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Table of Contents

Research Master Class	p. 2
Conducted by Dr. Laurel J. Trainor, McMaster University	
Predicting Parents Success in Facilitating Children’s Suzuki Music Education	
<i>McHugh-Grifa</i>	
Does Music Instruction Using The Suzuki Method Improve Working Memory And Visual-Spatial Processing In Children?	
<i>Hallberg</i>	
Research Presentations	p. 4
Choosing To Learn: The Effect of Observation Learning, Forced-Choice Learning, and Goal-Shaped Learning On Novice Instrumental Music Learners	
<i>Guerriero</i>	
Perception of Musical Meter in Kindergarten Children	
<i>Einarson & Trainor</i>	
Attitudes of Music Teachers Toward Taiwanese Elementary School Musically Gifted and Talented Programs	
<i>Li</i>	
Poster Presentations	p. 7
Music Performance Anxiety Therapies: A Review of the Literature	
<i>McGrath</i>	
The Role of Evaluative Performances in Defining and Developing Musical Talent	
<i>Mitchell</i>	
Creating Safe Spaces for Music Learning	
<i>Smith, Hendricks, & Stanuch</i>	
Suzuki Research Bibliography	p. 10

Predicting Parent Success in Facilitating Children's Suzuki Music Education

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This purpose of this study was to identify specific elements of Suzuki parents' experience that contribute to their "successful" enactment of their role as Suzuki "home teachers." Two hundred fifty-eight parents from eight Suzuki schools around the United States participated in this study, for which they completed a survey designed to explore a wide variety of possible influences on their behavior. I used factor analysis to extract the following two measures of "success" from parents' self-reported data: (1) the frequency and/or consistency with which parent-child dyads, or children alone, engaged in behaviors that are integral to the Suzuki method (e.g., practicing, attending group classes, listening to Suzuki recordings, and reviewing previously learned repertoire), and (2) parents' reported enjoyment and perceptions of efficacy as home teachers. I then formulated two regression equations that would account for the variance in parents' outcomes on these measures. Significant predictors of parents' success included which Suzuki school they attended, how they conceived of their role in their children's music education, what type of training they received to help them support their children's music learning, how effectively they felt they practiced with their children, and how realistic their expectations for personal effort were when they began their Suzuki instruction.

Does Music Instruction Using The Suzuki Method Improve Working Memory And Visual-Spatial Processing In Children?

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Musicians provide an accessible and unique population to study psychological constructs and behaviors. In researching the development and processes involved in becoming a musician, not only artistic value is gained to a society, but also knowledge in cognitive growth and functions, such as memory and visual-spatial abilities.

Past research on differences between musicians and nonmusicians in cognitive functions has indicated that early music training can affect spatial (Bilhartz et al., 1999; Gaser & Schlaug, 2003) and verbal abilities (Moreno et al., 2011; Franklin et al., 2008), constructs associated with working memory (WM) and academic learning (Marin, 2009; Jakobson, Schellenberg, 2006). These differences in WM measures between musicians and non-musicians concluded better working memory task performances in musicians possibly due to sustained cognitive control, or the ability to maintain attention on a working task, a probable outcome from long-term musical training (George & Coch, 2011; Franklin et al., 2008; Pallesen et al., 2010). Currently, there are limited direct studies demonstrating enhancement of WM by musical training in children.

The purpose of this study is to assess if administering music instruction using the Suzuki Method increases measures of performance in verbal and nonverbal working memory (WM) tasks and visual-spatial processing in kindergarten children. A randomized experimental design using the independent variable of music instruction will be deliberately manipulated and the dependent variables of verbal and nonverbal working memory and visuo-spatial processing measures from the Stanford-Binet 5 will be assessed.

Uncovering a relationship between musical training and WM will supplement the research on elementary aged children and music instruction by presenting measures of verbal, nonverbal working memory and visuo-spatial processing in relation to students receiving music instruction by using the Suzuki Method.

Choosing To Learn: The Effect of Observation Learning, Forced-Choice Learning, and Goal-Shaped Learning On Novice Instrumental Music Learners

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An overview of the music practice literature suggests that while practicing is important to the continued acquisition of skill learning, the type of practice and self perception or awareness of practice are most important to the learner's success. Few research studies have focused on novice learners' skill acquisition of a complex task without practice. The purpose of this experimental study was to examine maximum efficiency of skill learning without practice using Observation Learning (OL), Forced-Choice Learning (FCL), and Goal-Shaped Learning (GSL) on the performance of novice instrumental music learners.

