

SYSTEMATIZED LITERATURE REVIEW OF EL SISTEMA, THE VENEZUELAN SOCIAL MUSIC EDUCATION METHOD

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Abstract

This article presents a cross-sectional examination of El Sistema, a social music education method, its educational background, philosophy, history and contemporary practices based on a systematic literature review.

First, we describe the background and key principles of the El Sistema method, and then examine each of the identified studies and present a synthesis of their results. The El Sistema method has spread widely around the world and a range of modelling approaches and educational programmes have been inspired by its ideas. Research and constructive critique are needed to help ensure high-quality dissemination and application of the method.

This article addresses the following research questions:

1) What music educational starting points does the international El Sistema social music education method include?

2) What has been researched about El Sistema?

3) What are the main results of the research conducted on El Sistema?

The method used in this article is systematic literature overview. Using three search words, the database of the University of Eastern Finland found 223 hits from which 37 were selected to be analysed. In addition, searches were carried out in the following databases: UEF Primo Central Index, Social Science Premium Collection (Pro Quest), Uniarts Finna Arsca, and the Education Resources Information Center (ERIC), and nine more hits were found (N=46).

The publications were classified into five groups: 1) history of El Sistema, 2) brain research, 3) academic impacts, 4) psychosocial impacts, and 5) El Sistema programme activities. The weighting of the studies was evaluated based on the content in relation to the subject under study, the scientific level, Publication Forum JUFO classification, and date of publication.

Synthesis: Historically, the birth of El Sistema in Caracas in 1975 was preceded by a versatile positive cause-consequence relationship. It is beneficial for the brain to engage

in music more than is typically offered in schools. In addition, psychosocial abilities are improved through participation in an orchestra or a choir. El Sistema and its ways of operating always differ depending on the local culture and needs of different countries and communities.

Music education needs to be more than merely practising compositions for performance in an orchestra or a choir. Music itself does not do anything life-changing – the people involved in it do.

Keywords: *El Sistema, research, literature overview, synthesis*

El Sistema Venezuela

The El Sistema method was founded in Caracas in 1975 by José Antonio Abreu (Dr.h.c., economist, teacher, musician and politician). Officially named The Venezuelan National System of Youth and Children's Orchestras (Fundación del Estado para el Sistema Nacional de las Orquestas Juveniles e Infantiles de Venezuela – FESNOJIV), the method has become widely known simply as El Sistema (Nowakowski, 2012; Tunstall, 2013).

The aims of the method are first of all social and communal. The child comes first, and the music is the content of the method (Tunstall, 2013). The most important concepts consist of democratizing music and developing and changing society through the use of orchestras and choirs to achieve social order and sociological development (Pedroza, 2015). At the beginning of the development of El Sistema the concepts 'poor' or 'social' were not used in the rhetoric (Baker, 2018, 170; Storther, 2017, 8) as the aims were more specifically focussed on musical development.

While a considerable amount has been written about the method, which has spread intercontinentally across 55 countries (Majno et al., 2012; Gustavsson & Ehrlin, 2018, 188), scientific critical studies of the approach are scarce (Shoemaker, 2012, 27; Uy, 2012, 6; Baker, 2014; Bergman et al., 2016, 366; Krupp, Schleußner, Lehmann & Wermser, 2018, 758). Peer reviewed research has also been complicated by the tightly guarded statistics and information, which are held by the administration of El Sistema and not open to independent researchers (Shoemaker, 2012, 27; Baker & Frega, 2018, 502).

The first critical studies were conducted in the 2010s (Baker, 2018). The findings of the method concerning individuals as well as the community have been promising (Majno 2012; Nowakowski, 2012; Harkins et al., 2016; Osborne et al. 2016; Hedemann & Frazier, 2017). Poor and even negative impacts of the method on the life of participants have also been shown (Baker, 2018). There has also been critique of the old-fashioned music educational methods of El Sistema (Baker, 2014, 136; Bergman & Lindgren, 2014; Baker, 2016). The basic thesis - the child comes first and the music is just the content - has also been criticized for fostering children as citizens who are loyal to the authorities instead of educating them to become individuals actively participating in democratic actions and processes. Storther (2017, 11) compares the situation of a musician to a soldier from the point of view of spontaneity and identity. One cause of this critique was the change of the name of the El Sistema Youth Orchestra in the year 2011 to the patriotic Fundación Musical Simón Bolívar (Storther, 2017). The change of name can be seen as moving from the original individual centred thinking to the supervision of the state authorities (Majno, 2012). The colours of the uniforms can

also be seen as intended to show the performers' loyalty and thankfulness to Venezuela (Shoemaker, 2012, 88).

Wide critique has also been raised about the silence of the leaders of El Sistema considering the political situation in Venezuela (Baker, 2016). As researchers, we observe a situation where a free music education is offered to children; but does this mean buying loyalty to the government?

Every child in Venezuela has a right to participate in El Sistema (Driscoll, 2013). Of the 28 million citizens in Venezuela an estimated 400 000 children and youngsters participate in El Sistema, with over 200 orchestras offering free premises, teachers, instruments and uniforms to the participants (Nowakowski, 2013; Slevin & Slevin, 2013). The core idea of El Sistema is to remove the boundaries to participating in music and being an active member of society (Lesniak, 2013).

El Sistema as a social music education method has also been compared to popular enlightenment where a large group of people are attempted to be made to behave according to a certain model, as done in Sweden during the recent period of mass immigration (Bergman & Lindgren, 2014) or the *Éducation Populaire* movement in France after World War II, when the population was collectively depressed (Kurki, 2000).

In addition to the critique towards the philosophical or educational approach of El Sistema, we must also remember that the method as it is cannot work in the same way in different countries (Lesniak, 2012; Sæther, 2017). Quinn (2013) also asks in his article: Limits of the system – is it too much expected of El Sistema, if any music education method can be called social music education? El Sistema was founded in a certain society in a certain political and sociological situation which was totally different compared to the new solutions that have been later founded on it in different countries. Quinn (2013) also considers if it would be better to target only musical education, as the other social impacts of it can be questioned, for example, because delinquency has been strongly rising in Venezuela since 1975.

On the other hand, all formal music education in Western countries includes wider aims than just transferring musical content from the teacher to the pupil (Elliot & Silverman, 2015, 18; Susić, 2017). Also, Lesniak (2013) notes that it is not unique to aim for an emotionally harmonized humanity through the means of arts education. Booth (2011) sees El Sistema as a unique system where the theory of music pedagogy is built on four basic pillars: 1) Sustaining the dynamic tension between polarities; 2) Continuing following of the development; 3) Embodying the mission – 80 % of what you teach is who you are; and 4) The power of beauty, craft and community.

El Sistema Finland

The Finnish El Sistema achievement started in 2009 in Vantaa as a part of the *"Kokonainen maailma lähiössä"* (*"A Whole World in a Suburb"*) programme. Originally called the Tempo-orchestra, it aimed at increasing meaningful social intercourse and interaction in areas with a large immigrant population. The target group included both the original population and immigrants. A core goal of the programme was to promote

friendship between children from different backgrounds, prevent racism, and promote immigrants' integration into society.

Target of this Article and its Research Question

This article aims to review the existing research on El Sistema and show its main findings. We also examine the history, music educational background, and critical research of El Sistema. Based on our preliminary searches we identified a lack of scientific research on El Sistema. General descriptions and commendations of El Sistema are, in contrast, very common and are usually written by people with close connections to the method (Baker, 2014, 9).

We use the systematic literature review method to explore the activity of El Sistema (Glass, McGaw & Smith, 1981; Thomas, 2009, 30-59; Cohen, Manion & Morrison, 2011; Metsämuuronen, 2011, 22-24). We provide syntheses of the problems and challenges presented in earlier studies, including the suitability of the method for different countries, times, or music education methods. We also consider the originality of the method as social music education.

Systematic Literature Review

Our method is a systematic literature overview; however, our aim was to present our article as a narrative, not only a list of literature. Through our systematic analysis we try to see the larger picture of reality, the forest, not only the trees (Thomas, 2009, 34, 36, 58). A systematic way of working requires that the research process is designed and described as is usually the case in scientific work. It must be possible to repeat the study on the basis of the description (Mäkelä et al., 1999).

