that the environment allows the students to feel safe which will direct their experiences towards a transformative engagement in the ways they see and positively transform their circumstances, ideas, and experiences (O'NEILL, 2012, 2014, 2016. SILVERMAN, 2013). However, regarding the mood state "I am reflecting", its decrease in value presents a contradiction when comparing the students' reported experiences with the literature on student engagement (e.g., FREDRICKS et al., 2004. ROSE-KRASNOR, 2009. CHRISTENSON et al., 2012. RAMEY et al., 2015). The thoughtful experience is an important aspect of the cognitive engagement in an activity, and it is accounted for in the qualitative reports of this research (e.g., reflections on the data collection instruments), but there was a decrease in the value of this mood state in the quantitative results.

Twenty-two mood state values presented statistically significant differences in the specific comparisons of mood states before and after each encounter. In general, all the results from the specific comparisons are in agreement with both the general comparisons and the qualitative results. Two encounters (the sixth class and the final concert) presented statistically significant differences in mood state values that will guide some additional discussion.

The sixth class presented two mood states with statistically significant value increases and two mood states with statistically significant value decreases. The qualitative results, in turn, presented reports of mixed emotional experiences and descriptions of "surprise" that were related to the presence of a different professor. According to the ITPRA theory (imagination, tension, prediction, reaction, and appraisal), the expectation is related to the ability to predict future events that may influence the individuals' emotional states (HURON, 2006). On the imminence of an event that unfolds over time, the theory holds that emotional states can be triggered by imagination and tension. On the other hand, based on the

occurrence of a certain event, individuals may also present predictions, reactions, and appraisals that influence their emotional experiences (HURON, 2006). In this research, students may have experienced pre-event emotional states caused by imagining the situation and the tension associated with knowing that a different professor would be present in the class. From the beginning of the class and during its unfolding, predictions, reactions, and appraisals may have been directed to the idea that the event was not as surprising, strange, and frightening as it initially seemed, whereas the positive experiences also increased. Taking into account these experiences in the findings, the literature also addresses the discussion of other people's influence on students' emotions and engagement in different contexts, indicating the important role of teachers, colleagues, and other individuals in an educational, social, and musical setting (e.g., O'NEILL; GREEN, 2004. FREDRICKS, 2011. O'NEILL, 2012, 2016. PIANTA et al., 2012. SCHIAVIO et al., 2019. TAN et al., 2021. TONI; VELOSO, 2022).

Lastly, the final concert presented six mood states with statistically significant value increases and three mood states with statistically significant value decreases. The focus of this discussion is the performance situation present in the students' reports. In this study, the negative experiences were less recurrent and mainly present in reports of experiences related to not performing well and to the situation preceding a performance to an audience. These reports may be related to anxiety when performing, since the performance can be influenced by personal circumstances, such as lack of practice, or psychological issues related to the exposure situation, which may arouse negative emotions before the performance and even a certain level of frustration after it (RAY, 2010). The qualitative results also indicated positive emotional experiences regarding students' self-perception of performing well. In fact, musical performance can be associated with positive emotional responses to the music itself and to the social feedback that emerges from the performance situation (e.g., GOODMAN, 2002. RAY, 2010. LAMONT, 2012. ELLIOTT; SILVERMAN, 2015).

Discussion of Emerging Themes

The professor's role is frequently mentioned in the qualitative results, confirming that one of the reasons the students felt better emotionally and more engaged is the teacher's didactics and positive influence in class. It is worth mentioning that most of the positive experiences gathered in this study are related to the educational context, the use of adequate teaching structures, and the task characteristics in promoting student engagement (e.g., FREDRICKS et al., 2004. FREDRICKS, 2011. SKINNER; PITZER, 2012). In the literature, different authors reinforce that student engagement may be achieved when learning activities are goal-oriented, interesting, contextual, challenging, related to real-world experiences, and also promote social interaction, reflexive practices, and autonomy (CHRISTENSON et al., 2012; O'NEILL, 2016. WILSON, 2019; TONI; ARAÚJO, 2021).

