



## Research article

## Adaptation and destabilization of interpersonal relationships in sport and music during the Covid-19 lockdown

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## ABSTRACT

The 2020 COVID-19 pandemic and the resulting imposition of physical distancing rules had consequences in the domains of music and sport. The present study sought to analyze how the COVID-19 lockdown period affected interpersonal relationships between music teachers and students and sports coaches and athletes. As part of a semi-structured interview, eighteen participants—six athletes and their three coaches and six musicians and their three teachers—were asked to recall how their interpersonal relationships evolved during the lockdown. Findings showed that these changes could be grouped into four dimensions: *establishing a new relationship*; *working on a new form for the relationship*; *developing functional, positive adaptations*; and *developing non-adaptive, detached relationships*. Findings also showed that members of the dyad gave meaning to their interpersonal relationship in a dynamic way, even over such a short time. There were some similarities between the experiences of musicians and athletes, highlighting the importance of a well-functioning dyad and good communication between the parties.

## 1. Introduction

As COVID-19 made its appearance and dramatically spread across the globe in 2020, fewer face-to-face contacts, increased physical distances, and different levels of quarantine were advocated or enforced all around the world. These restrictions were adopted almost universally, proving themselves necessary to limit the spread of the infectious coronavirus disease at a time when no specific antiviral treatment or vaccine was available. The impact which such preventive measures had on everyday life was widely acknowledged, with many inherently social activities—such as sport and music—being postponed or cancelled. Initially, many countries only imposed limitations on major sporting competitions and concerts, but these were then extended to all events which brought together significant groups of people, crowds, audiences, opponents, and teammates. Solitary sporting pursuits and musical practice were allowed because they could be carried out in strict compliance with the relevant “social distancing” recommendations.

The perception of physical, psychological, emotional, and social distancing from others can cause a range of negative emotional experiences. Social psychology explains this as a deterioration of the *social belonging* that lies at the core of what characterizes human beings. As an inherently social species, the feeling of being *with* others is best

understood as a fundamental need that plays out in our everyday life. Indeed, feeling part of one or more groups plays an important role in the construction of a person's social identity. Eisenberger (2012) defines the disruption of social identity as one of the most painful and emotionally unpleasant feelings a person can experience because it involves the risk of damaging one's ability to relate to other individuals. Social belonging and affiliation are also crucial aspects of musicians and learners being able to perform well in various contexts. Recent work on collaborative music teaching methods (e.g., Nielsen et al., 2018), improvised interaction (e.g., Aucouturier and Canonne, 2017), and high-level performers in classical orchestras (Biasutti, 2013) has highlighted the key role of social communication and companionship. In orchestras and ensembles, for example, instrumentalists often report having the sensation that the group shares common aims, artistic ideas, and musical objectives (*ibidem*). The existence of musical groups can thus be understood because each “individual contribution is framed in an overall shared design at a group level which cannot be reduced to merely the sum of the individuals” (Biasutti, 2013, p. 63). This is also expressed in several forms of shared musical behaviors, such as listening to music together or adapting to the other members of the ensemble (see, e.g., Schiavio et al., 2019, 2020).

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Related to social distancing, an important outcome is loneliness, which can be defined as a lack in desired and perceived social relationships (Jeste et al., 2020). Although social distancing is an essential measure to face the current pandemic, continued isolation and loneliness can be severely detrimental for people (Palgi et al., 2020) and may lead to multiple deleterious physical and mental consequences (Heinrich and Gullone, 2006).