Data Collection

Data collection was carried out using the University of Eastern Finland's FINNA database in February 2018. We also performed the same search in following databases in December 2019: UEF Primo Central Index, Social Science Premium Collection (Pro Quest), Uniarts Finna Arsca, and the Education Resources Information Center (ERIC).

The search terms used were 'El Sistema' AND 'music education' AND 'research dissertation'. The search offered 223 hits. We did not search for peer review sources (Thomas, 2009, 34). The search terms were selected so that they would not guide the research in any specific direction. The search soon revealed scientific studies of El Sistema to be few in number.

Examination of the results showed that the search was sufficiently wide; some critical studies as well as numerous descriptive articles that followed a general research approach, but were not proper scientific studies, were found. Our record of hits includes numerous types of results: electronic articles, newspaper articles, concert critiques, conference paper publications, book chapters and reports.

The results were read through to determine how El Sistema was approached in the text. We categorized the records during several examinations of the records. While doing the quantitative distillation of the metadata an additional record was found.

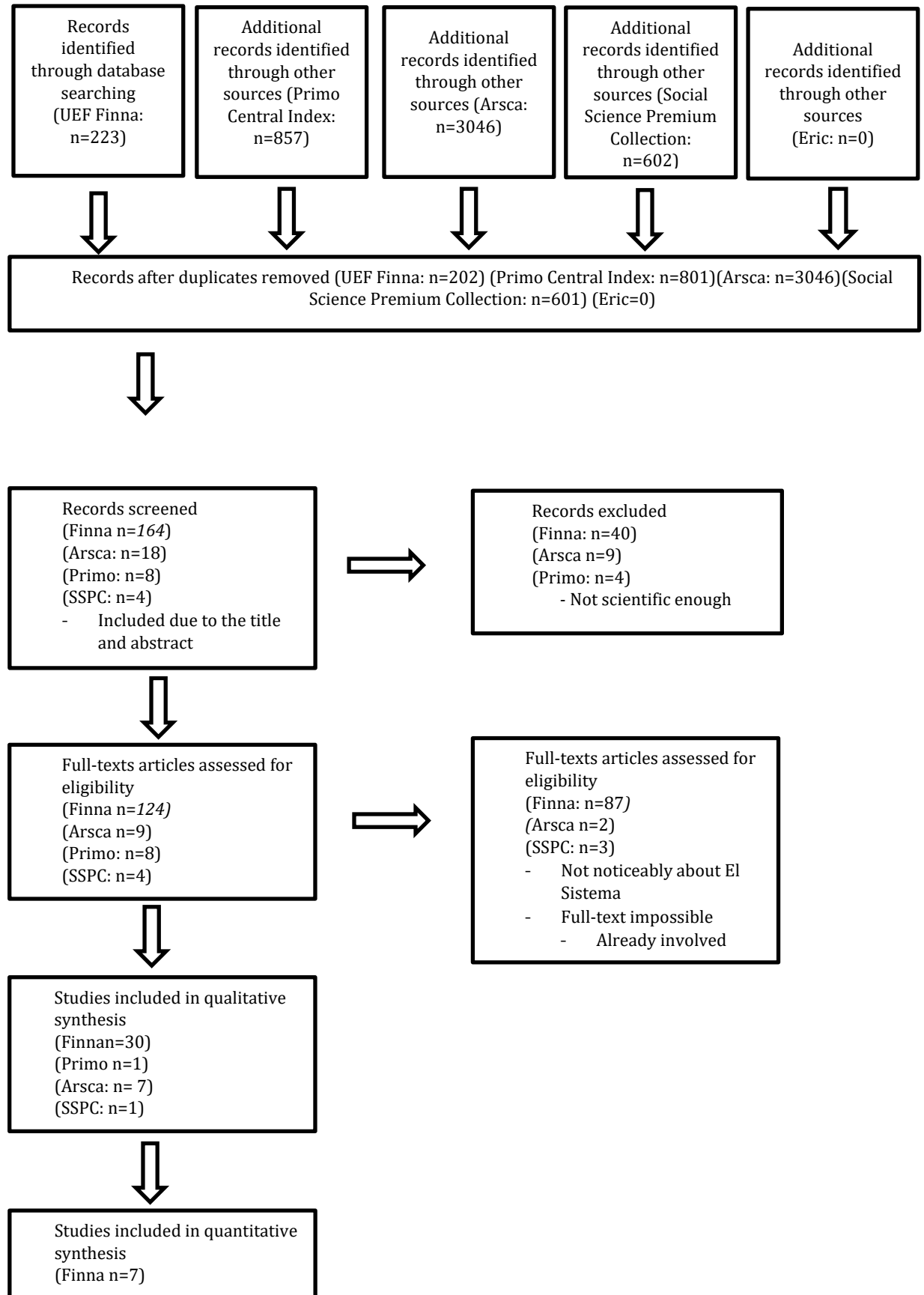


Figure 1. According to PRISMA Flow Table

Categorizing According to the Value and Contents of the Record

In our qualitative analysis the content of the record was considered the most important data, but also the impact of the publication was taken into consideration when exploring the results (Metsämuuronen, 2011, 23).

Assessing the methodological quality of the original studies ensured that each individual study was given the weight it deserves (Mäkelä et al., 1999). Extensive measures were taken to obtain the texts. Library informatics was used and two authors were personally contacted to obtain their articles. Most of the records that could not be reached were not peer reviewed and, according to their titles, were not suitable for this research.

Results

Publications by topic:

Historical: 1-6

Brain research: 7-10

Academic and psychosocial studies: 11-18

El Sistema activity research: 19-46

The results include a large amount of information but only small details can be presented in an article. The most important information is presented in the Appendix. Please refer also to the reference list.

Next, we will explore each of the above studies and their results in more detail.

Category 1. History

1. Pedroza, L. 2015. Of orchestras, mythos, and the idealization of symphonic practice: The Orquesta Sinfonica de Venezuela in the (collateral) history of El Sistema

The article offers a critical point of view of El Sistema research (Baker & Frega, 2018, 1). The starting point of the article is that the method is spreading and thriving, but its idealistic rhetoric in contrast to real life and the similarities with organized religion have gained increasing interest in the last few years. The narratives that emerge from within the system are to be considered as figurative, not factual accounts, similar to biblical stories.

Musical life in Venezuela was not dead prior to Abreu, contrary to his own narrative (Pedroza, 2015, 70, 73). The liveliness of Venezuelan musical life before 1975 is also referred to in the following article by Carlson. Artistic education in Abreu's rhetoric principally means the use of orchestras and choirs as a means for the democratization of music (Pedroza, 2015, 74-75). Music schools and conservatoires represent solo education and music democratization was needed (Pedroza, 2015, 76). Also, Baker and Frega (2018) refer to this.

2. Carlson, A. 2016. *The Story of Carora: The origins of El Sistema*

Like Pedroza, this article also confirms the liveliness of Venezuelan musical life prior to 1975 (Carlson, 2016, 66). The article also discusses the roots of Venezuela's youth symphony programme. Although the traditional account begins with Abreu starting the first rehearsal in his garage in 1975, the origins of El Sistema belong equally to another similar children's orchestra (Carlson, 2016, 72) founded by Juan Martinez in the city of Carora. It had the same philosophy and pedagogical methods: pedagogy of love and musical communality aiming to enhance pupils' ability to concentrate on their schoolwork and to benefit their life holistically (Carlson, 2016, 70). Today, this orchestra has integrated with El Sistema, but allows more autonomy compared to other units of El Sistema (Carlson, 2016, 71).

3. Baker, G. & Frega, A.L. 2018. *'Producing musicians like sausages': New perspectives on the history and historiography of Venezuela's El Sistema*

The heading of the article refers to El Sistema's focus on filling the country with orchestras as opposed to educating musicians (Baker & Frega, 2018, 507). It also refers to the research on El Sistema and its history: reports from the year 1966 are idealized, clichéd and mainly use the same texts as published on El Sistema's own website (Baker & Frega, 2018, 502). In 1997 Estrada and Frega presented an extensive critical evaluation of El Sistema, but their work was largely disregarded. Now, 20 years later, similar research results are again being brought to light. Thousands of children have gone through the system which has not been renewed in any way, even though renewal would have been important from the social music educational point of view. The writers demand responsibility from the system for its actions, in light of the immense importance of its work (Baker & Frega, 2018, 503).