The sense of belonging to the group is present in the qualitative results of this research, indicating that the group seems to have influenced the students' self-reported experiences. It is necessary to consider the collective experience of music practice, teaching, and learning, since strong emotions related to musical activities are often shared experiences (LAMONT, 2012). In addition, music is present in several human activities that involve people's interaction in social groups, so that individuals tend to respond emotionally to different musical activities through their interpersonal relationships (e.g., MITHEN, 2005. LEVITIN, 2006. CROSS, 2016. SAVAGE et al., 2021). Music teaching and learning must be able to empower each individual musically and personally

through transformative spaces, promoting personal and collective development (O'NEILL, 2012, 2016. SILVERMAN, 2013. ELLIOTT; SILVERMAN, 2015). Therefore, the understanding of how the group's behavior and the sense of collectivity contribute to the students' musical and personal development is a relevant aspect of music teaching and learning activities. Another important aspect is the identification of social exclusion behaviors that may lead to the alienation of group members (BOWMAN, 2009).

Motivation and engagement in an educational or musical activity depend on the value students attribute to it and on the recognition of its importance to oneself (e.g., NORTH; HARGREAVES, 2008. CHRISTENSON et al., 2012. REEVE, 2018). In this research, the development of personal and collective identities and the sense of belonging to the group may have influenced the attribution of affective value to the musical activities and to the interpersonal relationships present in the classes, which, in turn, may have influenced the students' positive emotional experiences and engagement. Student engagement involves social aspects generally related to the emotional engagement in different settings (e.g., ROSE-KRASNOR, 2009. KAHU, 2013. WANG; DEGOL, 2014. KAHU; NELSON, 2018). These social aspects are also present in music practice, teaching, and learning, as individuals' musical engagement includes social and affective elements that operate together (ELLIOTT; SILVERMAN, 2012, 2015, 2016. LAMONT, 2011, 2012. O'NEILL, 2012, 2014, 2016. RICHMOND et al., 2016. JOSEPH; SOUTHCOTT, 2017. TONI; ARAÚJO, 2023).

The music repertoire studied in the classes seems to be another relevant element that drove students' interests, emotions, and engagement. Despite lacking a deeper analysis, emotional experiences related to music are present in the qualitative results gathered in this study. Qualitative results show that the students' visual imagery experiences aroused emotions while making and listening to the musical pieces and songs. Visual imagery is an underlying mechanism used to explain the musical emotions aroused in individuals, which correspond to the imagination of visual scenes related to musical sounds (JUSLIN, 2016, 2019). When asked about their attempts to express emotions while performing, students answered that they preferred the professor to talk about the idea of a musical piece or song, so they could metaphorically imagine what to express musically and emotionally. According to these results, the literature indicates that students prefer to use metaphors rather than modeling when considering the expression of emotions in a musical performance (cf., LINDSTRÖM et al., 2003. LAUKKA, 2004).

Finally, the group interview presented some reports about the loss of time and focused attention in music practice, corresponding to two indicators of flow experience (CSIKSZENTMIHALYI, 1990). In addition, most students mentioned the music repertoire as a different musical experience and as something they perceived as a challenge, which is another relevant condition of flow experiences. These results support other studies on self-reported experiences of positive emotions, engagement, and flow in different contexts (e.g., CSIKSZENTMIHALYI, 1990. SHERNOFF; CSIKSZENTMIHALYI, 2009. BEMPECHAT; SHERNOFF, 2012. LAMONT, 2012). Engagement, according to O'Neill (2012), is associated with the participation in an activity that features both psychological and behavioral dimensions, such as loss of time and focused attention. These two aspects correspond to the indicators of flow experience mentioned in the students' reports in this research, as well as other elements that qualified their experiences, such as the attribution of value and the recognition of challenges, skills, and effort.

Limitations, Future Research Directions, and Conclusion

First, just as the questionnaires and the group interview contributed to understanding the educational and musical processes in the music ensemble course investigated, the research may also have influenced the behavior of the students and the professor. Based on this limitation, future research can explore the development of data collection procedures and specific data collection instruments for the measurement of affective experiences and engagement in music classes. Discussions on the measurement of student engagement in the literature may also help improve data collection procedures to better understand the engagement of students and musicians (e.g., FREDRICKS et al., 2004. CHIN; RICKARD, 2012. O'NEILL; SENYSHYN, 2012. FREDRICKS; MCCOLSKEY, 2012).

