EDUCAÇÃO E DESENVOLVIMENTO SOCIAL
EDUCATION AND SOCIAL DEVELOPMENT
EDUCACIÓN Y DESAROLLO SOCIAL

millenium 61

Millenium, 2(10), 61-67.

O CORPO E O SOM COMO ESTIMULADORES DOS PROCESSOS INTERATIVOS EM JOVENS COM NECESSIDADES EDUCATIVAS ESPECIAIS

THE BODY AND SOUND AS STIMULATORS OF INTERACTIVE PROCESSES IN YOUNG PEOPLE WITH SPECIAL EDUCATIONAL NEEDS

EL CUERPO Y EL SONIDO COMO ESTIMULADORES DE LOS PROCESOS INTERACTIVOS EN JÓVENES CON NECESIDADES EDUCATIVAS ESPECIALES

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RECEIVED: 08th July, 2019
ACCEPTED: 11th September, 2019

Lamounier, S. & Lopes, P. F. (2019).
The body and sound as stimulators of interactive processes in young people with special educational needs. *Millenium*, 2(10), 61-67.
DOI: https://doi.org/10.29352/mill0210.06.00252

RESUMO

Introdução: Inserido no âmbito do desenvolvimento de um instrumento musical digital, o Digital Sock, apresentamos neste documento os resultados obtidos da análise do ciclo interativo psicopedagógico no qual investigamos o instrumento como ferramenta de estimulação sonora em processos interativos entre corpo-instrumento-ambiente.
Objetivos: Análise do ciclo de interação psicopedagógica que investiga a relação entre corpo e som, com o novo instrumento, o Digital Sock, como dispositivo estimulador de processos comunicacionais.
Métodos: A metodologia utilizada para esta investigação foi a investigação-ação. Na primeira fase, realizamos uma intervenção psicopedagógica com jovens em Educação Especial. Na segunda fase, realizamos um Estudo de Caso com um jovem diagnosticado com Perturbação do Espectro do Autismo. Para a recolha dos dados utilizámos os meios audiovisuais e o diário de campo, a entrevista focalizada, a observação participante e a análise documental. Para a interpretação dos dados realizámos a análise do discurso e a análise de conteúdo. O modelo de atuação utilizado durante as duas fases da intervenção prática priorizou a integração da música e do movimento corporal (Dalcroze, 1920; Pederiva, 2004; Santiago, 2008; Storolli, 2011); a formação do gesto cénico (Laban, 1978; Katz, 2005; Miller, 2007; Greiner & Amorim, 2010; Miller, 2012; Amaral, 2015; Roquet, 2017); a prática lúdica (Lapierre, 1982; Fonseca, 2001; Acouturier & Lapierre, 2004; Vieira, Batista & Lapierre, 2005); a improvisação criativa (Nordoff & Robins, 1959; Bruscia, 1999) e a crença de que o som e a música permitem a comunicação entre pares (Benenzon, 1981; Whipple, 2004).
Resultados: A relação corpo-som como meio de expressão demonstrou ser capaz de estimular processos criativos e o desenvolvimento do pensamento crítico e reflexivo. Todas as atividades desenvolvidas durante as reuniões priorizaram a relação corpo-som. A análise das narrativas mostrou que a mensagem propagada através da meia (a sonoridade) era entendida como uma reação ao som ouvido durante o exercício (com codificação e decodificação individual) e expressa através dos olhos das mãos, expressão facial e equilíbrio corporal - movimentos subtis, mais visíveis que os movimentos amplos.
Conclusões: A interpretação dos dados levou-nos a concluir que o Digital Sock, percebido como ferramenta psicopedagógica de estimulação sonora e gestual, favorece o desenvolvimento de narrativas cénico-musicais em jovens com Necessidades Educativas Especiais.

Palavras-chave: Necessidades Educacionais Especiais; Estímulo Sonoro-Motor; Som Corporal; Interatividade; Digital Sock