El Sistema does not use the principle of open information in its conference activities, and no open invitation or opportunities to present different opinions or join the discussion are offered (Baker & Frega, 2018, 512).

4. Strother, E. 2017. *Political economy and global arts for social change: A comparative analysis of youth orchestras in Venezuela and Chile*

Studies often assume that arts engagement creates social change through universal mechanisms - this study examines the influence of political economy on the implementation of public arts programmes (Strother, 2017, 1). The conclusion is: political-economic context matters (Strother, 2017, 4).

The original social aims of El Sistema seem to point to the professional music world and primarily to changing the demographics of the orchestras in Venezuela. They do not mention the other advantages which have become the trademark of the El Sistema organization, or its sources of funding during the Chavez period (Strother, 2017, 8-9).

5. Lorenzino, L. 2015. *El Sistema in Canada: A recent history, Part 1*

The article shortly presents 23 of the Canadian El Sistema applications, 14 of them very briefly. The operational culture, funding and targets are addressed. The article also presents the processes that make the El Sistema activities according to f.e. Booth listing. El Sistema is viewed by Lorenzino to be well implemented in Canada, where its values are founded more on social aims.

6. Lorenzino, L. & Smith, G. 2016. *El Sistema in Canada: A recent history: Part 2 of 2*

The Ontarian umbrella organization supports its members by sharing best practices in developing collaboration, supporting networks, creating and executing new programmes, securing funding, and assisting teacher education and curriculum work. Collaboration with research groups combines research and practical work.

Category 2. Brain research

Orchestral work and choir singing teach participants how to behave in society; they serve as guiding behavioural models. What, then, are their affects at the brain level? El Sistema in connection with brain research had four hits in our data search.

7. Sachs, M., Kaplan, J., Der Sarkissian, A. & Habibi, A. 2017. *Increased engagement of the cognitive control network associated with music training in children during an fMRI Stroop task*

The participating children studied in the El Sistema-inspired Youth Orchestra of Los Angeles (YOLA) which ran sessions seven hours per week over five days for two years. A second comparison group focussed on sports (football and swimming) for the same period of time. A third comparison group did not commit to any special activity after schoolwork. The music group did not do sports and the sport group did not practice music. Socio-economic background factors were equalized and taken into account as much as possible to avoid their impact on the results. The results of this comparative research suggest (supporting the hypothesis) that systematic extracurricular training, both in music as well in sports, but particularly music-based training, is associated with changes in the cognitive control network in the brain (even in the absence of changes in behavioural performance.) Extracurricular training, in music or sports, was shown to have beneficial effects. The research is still ongoing, so more results will become available.

8. Hille, A. & Schupp, J. 2015. *How learning a musical instrument affects the development of skills*

This research showed similar results to the previous study. Although all possible background factors were eliminated from the analysis, the results showed that adolescents with music training have better school grades and are more conscientious, open and ambitious. Moreover, the researchers found that the effects of their treatment were stronger among adolescents with lower cultural capital and socio-economic status (Hille & Schupp, 2015, 58, 67). The comparison group participated in sports for similar amounts of time per week, which also had a positive effect, but not as strong as extracurricular music activities. The researchers found that the effect of music was much stronger than that of sports (Hille & Schupp, 2015, 58). The research was done based on the extensive German Socio-Economic Panel Study (SOEP) data. The German Federal Ministry of Education has invested considerable funding in Germany's El Sistema-inspired programmes, and therefore the actual enforcing impacts of music on cognitive and non-cognitive abilities require thorough scientific research.

9. Habibi, A., Rael Cahn, B., Damasio, A. & Damasio, H. 2016. *Neural correlates of accelerated auditory processing in children engaged in music training*

The research design included three comparison groups: music hobbyists, sports hobbyists and a group with no specific hobby. The music group consisted of children from YOLA (Youth Orchestra of Los Angeles). All background factors were eliminated from the analysis. The music group children had clearly better developed auditive definition abilities than the other groups. Such enhanced maturation may also favour faster and more efficient development of language skills, which is important for success in social and academic life. It is important to target these opportunities for development especially for children who live in disadvantaged circumstances (Habibi et al., 2016, 24). This research supports all kinds of social music education methods for children.

10. Hudziak, J., J., Albaugh, M.D., Ducharme, S., Karama, S., Spottswood, M., Crehan, E., Evans, A.C. & Botteron, K.N. 2016. *Cortical thickness maturation and duration of music training: Health-promoting activities shape brain development*

This research compared cortical thickness to child age and engagement in music as a hobby (Hudziak et al., 2016, 1155). According to the report, playing a musical instrument was associated with more rapid cortical thickness maturation within areas implicated in motor planning and coordination, visual-spatial ability, and emotion and impulse regulation. Although the results are clinically weak, the research presents El Sistema and supports it as an example of effective music education for the disadvantaged (Hudziak et al., 2016, 1159).

Category 3. Academic and psychosocial impact

11. Heagy, L. 2018. *Instrumental Music and Reading Achievement of First Graders*

This study carried out in Alaska investigates the relationship between instrumental music and academic achievement measures of academic progress (MAP) using Vygotsky's socio-cultural theory as a framework (Heagy, 2018, 1). The results considering literacy skills (in MAP testing) were rather weak, but the writer still supports stringed instrument learning programmes as social benefits were noticeable in the causal relationship between music as a hobby and literacy skills, although hard clinical testing cannot show all the advances (Heagy, 2018, 107).

12. Osborne, M.S., McPherson, G.E., Faulkner, R. & Davidson, J.W. 2016. *Exploring the academic and psychosocial impact of El Sistema-inspired music programmes within two low socio-economic schools*

The research focused on two El Sistema-inspired extra-curricular programmes situated in socio-economically disadvantaged areas in Melbourne, Australia. The research measured, among the first studies, psychosocial non-musical benefits. Many of the children attending these schools face significant challenges due to generational poverty or being first-generation immigrants or refugees, including significant linguistic problems (Osborne et al., 2016, 157). The results show that participating in the school

programmes for 12 months offers better non-verbal visual-spatial reasoning, verbal and mathematical skills and psychosocial well-being among the pupils. The results were clear, even though the programmes were short term.

13. Harkins, C., Garnham, L. Campel, A. & Tannahill, C. 2016. *Hitting the right note for child and adolescent mental and emotional wellbeing: a formative qualitative evaluation of Sistema Scotland's 'Big Noise' orchestral programme*

The research focussed on mental and emotional well-being over the mid and long term. The design included interesting mixed methods: participant drawing and filmmaking (Harkins et. al., 2016, 28). The qualitative results show that participating in the Big Noise programme increased the participants' mental and emotional well-being in three ways. Firstly, happiness and enjoyment from participating in the programme and the orchestra, especially making music. Secondly, participating creates safety, feelings of belonging, and human relationships. The quality of participant relationships was found to be important as well as planning of the activities, which enables support, routines and structure. Thirdly, increased pride, confidence and self-esteem arising from the ability to learn challenging musical skills, being praised on a regular basis, and being able to present learned skills through regular orchestral performances (Harkins et al., 2016, 25). The research shows that the nature of the effects is dependent on many factors, such as participant circumstances, programme design, and the qualities of the staff (Harkins et al., 2016, 35).

14. Hedemann, E.R. & Frazier, S.L. 2017. *Leveraging after-school programmes to minimize risks for internalizing symptoms among urban youth: Weaving together music education and social development*

The research uses mixed methods to explore an El Sistema-inspired after-school programme called the Miami Music Programme, started in 2010. Participation was offered for free to families whose child was supported with a free school meal and for a small fee to other families. Students were also offered donated musical instruments (Hedemann et al., 2017, 759). The framework of the measures used was mental health problems, social functioning, and emotion regulation strategies (Hedemann et al., 2017, 760). The research focus was on: (a) supporting staff around student engagement and behaviour management; (b) integrating social-emotional activities into the curriculum. The cautious preliminary results indicate that the programme represents a good approach to supporting pupils living in economically vulnerable circumstances or immigrant communities. Needs are identified for promoting mental health and offering opportunities for extracurricular activities (Hedemann et al., 2017, 767).