Second, the context has a major influence on results. In the case of this study, the research was carried out in a Brazilian context of young students who collectively studied a particular music repertoire. Therefore, it is possible to conduct studies with larger groups of music students or musicians (amateurs or professionals). Future studies may also explore individuals of different ages, diverse music repertoire, and other musical and educational contexts (e.g., choir, brass ensembles, music and movement classes). Furthermore, researchers might benefit from exploring the influences that educators or ensemble leaders may have on the participants' affective experiences and musical engagement (e.g., FREDRICKS et al., 2004. FREDRICKS, 2011. SKINNER; PITZER, 2012. JOSEPH; SOUTHCOTT, 2017. FIGUEIREDO, 2019. TAN et al., 2021). Finally, the categories in the qualitative results may also drive future research.

Therefore, the main conclusion of this study is that the students' mood states and emotions seemed to influence their musical engagement and, at the same time, their sense of musical engagement seemed to influence the presence of positive experiences. This conclusion has important implications for musical and educational contexts and may encourage discussions on how the students' experiences are being considered in these contexts. The methodological design, empirical data, and literature/discussions of this research helped to address the purpose of exploring the self-reported perceptions of moods, emotions, and engagement of Brazilian undergraduate students enrolled in a music ensemble course. This research might contribute to reflection among music educators, researchers, and students, as well as among those interested in the possibilities of feeling emotionally and musically engaged both in individual and collective ways.

Acknowledgments

The author thanks all the students and the professor for their participation in this research. The author would also like to thank the Academic Publishing Advisory Center (Centro de Assessoria de Publicação Acadêmica, CAPA – www.capa.ufpr.br) of the Federal University of Paraná (UFPR) for assistance with English language developmental editing.

Funding

The author disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was partially financed by the Coordination for the Improvement of Higher Education Personnel – Brazil (CAPES) – Finance Code 001.

References

APPLETON, James J.; CHRISTENSON, Sandra L.; FURLONG, Michael J. Student Engagement With School: Critical Conceptual and Methodological Issues of the Construct. *Psychology in the Schools*, v. 45, n. 5, p. 369-386, 2008.

BARDIN, Laurence. *Análise de conteúdo* [Content analysis]. São Paulo: Edições 70, 2016. (Original work published 1977).

BEINEKE, Viviane. Ensino musical criativo em atividades de composição na escola básica [Creative music teaching in composition activities at primary school]. *Revista da ABEM,* v. 23, n. 34, p. 42-57, 2015.

BEMPECHAT, Janine; SHERNOFF, David J. Parental Influences on Achievement Motivation and Student Engagement. *In*: CHRISTENSON, Sandra L.; RESCHLY, Amy L.; WYLIE, Cathy. (Eds.). *Handbook of Research on Student Engagement*. New York: Springer, 2012. p. 315-342.

BOWMAN, Wayne. The Community in Music. *International Journal of Community Music*, v. 2, n. 2 & 3, p. 109-128, 2009.

CHEN, Jason C. W.; O'NEILL, Susan A. Computer-Mediated Composition Pedagogy: Students' Engagement and Learning in Popular Music and Classical Music. *Music Education Research*, v. 22, n. 2, p. 185-200, 2020.

CHIN, TanChyuan; RICKARD, Nikki S. The Music USE (MUSE) Questionnaire: an Instrument to Measure Engagement in Music. *Music Perception*, v. 29, n. 4, p. 429-446, 2012.

CHRISTENSON, Sandra L.; RESCHLY, Amy L.; WYLIE, Cathy. (Eds.). *Handbook of Research on Student Engagement*. New York: Springer, 2012.

COLOMBETTI, Giovanna. *The Feeling Body:* Affective Science Meets the Enactive Mind. Cambridge: MIT Press, 2014.

CRESWELL, John W.; PLANO CLARK, Vicki L. *Designing and Conducting Mixed Methods Research*. 3. ed. Los Angeles: SAGE Publications, 2017.