Undergraduate non-music majors with no previous experience in string instrumental music participated in this study ($N=57$). All participants completed a pretest and post-test during which they were asked to perform the first phrase (first 13 notes) of the common folk song "Mary Had a Little Lamb." During the treatment, the OL participants viewed the researcher performing the task in pairs of videos with good and poor performances. The FCL participants viewed the same pairs of videos and were asked to choose which of the videos in each pair seemed better to them. The GSL participants observed the same pairs of videos, made forced-choice decisions about which video in each pair seemed better to them, and received the expert feedback in the form of agreement or disagreement with the experts.

Participants' pre- and post-test performances were sent to experts who provided Likert ratings in five component areas: posture, left hand technique, right hand technique, rhythmic accuracy and tonal accuracy. Statistically significant results ($p < .05$) indicated that participants in the OL and GSL groups increased their posture scores following the treatment. Interestingly, participants in the FCL group had lower post-test ratings in all five measured areas, although only the area of posture was statistically significant. An important practical finding for this study is that novice learners may be able to learn complex tasks without practice when correct information is presented and they are sufficiently engaged in the learning process. GSL may be an effective method for efficient learning and its use in music learning should be researched further. Additional research studies could explore skill learning without practice, GSL in other learning areas, or examine forced-choice and Likert Scale ratings as tools for assessment.

Keywords: goal shaped learning, skill acquisition, forced choice, violin, music learning

Perception of Musical Meter in Kindergarten Children

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Meter is the regular, hierarchical pattern of beats that can be perceptually abstracted from a musical composition (e.g., Lerdahl & Jackendoff, 1982). There is evidence that newborns can abstract metrical structure (Winkler et al., 2009), and that by 12 months of age infants have become specialized at processing the metrical structures predominant in their culture (Hannon & Trehub, 2005; Soley & Hannon, 2010). Western music commonly uses simple 4/4 or 3/4 time signatures, and complex meters (e.g., 5/4, containing alternating groups of two and three beats) are challenging even for musically trained Western adults. However, adults whose native folk music uses complex meters have little difficulty perceiving and producing such meters (Hannon & Trehub, 2005). Although research has examined meter processing in infants and adults, there is little research with children. In the present study we examined kindergarten children's sensitivity to the beat using musical excerpts with either simple or complex meters. We developed an engaging, age-appropriate test based on the Beat Alignment Task by Iverson and Patel (2008). In our video task children judge which of two puppets is a better drummer, when one drums in synchrony with the beat of a musical excerpt and the other drums either out of phase with the beat, or at an incorrect tempo. Additionally, we measure receptive vocabulary and working memory. Results indicate that musically untrained children are significantly better at detecting beat alignment errors in music with simple metric structure for both tempo errors ($p = .013$) and phase errors ($p = .004$). Furthermore, preliminary results suggest that overall performance on the musical task is associated with higher scores on the vocabulary and working memory tests. This study serves as the basis for future studies examining relations between beat perception and production, and the effects of musical training on children's ability to process metrical structure.

Attitudes of Music Teachers Toward Taiwanese Elementary School Musically Gifted and Talented Programs

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The first public school's Musically Gifted and Talented Program (MGTP) was founded in 1973 at Fu-Shin Elementary School in Taipei, Taiwan. In 2010, approximately 50 elementary schools that offered Musically Gifted and Talented Programs served 3,166 pupils from third to sixth grade. During the past three decades, debates regarding whether Taiwanese MGTPs should be continued or abolished have persisted. However, broad and in-depth research related to these programs has been very limited.

This paper reports results from a large research (Li, 2008), which investigated the nature of music teachers' attitudes toward three aspects of Taiwanese elementary school MGTPs: identification, grouping and curriculum, and values. Specifically, the study also explores how these attitudes related to music teachers' professional backgrounds and their positions. Subjects for this study were elementary school MGTP music teachers. Of the 20 elementary schools participating in this study in 2008, 146 music teachers completed online surveys.

Results of this study indicated that respondents strongly agreed with the following: (a) learning environment is more important than the innate giftedness of students themselves; (b) the criteria in the 2006 revision for entering elementary school MGTP are too high for second grade students; (c) parents' attitude toward the MGTP strongly impact their children's participation in an elementary school MGTP; (d) the goal of elementary school MGTP is not vocational training but to develop all students' musical potential; (e) full-day isolated grouping (ability tracking) is an efficient and necessary approach to administer elementary school MGTPs.

Responding to strong requests from music educators and MGTPs' parents associations, the government again revised the regulation related to MGTP in 2010. The title of MGTP was also revised as Musical Talent Program (MTP). These positive new policies will lead Taiwanese MTPs into a new age.