15. Roy, M.M., Devroop, K. & Getz, L. 2014. *Improvement in South African students' outlook due to music involvement*

The focus of the study was a concert band programme based upon the Venezuelan El Sistema model at a disadvantaged high school in KwaZulu-Natal (Roy et al., 2014, 465, 480). Participation in the music programme seemed to improve participants' motivation to reach for better life goals and to be more optimistic (Roy et al., 2014, 474). The report supports the implementation of music programmes at schools.

16. Krupp-Schleußner, V. & Lehmann-Wermser, A. 2018. *An instrument for every child: A study on long-term effects of extended music education in German primary schools*

The programme was partly arranged by schools and closely resembles the Sistema Finland music education programme. The programme was provided for grade 1-4 pupils (age 7-11) (Krupp-Schleußner et al., 2018, 44). The researchers explore the long-term impacts of participating in a music programme. How many of the participating children pursue music studies after elementary school? Do they study music more often than other children in the 6th and 7th grade (age 12-14) and do they experience music activities more intensively than the others?

The results show that child's affinity to music and the significance of music to child mean more than other factors in instrument learning and commitment to music (Krupp-Schleußner et al., 2018, 55). The results show that the programme overcomes at least some of the obstacles hindering participation in instrument learning or choosing special music classes presented by the immigration or educational background of the participants (Krupp-Schleußner et al., 2018, 51). The results include a large amount of interesting data on the sociocultural and economic background of the home and their impact on children's pursuit of music as a hobby (Krupp-Schleußner et al., 2018, 49-55).

17. Morin, F. 2014. *From Caracas to the Canadian Prairies: Executive summary of the pilot evaluation of an El-Sistema-Inspired After-School Orchestral Program*

According to the report, the first-year pilot project of the long-term music education programme has achieved the targets set for the El Sistema model of after-school orchestral activity. The report shows a small number of concerns, which will be taken into account in planning further model development (Morin, 2014, 25-26).

18. Aleman, X., Duryea, S., Guerra, N.G., McEvan, P.J., Munoz, R., Stampini, M. & Williamson, A.A. 2017. *The effects of musical training on child development: A randomized trial of El Sistema in Venezuela*

The results of the research show that the programme increased the children's self-control and regulation and decreased behavioural problems. The effect was focused on subgroups of vulnerable children. Resources should be directed to children who are in most need (Aleman et al., 2017, 866).

19. Baker, G. 2014. *El Sistema, Orchestrating Venezuela's Youth*

Baker is one of the leading researchers of the El Sistema genre. Baker starts his work from an empty table with no presumptions about the El Sistema method. He discusses the traditional romanticizing myths of El Sistema. The good reputation of El Sistema is based on good PR work and short well-prepared visits to Venezuela. Baker (2014, 8) also uses the term 'cult', in which Abreu is portrayed as a saint who cannot be criticized in the narratives.

According to Baker, the piquancy of the SBOY (Simón Bolívar Youth Orchestra) derives from exotic people from an exotic country playing Shostakovich wildly and energetically. The interpretation is not, however, futuristic as it is built on strong

authority and group control and very traditional programme choices (Baker, 2014). El Sistema is a labour-intensive organization (Baker, 2014, 133). *“Abreu’s pragmatic philosophy prefers action to reflection”* (Baker, 2014, 142). Baker (2014) offers a constructive critique of El Sistema’s music educational philosophy: there is no orientation, no meta-level, only good-sounding melodies. The lack of music education: training pieces of music for performance is not the same as music education. His critique is captured in the following concepts, based on interviews (Baker, 2014): *“Not musicians but players; no learning but practising; the pupils become performers of certain musical compositions as technical masters, not artists”* (p. 145).

20. Baker, G. 2016. *Before you turn the page: Connecting the parallel worlds of El Sistema and critical research*

The title of the article calls for no further pages to be turned before the mistakes shown by critical research have been corrected. Critical research is not the same as negative research (Baker, 2016, 9). El Sistema is a trademark, a parent programme where problems should be taken into account; it should not be used merely as an idealized brand (Baker, 2016, 7, 53). The mere promotion of the programme itself is a form of social and cultural fascism, according to Baker.

21. Tunstall, T. 2012. *Changing Lives, Gustavo Dudamel, El Sistema, and the Transformative Power of Music*

Tunstall (2012) and Booth (2009) replicate the writings of the El Sistema website with no critical analysis (Baker, 2014, 14). The book is scientifically inadequate, yet as a chronicle with interviews and stories, it is one of the El Sistema field’s basic publications. Naïveté also has its own role.

22. Booth, E. 2009. *Thoughts on seeing El Sistema*

Booth is a music educator and El Sistema personality and the originator of the concept of ‘Teaching artistry’. The article is a laudatory description compiled after one weeklong visit to Venezuela. Compared to Baker, who stayed in Venezuela for a year and saw the reality quite differently, Booth’s article has no major impact. One interesting section of the article, ‘Challenges for Adapting El Sistema in the United States’, includes an educational discussion about transferring the El Sistema ideal to the USA. El Sistema USA leans strongly on the Venezuelan model, but is modern application as it is child-centred and beautiful (Booth, 2009, 82).

23. Booth, E. & Tunstall, T. 2014. *Five encounters with ‘El Sistema’ international: A Venezuelan marvel becomes a global movement*

The article provides an international comparative overview of El Sistema in 2013. The writers report encountering the wide spread of the El Sistema movement, its passionate commitment and congenial El Sistema colleagues all over the world. The article presents The White Hands Choir for hearing-impaired children (Booth et al., 2014, 7), who make music through hand movements with white gloves while another choir stands alongside singing aloud. Also, Majno (2012) mentions this choir along with other choirs with disabled performers seeing them as representing integration and inclusion at its best.

El Sistema of Japan highlights social development: They sought 'a pedagogy of joy,' and they believe they have found it in El Sistema, in Soma. This was significant especially in Fukushima where the children had lived through a natural disaster and human-made catastrophe. Japan has one of the highest rates of teenage suicide. There is considerable evidence of much higher stress among young (well-behaving) people in Japan compared to other countries worldwide. The country's problems regarding youth social skills and emotional well-being are similar to South Korea, where El Sistema is referred to as 'the talkative programme' (Booth et al., 2014, 76-79).

24. Majno, M. 2012. *From the model of El Sistema in Venezuela to current applications: Learning and integration through collective music education*

The article presents the continuities and contrasts of El Sistema across the decades and sketches its future directions and visions. The article presents a categorization of the system's different modulations. The models can be categorized as in-school and after-school programmes. The South American models are all close to the Venezuelan model (Manio, 2010, 58-59). The systematic categorization of European El Sistema models is: 1) pilot projects with close kinship to El Sistema, e.g. Big Noise and In Harmony. 2) National initiatives inspired by similar ideas, e.g. the German Jedem Kind. 3) Attempts at more concerted efforts to replicate the model on a systematic basis, e.g. Italian Sistema (Majno, 2012, 58-60).

25. Nemoy, L. & Gerry, D. 2015. *Adapting the El Sistema program to Canadian communities*

The research is descriptive and is based on four structured interviews of Canadian El Sistema programmes. The description is made on a general level. The results highlight the positive impact of the programme for the surrounding environment as a whole.

26. Allan, J., Moran, N., Duffy, C. & Loening, G. 2010. *Knowledge exchange with Sistema Scotland*

The article represents meta-level research of Scotland's El Sistema programme. It explores the interactions between researchers, the project itself and politics, and efforts to improve information exchange between these elements. The study consists of a series of four Learning Space meetings (Allan et al., 2010, 337).

Regarding knowledge exchange, some groups and individuals have more decision making power than others. All groups are motivated by different factors, which produce many different information contexts regarding Big Noise. Some groups' knowledge contexts have more impact in decision making than others (Allan et al., 2010, 325).