CROSS, Ian. The Nature of Music and Its Evolution. *In*: HALLAM, Susan; CROSS, Ian; THAUT, Michael. (Eds.). *The Oxford Handbook of Music Psychology*. 2. ed. Oxford: Oxford University Press, 2016. p. 3-18.

CSIKSZENTMIHALYI, Mihaly. *Flow:* The Psychology of Optimal Experience. New York: Harper and Row, 1990.

DAMÁSIO, António. *Descartes' Error: Emotion, Reason, and The Human Brain*. New York: Putnam, 1994.

ELLIOTT, David. J.; SILVERMAN, Marissa. Rethinking Philosophy, Re-Viewing Musical-Emotional Experiences. *In*: BOWMAN, Wayne; FREGA, Ana Lucía. (Eds.). *The Oxford Handbook of Philosophy in Music Education*. Oxford: Oxford University Press, 2012. p. 37-62.

ELLIOTT, David. J.; SILVERMAN, Marissa. *Music Matters:* a Philosophy of Music Education. 2. ed. New York Oxford University Press, 2015.

ELLIOTT, David. J.; SILVERMAN, Marissa. Felt Experiences of Popular Musics. In: MCPHERSON, Gary E. (Ed.). *The Child as Musician:* a Handbook of Musical Development. 2. ed. Oxford: Oxford University Press Scholarship Online, 2016. p. 244-264.

ENGELMANN, Arno. LEP - Uma lista, de origem brasileira, para medir a presença de estados de ânimo no momento em que está sendo respondido [LEP - A list, of Brazilian origin, to measure the presence of moods at the time it is being answered]. *Ciência e Cultura,* v. 38, p. 121-146, 1986.

ENGELMANN, Arno. A New Scale for Evaluating Hedonic Percepts. *In*: DA SILVA, José A.; MATSUSHIMA, Eelton H.; RIBEIRO-FILHO, Nilson P. (Eds.). *Annual Meeting of the International Society for Psychophysics 2002*. vol. 18. Rio de Janeiro: International Society for Psychophysics, 2002. p. 191-196.

FIGUEIREDO, Edson A. de F. Associations Between Training, Employment, and Motivational Styles of Brazilian Instrumental Music Teachers. *International Journal of Music Education*, v. 37, n. 2, p. 198–209, 2019.

FITZPATRICK, Kate R. Points of Convergence in Music Education: The Use of Data Labels as a Strategy for Mixed Methods Integration. *Journal of Mixed Methods Research*, v. 10, n. 3, p. 273-291, 2016.

FREDRICKS, Jennifer A. Engagement in School and Out-of-School Contexts: a Multidimensional View of Engagement. *Theory Into Practice*, v. 50, n. 4, p. 327-335, 2011.

FREDRICKS, Jennifer A. *The Eight Myths of Student Disengagement:* Creating Classrooms of Deep Learning. Thousand Oaks: Corwin Press, 2014.

FREDRICKS, Jennifer A.; BLUMENFELD, Phyllis C.; PARIS, Alison. School Engagement: Potential of the Concept, State of the Evidence. *Review of Educational Research*, v. 74, p. 59-119, 2004.

FREDRICKS, Jennifer A.; MCCOLSKEY, Wendy. The Measurement of Student Engagement: a Comparative Analysis of Various Methods and Student Self-Report Instruments. *In*: CHRISTENSON, Sandra L.; RESCHLY, Amy L.; WYLIE, Cathy. (Eds.). *Handbook of Research on Student Engagement*. New York: Springer, 2012. p. 762-782.

FREDRICKS, Jennifer A; RESCHLY, Amy L.; CHRISTENSON, Sandra L. Interventions for Student Engagement: Overview and State of the Field. *In*: FREDRICKS, Jennifer A; RESCHLY, Amy L.; CHRISTENSON, Sandra L. (Eds.). *Handbook of Student Engagement Interventions:* Working with Disengaged Students. Mahwah: Elsevier, 2019. p. 1-11.

