Creative Movement Education in Early Childhood and Adolescence: Effects on Movement Proficiency

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Abstract

This paper reviews recent literature surrounding the effectiveness of selected creative movement programs and activities (dance, theatre, and circus) to the motor development and proficiency of children and adolescents over time. The purpose of the review is to discover that children and adolescents who participate in creative movement activities exhibit greater motor proficiency over time. Major considerations of this review include the integration of creative movement activities into the physical education classroom, proper evaluative measures of programs, and recommendations for successful creative movement programs. The hypothesis that young participants in creative movement activities are more proficient movers over time is gently accepted as true, but requires more longitudinal studies and reviews to be done to solidify this assumption.

Table of Contents

1. Introduction

One of the most common ways children and youth are exposed to physical education is through competitive sports. Though there are obvious and many research-supported benefits to motor proficiency from participating these types of activities, this paper focuses on the effects that selected creative movement activities can have on motor proficiency, social skills, fitness habits, and creative problem solving for youth and adolescents. Creative movement activities here broadly refer to circus arts, theatre, and dance.

Recent trends have shown an increase in creative movement integration into traditional physical education curriculum and in classroom activity. Teachers' desire for variance and engagement of students is one reason for this trend. Another possibility is creative movement's ability to solidify concepts and assist in memorization.

A report by the American Academy of Pediatrics (2003), as cited by Gabbard (2008) indicated that play was an essential part of childhood development (p. 419). A main reason behind these changes is due to the trend of physical inactivity of young people in the last half century, largely due to the increase of television watching. Gabbard argues that this promotes more solitary and parallel play than ever before and that this change in social behavior and interactions among playing children and adolescents has no doubt affected motor development, skill acquisition, and proficiency (p. 421). Santaouck (2007), as cited by Gabbard (2008), indicated that, "children spend over 26 hours per week watching television, which is more time spent on any other activity except sleep" (p. 421).

In this paper, two recent research studies will be analyzed and recommendations will be given from several other articles to make conclusions about creative movement education's role

in promoting motor proficiency. Major questions and concerns relate to proper evaluation of programs to determine effectiveness, and outcome-based analysis of motor proficiency training through creative movement programs. Another consideration lies in the implications for the physical education classroom setting and professionals in that field with limited experience in the creative movement, dance, theatre, and circus arenas.

Garcia et al. (2002) focused on the implications that participation in early childhood movement programs has on public health from an interaction model of motor development perspective. Using this framework, two studies will be analyzed and compared around the effectiveness of creative movement programs on the development of motor skills in children and adolescents. The first, conducted by Hui-Tzu in 2004, compared the gross motor, object manipulation, stationary, and locomotor skill scores of preschoolers who participated in either a creative movement program or free play. Gabbei & Clemens (2005) used the BSER (Body, Space, Effort, Relationships) movement framework to explore pantomime and creative movement lessons as tools for any instructor, regardless of dance training and experience, to engage students and solidify concepts (in both academic and expressive areas).

This review will also explore the works of Magglio & McKinstry (2008), Stinson (1988), Sprague (2004), Woodhead (1998), and Carr (2004), who all make their own cases for why creative movement programs in dance, circus arts and theatre are effective learning tools for motor development for the population.

1.1. Personal Interest

My own personal interest in this topic is couched in my passion for creative movement. I strongly believe in the benefits of creative movement activities on social, psychological, and physical levels. I wanted to test the validity of this positive association and examine specifically the physical effects and motor behavior implications of participating in selected movement activities. I am interested in learning ways to integrate creative movement activities into the classroom and apply principles that will yield the greatest positive outcomes for participants in all domains of learning. I am especially intrigued in evaluation procedures and techniques to prove or deem certain activities and programs "effective" for the various variables: motor skill development, social interactions, etc.

1.2. Hypothesis

Children who participate in selected creative movement activities are more proficient movers across childhood and adolescence.

2. Literature Review

2.1. Overview

Focus throughout this literature review will be around the Interaction Model of Motor Development, looking across the lifespan on what causes individuals to gain motor skills through a creative movement lens. This requires acknowledgement that a combination of genetics and environment yields learning potential. Learning potential can then be maximized by demonstrating natural abilities, being given opportunity experiences, developing core principles (and gross motor skills), having proper instruction, practicing, receiving feedback, and finally showing development. Taking a public health approach to early childhood movement programs, Garcia et al. (2002) provide professionals with a few basic assumptions and combat three common misconceptions concerning movement and children, as outlined by Barrett & Merriman (1991).