ABSTRACT

Introduction: Inserted in the development of a digital musical instrument, the Digital Sock, we present in this document the results obtained from the analysis of the psycho-pedagogical interactive cycle in which we investigate the instrument as a sound stimulation tool in interactive processes between body-instrument-environment.
Objetives: Analysis of the psych pedagogical interaction cycle that investigates the relationship between body and sound, with the new instrument, the Digital Sock, as a stimulating device for communicational processes.
Methods: The methodology used for this investigation was action research. In the first phase, we conducted a psychopedagogical intervention with young people in Special Education. In the second phase, we conducted a Case Study with a young man diagnosed with Autism Spectrum Disorder. For data collection we used audiovisual media and field diary, focused interview, participant observation and document analysis. For the interpretation of the data we performed the discourse analysis and the content analysis. The acting model used during the two phases of practical intervention prioritized the integration of music and body movement (Dalcroze, 1920; Pederiva, 2004; Santiago, 2008; Storolli, 2011); the formation of the scenic gesture (Laban, 1978; Katz, 2005; Miller, 2007; Greiner & Amorim, 2010; Miller, 2012; Amaral, 2015; Roquet, 2017); ludic practice (Lapierre, 1982; Fonseca, 2001; Acouturier & Lapierre, 2004; Vieira, Batista & Lapierre, 2005); creative improvisation (Nordoff & Robins, 1959; Bruscia, 1999) and the belief that sound and music enable peer communication (Benenzon, 1981; Whipple, 2004).
Results: The body-sound relationship as a means of expression has shown to be able to stimulate creative processes and the development of critical and reflexive thinking. All the activities developed during the meetings prioritized the body-sound relationship. The analysis of the narratives showed that the message propagated by the sock (the sonority) was understood as a reaction to the sound heard during the exercise (with individual encoding and decoding) and expressed through the eyes of the hands, facial expression and body balance - subtle movements, more visible than the broad movements.
Conclusions: The interpretation of the data led us to conclude that Digital Sock, perceived as a psychopedagogical tool for sound and gestural stimulation, favours the development of scenic-musical narratives in young people with Special Educational Needs.

Keywords: Special Educational Needs; Sound-Motor Stimulus; Body Sound; Interactivity; Digital Sock

RESUMEN

Introducción: Insertado en el desarrollo de un instrumento musical digital, el Digital Sock, presentamos en este documento los resultados obtenidos del análisis del ciclo interactivo psicopedagógico en el que investigamos el instrumento como una herramienta de estimulación del sonido en procesos interactivos entre el cuerpo-instrumento-ambiente.
Objetivos: Analysis of the psych pedagogical interaction cycle that investigates the relationship between body and sound, with the new instrument, Digital Sock, as a stimulating device for communicational processes.
Métodos: La metodología utilizada para esta investigación fue la investigación de acción. En la primera fase, realizamos una intervención psicopedagógica con jóvenes en Educación Especial. En la segunda fase, realizamos un estudio de caso con un joven diagnosticado con trastorno del espectro autista. Para la recolección de datos, utilizamos medios audiovisuales y diarios de campo, entrevistas enfocadas, observación participante y análisis de documentos. Para la interpretación de los datos realizamos el análisis del discurso y el análisis de contenido. O modelo de atuação utilizado durante as duas fases da intervenção prática priorizou a integração da música e do movimento corporal (Dalcroze, 1920; Pederiva, 2004; Santiago, 2008; Storolli, 2011); a formação do gesto cénico (Laban, 1978; Vianna, 1990; Godard, 1995; Katz, 2005; Miller, 2007; Greiner & Amorim, 2010; Miller, 2012; Amaral, 2015; Roquet, 2017); a prática lúdica (Lapierre, 1982; Fonseca, 2001; Acouturier e Lapierre, 2004; Vieira, Batista e Lapierre, 2005); a improvisação criativa (Nordoff & Robins, 1959; Bruscia, 1999) e a crença de que o som e a música permitem a comunicação entre pares (Benenzon, 1981; Whipple, 2004).
Resultados: Se ha demostrado que la relación cuerpo-sonido como medio de expresión puede estimular procesos creativos y el desarrollo del pensamiento crítico y reflexivo. Todas las actividades desarrolladas durante las reuniones priorizaron la relación cuerpo-sonido. El análisis narrativo mostró que el mensaje propagado a través del calcetín (el volumen) se entendió como una reacción al sonido escuchado durante el ejercicio (con codificación y decodificación individual) y se expresó a través de los ojos de las manos, la expresión facial y el equilibrio corporal: movimientos sutiles , más visible que los movimientos amplios.
Conclusiones: La interpretación de los datos nos llevó a concluir que Digital Sock, percibido como una herramienta psicopedagógica para la estimulación sonora y gestual, favorece el desarrollo de narrativas escénicas y musicales en jóvenes con necesidades educativas especiales.