It has recently been argued that the activities of athletes and musicians faced with similar challenges during the COVID-19 pandemic (Williamon and Antonini Philippe, 2020). Generally speaking, optimal musical and sport performances must meet the social demands of competition and survive under pressure (Craft et al., 2003). To address these challenges, musicians and athletes nurture their potential by rehearsing or training for many hours per day, making use of their good discipline and organization to repeat, transform, deconstruct and reconstruct the same physical movements until they reach the limits of their physical performance (Kenny and Ackermann, 2015; Ascenso et al., 2017). A musician's everyday life usually involves rehearsals, recitals, solo performances, contests and concerts; similarly, many athletes train daily and participate in different kinds of competitions. For both categories, preparation is essential, and very high levels of performance are expected (Habe et al., 2019). However, none of these activities alone can improve performance. Indeed, musicians and athletes do not spend their life in a vacuum: they are embedded in social events, cultural practices, and conventions that play out at both the individual and societal level. In most cases, cultivating their repertoire of physical movements and actions requires the support of trained professionals. Teacher–student and coach–athlete relationships, therefore, are crucial to practicing and training and to providing students and athletes with the opportunity to give their best.

There is a vast amount of interdisciplinary literature highlighting how fundamental the role of the coach–athlete relationship is for successful sporting performances (Antonini Philippe and Seiler, 2006, 2011; Jowett, 2017); and likewise, for the teacher–student dyad in music education (Biasutti and Concina, 2018; Davidson et al., 1998; Ryan, 2020; Zhukov, 2012). As such, in both contexts, developing meaningful relationships with teachers and coaches can help enhance technical and performance ability (Habe et al., 2019).

For many athletes, for example, the coach–athlete relationship represents a key supporting structure to their training as well as to their social and athletic development (Jowett, 2005; Smith et al., 2007; Huguet and Antonini Philippe, 2011). A harmonious relationship can be associated with positive effects on athletes' performances, perceived satisfaction, mental strength (Antonini Philippe et al., 2011), wellbeing (Antonini Philippe and Seiler, 2006), achievement goals and intrinsic motivation (Adie and Jowett, 2010), passion for the sport (Lafrenière et al., 2008), self-control and fear of failure (Sagar et al., 2010), and interpersonal communication skills (Antonini Philippe et al., 2016). Kristiansen and Roberts (2010) showed that good coach–athlete relationships help cope with stressful experiences during performance contexts.

In the musical field, Siebenaler (1997) analyzed teacher's and student's actions in piano lessons with regard to the student's performance. Lessons associated with high performance levels involved the following aspects: a high percentage of time during which the student listened and watched the teacher, and a significant time during which the teacher played and talked simultaneously while providing positive feedback to their own playing. Furthermore, Davidson et al. (1998) found that personality dimensions such as friendliness on the part of the student's very first teacher seemed to be very important to successful future learning. In addition, social skills were found to play a significant role in predicting a teacher's efficacy (Biasutti and Concina, 2018) as was vitality—the feeling of being alive, vigorous, and energetic. A teacher's vitality is a relevant indicator of how a student's abilities will progress and is crucial to their wellbeing and motivation (Blackwell et al., 2020).

Social psychologists have put forward several theoretical models to enrich our comprehension of the relationships between teachers and coaches and the performer. Antonini Philippe et al. (2011) used Nitsch and Hackfort's (1984) model, which originated in early insights on social constructionism, to offer a detailed exploration of the nature and development of the coach–athlete relationship. This model distinguishes three dimensions of social relations in particular: the *bond* dimension (sympathy and antipathy); the *power* dimension (authority and accountability); and the *co-operation* dimension (task distribution). Jowett and colleagues (Jowett, 2007; Jowett and Cockerill, 2003; Jowett and Ntoumanis, 2004), developed a model where emotions, thoughts, and behaviors were operationalized into four categories: closeness (affective or emotional interdependence); co-orientation (degree of agreement between coach and athlete); complementarity (co-operation and affiliation); and commitment (bonds and connections) (Jowett and Meek, 2000). Poczwadowski and colleagues (Poczwadowski et al., 2002; Poczwadowski et al., 2002) aimed to describe the development of coach–athlete relationships over three phases: the pre-relational phase, the transition/conclusion phase, and the post-relational phase. This model suggests that coaches and athletes can influence each other at both the professional and personal levels as their relationship develops through time.

In line with the frameworks described above, there are many interesting questions about how the extraordinary situation of the COVID-19 lockdown affected these relationships. Our study builds on these previous insights to focus on the evolution of the interpersonal relationships between music students and their teachers and athletes and their coaches.