Music Performance Anxiety Therapies: A Review of the Literature

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Music Performance Anxiety (MPA) is a widespread epidemic in the world of instrumental and vocal performance. While traditional music education provides a solid training in terms of technical and interpretive execution, attention is rarely given to managing the very symptoms that may challenge one's ability to perform at optimum level. As both collegiate study in music performance and the process of acquiring employment as a performer often require the presentation of skill in an evaluative setting, it is imperative that more light be shed on the management of music performance anxiety. Equipping the next generation of musicians with the skills to handle fear, adrenaline, tension, and other threats to their concentration in demanding situations may not only improve the quality of the performing arts henceforward, but also the success and satisfaction of those onstage.

This poster highlights findings from an extensive assessment of the current literature and research on the methods by which Music Performance Anxiety has been and is currently being treated among amateur musicians, conservatory students, and professional instrumentalists. Cognitive-Behavioral therapies including Rational Emotive Behavioral Therapy, Meditation, Electromyographic Biofeedback, Progressive Muscle Relaxation, and Alexander Technique, Expressive Art Therapies such as Guide Imagery and Music Therapy, as well as Exposure Therapies, and pharmacological treatments will be discussed, as well as implications for future research and current music educators.

The Role of Evaluative Performances in Defining and Developing Musical Talent

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Evaluative performances, such as festivals, competitions, and conservatory examinations, are a frequent fixture of formal music education. Many teachers, parents, and students believe that the rigorous curriculum expectations and expert adjudication provide an authoritative assessment of musical ability; however, the definition of musical talented that is perpetuated through evaluative performances is narrow and includes many factors which are not directly related to musical skill. This poster examines the role of evaluative performances in influencing which students are considered musically talented and how musical talent is developed. The findings are based on a study involving current and former piano students who were interviewed about their experiences participating in evaluative performances. The quality of student experiences with evaluative performances is affected by several factors, including the student's musical preferences, work habits, motivational orientation, ability to cope with performance anxiety, and relationships with parents and teachers. When students' characteristics align with the demands of the evaluation, they are likely to be successful and to have a strong sense of self-efficacy that propels them toward future learning and participation in evaluative performances. If any one of these factors is absent for a particular student, he or she is likely to have negative views about participation in evaluative performances. Because students' festival and examination achievement is so often taken as an indication of musical talent, students who are unsuccessful or who do not want to participate in these evaluations are in danger of being viewed as lacking in musical ability and of having their musical development neglected as a result. It is important to examine the construct of musical talent that is fostered through evaluative performances so that students whose abilities lie outside of the required curriculum can be offered opportunities to pursue their full musical potential.

Creating Safe Spaces for Music Learning

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A vast amount of educational research has addressed issues of motivation, providing teachers with numerous strategies for encouraging students to engage and persist in learning activities. Before music educators consider using such strategies, however, it may be necessary to ensure that students feel safe enough to take musical risks and freely express themselves. For example, some evidence suggests that student expressiveness may be hindered in highly critical, socially comparative musical environments, especially in cases where students enter the environment with a relatively low sense of self-efficacy.

Drawing upon research literature in motivation, creativity, and counseling psychology, this poster provides a theoretical model for fostering emotionally safe learning environments that instill music students with a positive sense of self-belief, freedom, and purpose. Our inquiry is framed by four questions:

1. What kind of learning environments foster intrinsic motivation and musical engagement?
2. In what ways are music students influenced by critical, demeaning, or fear-based attempts at motivation?
3. How do competitive structures affect student creativity and self-expression?
4. What impact do elitist notions of talent have on perceptions of music as an accessible, learnable skill?

This literature review organizes past research findings according to the above four themes, in order to offer implications for music educators in creating effective learning environments. Recommendations include (a) specific teacher attitudes and behaviors that nurture a sense of trust and respect, thereby encouraging experimentation, risk-taking, and self-expression; and (b) music teaching strategies that foster purpose-driven student commitment and musical mastery toward self-actualization.



Suzuki Method Research: A Bibliography

Compiled through 2010 by Dr. Alice Ann M. O'Neill

Updated in 2012 by Dr. Karin S. Hendricks

Updated in 2014 by Dr. Nancy Mitchell and Dr. Elizabeth Guerriero

- Beegle, Jeanne. "Suzuki Piano School: Support from Contemporary Music Learning Research." Dissertation, 1998.
- Berardocco, Diana, B. "A Study of the Philosophy and Method of Shinichi Suzuki; A Dissertation." M.M. Thesis, Catholic University of America, 1974.
- Blaker, Suzanne Leslie. "A Survey of Suzuki Violin Programs in Community Music Schools in the U.S." D.M.A. Diss., The Ohio State University, 1995.
- Blunt, Jeremy, W. "A Comparative Study of the Suzuki Method and the Training of Suzuki Teacher's in Japan and England." M.Ed. Thesis, University of Birmingham, 1987.
- Bujega, Clare. (2009). "Parental Involvement in the Musical Education of Violin Students: Suzuki and 'Traditional' Approaches Compared. *Australian Journal of Music Education*,