Though the authors never come outright and mention the Interaction Model of Motor Development, it is clear in their thinking that this framework is present in the work of Garcia et al (2002). In the study on throwing patterns discussed in the article, a sequence of instruction, encouragement, and practice is emphasized for success. They argue that movement programs are "more effective" if they contain elements of cognitive, social, and affective development as well. According to Garcia (1994) as cited by Garcia et al. (2002), "Successful programs have activities that are developmentally appropriate, integrate and reinforce other developmental domains besides the physical, and contain contextual reinforcement" (p. 27).

Two other key components to success of creative movement programming according to Garcia et al. (2002) are identified as: the presence of fun (which predisposes individuals to

participate in physical activity later in life), and good teaching fundamental motor skills. Creating fun experiences and building important motor skill sets early in life gives children a better chance at being active adults rather than their sedentary counterparts.

2.2. Recent Studies

In a study by Hui-Tzu Wang (2004), two groups of preschool children were evaluated on their gross motor, locomotion, object manipulation, and stationary skill scores. One group participated in an organized creative movement activity while the other took part in free play for thirty minutes per day, two days per week. The creative movement program sessions were broken up into five parts: warm up, exploring a concept, developing skills, creating, and cool down. Laban (1980), as cited by Hui-Tzu Wang (2004) indicates that space, effort, body, and relationships condition each movement. This principle is also known as the BSER Movement Framework. The same framework will be used in the second study explored done by Gabbei & Clemmens (2005).

The findings of Hui-Tzu Wang's study indicated that gross motor (static/ dynamic balance, strength/ agility, and body coordination) and locomotion exhibited statistically significant increases in the posttests of participants in the creative movement program compared to those in the free play program. There were no significant differences between the two groups in the areas of object manipulation or stationary scores. The method of evaluation was the Peabody Developmental Motor Scale- Second Edition (PDMS-2), which includes video evaluation, individual scoring and analysis of proficiency in the various skill areas. Seven research assistants who showed 85-100% agreement on skill assessment scores evaluated the videos.

The study also discusses the idea of maturation in relation to motor skill development. This means that skills are automatically acquired at a low level just by aging. Hui-Tzu Wang (2004) stresses the interaction model in stressing the fact that practice and instruction are both key to proficiency and later success in skills (p. 32).

An article by Gabbei & Clemmens (2005) gives an innovative approach to creative movement: using storybooks to provide the "creative material". The authors offer ways to integrate interdisciplinary learning of language, motor skill development and critical thinking through this way of expression using the BSER movement framework from Allison & Barrett (2000). Gabbei & Clemmens (2005) call creative movement activities the "ideal vehicle for integrating curriculum because the potential for human inspiration is limitless" (p. 32).

The article acts as a framework for physical education instructors with little or no dance training or experience to use these activities of pantomime and creative movement lessons to liven up their courses and solidify concepts. The steps in a typical lesson include: communicating ideas through movement, creating a dance, acting out a scene, abstracting movements, and coordinating/ refining movements. In order to help students achieve the toughest step of turning the literal movements into metaphoric ones, the authors provide the BSER model concepts and ways to guide students using abstractions to alter the movements.

Assessment of the effectiveness of this program occurs after students present dance sequences. They are evaluated using a dance presentation rubric on "smoothness of movements, creativity, abstract representation of the story, and continual movement of all group members throughout the dance" (p. 37). Again in this movement program proposition, there are significant undertones of the Interaction Model of Motor Development through the demonstrated aspects of instruction, opportunity, practice, feedback, and development.

2.3. Other Models to Consider

Carr (2004) studied six circus schools and programs internationally in three categories: government sponsored, community-based, and privately owned. Many of these programs catered to reluctant exercisers and children who are unable or unmotivated to participate in competitive team sports or conventional physical education programs. She indicates that, "the non-competitive and nonthreatening activities provided children with different choices and therefore they didn't seem to notice they were involved in physical activity" (p. 2). This is a perfect example of a creative movement activity that develops motor proficiencies in children in adolescents that is also fun, as outlined by Garcia (2004) as the two keys necessary for a successful creative movement activity. Carr (2004) makes a call to action to change attitudes surrounding physical education in the traditional setting. She provides a chart of positive, negative, and interesting effects of circus arts programs on youth development (social and motor).