Palabras Clave: Necesidades Educativas Especiales; Estímulo Sonoro-Motor; Sonido Corporal; Interactividad; Digital Sock

INTRODUCTION

Inserted within the scope of the development of the digital musical instrument, called Digital Sock - a tool which sonic control is performed through the movement of the feet, and the interactional process involving the sound control, this document records the first results obtained from the analysis of the psych pedagogical interaction cycle that investigates the relationship between body and sound, with the new instrument as a stimulating device for communicational processes.
The analysis of the psycho-pedagogical interaction cycle was organized in two main phases:
a) The first phase refers to a psych pedagogical intervention with youngsters with special educational needs, in which we investigate how body movement and sound stimulus can benefit the development of communication and expression in children and young people with different diagnoses in special education.
b) The second phase refers to a Case Study, conducted with a person with 21 years old diagnosed with Autism Spectrum Disorder (non-verbal). This phase aims to analyze the stimulating capacity of Digital Sock during relationships and is subdivided into two other stages:

- sound and motor sensitization, in which we perform different directed activities, involving the body and the sound, in search of the creation of a relational link between intermediate / participant;
- sound narratives and Digital Sock, when we explore different body and musical narratives involving the Digital Sock.

In both phases of the research, the methodology used to collect / analyze data was participatory observation (in context) and content analysis (audiovisual material collected during the sessions). Specifically, in the Case Study, it was also object of analysis the testimonies written by the youth about the experience, collected during the psychopedagogical intervention.
The interpretation of the data was performed through the analysis of the movements, taking into account the spontaneous choice of the sound, sensory or sensory-musical stimulus, the gestural manifestation prioritized during the interactional processes and the main theories studied, among them: the formation of the gesture scenic (Laban, 1978); (Godard, 1995, after Michel, M. & Ginot, I., 1995); the idea that the body, being an instrument of of communication of its own, is able to position itself critically in the face of everyday events (Katz & Greiner, 2005); the integration of music and body movement (Dalcroze, 1920); the playful practice (Lapierre, 1982), creative improvisation (Nordoff & Robins, 1971, 1977, 2007) and the belief that sound and music allow peer communication (Benenzon, 1981).

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In this article we will address the psychopedagogical intervention in its two phases, highlighting the methodology used, the data collected and the analysis performed. In the final part of the article, we will give an account of the results and conclusions of this paper.

1. METHODS

1.1 The Body and Sound: identifying interactions and new languages

The first phase of the practical intervention - "The Body and Sound: identifying interactions and new languages" aimed to investigate how body-sound stimulation could benefit the development of communication and expression in children and young people with different diagnoses within the scope of special education.

The intervention took place in June of 2016 and was invigorated in a multi-sensory environment, conceived with diverse sensorial stimuli (sounds, colors, lights, images, among others) that can be used individually or in combination - Room Snoezelen.

The children and young people who participated in the intervention constituted a "sampling of convenience [to] use a group of individuals that is available or a group of volunteers" (Carmo & Ferreira, 1998) and were divided into two groups, organized by their ages:

- Group 1: two eight-year-old boys (one with Attention Deficit Hyperactivity Disorder and another with Specific Language Impairment).
- Group 2: five youngsters between 12 and 24 years old (three with Trisomy 21 and two with Autism Spectrum Disorder).

We had a participatory sample of seven children / young people.

The methodology chosen for the development of this study prioritized participant observation and systematic observation as a research technique. The procedures used to document the data obtained involved a book of records, photographs and videos. A data sheet was developed to facilitate the annotation of the data observed in context. This worksheet has been organized into four key criteria and refers to the main activities developed:

Table 1: Data Sheet - Phase 01 – Psycho Pedagogical Interactive Cycle

Criteria	Activities
free stimulation	exploring space
initial interaction	directed activities
interaction maintenance	maintenance or disposal of the activity
completion of tasks	termination and resumption of activity

The interpretation of the data obtained in this first phase of the practical intervention revealed that:

a) Initial choice of instrument (criteria 01 and 02): most of the participants had as their initial choice an artifact already known and handled previously. This data showed that the construction of the gesture is closely linked to the individual experiences, and its manifestation is a momentary conclusion of stored memory.

b) Maintenance / Disposition of the choice and transition between activities (criteria 03 and 04): in regard to this item it was possible to observe a gestural tendency - with motor intentionality, sound or both (when conjugated with each other). This data shows the duality between body and sound: the body, while facilitating the understanding of the musical components through their articular patterns, is s musically stimulated during the interactional processes, being the expressive gesture, the particular representativity of the sonority apprehended.