27. Rimmer, M. 2018. *Harmony or Discord? Understanding children's valuations of a Sistema-inspired initiative*

The article criticizes earlier El Sistema studies which do not address the children's own experiences. The previously presented Big Noise psychosocial research, in contrast, succeed in this rather well, according to Rimmer. The child-based point of view is not represented in the articles under study. The voices of the children are not heard except in two non-relevant contexts (Rimmer, 2018, 44). The article calls for change.

Considerable amounts of research about school music education have been published that do not respect children's interests; this raises the need to explore children's experiences in this field.

28. Hsu, T. 2017. *El Sistema USA: An exploratory study of the pedagogical approaches in beginning violin classes*

This dissertation explores the incoherence of El Sistema USA's violin pedagogy, especially concerning beginners. The author proposes peer teaching as a solution, as it already belongs to the toolkit of El Sistema. This requires good preparation by a professional teacher. The CATS-in method would also be useful (Hsu, 2017, 1, 12).

29. Uy, M.S. 2012. *Venezuela's National Music Education Program El Sistema: It's interactions with society and its participants' engagement in praxis*

The article contains a lot of practical descriptions. The writer spent five months in Venezuela, and his notions are quite similar to those described by Baker (2014). The method is based on the amount of work and repetition without any sense of individuality. You are a part of a machine and the programme does not target low-income students or families (Uy, 2012, 18-19). According to the research, the sociological research of El Sistema should concern questions of social inclusion and questions of how music could work in changing class, cultural, political and geographical differences towards greater social harmony and action (Uy, 2012, 20).

30. Lopez, J.T., Boia, P.S., Veloso, A.L. & Caldas, M. 2018. *Orchestra and life: Youth paths in the 'Orquestra Geração'*

This Portuguese article is based on a chapter in an English language book. El Sistema programmes are extensively implemented in Portugal. The authors aim to equally address both negative and positive experiences and reasons for satisfaction or criticism (Lopez et al., 2018, 167). As in earlier articles presented in this overview (Uy, 2012; Baker, 2014), Lopez and his colleagues also refer to the large amount of work involved in El Sistema actions, but in a slightly different light. They do not believe in miracles through playing music, rather that the transformations that take place come through socio-musical practices, instrument lessons, practice and concerts, which are organized through hard work and explicitly verbalized. The dominant discourse also plays a dominant role in setting the targets for the programme as a whole. When they are clearly defined, it is easier to head towards them (Lopez et al., 2018, 230).

31. Edwards, J. 2011. *A music and health perspective on music's perceived "goodness"*

This article focuses on the social and professional use of music from the perspective of music's health impacts. Examples of communal music projects include, in addition to El Sistema, the Choir of Hard Knocks (Australia) and the Montreal Homeless Choir (Edwards, 2011, 96). These are examples of how practical music making joins people together and creates possibilities that are not necessarily as easily achievable through other collective aims or traditional ways of helping people (Edwards, 2011, 96).

It is also interesting to note the versatile changes that these kinds of projects can bring about in participants (also audience's) who can use the experience in many ways as

entertainment, distraction or as a way of promoting and experiencing hope and new possibilities (Edwards, 2011, 96). It is not clear what spiritual poorness means or if it is caused by social poorness, or how Western classical music might work as an antidote to this kind of shortfall (Edwards, 2011, 96).

32. Ramnarine, T. 2011. *The orchestration of civil society: Community and conscience in symphony orchestras*

This article calls for the same concrete impacts as the previous study. It includes in depth exploration of the social and sociological tasks and achievements of symphony orchestras. According to Ramnarine, orchestras nowadays recognize more than ever the opportunities they have to work as communal, consciously active members of society. El Sistema and El Sistema Big Noise are mentioned as examples of this. How can orchestras combat poverty? How can a musical experience change social conditions? The key factors affecting in this are the state, market and civil society activism. (Ramnarine, 2011).

33. Spruce, G. 2017. *The power of discourse: Reclaiming social justice from and for music education*

The article analyses the paradigms of rightness – the state of being morally correct - in music education in connection with El Sistema. It discusses the relation between material and immaterial poverty. The author states that in its own discourse El Sistema tends to view economic deprivation and cultural deprivation as synonymous (Spruce, 2017, 726). An interesting comparison is drawn with religious salvationism: the teacher is like a missionary. Through music, life changes (Spruce, 2017, 725). El Sistema offers the solution through feelings of superiority and the El Sistemas of the UK standardize their participants as a condition for participation (Spruce, 2017, 727).

34. Nomi, D. 2015. *Music and the myth of universality: Sounding human rights and capabilities*

Nomi listed three opportunities to use music in support of human rights: Music therapy for traumas caused by war and being a refugee. Proper prioritizing would easily free funds for this end (Nomi, 2015, 178). Music may also have significance in human rights work as a non-judicial mechanism fostering justice and public morale (Nomi, 2015, 179). The third use of music in support of human rights is through achieving certain community and societal objectives, such as those of El Sistema.

The article also mentions El Sistema in Baker's (2014) research and the general critique against the method: El Sistema has been criticized for its narrow top-down benefits and tight discipline instead of helping people living in poverty by building creative and critical thinking skills.

35. Dyck, R. 2015. *Youth education for social responsibility*

The essay speculates about the forms of social responsibility and their impacts. The developmental right approach is considered more realistic than typical help in the form of food or money, as charity seldom causes structural change (Dyck, 2015, 6). The article lists a number of long-standing models, and sees the publicly funded Venezuelan El Sistema method as the best of these (Dyck, 2015, 6).

36. Susić, B.B. 2017. *Music education for every child – ideal or reality?*

The positive effects of music on child development have been known since at least the 15th century. Despite this knowledge, music education has been long neglected in many countries such as the USA. Today the situation is improving slightly (Susić, 2017, 85-86). El Sistema is described in brief along with some other music educational systems. The support of the Venezuelan Ministry of Health offers an advantage compared to other systems (Susić, 2017, 85).

37. Lesniak, M. 2013. *Things to remember about El Sistema: A response to “El Sistema – a perspective for North American music educators” by Tricia Tunstall*

The writer sees the significance of El Sistema USA as a part of a bigger debate. There is a clear growing need for communal young people’s orchestra programmes across the USA, especially in underserved low socioeconomic communities. With proper strategic planning, programmes inspired by El Sistema could easily help meet the needs of these many communities. Collaboration and planning will help current music organizations and programmes achieve this aim in a productive and united manner (Lesniak, 2012, 74).

38. Cortese, P.A. 2019. *Changing social perspectives teaching artists and transformative learning in an El Sistema-inspired after-school music program*

This case study observes the efficacy of the programme in its task of preventing poverty and social inequality. Education is an essential tool, or weapon, in the fight for social equality, and music education can be a highly effective part of that toolkit (Cortese, 2019, 25). Music programmes inspired by El Sistema have spread worldwide, but the quality of education that they offer is often lacking, as mentioned by Majnok (2012). This research focused on three teacher-artists’ experiences to determine whether they see changes in social perspectives in the El Sistema-inspired learning environment and how they are changing. The research revealed that the teachers did experience such changes. All three teacher-artists were conscious of broadening societal perspectives and described cognitive, affective and behavioural experiences that increased their goal-orientation in the classroom. The results can be used in educating current and future teacher-artists in the El Sistema field.

39. Hollinger, D.M. 2006. *Instrument of social reform: A case study of the Venezuelan system of youth orchestras*

The main finding of this dissertation was that in orchestras where the musicians came from the lowest socio-economic groups, improved self-efficacy was brought about by the orchestral work. This is an interesting finding regarding quality measurement of the El Sistema system, although the author also found significant shortcomings.

40. Shoemaker, A.H. 2012. *The pedagogy of becoming: Identity formation through the Baltimore Symphony Orchestra's OrchKids and Venezuela's El Sistema*

This research focused on the social music education programmes OrchKids and El Sistema, which both aim at improving their participants’ and their families’ life

circumstances by offering them a strong sense of identity and belonging to the community. Whereas El Sistema focusses exclusively on classical music, OrchKids more widely explores other musical styles. Both programmes teach children responsibility for surrounding communities, such as neighbouring countries, and for their orchestra, and they also develop a feeling of belonging to a wide international music community. The writer raises an interesting point: in the USA the teachers often represent a different social class to the pupils as they come from a higher socio-economic background. In the Venezuelan El Sistema, teachers and pupils represent the same social class (Shoemaker, 2012, 86).