Another similar framework is provided in a handbook by Woodhead (1998) entitled 'Circus in Schools'. Here, circus arts is identified as a way to promote physical fitness and motor development, social involvement, and self esteem. It provides a guide for facilitators and instructors to use in hopes of creating positive developmental experiences for youth. Collaborative processes are very present in the "adapted dance process" outlined by Block (2011). The article describes an inclusive creative movement dance experience that addresses psychomotor, affective, and cognitive areas (p. 16).

2.4. Professional Recommendations

In creative movement activities, it has been suggested by Garcia et al. (2002) that allowing for adaptation and spontaneity provides for more opportunity for success, and thus

more chance that participants will remain engaged in the activity for a longer period of time. At the same time, it is important to note that too much freedom can often be detrimental to the positive outcomes creative movement activities are known to provide.

Gabbei & Clemens (2005) warn practitioners about the pitfalls of telling students to "be creative" (p. 37). They stress not overwhelming students by making concepts clear (i.e. explaining speed, levels, and shapes desired) but allowing for many movement possibilities and interpretations. The authors provide a list of possible abstractions for instructors to give to participants to alter their movements and sequences of movements in a specific, yet creative way. It appears that finding the proper balance between structure and freedom is key in participant development, both social and physical through creative movement activities.

Stinson (1988) agrees with this notion in her statement concerning dance: "The emphasis in dance for preschoolers is not on imitating the teacher but discovering the dance within each child" (p. 54). Her perspective is one of finding the "magic" about dance and translating movement into dance by paying special attention to it. She argues that creating this kinesthetic awareness is critical in developing motor skills and that dance is a compilation of body and spirit, not just a physical exercise with awareness included. In order to obtain the "total involvement" of participants, the themes chosen for creative movement activities must be both significant to children and create a sense of ownership of the activity to the participant (Stinson, 1988). For physical education instructors with little or no dance or creative movement training or experience, Sprague (2004) stresses that these professionals must have "sensitivity to the art form and an ability to emphasize its creative qualities" (p. 88).

Magglio & McKinstry (2008) propose a new idea of combining a specific creative movement activity (circus arts) with occupational therapy as a way to promote holistic health and

wellbeing of children and adolescents involved. The main Interaction Model pieces they focus on are opportunity and feedback. The program offers the opportunity for "calming rhythmic activities, increased sensory feedback, and a focus on balance and coordination" (p. 289).

2.5. Implications for Physical Education Curriculum

In an article entitled, "From Pas de Chats to Pushups", Sprague (2004) discusses the implications of dance and creative movement activities' integration into physical education curriculum. This upswing in integration is due in part due to various educational budget cuts and the 2002 No Child Left Behind Act. The morsel most relevant in this piece is related to how professionals will classify their creative movement or dance activities. Sprague explains the importance of differentiating between dance as an art form, competitive sport, recreation, or vehicle for content learning. Two considerations to keep in mind as well include the local community's perception of dance and asking oneself (as a facilitator) what will best serve students in the long run.

3. Summary

It is clear that creative movement education has its benefits for children and adolescence. With declining overall physical activity and increased technology, children and adolescents are exhibiting new social behaviors in play. This has created a recent need for creative movement education to fill the gap and promote lifelong fitness along with play and motor skill development in children and adolescents.

The pantomime research and framework created by Gabbei & Clemmens (2005) stressed the importance of finding a proper balance between freedom and structure in creative movement exploration activities. Stinson (1988), Gabbei & Clemens (2005), and Magglio & McKinstry provided recommendations on how best to approach the creative movement activity process. Hui-Tzu Wang (2004) proved the benefits of a creative movement program over a free play program by significant increases in locomotor and gross motor skills exhibited by preschool participants. Block (2011), Carr (2004), and Woodhead (1998) provided additional frameworks of circus arts and dance program approaches that are geared toward motor skill development of young people. Sprague (2004) explained the physical education implications of integrating creative movement activities into curriculum.

