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Music improvisation: A study on communication and social interactions

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Background

In music therapy, improvisation is understood as a combination of sounds created within a frame with a beginning and an ending (Aldridge, 1998; Wigram, 2004). It is one of the most widely used interventions for establishing non-verbal communication between therapist and client, or therapist and educational/therapeutic group. This approach focuses on the processes rather than the products of improvisation (Alexakis et al., 2013). Clinical and non-clinical improvisation in music therapy allows participants and clients to use musical expressive means for nonmusical proposes, according to their own capabilities and technical abilities, cultural background, and musical preferences (Carroll & Lefebvre, 2013; Seabrook, 2018; Wigram, 2004).

Some studies rooted in educational, musical, social, and philosophical orientations describe musical improvisation as interactive music-making with special attention given to social interaction (Procter, 2016). In this sense, several authors argue that musical interactions in these experiences could provide knowledge about the nature of human social interactions (D´Ausilio et al., 2015; Moran, 2014; Walton et al., 2018). This knowledge could contribute substantially to understanding improvisation in music therapy.

Aims

This research aims to compare music improvisation with a non-improvised music performance activity in order to identify differences concerning variables of communicative and social interactive musical processes between them. For this purpose, six analytical categories were generated to evaluate different aspects of the social interrelation and nonverbal communication of the participants (groups of younger and older adults) during two different musical experiences: improvisation and imitation.

Methods and results

One hundred and thirty-one young adults (43% female) aged between 18 and 40 years (27.53 ± 0.83) and 110 older adults (73% female) aged 60 or over (72.5 ± 0.81), participated in one of two types of music activities: group musical improvisation or group rhythmic imitation.

Participants worked in groups of 8 to 13 people (younger and older adults worked separately). Each group listened to a rhythmic pattern played live by the music therapist and when they wished started to participate. In music improvisation task group, participants generated and combined musical patterns with instruments, voices, or bodies, spontaneously creating music according to the context provided by the base pattern. In rhythmic imitation task group participants started to imitate the pattern as faithfully as possible, avoiding variations or new musical ideas with instruments, voices, or bodies. Both tasks lasted 3 minutes.

Eight group musical improvisation tasks were compared with eight group rhythmic imitation tasks, according to six categories of analysis: visual contact, body movement, type of production, music interaction, vocal aspect, and leadership. Also, categories were comparing across time (Minute 1 vs Minute 2 vs Minute 3).

Statistical analysis showed greater social interaction among the participants in improvisation groups than in rhythmic imitation groups, in both age ranges (young and older samples). The improvisation group established more visual contact with other partners, moved more freely, showed greater whole-group involvement in the musical production, displayed more instances of successive production, talked more during the performance and shows a greater number of participants acted as guides for the music production than the imitation group ($p < .001$). When comparing the behavior over time, observations of the variables analyzed increased their frequencies ($p < .001$).

Discussion and conclusion

Music improvisation have been recognized as self-organizing performances emerging from the collective actions and interactions of the entire group (Sawyer, 2008; Siljamäki, 2022). From an ecological perspective, musical improvisation is considered a social act itself, which involves the personal contribution of two or more persons—each responding musically to the others—creating music spontaneously in real time (MacDonald & Wilson, 2014).

Our results show that elements of non-verbal communication and interaction would emerge more frequently during an improvisation - understood into the music therapy setting- than an imitation task. We found that the improvisers exhibited greater social involvement when we proposed “creating something musical as a group”.

The present study provides knowledge about the nature of human social interactions through music improvisation analysis. Different theories about social interaction, like enactivism (De Jaegher et al., 2010), could offer alternative explanation for understanding the processes of interaction and creation during music therapy improvisation. This will be considered in future studies.

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