



Habilitation thesis reviewer's report

Masaryk University	
Faculty	Faculty of Sports Studies
Field of study	Kinanthropology
Applicant	Czyż Stanisław Henryk, dr.
Unit	
Habilitation thesis (title)	"The Model of Acquiring Especial Motor Skills"
Reviewer	Mario Kasović, Ph.D. Associate professor
Unit	Faculty of Sports Studies, Masaryk University Faculty of Kinesiology, University of Zagreb

Reviewer's report (extent of text up to the reviewer)

In the European and even in the world's scientific literature, only few scientists decided to write and engage in the field of motor learning and control. Even more rare are papers which enter deeper into the problem and more complexly describe specific areas of motor skills and motor learning. The book "The Model of Acquiring Especial Motor Skills" is primarily intended for scholars and students of sports studies, because it represents a modern approach and introduces to the reader the complex field of motor skills. The book is the result of an author's many years of scientific and research work, supported by a large number of published papers in recent scientific publications. The author has included the most significant time period in the research of motor skills by studying relevant world literature, 193 scientific and professional publications publishes from 1868 to 2013. The book is divided into four main chapters that are conceptually linked and complemented by introducing a reader into the field of interest: Definition and classification of motor skills (13-19), Motor learning (21-49), Especial motor skills (51-91) and Discussion 93-108).

Chapter 1 (Definition and classification of motor skills): In this chapter, the author introduces the term "ability", clearly and specifically describing its categories, citing examples from literature. Detects, by supporting examples, two basic categories of abilities: perceptive and cognitive. In the second part of this chapter, it describes in detail the classification of motor skills on those one-dimensional to Poulton in 1957 and those two-dimensional described by Gentile in 1972.

Chapter 2: Motor learning is consisted of two sub-chapters. In the first sub-chapter the author represents the phases of the acquisition of motor skills and the main models according to Fitts and Posner from 1967 and Gentile from 2000. Model Fitts and Posner are described as a three-phase model with a detailed description of each stage. The second model, in this chapter, is directly linked to open and closed abilities. The author distinguishes between two phases, both earlier and later, which are described in detail. In addition to these two models, the author also presents other models and references them through research. In the second sub-chapter, details of the theories of motor learning are presented to the reader with many examples describing two perspectives in explaining the mechanism of motor learning. In these attempts, the most is relied on Schmidt's theory, which is most prevalent among scientists.



Chapter 3 (Especial motor skills): In the introduction to this chapter, the reader can gain a picture of what special abilities or skills are and how they are acquired through a picturesque example of basketball and basketball test. In the second part, the author focuses more on hypotheses explaining the acquisition of special abilities. The reader clearly and concisely presents three hypotheses: the visual-context hypothesis, the special hypothesis of the general motor program (especial GMP) and the hypothesis of learned parameters (learned parameters hypothesis). Besides of these hypotheses, readers will also become familiar with other factors that can influence the acquisition of special abilities. In the third part, the author, looking for a solution to the problem, presents a simplified model with all its details and features. Finally, in the final part, as a solution, the author presents to the reader an example of a full model of special skills based on the research of Czyż, Breslin, Kwon, Mazur, Kobińska, and Pizlo.

Chapter 4 Discussion: In the final part of the book, the author summarizes all the previous knowledge and presents the facts. He refers to readers, generalizes and differentiates special abilities in the context of conditioning, but also in the context of motor learning. He raises new questions and paradigms for future research. It gives guidance in developing a new model of acquisition of special motor skills.

Final Opinion

The author of the book used all relevant literature, as can be seen from the list of enclosed papers. The book with its style of writing, its form, the used contents and examples, has the characteristics of original and contemporary author's work.

From all of the above, the book enables the acquisition of new knowledge and knowledge in the processes of motor learning, especially new specific and special skills in the field of kinesiology. It is applicable to students, but also coaches with kinesiological background.

Reviewer's questions for the habilitation thesis defence (number of questions up to the reviewer). In the future, how do you see the upgrade of the book in the field of kinesiology and sport science? How do you see your future contribution to the field of research regarding the book content?

Conclusion

The habilitation thesis submitted by dr. Czyż Stanisław Henryk, entitled "The Model of Acquiring Especial Motor Skills" *meets* the requirements applicable to habilitation theses in the field of kinesiology/sport science.

In Brno on