1.2 Case Study: Musical Narratives and the Digital Sock

1.2.1 Digital Sock

Built with wearable technology, the Digital Sock has the sound control achieved through the movement of the feet. It was conceived in two versions, the first with sound samples (sampled sounds) and the second a synthesizer (sinusoidal sound wave). In the Case Study we used the first version of the instrument. Designed as a stimulating instrument for musical scenic narratives, the heel and finger sensors (pressure sensors) are responsible for producing sampled sounds (sound landscape). The sensors applied in the metatarsal region (also pressure), aim to modulate the sound projected by these two sound channels.

2. CASE STUDY

The second phase of the practical intervention, called "Musical Narratives and Digital Sock" refers to a case study, conducted with a person with 21 years old diagnosed with Autism Spectrum Disorder (non-verbal). This phase aims to analyze the stimulating capacity of Digital Sock during relationships and is subdivided into two other stages:

a) sound and motor sensitization, in which we perform different directed activities, involving the body and the sound, in search of the creation of a relational link between dynamiser / participant - five encounters
b) Digital Sock and narratives sound, when we will explore different corporal and musical narratives involving the Digital Sock - three encounters.

The sessions, held between November 2017 and March 2018, took place in rooms prepared to meet the objectives assumed at this stage of the research. Thus, the first five encounters (sensitization phase) occurred in dance halls, prepared with psychomotor material and with sound material. The last three meetings, aimed at the creation and elaboration of sound narratives and experimentation of the Digital Sock, took place at the School of Arts of the Portuguese Catholic University, in a studio equipped with a piano and a harpsichord, in which we added other sound stimuli and tools used for construction of sensory narratives.
The methodology used, similar to the first phase, prioritized participant observation and systematic observation. The criteria established for this second phase of the research are strongly anchored in the authors studied and relate to an action based on improvisation as a technical procedure, on the body-sound relationship as a means of expression and on playfulness as a pedagogical practice.
Improvisation, as a technical procedure, allowed an adequacy between the objectification of action and the individuality of the subject. It was possible during the whole intervention to change strategy whenever a loss of connection or abandonment of a proposed activity was observed. This facilitated relationships and allowed interest in the proposed activities to be maintained longer.
Ludicity, as a pedagogical model, showed to be able to cause greater involvement during the accomplishment of the tasks, increasing the capacity of simulation and resolution of problem situations. Activities involving psychomotor materials, such as activities with balls (in different sizes) and trampoline, provoked immersive reactions when experienced, becoming preferred (and often necessary) in moments of tension and excitement.
The body-sound relationship as a means of expression has shown to be able to stimulate creative processes and the development of critical and reflexive thinking. All the activities developed during the meetings prioritized the body-sound relationship.
The analysis of the interaction process focused on two musical narratives constructed during sessions with the Digital Sock, other sound instruments and psychomotor artifacts: a) narrative 01 - body-instrument-instrument-body, being:
body (participant); instrument (Digital Sock), another instrument (Piano and arch as psychomotor artifact) and body again (mediator)
b) narrative 02: body-instrument-body being: body (participant); instrument (Digital Sock) and body again (mediator)
The analysis of narrative 01: (body-instrument-instrument-body) had as its chosen sound, the sound of the sea and the whistle of a ship (Digital Sock) and a composition at the piano (composed and interpreted by an artist who participated in the action). The body-sound relationship, as a result of this action, was represented by the participant (with the support of the mediator and a bow) by means of the swinging of the trunk, in a movement that resembled a boat to sail. In narrative 02: (body-instrument-body) the sound chosen for the Digital Sock was the sound of the heart to the heel and birds to the tip of the foot. On hearing the sound, the participant, stimulated by the mediator, reproduced with his hands the heartbeat in response to the sound heard.
The analysis of the narratives showed that the message propagated by the sock (the sonority) was understood as a reaction to the sound heard during the exercise (with individual encoding and decoding) and expressed through the eyes of the hands, facial expression and body balance - subtle movements, more visible than the broad movements.

CONCLUSIONS

The analysis of the movements performed during the intervention showed that the interactional process happens in stages, and they concern the anticipation of the gesture (perception and observation of the medium), experimentation (handling, reflection, codification and decoding of perceived codes) and performance ideas, message). In all the cases studied (phase 01 and 02) it was possible to notice that, at different moments, the participants acted in these three stages, alternating the order with which it happened and the intensity propagated. This empirical data agrees with our theoretical perception about the study of scenic movements (Laban, 1978) and, in which we conceive three attitudes with which the gestures are built: inner attitude (perception), psychological attitude (experimentation) and dialogic attitude (relationships).
By combining the activities involving the body and various stimuli (sensory and sound) we promote an explosion of sensations that are transmitted and perceived during the handling of the instruments, felt by the body itself and expressed during the relationships. Sound, in its complexity of timbres, cadence and rhythms, reaches different meaningful scales that are imprinted in our body, being a stimulator of the interactional processes (Benenzon, 1981).