FREDRICKS, Jennifer A.; HOFKENS, Tara L.; WANG, Ming-Te. Addressing the Challenge of Measuring Student Engagement. *In*: RENNINGER, K. Ann; HIDI, Suzanne E. (Eds.). *Cambridge Handbook of Motivation and Learning*. Cambridge: Cambridge University Press, 2019. p. 689-712.

GABRIELSSON, Alf. Strong Experiences with Music. *In*: JUSLIN, Patrick N.; SLOBODA, John A. (Eds.). *Handbook of Music and Emotion:* Theory, Research, Applications. 2. ed. Oxford: Oxford University Press, 2010. p. 547-574.

GABRIELSSON, Alf. A *Strong Experiences with Music:* Music Is Much More than Just Music. Oxford: Oxford University Press, 2011.

GOODMAN, Elaine. Ensemble Performance *In*: RINK, John. (Ed.). *Musical Performance*: a Guide to Understanding. Cambridge: Cambridge University Press, 2002. p. 153-167.

GREENE, Jennifer C. *Mixed Methods in Social Inquiry*. San Francisco: Jossey-Bass, 2007.

HALLAM, Susan. Music Education: the Role of Affect. *In*: JUSLIN, Patrick N.; SLOBODA, John A. (Eds.). *Handbook of Music and Emotion:* Theory, Research, Applications. 2. ed. Oxford: Oxford University Press, 2010. p. 791-817.

HURON, David. *Sweet Anticipation:* Music and the Psychology of Expectation. Cambridge: MIT Press, 2006.

JOSEPH, Dawn; SOUTHCOTT, Jane. Older People in a Community Gospel Choir: Musical Engagement and Social Connection. *The Qualitative Report*, v. 22, n. 12, p. 3209-3223, 2017.

JUSLIN, Patrick N. Emotional Reactions to Music. *In*: HALLAM, Susan; CROSS, Ian; THAUT, Michael. (Eds.). *The Oxford Handbook of Psychology of Music*. 2. ed. Oxford: Oxford University Press, 2016. p. 197-213.

JUSLIN, Patrick N. *Music Emotions Explained:* Unlocking the Secrets of Musical Affect. Oxford: Oxford University Press, 2019.

KAHU, Ella R. Framing Student Engagement in Higher Education. *Studies in Higher Education*, v. 38, n. 5, p. 758–773, 2013.

KAHU, Ella R.; NELSON, Karen. Student Engagement in the Educational Interface: Understanding the Mechanisms of Student Success. *Higher Education Research & Development*, v. 37, n. 1, p. 58-71, 2018.

LAMONT, Alexandra. University Students' Strong Experiences of Music: Pleasure, Engagement, and Meaning. *Musicae Scientiae*, v. 15, n. 2, p. 229-249, 2011.

LAMONT, Alexandra. Emotion, Engagement and Meaning in Strong Experiences of Music Performance. *Psychology of Music*, v. 40, n. 5, p. 574-594, 2012.

LAUKKA, Petri. Instrumental Music Teachers' Views on Expressivity: a Report from Music Conservatoire. *Music Education Research,* v. 6, n. 1, p. 45-56, 2004.

LEUNG, Man C.; CHEUNG, Yuen M. R. Music Engagement and Well-Being in Chinese Adolescents: Emotional Awareness, Positive Emotions, and Negative Emotions as Mediating Processes. *Psychology of Music*, v. 48, n. 1, p. 105-119, 2020.

LEVITIN, Daniel J. *This is your Brain on Music:* The Science of a Human Obsession. Boston: Dutton, 2006.

LINDSTRÖM, Erik; JUSLIN, Patrick N.; BRESIN, Roberto; WILLIAMON, Aaron. "Expressivity Comes from Within Your Soul": a Questionnaire Study of Music Students' Perspectives on Expressivity. *Research Studies in Music Education*, v. 20, p. 23-47, 2003.

MARTIN, Andrew J. Motivation and Engagement in Diverse Performance Settings: Testing Their Generality Across School, University/College, Work, Sport, Music, and Daily Life. *Journal of Research in Personality*, v. 42, p. 1607-1612, 2008.

