



TEMPLE UNIVERSITY GRADUATE BOARD

Title of Dissertation: THE EFFECTS OF INFORMAL MOVEMENT INSTRUCTION DERIVED FROM THE THEORIES OF RUDOLF VON LABAN UPON THE RHYTHM PERFORMANCE AND DISCRIMINATION OF HIGH SCHOOL STUDENTS

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Date submitted to Graduate Board: October 30, 1985

Accepted by the Graduate Board of Temple University in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Date 11/10/85 [Signature] (Dean of Graduate School)

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October 1985

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ACKNOWLEDGEMENTS

The writer wishes to express his gratitude to his major advisor, Dr. Edwin E. Gordon, for his contributions to the thesis and for his dedication to scholarly research. Thanks to co-advisor Dr. John M. Holahan for his friendship and contributions to the early drafts of the thesis. Special thanks to Dr. Sarah A. Chapman for her contributions and insights into the work of Rudolf von Laban. Thanks to Dr. B. Stimson Carrow, Dr. Roger A. Dean, and Dr. Eve Meyer for their scholarly contributions to the final draft of the thesis.

Thanks to Mr. Lawrence Cooper, Mr. Thomas Gallup, Ms. Janet Herrick, and Dr. Kenneth Raessler for their participation in the testing of the criterion measures. Gratitude is expressed to the Board of School Directors, Dr. Donald Eichhorn, and Dr. Robert Baker, of the Lewisburg School District, for their support. Thanks to Catherine Fowler Payn and C. Scott Smith for their rating on the performance measure. The writer wishes also to express his thanks to Professor David Milne, Chairman of the Department of Psychology at Bucknell University, for his keen observations concerning this study.

Deepest thanks is expressed by the author to the mem-

bers of the Lewisburg High School Choirs for their participation in the experimental study. Those students have taught the author the value of music education and its impact on young lives. They have taught the writer the joys of teaching, the excitement of learning, and the value of research. Special thanks to Paul Keltcher and Bernard Kunkel for their help with the technical aspects of the criterion measures.

Thanks to George Miller. George, you have taught me the value of dedicated teaching and its profound effects on both the teacher and the student.

Thanks to my friends and family for their support throughout my graduate study. Thanks to Dr. William Payn, Daniel Jared Payn, Jeffrey Bruce, and Nicholas Edgerton for their encouragement. Thanks to Mr. and Mrs. Frederick Jarrett for their support. Thanks to my special parents, Mr. and Mrs. Louis Jordan, for their love and enthusiastic support of my education.

Finally, thanks to my wife Leslie, without whose love, patience, and understanding, none of this would have been possible.

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CHAPTER ONE
PURPOSE OF THE STUDY

Introduction

Music educators use many movement activities to assist them in the teaching of rhythm. Few persons, however, have studied objectively the effects of movement instruction on rhythm performance. Studies in the techniques and theories of rhythm, and studies in the techniques and theories of movement, have been developed to describe rhythm and movement. The effectiveness of specific movement techniques upon rhythm performance, however, has not been studied extensively.

Some researchers in modern educational dance have investigated problems that bear on the relationship between the pedagogy of dance and the sequence of movement development. Dance educators have been concerned with pedagogical techniques for teaching movement activities that familiarize persons with all aspects of their movement potential. Objective evidence that bears on the relationship between dance instruction and the development of rhythm achievement does not exist. The work of Rudolf von Laban, however, provides a wealth of philosophical material about movement, and an objective technique for describing and analyzing

movement.¹

Laban's system of Effort/Shape analysis can be used to describe changes in movement quality related to the kinds of exertions and body adaptations that one makes as he moves through space. The body, as interpreted by Laban, is an architecture which may be described geometrically in space. An understanding of that geometric space, or kinesphere, enables one to engage in the skilled observation of movement.

Laban's four effort elements can be considered to be an observable complex of interacting movement elements that are exhibited in body motion. Laban defines the four effort elements in the following way:

The weight of the body follows the law of gravitation. The skeleton of the body can be compared to a system of levers by which distances and directions in space are reached. These levers are set in motion by nerves and muscles which furnish the strength needed to overcome the weight of the parts of the body that are moved. The flow of motion is controlled by nerve centres reacting to external and internal stimuli. Movements take a degree of time, which can be exactly measured.²

¹The philosophical basis of Laban's theories is often overlooked by those who claim to use his approach in music and dance education. Laban spent considerable time organizing his thoughts concerning the movement act. He attempted to describe the complexity and beauty of both individual and group movement in various environments. Moreover, it is important that Laban's own works remain the primary source for those studying his movement theory. The most detailed account of his works may be found in Rudolf Laban, A Life for Dance (London: MacDonald and Evans, Ltd., 1975).

²Rudolf Laban, The Mastery of Movement (Boston: Plays, Inc., 1975), p. 22.