41. Powell, B., Smith, G.D. & D'Amore, A. 2017. *Challenging symbolic violence and hegemony in music education through contemporary pedagogical approaches*

According to Powell and colleagues, El Sistema and its various applications (in the UK) can be understood as a middleclass educational instrument for developing the working class as the system uses as its primary tool classical music, which is normally associated with upper social classes. El Sistema can be seen as a system that underlines social class differences. In Baker's (2014) view, Venezuelan parents see classical music as a route out of poverty. In Europe, the reasons for choosing classical music in El Sistema are quite different.

42. Bergman, Å., Lindgren, M. & Saether, E. 2016. *Struggling for integration: Universalist and separatist discourses within El Sistema Sweden*

The central concepts of this discourse analysis are social class differences, as in the earlier articles. Its perspectives are, however, different: integration, separation and post colonialism. The central question of the article is: How are ideas about integration socially constructed within the Swedish El Sistema programme? The Swedish El Sistema does not target only the poor, marginalized or immigrants, but is instead aimed at everyone in order to achieve genuine integration (Bergman et al., 2017, 365).

When researching El Sistema, it is important to explore power relations and how pupil identity is defined and reproduced culturally in the Swedish school environment (Bergman et al. 2017, 367). Does the ethnic background define similarity or dissimilarity? If the principle of equal respect is understood to require that we treat people equally without taking into account their differences, this can blind us to existing hegemonies. (Bergman et al., 2017, 370-373).

43. Gustavsson, H.O. & Ehrlin, A. 2018. *Music pedagogy as an aid to integration? El Sistema-inspired music activity in two Swedish preschools*

The research explores the conceptions and consciousness of workers of two preschool-level Swedish El Sistema programmes. The research reveals the workers' relatively limited knowledge of El Sistema's origins and content (Gustavsson et al., 2018, 195). El Sistema was introduced in Sweden in 2010 in Gothenburg and is currently promoted as an inspirational model in several municipalities. El Sistema is seen in Sweden as a tool for integration of immigrant parents and children into Swedish society. El Sistema Sweden uses music education to combat alienation (Gustavsson et al., 2018, 184-187).

According to the authors, it is difficult to avoid ethnocentric attitudes due to the norms of Swedish society and the focus of El Sistema on Swedish folk music (Gustavsson et al., 2018, 200). The interviews show that the teachers have noticed linguistic development among the El Sistema participants. The authors also explore the differences between the concepts of assimilation and integration, and conclude that Swedish El Sistema fosters inclusion (Gustavsson et al., 2016, 197-202).

44. Kuuse, A-K. 2018. *'We will fight Goliath': Negotiation of space for musical agency in children's music education*

The research explores El Sistema's dualistic task as a qualitative musical product aimed at various social goals. Kuuse views the programme teachers as acting also as social workers, with the provision of structural space, opportunities to influence, and discipline clearly associated with carrying out the musical task. According to Kuuse, the tasks of music teaching and social work do not self-evidently correlate with each other (Kuuse, 2018, 152-153).

45. Simpson Steele, J. 2017. *El Sistema fundamentals in practice: An examination of one public elementary school partnership in the US*

The study examined the Hawaiian El Sistema after-school programme, held two hours a day, four days a week.

The study found that teacher-artists were frustrated by the school teachers' attitudes toward pursuing music as a hobby. Academic subjects always came first when allocating school premises. Music was also seen as taking other resources away from the pupils and from academic subjects, even though the benefits of social music education were evident (Simpson Steele, 2017, 363-365).

46. Levitas, R. 2010. *In eine bess're Welt entrückt: Reflections on music and utopia*

The article sees music as offering its participants a path to a 'better world'. According to Levitas, music has potential for enormous individual and social impact; the key lies in exploring how this power can be used. El Sistema and especially its applications in the UK are a concrete example of this (Levitas, 2010, 227-228).

Summary

The history of the Venezuelan El Sistema programme shows that orchestral activities did not originate with Abreu or emerge from a void. Abreu's rhetoric seems to irritate some researchers. The origins of El Sistema are also revealed by the vocabulary used when its activities began. The original terms used to describe its aims relate more to musical than social goals. Finally, El Sistema formed a large international network of social music education. Compared, for example, to communism, El Sistema is a positive socialistic idea that does not work only for human matters. Programmes since innovated based on El Sistema can be even more beneficial than replications of the original programme (Baker, 2014, 320). Some international El Sistema applications replicate the model exactly, and do not explore the children's reactions (Rimmer, 2018). The critique against Venezuelan El Sistema cannot be applied to all applications in other countries. El Sistema was not originally unchangeable (Baker, 2014, 138; Tunstall,

2012). For example, whereas the Venezuelan El Sistema aims generally at preventing poverty, the Swedish programme focuses on solving segregation problems in the capital area of Sweden (Bergman et al., 2017, 365).

According to brain research, El Sistema activities, especially orchestral work, provide optimal training for brain development. According to the research, the differences do not show in behavioural stage. Clinical evidence for this is only minimal. (Sachs et al., 2017). In addition, while orchestral musicians typically play from written music sheets, learning by heart is suggested to be even more beneficial for brain health and performance

Causal connections have not been well established regarding, for example, academic or psychosocial effects. Some researchers have explored children's achievements between those pursuing music as a hobby and those not, but have not been able to find a causal dependence (Aleman et al., 2017, 865). In measurements of cortical thickness, the results have been weak; nevertheless, in interview, brain researchers often raised the importance of after-school music programmes for brain health. They also wished for more El Sistema programmes to be founded in the USA (f.e. Aleman et al., 2017, 1159).

José Antonio Abreu wrote: "From the minute a child is taught how to play an instrument, he is no longer poor. He becomes a child in progress, who will become a citizen" (Tunstall, 2012, XII). A strong personal identity and sense of belonging to a community are important aspects of what Abreu refers to as mental richness (Shoemaker, 2012).

The benefits of music education derive from a range of factors, such as the physical circumstances, the planning of the programme's contents, the qualities of the working staff, the quality of the participants' relationships, and the performances and their organization (Harkins et al., 2016, 35; Steele, 2017, 363-365). Baker (2014, 135) highlights the intense level of practice required by the SBYO. The school cultures of different countries might also be mirrored in the ways El Sistema orchestras and choirs operate. How is it done in Venezuela? How much do children practise in other contexts compared to El Sistema? (Steele, 2017, 363-365). How much do children practise in countries where classical music does not have as high status as in Venezuela?

The role of the teacher is, naturally, also crucial. If the teacher is good, everything else follows. However, being a talented musician does not necessarily mean you are a talented teacher. Support for less experienced teachers can help children achieve better outcomes, not only in music education, but also in other disciplines (Hedemann & Frazier, 2017, 758). Introducing teachers to the goals of the programme is essential; otherwise they will follow their own vision. Our analysis of the research results shows that preschool teachers and music teachers, for example in Sweden, have a rather low level of knowledge about the origins of El Sistema and its contents (Gustavsson & Ehrlin, 2018, 195).

Teacher awareness of a pupil's musical hobby outside school can result in higher student evaluation (Hille & Schupp, 2015, 57-58). Similarly, several studies have shown that good social skills can also result in better student evaluation.

Hsu (2017, 12) has suggested in his exploration of good pedagogical practices that peer teaching should be introduced as standard practice. In the light of novel brain research, the mirror cell theory could explain the efficiency of this method: a child learns best

from someone similar to themselves, because the brain's mirror cells mirror the activities of the other, resulting in imitative learning.

There is a need to move away from Western musical aesthetics. Given that study after study shows that school music education is not synchronized with children's interests, we should ask why the children's experiences and reactions are not raising interest in the research community (Rimmer, 2017, 45).