MITHEN, Steven. *The Singing Neanderthals:* the Origin of Music, Language, Mind and Body. London: Weidenfeld and Nicolson, 2005.

NORTH, Adrian C.; HARGREAVES, David J. *The Social and Applied Psychology of Music*. Oxford: Oxford University Press, 2008.

O'NEILL, Susan A. Becoming a Music Learner: Toward a Theory of Transformative Music Engagement. *In*: MCPHERSON, Gary E.; WELCH, Graham F. (Eds.). *The Oxford Handbook of Music Education*. vol. 1. Oxford: Oxford University Press, 2012. p. 163-186.

O'NEILL, Susan A. Mind the Gap: Transforming Music Engagement Through Learner-Centred Informal Music Learning. *The Recorder: Journal of the Ontario Music Educators' Association*, v. 56, n. 2, p. 18-22, 2014.

O'NEILL, Susan A. Transformative Music Engagement and Musical Flourishing. *In*: MCPHERSON, Gary E. (Ed.). *The Child as Musician:* a handbook of musical development. 2. ed. Oxford: Oxford University Press Scholarship Online, 2016. p. 606-625.

O'NEILL, Susan A.; GREEN, Lucy. Social Groups and Research in Music Education: Mapping Music Education Research in the UK. *Psychology of Music*, v. 32, n. 3, p. 252–258, 2004.

O'NEILL, Susan A.; SENYSHYN, Yaroslav. On Meaning Making and Student Music Engagement. *In*: ISME 24th International Seminar on Research in Music Education, 24, 2012, Thessaloniki. Proceedings… Thessaloniki: ISME, 2012, p. 167-176.

PIANTA, Robert C.; HAMRE, Bridget K.; ALLEN, Joseph. Teacher-Student Relationships and Engagement: Conceptualizing, Measuring, and Improving the Capacity of Classroom Interactions. *In*: CHRISTENSON, Sandra L.; RESCHLY, Amy L.; WYLIE, Cathy. (Eds.). *Handbook of Research on Student Engagement*. New York: Springer, 2012. p. 365-386.

RAMEY, Heather L.; ROSE-KRASNOR, Linda; BUSSERI, Michael A.; GADBOIS, Shannon; BOWKER, Anne; FINDLAY, Leanne. Measuring Psychological Engagement in Youth Activity Involvement. *Journal of Adolescence*, v. 45, p. 237-249, 2015.

RAY, Sonia. Considerações sobre o pânico de palco na preparação de uma performance musical [Considerations about stage panic in musical performance]. *In*: ILARI, Beatriz S.; ARAÚJO, Rosane Cardoso de. (Orgs.). *Mentes em música* [Minds in music]. Curitiba: UFPR Press, 2010. p. 153-172.

REEVE, Johnmarshall. *Understanding Motivation and Emotion*. 7. ed. Hoboken: John Wiley & Sons, 2018.

RESCHLY, Amy L.; CHRISTENSON, Sandra L. Jingle, Jangle, and Conceptual Haziness: Evolution and Future Directions of the Engagement Construct. *In*: CHRISTENSON, Sandra L.; RESCHLY, Amy L.; WYLIE, Cathy. (Eds.). *Handbook of Research on Student Engagement*. New York: Springer, 2012. p. 3-19.

RICHMOND, James; MCLACHLAN, Neil M.; AINLEY, Mary; OSBORNE, Margaret. Engagement and Skill Development Through an Innovative Classroom Music Program. *International Journal of Music Education*, v. 34, n. 2, p. 143-160, 2016.

ROSE-KRASNOR, Linda. Future Directions in Youth Involvement Research. *Social Development*, v. 18, n. 2, p. 497-509, 2009.

RYAN, Allison M.; NORTH, Elizabeth A.; FERGUSON, Sharlyn. Peers and Engagement. *In*: FREDRICKS, Jennifer A; RESCHLY, Amy L.; CHRISTENSON, Sandra L. (Eds.). *Handbook of Student Engagement Interventions:* Working with Disengaged Students. Mahwah: Elsevier, 2019. p. 73-85.