## 2. Methods

### 2.1. Participants

The present study investigated twelve teacher–student or coach–athlete dyads. A total of 18 individuals (12 males and 6 females) were recruited: six musicians and their three teachers and six athletes and their three coaches volunteered to participate in the study. Their ages ranged between 21 and 62 years old, with an average of 33.50 ( $SD = 10.45$ ). Musicians, athletes and their respective teachers and coaches have been working together for an average of 4 years. Music teachers and musicians played the trumpet (1 teacher, 2 trumpetists), the violin (1 teacher, 2 violinists), and the viola (1 teacher, 2 violists). Coaches and athletes were involved in the three individual sports of swimming (1 coach, 2 swimmers), running (1 coach, 2 runners), and tennis (1 coach, 2 players). These specialties were chosen based on their level of expertise. Musicians were in their last year of a Master's Degree in Music at a music conservatory and earned their living from music. Athletes were university students in sport sciences and held national titles in their age categories. These criteria ensured that participants were among the best athletes and musicians in their country.

### 2.2. Procedure

This study was part of a larger project investigating the domains of music and sport during the COVID-19 lockdown (Biasutti et al., *under review*; Schiavio et al., *under review*). The University of Graz's Research Ethics Committee gave the present investigation ethical approval for the recruitment of participants. The authors obtained written informed consent from all participants attesting that the data collected could be analyzed and discussed for publication without restriction.

The first author conducted semi-structured interviews on an individual basis using video conferencing software (due to the continuing lockdown at the time), and each interview was recorded using a tablet computer. Interviews lasted between 40 and 50 min. Each dyad was asked about different aspects of their relationship during the lockdown period in a separate way. The interview guide composed of ten questions was designed to investigate the interpersonal teacher–student and

coach–athlete relationships and was divided into three sections (the interview guide is available upon request to the first author). The first section included questions about the dyad's general relationship (e.g., “How would you describe your relationship with your student?” and “What specific feelings do you consider helpful in your coach–athlete relationship?”). The second section included questions regarding the quality of the relationship during lockdown (e.g., “Can you describe your role as the athlete in the coach–athlete relationship during the lockdown?” and “How close are you to your teacher?”). The third section included questions about the evolution of the relationship (e.g., “How did your relationship evolve during the lockdown?” and “What was different and what was the same?”). Audio recordings were then transcribed verbatim. Participants took part in the study voluntarily and could stop answering questions at any time if they felt uncomfortable.

### 2.3. Data reliability and analysis

Several measures were taken to ensure data reliability. First, the researchers involved were experienced in conducting qualitative research in music and sports psychology. Second, data were coded independently by each of the three researchers. When the three researchers all disagreed, data were ignored; when two of the researchers agreed, they collectively re-examined the data until a consensus agreement was reached with the third coder (a consensus was always found). This ensured coding reliability and minimized interpretive bias.

No software was employed at any stage of the analysis; all analysis and coding were done by hand. A thematic, inductive approach was used to analyze the data (Braun and Clarke, 2006). First, the transcripts were read thoroughly to allow the researchers familiarize themselves with their content. Next, different *meaning units* were individuated, i.e., parts of the text which represented a single common idea related to a research question (Robson, 2011). After each unit was labelled, the researchers conducted a review of every transcript to check for consistency across the dataset. Finally, the labelled meaning units were grouped into categories and themes with other similar meaning units, and themes were collapsed into general dimensions describing the evolution of the dyads' relationships. The team was engaged in several reflective discussions to ensure agreement in the data analysis. The coding procedure's reliability was assessed using Bellack's agreement rate (Turcotte, 1973) and ranged from 70% to 90% between coders for the different representative sequences and common structures between them. The process of reflection and verification between the researchers continued until every theme was agreed on and verified. To ensure participants' anonymity, they are identified using the following coding: Teacher (T1, T2, T3), Coach (C1, C2, C3), Musician (M1, M2, etc.), and Athlete (A1, A2, etc.).