Laban describes how flow, weight, time, and space interact in dyads. Those dyads are referred to as inner attitudes. Triad combinations of effort elements are referred to as effort actions or drives. From Laban's writings it becomes apparent that time and space contribute less to effort actions than do weight and flow. Despite Laban's work, dance educators have used all the effort actions in the construction of balanced dance curricula, but they have not determined which, if any, particular effort actions contribute significantly to movement development.

Psychologists have investigated rhythm in relation to time and space. The nature of the perception of rhythm has been studied indirectly using space perception and motion perception to form hypotheses for experimental research. Different definitions of time and space within philosophy and psychology, however, are the bases for incompatible statements concerning space and motion perception.³ Moreover, although most psychologists would agree that kinesthesia is functioning in perception, kinesthesia is discussed in relationship to only time and space. The physical experiences of weight and flow are not discussed, nor have they been investigated.

³Philosophers and psychologists have attempted to study the perceptive processes as they relate to movement and motion, yet they differ as to the medium to be studied and the terminologies to be used. Studies by Hobbes, Locke, Mill, James, Kant, McDougall, Watson, Hochberg, and Skinner define space perception as a kinesthesia in time and space. Studies by Carr, Gesell, Feller and McNear, Piaget, Werner, E. J. Gibson, and Thelen define perception in developmental stages.

Music educators use several techniques to assist them in rhythm instruction. Orff, Dalcroze, Kodaly, and Gordon advocate the use of movement in various forms to support specific rhythm concepts. The efforts of time, space, weight, and flow, however, are used differently by those music educators.

Orff intended to establish a subconscious rhythm function within the conscious musical mind of the child.⁴ He recognized the importance of movement through the playing of ostinati patterns for the teaching of rhythm. Orff techniques include only the efforts of time and space. In addition to the use of movement, Orff simultaneously uses speech rhythms, song patterns, improvisations, and motor development activities. Subsequently, improvement in rhythm performance may be due to interactions between and among the different activities. Because of the interactions, the effect of Orff movement instruction upon students' rhythm performance is difficult to study objectively.

Emile Jaques-Dalcroze presented a general technique for teaching rhythm based upon movement.⁵ Dalcroze attempted to define eurhythmics in terms of rhythm performance. Eurhythmics, according to Dalcroze, is a function of space and time. They are inseparable. According to Dalcroze, a

⁴Grace C. Nash, Creative Approaches to Child Development with Music, Language and Movement (Sherman Oaks, California: Alfred Publishing Co., 1971), p. 5.

⁵Emile Jaques-Dalcroze, Rhythm, Music and Education, trans. Harold F. Rubenstein (London: The Riverside Press, 1967).

student who is able to establish musical concepts for space and time will be rhythmic. For Dalcroze, the role of music education, then, is to give the student specific experiences which manifest the concepts of space and time in the body. Dalcroze hypothesized that when one engages in rhythm activities, kinesthesia that involves space and time is functioning. His general technique was to establish a relationship between body movements and the recall of a specific meter. Specific techniques include stepping "the beat," clapping rhythms, and performing rhythm ostinati. Dalcroze did not employ a system of rhythm syllables to support his eurhythmic activities for the teaching and learning of rhythm.

To assist in the performance of rhythm, Kodaly recognized the importance of movement skills as contained in the folk dances of Hungary, but he did not separate those movement skills from folk song materials. Folk songs and dance were to be taught as a whole. Americans have substituted time and space activities such as partner choosing, arch forming, role playing, changing circle dances, spiral dances, and line dances, (each learned in conjunction with song), for the rhythmic activities that Kodaly advocated.⁶

Kodaly adapted Curwen's rhythm syllables to assist students in the reading and writing of rhythm. The Kodaly syllables emphasize the aspects of time and space in rhythm.

⁶Lois Chosky, The Kodaly Context (Englewood Cliffs, New Jersey: Prentice-Hall, 1981), p. 41.

Gordon has proposed a comprehensive rhythm syllable system that provides flexibility for musical expression.⁷ Central to that system of rhythm performance is free body movement which emphasizes the effort qualities of weight and flow to assist in the teaching of rhythm and rhythm styles. Gordon states:

It (rhythm) should be understood as the encouragement of body response to rhythm. This can be accomplished as strict eurhythmics, children's dance, and creative movement. Any one of these activities may serve as a readiness for understanding rhythm and as a technique for acquiring rhythm skills ... One must kinesi-
thetically feel consistency of tempo in terms of paired macro beats of equal length before one can audiate usual meter, and, of course, unusual meter.⁸

Although Kodaly, Dalcroze, and Gordon each approach the teaching of rhythm differently, each educator employs movement to support the teaching of rhythm. Hypotheses can be formulated according to Laban's framework which concern the efforts of flow, weight, time, and space. Kodaly and Dalcroze emphasize the Laban effort combinations of time and space, whereas Gordon emphasizes weight and flow in combination with time and space through natural body response to rhythm. Gordon, Kodaly, and Dalcroze have approached the teaching of rhythm with good intuition. Yet,

⁷Edwin E. Gordon, Learning Sequences in Music (Chicago: G. I. A. Publications, Inc., 1984), pp. 250-253.