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As a performance technique, creative improvisation (Nordoff & Robins, 1971, 1977, 2007) it is provided to be efficient because it allowed adaptation during intervention with different diagnoses. Without rigidity in the acting procedure and based on dialogue, improvisation, when coupled with a playful practice (Lapierre, 1970) allowed the creation of an interactive environment of great learning and drive for creative processes, which helps us to conclude that the use of body and sound action strategies, when used in a creative environment, can contribute to the development of the expressive capacity of young people and children with Special Educational Needs (SEN), namely Autism Spectrum Disorder.

The sound landscape (Schafer, 1991), found in the Digital Sock, was able to stimulate the composition of sound narratives by means of a mechanism of activation of the individual memory, being this sound, expressed by means of a gestural semantics. During the construction of the musical narratives with the Digital Sock, we observed that the known sounds (heartbeat, sea, birds and ship whistle) worked as activate valves that the stored information flow. Upon being triggered, this information was corporately identified, deciphered, grouped and restructured into concepts (personal meanings) so that they could be transmitted through the observed body movements.

This process, which we call the interactional cycle, is composed of a cyclic current of meaning-making and is what defines the communicational process, also described by the young man with ASD in your testimonial (Case Study). In his account of experience, we found clues that helped us to perceive the sensations that the action (s) caused, the clear identification / description of the activity developed; the subjective reflection about the experience; problem solving and the discovery of new individual paths. In the table below you can identify each of these moments:

Table 2: Case Study Testimonials

sensations that the action (s) caused	"I am happy with the melody our bodies have achieved and the story created" (session 01); "The sound of music enters the soul and hearts merge in rhythm and harmony" (session 02) "The digital sock can awaken the inner rhythms and create a symphony between the inner rhythmic body and digital sound" (session 07)
Identification / clear description of the activity developed	"Bows that unite naked souls and painted handkerchiefs that beckon to the colorful world that opens" (session 01 - activity with bows and handkerchiefs) "The sound of music enters the soul and hearts merge in rhythm and harmony. Bodies vibrate and bounce like beams of light that clash and intertwine" (session 02 - activity with balls and trampolines) "The session with Slavisa continued with rhythm and brightness" (session 03 - how the session was coordinated); "The charcoal that draws on the canvas on the floor. Scratches and scribbles that begin to play and form melody" (Session 04 - Concerning the activity of sound design with coal) "The piano and the harpsichord. The notes dance the colors of green with blue on the screen" (session 05 - sound design and experimentation of piano and harpsichord sonorities) "The green plasma, the neighing of the horse that was inert in the digital exercise" (session 07 - referring to the drawing of the sound with ink) "The colorfulness of the sounds, the freshness of the melody and the sweetness of the fruit singing alongside the cunning piano" (session 08 - referring to percussive instruments, the digitally sounded apple exercise, the construction of musical narratives with the digital sock and the piano)
problem solving (communication difficulties)	"Communication can be established with Slavisa's lines and with the established energy. We get an internal choreography and with the look and body the external choreography becomes visible" (session 03 - reference to body stages - internal, psychological and dialogical attitude) "The bodies are separated in the physical, but united in the ether. The invisible and the visible intertwine on Earth" (session 04)
the subjective reflection about the experience	"There are peoples from other planets who rejoice and cheer with joy and balls that touch with oxygen bubbles and life with free and spontaneous manifestation" (session 01) "Art is the communion of wills and colors creating uniqueness and harmony. Art in its purest and simplest expression unites souls and peoples without prejudice "(session 02) "Digital socks can awaken inner rhythms and create a symphony between inner rhythmic body and digital sound (session 07) "Art and synesthesia. The body listens and responds" (session 08)
the discovery of new individual paths	"Let us look at art as the form of expression and communication that transcends barriers and obscures eclipses that disturb the vision of the whole" (Session 02) "Let us dance to the melody of colors and notes that fly in space and build enchanting stories" (Session 05) "Let us listen with our eyes open to the waking orchestra" (session 08)

The performance model used during the intervention, using scenic artifacts, percussive and digital instruments, such as the Digital Sock, were able to arouse interest, promoting reflection and the construction of critical thinking. The tools used and the affectionate way in which the actions were conducted helped to establish an efficient and promising communication path. In this sense, it is possible to affirm that the Digital Sock has characteristics that favour the decrease of the communicational and relational damages of young people with Autism Spectrum Disorder. These instrumental peculiarities are not limited to the

instrument's sound composition, but also affect its physical nature. Flexible and comfortable thanks to the material that the structure (Neoprene) and easy handling, due to the intuitive sound control, the Digital Sock allowed a fun, creative and meaningful experience, not only for the participants, but also great learning for the mediator.