## 3. Results

Four dimensions describing interpersonal relationships were identified: establishing a new relationship; working on a new form for the relationship; developing functional, positive adaptations; and developing non-adaptive, detached relationships.

### 3.1. Establishing a new relationship

This dimension was characterized by the discovery and development of a new type of relationship—a long-distance relationship involving a profound relational reorganization. Both parties discovered something new about their interaction—something based on the construction of a new positive relationship (although distant and sometimes even quite complicated), especially for musicians. Because of its novelty, the development of this new form of relationship resembled the pattern gone through during a first encounter, and it involved the following three components: making a new acquaintance, the development of boundaries, and the maintenance of the previous relationship.

a) *Making a new acquaintance.* The participants started to live a new form of relationship with their coaches or teachers, which often assumes the colors of novelty, of discovery.

“As soon as we started using Skype, it was like a first meeting, yes, like a first contact. Seeing him remotely for the first time was moving, I felt like touching the screen... And as this was the only possibility, I felt like I was meeting someone new.” (A1)

“Clearly, it felt like it was someone else. I never imagined that one day I'd work remotely with my teacher. But the first time was special, just like making a new acquaintance. We've been working together for a long time, but I'd never seen him outside his conservatory classroom.” (M3)

b) *The development of boundaries.* Very soon, both parts of the dyad discovered unexpected aspects about the other which resulted in an unexpected and unsatisfactory relationship. Students, especially, may suddenly realize their teacher's limits and limitations, particularly with regards to the use of technologies and addressing time management issues.

“I noticed right away how difficult it was for me to get used to the new technology... I had never worked with tools like this before, and at the beginning, it wasn't easy. I canceled meetings because I couldn't connect to the internet, but I also think that I didn't understand how to explain things remotely. I showed her tables with diagrams, but it obviously wasn't very clear to her... and then the way to explain the technique wasn't well adapted for me.” (C1)

“In a word, he was overwhelmed! I had to take the first step because I think he was really uncomfortable with new technologies. But not only that, I think he lost track of time. He arrived late, but above all, I think he didn't know how to maintain contact with me... Yes. I know it was difficult, but everything was out of sync. He asked me to play when the sound wasn't optimal; we could have worked differently.” (M2)

c) *Maintenance of the previous relationship.* Some dyads felt that the new relational setting, mediated by the use of technology, was able to represent a natural continuation of what had been done before the lockdown. Accordingly, it became highly important to maintain dynamics similar to those existing before the lockdown, in both technical and human terms.

“We went back over everything we had done before the lockdown. He asked me questions about what it had been like before... considering that my abilities were still relevant, and that's appreciable... As a result, I started to feel good, less lonely. I could feel his confidence, you know? He talked to me a lot about everything that worked before the lockdown—it was reassuring.” (M1)

“On a purely physical level, what he did was to give me an adapted program that I could still do during the day. I think he was able to maintain the special relationship we had before confinement. He certainly adapted the content of our meetings by putting the emphasis on techniques and rules, but at the same time he spent a lot of time listening to me, to know how I was, how my family was doing.” (A3)

### 3.2. Working on a new form for the relationship

This dimension was characterized by the establishment of a new supportive relationship based on (the search for) new knowledge and strategies. Teachers and coaches are reference figures; they play a crucial role in guiding the player technically and artistically, but they are also involved in the wider personal dynamics surrounding the player, contributing to the player's development of the person as a whole. This is best understood by considering the following three aspects: the establishment of a very close bond between teachers or

coaches and learners; how each member of the dyad takes care of and supports the relationship; and how the guiding figure represented by the teacher or coach has been transformed by the new lockdown relationship.

a) *Establishment of a very close bond.* The sudden virtual approach to sport and musical practice established a more intense bond because the relationship had been modified. This adaptation enabled a communication-based rapprochement of the dyad.