As Baker underlines, to achieve all of the benefits of music education, well-organized machinery is needed together with high quality objective research to develop it in the right direction. Qualitative as well as quantitative research is needed in order to understand the phenomenon and open it up to decision makers.

Music in itself does not do anything; what matters is how it is used. We should also ask whether all music genres, including folk music, are available to all. Pedroza (2015, 86) challenges local El Sistema programmes to use local musical instruments and popular musical styles. This is already often done in different countries and different programmes. Bergman and his colleagues (2017) explore in their article the relationship between programme selection and dominance. Gustavsson and Ehrling (2018) consider the effect of the use of Swedish folk songs in Swedish El Sistema applications. Programme planning is an interesting area of future research, including the context and educational philosophies behind the planning.

El Sistema and its applications enable hidden talents to be brought to light that would never be discovered if formal music institutions had sole precedence. There is a clear and profound need to develop programmes that informally draw young people to freely engage in music, to explore their creative potential, and to excel.

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Appendix. Brief description of articles identified

Serial number	Name of publication	Research method	Research result	Publisher, JUFO classification database
1.	Of Orchestras, Mythos, and the Idealization of Symphonic Practice: The Orquesta Sinfónica de Venezuela in the (Collateral) History of El Sistema, Pedroza L., 2015.	Investigative journalism	Truths behind the rhetoric: Abreu did not create IS alone out of nowhere. The IS is not all-powerful as a method.	Revista de Música Latinoamericana 1
2.	The Story of Carora: The Origins of El Sistema, Carlson A., 2016.	Qualitative research; oral history, interviews, historiography	Abreu collaborated tightly with other similar children's orchestras in 1970s	International Journal of Music Education/ Sage Journals 2
3.	Producing musicians like sausages: new perspectives on the history and historiography of Venezuela's El Sistema Baker G. & Frega A., 2018.	Document-based evaluation, comparative analysis	The beginning of critical research of El Sistema from 1997. And the lack of music education	Music Education Research 3
4.	Political economy and global arts for social change: A comparative analysis of youth orchestras in Venezuela and Chile, Strother E., 2017.	Comparative research	Political-economic context matters for social change	Arts Education Policy Review 1
5.	El Sistema in Canada: A Recent History, Part 1, Lorenzino L., 2015.	Report / History	Canada is a strong IS country. Each of its 23 orchestras work from their own starting points to offer optimal help	Canadian Music Educator
6.	El Sistema in Canada: A Recent History: Part 2 of 2, Smith G. & Lorenzino, L., 2016.	Report / History	Like all Sistema and Sistema-inspired programmes in operation in Canada, Ontario's 11 projects have each adapted Maestro Abreu's vision in order to best suit the needs of their individual communities (Conclusion).	Canadian Music Educator
7.	Increased engagement of the cognitive control network associated with music training in children during an fMRI Stroop task, Sachs M. et al., 2017.	Quantitative, comparative, follow-up. FMRI and several behavioural tasks, N=14, age average 8.67 years	Systematic extracurricular training, particularly music-based training, is associated with changes in the cognitive control network in the brain (even in the absence of changes in behavioural performance.)	PLOS One 1
8.	How learning a musical instrument affects the development of skills, Hille A. & Schupp J., 2015.	Quantitative, comparative, follow-up, survey.	Some types of skills might be improved through participation in extracurricular activities in general, while others are influenced particularly by music.	Economics of Education Review 1
9.	Neural correlates of accelerated auditory processing in children engaged in music training, Habibi A. et al., 2016.	Quantitative, 5-year longitudinal study; target group at beginning 6-7 years old, N=50	Music training may result in stimulus- specific brain changes in school-aged children. Connection to auditive and linguistic abilities	Developmental Cognitive Neuroscience 1
10.	Cortical Thickness Maturation and Duration of Music Training: Health-Promoting Activities Shape	Quantitative research, longitudinal design, MRI, IQ, and music training data	Playing a musical instrument was associated with more rapid cortical thickness maturation within areas	Journal of the American Academy of Child

	Brain Development, Hudziak J. et al., 2014.	N= 232 youths (334 scans) age 6-18	implicated in motor planning and coordination, visuospatial ability, and emotion and impulse regulation.	& Adolescent Psychiatry 2
11.	Instrumental Music and Reading Achievement of First Graders, Heagy L., 2018.	Quasi-experimental study Analysis of covariance N=76 First graders	Although the results of this study did not show a relationship between instrumental music and academic achievement, this study has implications for positive social change.	Walden University, ProQuest Dissertations Publishing
12.	Exploring the Academic and Psychosocial Impact of El Sistema-Inspired Music Programmes within Two Low Socio-Economic Schools, Osborne M. et al., 2016	Quantitative InCAS method (Interactive Computerized Assessment System) Comparative research, 2 IS participating groups before and after 12 months. 3-5 graders, N=92, Australia	Academic and psychosocial status of disadvantaged students may be improved through music learning opportunities	Music Education Research 3
13.	Hitting the right note for child and adolescent mental and emotional wellbeing: a formative qualitative evaluation of Sistema Scotland's 'Big Noise' orchestral programme, Harkins, C. et al., 2016.	Mixed methods, non-clinical short- to medium-term impacts Semi-structured interviews, observation, participant drawing exercise, participatory filmmaking	Big Noise programme enhances participant mental and emotional well-being in three ways: happiness and enjoyment, security, increased pride, confidence and self-esteem	Journal of Public Mental Health 1
14	Leveraging After-School Programmes to Minimize Risks for Internalizing Symptoms Among Urban Youth: Weaving Together Music Education and Social Development, Hedemann, E.R. & Frazier, S.L., 2017.	Mixed method Several quantitative tests, open questions, Observations N=61 youth	Results suggest promise of this model (Miami Music Program) for mental health promotion for urban youth.	Administration and Policy in Mental Health and Mental Health Services Research 1
15	Improvement in South African students' outlook due to music involvement, Roy, M.M. et al., 2014.	Mixed methods, follow-up and comparative research. N=44 and N=28 Several different quantitative tests and a qualitative survey	The music programme appears to have certain psychosocial benefits, improving aspects of attitude and outlook for participants in the band.	Music Education Research 3
16.	An instrument for every child: a study on long-term effects of extended music education in German primary schools, <u>Krupp-Schleußner, V. & Lehmann-Wermser, A.</u> , 2018.	Quantitative. 2013 and 2014 survey of n = 886 sixth and seventh graders in North Rhine-Westphalia and Hamburg with questionnaires. The same children were questioned twice in two measurements.	Music at home and children's attitude to music have a bigger impact to instrument learning and general participation than any other factors.	Music Education Research 3
17.	From Caracas to the Canadian Prairies: Executive Summary of the Pilot Evaluation of an El-Sistema-Inspired After-School Orchestral Program, Morin, F., 2014.	Mixed methods: Participants (n=70) in the study included four sub-groups: children (n=31), teachers (n=7), families (n=29), and administrators (n=3). Interviews, focus groups, field notes, and open-ended survey items and later thematically analysed using interpretive strategies. Survey.	The Canadian pilot is a robust after-school orchestral programme that is working effectively and providing initial indicators of doing what it is intended to do.	Canadian Music Educator
18.	The Effects of Musical Training on Child Development: a Randomized Trial of El Sistema in Venezuela, Aleman, X & co., 2017.	Real clinical research, quantitative, comparative research N=2914, age 6-14 16 different focuses 1.5 years	We find that the programme improved self-control and reduced behavioural difficulties, with the effects concentrated among subgroups of vulnerable children.	Prevention Science 1