SAVAGE, Patrick E.; LOUI, Psyche; TARR, Bronwyn; SCHACHNER, Adena; GLOWACKI, Luke; MITHEN, Steven; FITCH, W. Tecumseh. Music as a Coevolved System for Social Bonding. *Behavioral and Brain Sciences*, v. 44, e59, p. 1-36, 2021.

SCHIAVIO, Andrea; VAN DER SCHYFF, Dylan; GANDE, Andrea; KRUSE-WEBER, Silke. Negotiating Individuality and Collectivity in Community Music: a Qualitative Case Study. *Psycholoy of Music*, v. 47, n. 5, p. 706-721, 2019.

SHERNOFF, David J.; CSIKSZENTMIHALYI, Mihaly. Flow in Schools: Cultivating Engaged Learners and Optimal Learning Environments. *In*: FURLONG, Michael J.; GILMAN, Rich; HUEBNER, E. Scott. (Eds.). *Handbook of Positive Psychology in Schools*. New York: Routledge/Taylor & Francis Group, 2009. p. 131-145.

SILVERMAN, Marissa. A Critical Ethnography of Democratic Music Listening. *British Journal of Music Education,* v. 30, n. 1, p. 7-25, 2013.

SKINNER, Ellen A.; PITZER, Jennifer. Developmental Dynamics of Student Engagement, Coping, and Everyday Resilience. *In*: CHRISTENSON, Sandra L.; RESCHLY, Amy L.; WYLIE, Cathy. (Eds.). *Handbook of Research on Student Engagement*. New York: Springer, 2012. p. 20-44.

SMALL, Cristopher. *Musicking:* the Meanings of Performing and Listening. Middletown: Wesleyan University Press, 1998.

TAN, Leonard; TJOENG, Jeanette; SIN, Hui Xing. "Ngeli": Flowing Together in a Gamelan Ensemble. *Psychology of Music*, v. 49, n. 4, p. 804-816, 2021.

TONI, Anderson. *A relação entre emoção e engajamento em aulas de prática em conjunto em um curso superior de música* [The relationship between emotion and engagement in ensemble classes in a college-level music program]. Dissertation (Master's in Music). Universidade Federal do Paraná, Curitiba, 2020.

TONI, Anderson; ARAÚJO, Rosane Cardoso de. Práticas docentes para o engajamento de estudantes de música em diferentes contextos: um estudo exploratório [Teaching practices for engaging music students in different contexts: an exploratory study]. *In*: XXV Congresso Nacional Associação Brasileira de Educação Musical, XXV, 2021, s/l. *Anais* […]. S/l: ABEM, 2021. s/p.

TONI, Anderson; ARAÚJO, Rosane Cardoso de. Engajamento dos estudantes: uma revisão de fundamentações para práticas educativas e suas aproximações com a educação musical [Student engagement: a review of foundations for educational practices and its approximation with music education]. *Educação (UFSM)*, v. 48, p. 1-29, 2023.

TONI, Anderson; VELOSO, Flávio Denis Dias. *Prática musical em conjunto*: um olhar ao ensino e à aprendizagem [Music ensemble: teaching and learning]. Curitiba: InterSaberes, 2022.

WANG, Ming-Te; DEGOL, Jessica. Staying Engaged: Knowledge and Research Needs in Student Engagement. *Child Development Perspectives*, v. 8, n. 3, p. 137-143, 2014.

WILSON, Emily. *"It's Music and We Came to Play Instruments":* Teaching for Engagement in Classroom Music. Thesis (Doctor of Education). Melbourne Graduate School of Education, University of Melbourne, Melbourne, 2019.

Anderson Toni holds a Doctoral degree in Music (Music Education and Cognition) from the Federal University of Paraná (UFPR). He also obtained a Master's degree in Music and a Bachelor's degree in Music Education (Licenciatura em Música) from the same institution. His academic pursuits center around music education and psychology. He has experience teaching music to children, young people, and adults. Additionally, he has served as a professor in the undergraduate music education program at the State University of Paraná (Campus Curitiba II) and he is a music professor at the Federal Institute of Education, Science and Technology of Mato Grosso (Campus Campo Novo do Parecis). andersontoni12@gmail.com