“I think that during the first month, I hardly heard from him and it was difficult, or only a little bit by phone. Then we set up several sessions per week, and this relationship became very strong. We talked a lot—about game patterns, matches—but also about other things.” (A6)

“During the lockdown, I had the opportunity to get to know another student. In fact, I discovered that she was extremely attentive to my remarks, open to criticism, but above all she opened up to me about problems related to music. What's sad, in fact, is that I didn't know her at all [before]... This period of forced distancing allowed me to get closer, to get closer to each other. I think it was really very positive.” (T3)

b) *Nurturing the relationship.* The novel settings in which relationships unfolded seemed to call into question previous dynamics and bring about important changes, particularly with regard to mutual listening and nurturing the relationship.

“What touched me a lot was the way he took care of me. We talked a lot about the instrument, the patterns, but it always started with a ‘How are you doing?’, and also lots of WhatsApp messages to know how I was, because he knew it was hard for me. More training, more effort, all at once, and more goals... I thought he was much more interested in me than before.” (M4)

“It was impossible to play it: the distance situation didn't allow that. So, I had to assume a posture more centered on listening and the relationship... In our classes at the conservatory, we used to play together. Often, at the beginning, he'd play alone, but then we'd spend a large part of the class playing together. All that ended... but it allowed me to take a step back, to give him the confidence to go on his own and, for that, I had to develop strategies to make him feel confident. I think it was far from an easy situation for both of us, but it brought us closer together.” (T2)

c) *Guiding.* For some students, apprehensions were related to concerns about the future. In this period of doubt, teachers and coaches assumed the role of guides to their pupils' future.

“I had been in a dilemma for several months because I had had other proposals, some from clubs that were better and some from clubs that were not as good, but closer to my family. We discussed it. He didn't want to lose me, but he wanted the best for me. He helped me to make the right choice. So it was a different relationship, especially since after the confinement I was going to change club... ” (A5)

“There were exams to prepare for, even though we didn't really know what form they would take... I was pretty much in a state of doubt. Especially being in the last year of the master's degree, I didn't ask a lot of questions... I had taken some auditions, but without even passing the first round... So, we spent a lot of time discussing all this. In fact, it opened my eyes because there are also other possibilities beyond exams. I needed that, at the time.” (M5)

### 3.3. Developing functional, positive adaptations

This dimension was characterized by a dynamic of positive adaptations by the partners in the dyad, resulting in increased adaptive behavior

(observable in improved practice) and increased focus on contextual activity. Here, the relationship was transformed, modulated, and adapted explicitly.

a) *Adaptation at the behavioral level.* The partners in the dyad were forced to rebuild a relationship that had previously been based on the connection between body and instrument. There was a need for a different model by looking for coping strategies to deal with the new situation.

“At the beginning, it was hard because I needed to see him, to exchange with him, but not via a screen... And that was impossible, especially as I knew it was going to last a while... I just had to listen passively; my physique was suddenly put to rest.” (A6)

“In front of the computer, it was very complicated to show the exercises for working on posture. The screen limited us in our work. I then took two screens, zoomed in on the posture and used Skype.” (T1)

b) *Adaptation of content.* Both teachers and learners had to adapt to the situation by proposing different content, but above all, by going back to the basics of their activity. One particular piece of work focused on the activity's fundamentals.

“On the whole, I tried to progress, to adapt myself to everything he proposed to me. We exchanged a lot about the rules, and we did some visualization sessions, especially in relation to technique, for being more aggressive, dropping some race techniques that I had learned, and that helped me a lot in terms of speed... As long as it had a positive influence on me and my performance, I was interested.” (A2)

“I had to revise my program because I couldn't follow what I had planned to. We had concerts planned, fees, travel—he even had a competition to prepare—everything was put aside. I made do, but I remember that at the beginning it wasn't so easy because we had to offer him something else. We worked a lot on technique. I went back to the fundamentals, the basics. Yes, I think we went back to working on the basics.” (T2)

### 3.4. Developing non-adaptive, detached relationships

This dimension was characterized by a change in the coach's attitude and, by inference, of the relationship within the dyad. It involved a destabilization of some of the different psychological aspects of the dyad, as well as feelings of dissatisfaction, almost resembling resignation.