19.	El Sistema, Orchestrating Venezuela's Youth, Baker, G., 2014.	Interviews, ethnography	Questioned the symphony orchestra and the whole El Sistema Venezuela as a progressive pedagogical tool and motor of social justice and that the programme prioritizes social over musical goals and promotes civic values.	Oxford, University Press.
20.	Before you turn the page: Connecting the parallel worlds of El Sistema and critical research, Baker, G., 2016.	Essay / description	The critical aspects of El Sistema must not be overlooked when developing the method. New critical research is needed.	Revista Internacional de Educación Musical
21.	Changing Lives, Gustavo Dudamel, El Sistema, and the Transformative Power of Music, Tunstall, T., 2012.	Narrative, chronicle, interviews, narratives	Arts education can indeed effect positive social change in the US and around the world.	W.W. Norton & Company Inc.
22.	Thoughts on Seeing El Sistema, Booth, E., 2009.	Descriptive report of a visit	This is God's work—whatever that means to you.	Teaching Artist Journal 1
23.	Five Encounters With 'El Sistema' International: A Venezuelan Marvel Becomes a Global Movement. Booth, E. & Tunstall, T., 2014.	Comparative look at the now global El Sistema community orchestra programme/movement. Five encounters.	The resulting energy and excitement are igniting in different ways, in different places, to produce the same worldwide guiding light, a light that can guide many out of the ravaging cycles of poverty on a path made of beauty.	The Teaching Artist Journal 1
24.	From the model of <i>El Sistema</i> in Venezuela to current applications: learning and integration through collective music education, Majno M. et al., 2012.	Description	How to control quality in a growing system. A systematic categorization of different El Sistema applications.	Annals of the New York Academy of Sciences 1
25.	Adapting the El Sistema program to Canadian communities. Nemoy, L. & Gerry, D.W., 2015.	Structured interviews, á 45 min.	The programme is successful at effecting social transformation because it affects the community as a whole, and it does so by giving the children who live there the opportunity to 'find their voice through music'.	Canadian Music Educator
26.	Knowledge exchange with Sistema Scotland, Allan, J. et al., 2010.	Series of four learning space meetings	Some groups and individuals have more power than others when it comes to decision-making in the Big Noise organization.	Journal of Education Policy 3
27.	Harmony or Discord? Understanding children's valuations of a Sistema-inspired initiative. Rimmer, M., 2018.	Interview survey: Children N=38 Parents N=20, Heads/teachers N=22 In Harmony managers/tutors N=12	Musical content should be closer connected to participants' own interests in order to succeed.	British Journal of Music Education 2
28.	El Sistema USA: An exploratory study of the pedagogical approaches in beginning violin classes, Hsu, T., 2017.	Data: - existing published literature - writer's first-hand experiences - teacher survey	A recognized lack of consistent pedagogy especially in stringed instrument teaching. Peer-teaching well prepared by a teacher could be offer this, or the CATS-in method could be the El Sistema pedagogy, which suits the original IS ideology.	ProQuest
29.	Venezuela's National Music Education Program El Sistema: It's Interactions	Ethnography, autoethnography, interviews	The best programmes are able to engage in a form of praxis, working within the	Music and Arts in Action 1

	with Society and its Participants' Engagement in Praxis Uy, M., 2012.		local and historical context of their situations whole also learning from the programmatic success of organizations like El Sistema.	
30.	Sociological portraits: Orchestral socialization, paths and experiences, Lopes, J.T., Boia, P.S., Veloso, A.L., Matilde Caldas, M., 2018.	Sociological portraits of 35 young Orquestra Geração participants.	Transformation arises from the fact that socio-musical practices in lessons, rehearsals and concert performances are framed, organized and disciplined according to certain models of organization, socio-musical values and goals that are made explicit verbally	CIPEM and ISFLUP, University of Porto
31.	A music and health perspective on music's perceived "goodness" Edwards, J. 2011.	Critical exploration Description	Wider discussion and exploration of music's concrete health-promoting impact is needed.	Nordic Journal of Music Therapy 2
32.	The Orchestration of Civil Society: Community and Conscience in Symphony Orchestras, Ramnarine, T., 2011.	The case studies discussed in this article	Symphony orchestras move away from serving only as metaphors of society to being socially-aware participants in orchestrations of civil society.	Ethnomusicology Forum 2
33.	The power of discourse: reclaiming social justice from and for music education, Spruce, G., 2017.	Discussion / essay	El Sistema in the UK standardizes participants as a condition for participation.	Education 3-13, International Journal of Primary, Elementary and Early Years Education 1
34.	Music and the Myth of Universality: Sounding Human Rights and Capabilities, Nomi, D., 2015.	Description / discussion	By combining a capabilities approach with ethnographic research, we are able to see music not as removed from or transcendent of culture and politics, but intimately tied up with it. IS as an example.	Journal of Human Rights Practice 1
35.	Youth Education for Social Responsibility, Dyck, R., 2015.	Discussion / essay	Structural changes, such as El Sistema, have a big impact, not momentary financial assistance.	Systems Research and Behavioural Science 1
36.	Music Education for Every Child – Ideal or Reality? Susić, B.B., 2017.	"Through a historical and theoretical overview of this idea, this paper examines the potential for its realization in contemporary educational practice."	"The Venezuelan music education program El Sistema, which promotes the humanistic idea of changing society through classical music education, stands out as a unique example of good practice."	Journal of Elementary Education
37.	Things to Remember about El Sistema A Response to 'El Sistema—A Perspective for North American Music Educators' by Tricia Tunstall, Lesniak, M., 2013.	Description	El Sistema is a good addition to the North American music education system.	Music Educators Journal
38.	Changing social perspectives: teaching artists and transformative learning in an El Sistema-inspired after-school music program, Cortese, P.A., 2019.	Multiple case study Mixed methods Three cases Doctoral dissertation	The study found that participants experienced a change in perspective on social issues while working in the learning environment.	ProQuest Dissertations Publishing
39.	Instrument of social reform: A case study of the Venezuelan system of youth orchestras, Hollinger, D.M., 2006.	Qualitative case study, Interviews, observations, and collection of artefacts. Ethnography, narrative, document research	Supports claims that participation in arts education has a positive effect on students, especially those who are from the lowest socio-	ProQuest Information and Learning Company

			economic strata or students who have trouble engaging in traditional education.	
40.	The pedagogy of becoming: Identity formation through the Baltimore Symphony Orchestra's OrchKids and Venezuela's El Sistema, Shoemaker, A.H., 2012.	Interviews, ethnography	Both programmes impact their students by giving them a strong sense of personal identity and of belonging to community. The children learn responsibility for the communities around them and develop a sense of belonging to a larger international music community.	Pro Quest Dissertations Publishing
41.	Challenging symbolic violence and hegemony in music education through contemporary pedagogical approaches, Powell, B. Smith, G.D. & D'Amore, A., 2017.	Discussion article	El Sistema and its applications in the UK can be understood as a middle class educational task or development of working class using classical music as a tool. El Sistema may be a system that underlines social class differences.	Education 3-13 1
42.	Struggling for integration: universalist and separatist discourses within El Sistema Sweden, Bergman, Å et al., 2016.	Discourse analysis	Underlining participants' differences or similarities? Rather so-called third stage.	Music Education Research 3
43.	Music pedagogy as an aid to integration? El Sistema-inspired music activity in two Swedish preschools, Gustavsson, H.O. & Ehrlin, A., 2016.	Semi-structured, qualitative, research interviews, 'conversational interviews', 4 preschool teachers, 4 music teachers	Preschool teachers and music teachers have relatively limited knowledge about El Sistema's origin and content. Assimilation promoted rather than integration, with Swedishness as a prerequisite for a social community.	Early Child Development and Care 1
44.	'We will fight Goliath': Negotiation of space for musical agency in children's music education, Kuuse, A-K., 2018.	Empiric, ethnographic research 3-month observation and recording in Gothenburg's El Sistema. Theoretical research	The dual claim of musical excellence and social transformation by El Sistema can be perceived as challenging. Correlation between music educational practices and social change cannot be taken for granted.	Research Studies in Music Education 2
45.	El Sistema fundamentals in practice: An examination of one public elementary school partnership in the US, Simpson Steele, J., 2017.	Qualitative case study: ethnographic observations and focus group interviews, 12 semi-structured focus groups and ethnographic notes from field observations totalling 27 observation hours	El Sistema has a great potential to influence young participants musically, personally, and socially, but may need the freedom to operate outside of the public school system to realize that full potential.	International Journal of Music Education 2
46.	In eine bess're Welt entrückt: Reflections on Music and Utopia, Levitas, R., 2011.	Essay	'In Harmony will be as much about building life skills, aspirations and self-esteem as it is about nurturing musical talent.'	Utopian Studies 1