⁸Edwin E. Gordon, Learning Sequences in Music (Chicago: G. I. A. Publications, Inc., 1980), pp. 125-127.

there is no experimental evidence to support the effectiveness of movement activities in rhythm instruction.

Many parallels can be found between dance education and music education in regard to the Laban Effort elements of Time and Space. The importance of Weight and Flow can be found in Laban's own writings, and it can be inferred from Gordon's work. In dance education, the value of establishing a hierarchy among the interactions of Weight, Time, Space, and Flow has not yet been considered as a basis for curriculum development in movement instruction. Moreover, music educators have not considered which, if any, aspects of rhythm achievement are influenced by different types of movement instruction. The purpose of this study was to investigate the effects of informal movement instruction upon rhythm achievement.

Problems of the Study

The specific problem of the study was to determine the comparative effects of the Laban Effort elements of (1) Weight and Flow, (2) Time and Space, and (3) all Effort elements in combination, upon the rhythm discrimination and performance achievement of high school students who possess different levels of rhythm aptitude.

CHAPTER TWO
REVIEW OF THE LITERATURE

Introduction

Studies in the techniques of teaching rhythm and in theories of rhythm, as well as studies in techniques of the teaching of movement and in theories of movement, have been undertaken in an effort to define rhythm and movement. Approaches to teaching those techniques and interpreting those theories may be found in the literature of psychology, music education, and modern educational dance.

A History of the Development of the Theories of Kinesthetic Sensation for Movement Perception

Movement has been studied because it is one aspect of perceptual experience. Philosophers were concerned with whether the ability to perceive spatial aspects of the world is an innate or learned process. Julian Hochberg stated in a study of perception that there is inter- and intra-individual variability in the relationship between the stimulus and the perceptual response. That ambiguity cannot be ascribed to the stimulus alone. It depends upon the various dimensions in which a movement response is

measured.⁹ Those dimensions have traditionally included vision, the perception of space, and the perception of movement. In the history of the study of space perception and movement perception, ambiguities arise as a result of different persons examining the problems.

To articulate that inter- and intra-individual variability between the stimulus and the perceptual response for the purpose of this study, the work of only those philosophers and psychologists who recognize the importance of body sensation or kinesthetic responses to movement perceptions will be discussed.

Perception as Examined by the Empiricist Philosophers and the Associationist Psychologists

Early Greek philosophers, and consequently their philosophies, were objective. The early Greek empiricists believed that the mind gains experience of the external world through the senses. Boring states that Heraclitus (5th century, B.C.) made the early distinction that knowledge comes to man "through the door of the senses."¹⁰ From Plato's Thaetetus, a dialogue between Socrates and Thaetetus, we are given information that knowledge and sen-

⁹Julian E. Hochberg, "Perception: Toward the Recovery of a Definition," in Psychological Review, 63 (1956), p. 404.

¹⁰E. G. Boring, Sensation and Perception in the History of Experimental Psychology (New York: Appleton-Century Crofts, Inc., 1942), p. 4.

sation are different.¹¹ Protagoras (485-411 B.C.) stated that the entire life of a person consists of only sensations. Consequently, the stoic philosophers first stated the tabula rasa concept: Sensations are impressions on the mind, and knowledge is gained through those impressions. Therefore, one gains knowledge through one's experience.¹²

Empedocles (490-435 B.C.) stated that objects "give off from their surfaces or pores effluvia, which act upon the senses to furnish knowledge of the outer world."¹³ Democritus (460-370 B.C.) and Epicuros (341-270 B.C.) described those projected sensations as "faint images, simulacra or eidola of the objects which, being conducted to the mind, give it acquaintance with the objects which they represent."¹⁴ It seems that the early Greeks were attempting to form hypotheses about the perceptive act through nature versus nurture. They agreed that generalized senses were used in perception gathering, yet no attempt was made to define the true nature of the sensation.

René Descartes (1596-1650) was both an empiricist and a nativist philosopher. His deductive methods classified him as an empiricist. Descartes' belief, i.e., that our

¹¹L. Postman, Psychology in the Making (New York: Alfred A. Knopf, 1962), p. 257.

¹²Aristotle, "Tabula Rasa Mind," in History of Psychology, ed. W. S. Sahakian (Itasca, Illinois: Peacock Publishers, 1980), p. 14.

¹³Boring, p. 4.

¹⁴Boring, p. 4.