a) *Change in the attitude of the coach or teacher.*

“I couldn't understand why we didn't have the same bond as before the lockdown... We never spoke, no Skype sessions, I wasn't used to a coach like this: I like human contact. I didn't know if what I was doing was bad, what exactly he wanted from me... I felt very distant, and this long-distance relationship didn't motivate me. I don't know if he had family problems, but what I felt was sloppiness. Not only in terms of content but also at a human level. Basically, I told myself that everything he had done before had been insincere.” (A4)

“I never really understood my teacher, but this was even more complicated. No contact at the beginning; then I found his distance courses complicated, as if it was a pain for him. I've often wondered about the meaning of our relationship... During that time, I told myself that our relationship was empty.” (M6)

b) *Destabilization and doubts.* This special period seems to have overwhelmed some musicians and athletes. Doubts appeared, even going so far as to question the pleasure they were getting from the activity.

“For me, it was quite destabilizing not to have serious, sustained follow-up. I had the impression of being abandoned, and I must say that it was very complicated. During this period, I even lost the desire to practice. I asked myself a lot of questions—I was in complete doubt.



At the beginning, I completely stopped doing any sport, then I started again.” (A3)

“I know for sure that I was wasting time, and for me, time is linked to progress and my career. This situation was stressful for me. I had talked about it with friends, who told me to go and see another teacher.” (M4)

c) *Resignation*. The impossibility of creating a bond induced a certain regression among learners, as well as psychological wear and tear. A spirit of resignation developed during this period.

“I knew it was my last year with him, too complicated our relationship. It was leading nowhere.” (A6)

“I told myself that this health emergency had opened my eyes. There was nothing between us, nothing. Or maybe there never had been... I suffered during those months, from the distance and the isolation from my teacher... I am still waiting.” (M2)

#### 4. Discussion

This study aimed to explore how interpersonal relationships between music teachers or sports coaches and their learners evolved during the lockdown period. The findings showed that dyads gave meaning to their interpersonal relationships in a dynamic way, and contained elements that were constantly moving during this period. There were, therefore, significant components of their interpersonal relationships that contributed to the construction and deconstruction of those relationships throughout the COVID-19 lockdown. Although each situation was unique, because of the context and meaning that subjects gave to their relationship, we were able to identify common themes and the emergence of general behaviors related to those interpersonal relationships.

Findings showed that two relational themes were linked to the construction and deconstruction of these relationships. The first theme was characterized by an adaptive relationship composed of the dimensions of discovering a new form of relationship, establishing that relationship, and functional adaptations between the partners in the dyad. Adaptive relationships involved good interaction and a new style of teaching or coaching that was adapted to the learner's characteristics. Adaptive relationships led to feelings of satisfaction and fulfillment when the learner perceived this context to be optimal. The perception of having a confident coach or teacher was one of the elements characterizing the adaptive phase. The aspect of communication also emerged from every experience. Indeed, the way the coach interacted verbally with the athlete represented one of the significant elements for the learner and characterized the relationship either positively or negatively. We found the same process happening with musicians. This can be expressed in several ways: the presence of feedback about the practice, encouragement, criticism, or the explanation of technical or tactical choices. Regarding this component, associations could be established with other studies (Antonini Philippe et al., 2011; Antonini Philippe and Seiler, 2006; Meissner & Timmers, 2020; Jowett and Cockerill, 2003) that have shown communication to be one of the elements which musicians and athletes define as essential to a good interpersonal relationship. The playing time which a teacher allocates to a musician is also a recurring factor influencing students' satisfaction (Siebenaler, 1997). The interactional character of teachers and coaches was highlighted as a factor involving their predisposition to listening, supportiveness, or even to being present as a reference point: these all appeared to be important measures of a healthy relationship. In a positive relational pattern, findings showed that there were nevertheless some difficulties related to the content of practice that were associated with performance management. This particular context led subjects to set up mechanisms of adaptation to their coach or teacher's requirements in order to overcome the problem. Adaptation remained a fundamental construct necessary to

ensure equilibrium within the dyad (Pennings et al., 2018; Schinke et al., 2012).