4. Conclusions

In conclusion, the hypothesis that creative movement programs make children and adolescents more proficient movers throughout life can be gently accepted. The research suggests that these programs are beneficial to overall health, social wellbeing, and motor skill development. There is, however, a need for further research and longitudinal studies in order to truly prove this assumption across these stages in the lifespan. More standardized evaluative procedures for creative movement programs should be used in the future so that programs and activities may be equally compared and understood to their fullest.

Annotated Bibliography

Block, B. A. (2011). The adapted dance process: planning, partnering, and performing. *Journal of Physical Education, Recreation & Dance*. 82 (2), 16- 23.

This article describes three domains of learning (psychomotor, affective, and cognitive) in relation to adaptive and inclusive dance. Importance is placed on socialization and accessibility of activity to all. I will use this as a model to compare with what others have done in creative movement.

Carr, M. (2004). *Circus skills—An alternative to team sports and conventional physical education for reluctant exercisers*.

This article describes the exploration of six circus schools around the world. The author categorizes pros and cons of adopting a change of attitude around traditional physical education activities and discusses the benefits of participation in circus arts. I will use this article to show examples of programs that provide circus arts as a fitness outlet.

Castaner, M. & Torrents C. (2009). Identifying and analyzing motor skill responses in body movement and dance. *Behavior Research Methods,* 41 (3), 857-867.

This article analyzes the diversity of motor skill responses based on three ways of given instruction: descriptive, metaphoric, and kinesic in a population of undergraduate students. I will use this research primarily to look at evaluation techniques and the OSMOS instrument.

Gabbard, C. (2008). Lifelong Motor Development, 5th Edition. New York: Pearson/Benjamin

Cummings.

This is the text from our course. I am using an excerpt that discusses Parten's Play Model from 1932 and research cited from Coakley (2004) in order to understand the categories of play and what they mean for behavior, motor and social development across the lifespan.

Gabbei, R. & Clemmens, H. (2005). Creative movement from children's storybooks: Going beyond pantomime. *Journal of Physical Education, Recreation, & Dance*, 76 (9), 32- 37.

This article provides an innovative approach to creative movement: using storybooks to provide the "creative material". The authors offer ways to integrate interdisciplinary learning of language, motor skill development and critical thinking through this way of expression using the BSER movement framework from Allison & Barrett (2000). I will use this source as a model for a creative movement program that Physical Education professionals may use.

Garcia, C., Garcia, L., Floyd, J. & Lawson, J. (2002). Improving public health through early childhood movement programs. *Journal of Physical Education, Recreation, & Dance*, 73(1), 27-31.

This article discusses common misconceptions about children and movement. A study about throwing patterns is examined, and the interaction model of motor development is touched upon and worked into the whole piece. The authors identify qualities of successful movement programs and give examples of possible activities for professionals to use. I will use this source as a framework to think about creative movement.

Maglio, J. & McKinstry, C. (2008). Occupational therapy and circus: potential partners in enhancing the health and well-being of today's youth. *Australian Occupational Therapy Journal*, 55, 287-290.

This article showed an intersectional health-care approach to meet needs of young people by combining occupational therapy and circus arts training. A program called "Circus in Schools", was evaluated using the 'Victorian Essential Learning Standards' (VELS) to promote holistic education for young people. I will use this article for its outlined objectives the evaluated circus program.

Sprague, M. (2004). From pas de chats to push-ups? *Dance Teacher,* 26 (4), 85-88.

This article discusses the implications of integrating dance into physical education curriculum due to budget cuts and the No Child Left Behind Act of 2002. Importance is placed upon agreement about the meaning of dance in an institution, whether it be art form, competitive sport, recreation or a vehicle for content learning. I will use this article for its recommendations about how PE teachers can be successful facilitators of dance.

Stinson, S. (1988). Creative dance for preschool children. *Journal of Physical Education, Recreation, & Dance,* 59 (7), 52-56.

This article gives a framework for how to consider turning movement into dance for preschool children. The author places strong focus on using themes significant to children to gain total involvement by making the experience belong to the students. I will use this as a model of creative dance to compare with what other practitioners have done.

Woodhead, P. (1998). *Circus in schools: An innovative approach to physical education sport and personal development*. New South Wales: Self Published, Woodhead.

This is a practical handbook to starting circuses in schools as fitness, education, sport, and personal development. The author has set up over forty 'Circus in Schools' programs and presents a model and resources for continuing. I will use this resource as another framework for creative movement education to compare with the other models.