ACKNOWLEDGEMENTS

The authors would like to thank the Center for Research in Science and Technology of the Arts - CITAR and the Portuguese Catholic University for their support, and also for the Foundation for Science and Technology - FCT, for the support and funding in their research, Individual PhD students.

REFERENCES

Acouturier, B., & Lapierre, A. (2004). *A simbologia do movimento: psicomotricidade e educação*. 3ª ed. Curitiba: Filosofart e CIAR.

Amaral, A. C. (2015). *Dança e Mimese corpórea. Conceição*. Concept., Campinas, SP, 4, (2) 65-76

Benenzon, R. (1981). *Manual de Musicoterapia*. Barcelona: Editorial Paidós, Ibérica S.A.

Bruscia, K. E. (1999). *Modelos de improvisación en musicoterapia*, Barcelona Publisher.

Carmo, H., & Ferreira, M.M. (1998). *Metodologia da Investigação: Guia para Auto-aprendizagem*. Lisboa: Universidade Aberta.

Dalcroze, E. J. (1920*). Le Rythme, La musique et l'éducation*. Paris, França: Jobin e Cie.

Fonseca, V. (2001). *Psicomotricidade: perspectivas multidisciplinares*. Lisboa: Ancora.

Greiner, C., & Amorim, C. (2010). *Leituras do corpo*. São Paulo: Annablume.

Katz, H. (2005). Um, dois, três. *A dança é o pensamento do corpo*. Belo Horizonte: Fid Editorial.

Katz, H. & Greiner, C. (2005). *Por uma teoria do corpomídia ou a questão epistemológica do corpo*. Colección Teoría de las Artes Escénicas – Archivo Virtual: Retreived from: http://artesescenicas.uclm.es/index.php?sec=texto&id=237 .

Laban, R. (1978). *Domínio do Movimento*. São Paulo: Summus Editorial.

Lapierre, A. (1982). *Reeducação física: cinesiologia, reeducação postural, reeducação psicomotora Vol. II.* (6ª ed.) São Paulo: Manole.

Miller, J. (2007) *A escuta do corpo: sistematização da técnica Klauss Vianna*. São Paulo: Summus.

Miller, J. (2012). *Qual é o corpo que dança-dança e educação somática para adultos e crianças*. São Paulo: Summus Editorial.

Nordoff, P., & Robbins, C. (1971). *Therapy in music for handicapped children*. London, UK: Victor Gollancz Ltd.

Nordoff, P., & Robbins, C. (1977). *Creative music therapy: Individualized treatment for the handicapped child.* New York, NY: John Day Company.

Nordoff, P., & Robbins, C. (2007). *Creative music therapy: A guide to fostering clinical musicianship*. (2nd ed.). Gilsum, NH: Barcelona Publishers.

Pederiva, P. L. (2004) *A relação músico-corpo-instrumento: procedimentos pedagógicos.* Revista da ABEM, Porto Alegre, 11, 91-98.

Roquet, C. (2017). *Ler o gesto, uma ferramenta para a pesquisa em dança*. Revista Cena, n.22. Programa de Pós-graduação em Artes Cênicas, Porto Alegre - RS, Brasil

Santiago, P. F. (2008) *Dinâmicas corporais para a educação musical: a busca por uma experiência musicorporal.* Revista da ABEM, Porto Alegre, 19, 45-55.

Schafer, M. (1991). *O Ouvido Pensante*. São Paulo: Fundação Editora da UNESP.

Storolli, W. M. (2011). *O corpo em ação: a experiência incorporada na prática musical*. Revista da ABEM, Londrina, 19 (25) 131-140.

Whipple, J. (2004). *Music in intervention for children and adolescents with autism: A meta-analysis*. Journal of Music Therapy, 41, (2), 9–106.

Vieira, L., Batista, M.I.B. & Lapierre, A. (2005). *Psicomotricidade Relacional: a teoria de uma prática*. Curitiba: Filosofart/CIAR.