The second relational theme was defined by a maladaptive form of relationship having an impact on the performers' practice. There was clearly a difference between musicians and athletes concerning this theme, including changes in the coach or teacher's attitude, destabilization, and resignation. It can be noted that a bad relationship in terms of communication—especially concerning exchanges with teachers and their opinions—did not have a negative impact on the perception of the musicians' practice of the student. Many quotes stated that a lack of interaction or a feeling of uncertainty about the teacher's opinions did not affect the student's performance. The resulting distancing from the teacher caused a reflection on the relative importance of the relationship and the emergence of a more inward-looking attitude on the part of the musician, who thus decided to focus on their performance. The learning process itself seemed to become an autonomous act (Creech and Hallam, 2003). In accord with (Schinke et al., 2012), the present study's students and athletes could be characterized as proactive learners, inspired to participate in activities autonomously. Those authors explained that this was possible when the performer was passionately involved in their activity. Moreover, developing a student's autonomy can lead to them having a better understanding of their own learning process and, in consequence, developing more lasting forms of learning (McPherson et al., 2016).

Another characteristic of the maladaptive form of the relationship is its total breakdown caused by the relational distance and seemingly reflected in a negative way in athletes' practice. That theme seemed to appear essentially in the domain of sport. One explanation involves the following difference between athletes and musicians: the latter, in most cases, had the possibility to continue playing music and rehearsing whereas many athletes had to face important changes in connection with reduced space and the adaptation of their sports practice. The causes of such situations seemed to be found in the decrease—or complete disappearance—of the time that the coach dedicated to their athlete, which led to a decrease in their motivation. This pattern was also affected by the change in the coach's behavior, which implied a psychological destabilization of the athlete's level of commitment. This appeared to show the dissonance between the different protagonists' desires. Various studies (Huguet and Antonini Philippe, 2011; Antonini Philippe et al., 2011) have highlighted the importance of interpersonal relationships in the quest for performance, including a shared commitment to optimization. These studies underlined the coach's decisive influence on the outcome of the athlete's personal efforts by their influence on the athlete's passion for practicing. A maladaptive form of relationship, on the other hand, seemed to push athletes into a state of frustration and brought out their need to change club in order to reverse the negative trend which they found themselves following.

The present study had some limitations with regard to its methodology. Participant sampling might have been biased by the difficulties in comparing the domains of sport and music. Indeed, there is no ranking that can categorize high-level musicians as there is in the world of sport. However, we took the precaution of choosing experienced musicians, so that we could compare them with athletes. Also, only nine dyads participated in the study, therefore, it is impossible to generalize these results. Another limitation concerns the lack of measurement of certain variables such as quality of the relationship before COVID-19, stress, uncertainty of the future, which could have some influence on the relationship studied.

In conclusion, this qualitative study provided some preliminary insights into how interpersonal relationships in the domains of music and sport evolved during the COVID-19 lockdown. Here, the most interesting aspect was the different patterns characterizing the domains of music and sport, which helped us to draw out some distinctions and outline domain-specific behaviors. The extent of the evolution in these relationships, in just a couple of months, was significant and very interesting. There were also some points of similarity between musicians and athletes. The

present study revealed that mutual recognition between the coach or teacher and the athlete or musician is fundamental to a well-functioning relationship, and hence to performance. This recognition is directly associated with the emotional needs of the learner and thus requires constant maintenance and nurturing from both sides.

## Declarations

### Author contribution statement

R. Antonini Philippe: Conceived and designed the experiment; Performed the experiment; Analyzed and interpreted the data; Wrote the paper.

A. Schiavio, M. Biasutti: Conceived and designed the experiment; Analyzed and interpreted the data; Wrote the paper.

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### Competing interest statement

The authors declare no conflict of interest.

### Additional information

No additional information is available for this paper.

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