

FIELD HOCKEY LEARNING: A PILOT PROJECT

APPRENDIMENTO DELL'HOCKEY SU PRATO: UN PROGETTO PILOTA

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Abstract

The words motor learning mean in science movement, the first general coordination skills (Gundlach, 1968). The aim of this research is to show the link between neuroscience and the game of field hockey, through the concept of motor learning. This concept is tightly connected to the basic technical aspects of the game and to the general coordination skills too. Through a pilot project the research try to demonstrate that learning hockey basic aspects(driving, passing and shooting) take place quickly through playing(Wein H., 1986) rather than training methodologies. The results obtained by comparing the data before and after the learning phase, demonstrate that the group trained by analytically way, apparently improve the performance of the test, reducing both times and errors in execution.

Con la locuzione apprendimento motorio si indica, nel mondo delle scienze del movimento, la principale tra le capacità coordinative generali(Gundlach, 1968). L'obiettivo del contributo è illustrare il legame esistente tra le neuroscienze ed il gioco dell'hockey su prato, attraverso il concetto di apprendimento motorio, legando tale concetto all'apprendimento dei fondamentali tecnici di gioco ed alle capacità coordinative generali. Nello specifico si è cercato di dimostrare attraverso un progetto pilota, se l'apprendimento dei principali fondamentali dell'hockey(conduzione, passaggio e tiro) avvenisse in modo più rapido attraverso il gioco(Wein H., 1986) oppure attraverso metodologie addestrative. I risultati ottenuti dalla comparazione dei dati prima e dopo la fase di apprendimento, hanno mostrato nell'arco di tempo considerato che il gruppo addestrato in maniera analitica ha migliorato apparentemente la realizzazione del test, diminuendo sia i tempi che gli errori di esecuzione.

Keywords

Field Hockey, Learning, Teaching.

Hockey su prato, Apprendimento, Insegnamento.

Introduction

The aim of this research is to show the link between neuroscience and the game of field hockey, through the concept of motor learning. This concept is tightly connected to the basic technical aspects of the game and to the general coordination skills too. After a literary review about learning and teaching methodologies for field hockey, the idea is to show, working with a pilot project, if it's easier and quicker to learn the basis of hockey with ludic methodologies or directive strategies. The results obtained by comparing the data before and after the learning phase, demonstrate that the group trained by analytically way, apparently improve the performance of the test, reducing both times and errors in execution.

Literary Review

First of all, many specialized sites were examined, of course their purpose was field hockey as the website of the international Hockey Federation(IHF) or other official organization. Moreover, among the sources, it's possible to find many manuals and technical texts about field hockey and how to teach and improving the technical basis. Many studies provided informations about psychological aspects of the game and about players' cognitive profiles(L. Starkes J., 1987). Other studies focused their attention on the aspects related to the performance and functional model of field hockey(Bonsignore D., Ruscello B.,2006).

Methods And Materials

The research hypotheses followed one simple question: using playing methods, was it faster for technical learning? The pilot project had a sample of twenty units, equally divided into men and women with an average of twenty years old, everyone was a student of University of Naples Parthenope. The research was about ten weeks, for ten lessons and every lesson was about two hours. For the pilot project the sample was also divided into a control group and into a research group. Before every special training, research group and control group did a test on the basis of field hockey, a timed path to analyse learning goals. After that, control group worked on the technical basis of the field hockey, only using playing methods and strategies(Wein, 1999). At the same time research group worked on the technical basis of the field hockey, only using analytic and directive methodologies. At the end of the entire work, every group repeated the first test again.

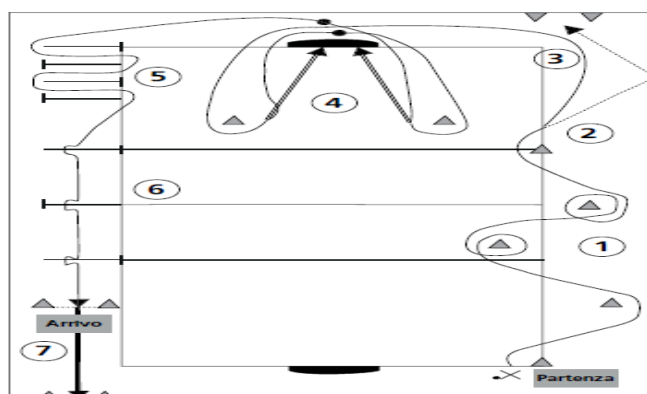
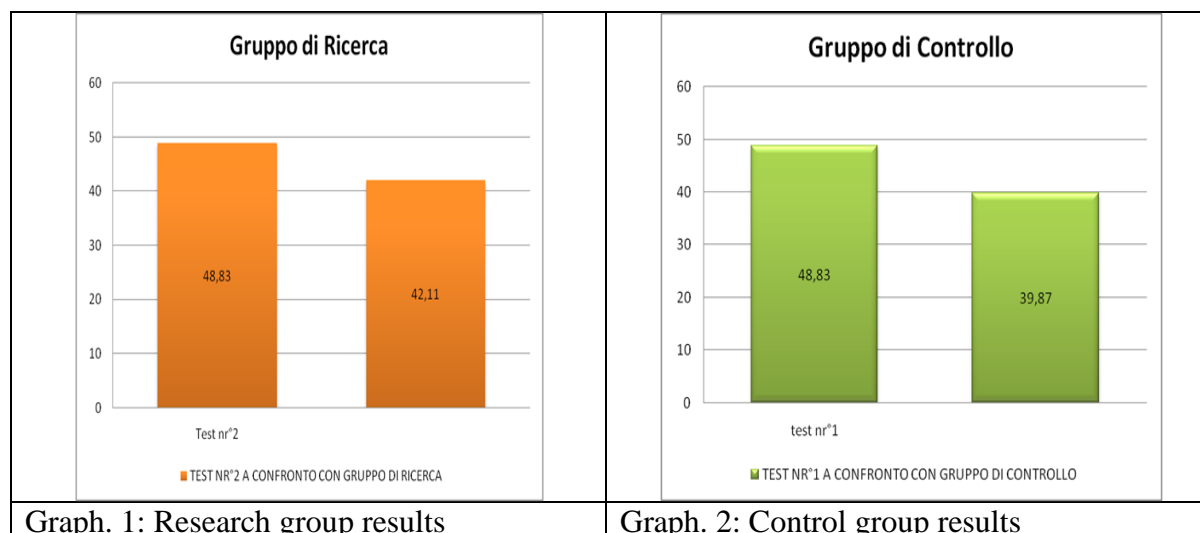


Figure 1: Test for technical basis

Results

About the results, the first step was a timed path for the entire sample, obviously before dividing the sample in control and in a research group. The average in seconds of the entire sample was 48,83 seconds. After their own work, research group improved its time in 42,11 seconds. Control group trained by analytic methodologies, improved its time in 39,87 seconds.



Discussion

So as you can see from results, control group apparently seems to learn more quickly the technical basis of field hockey, against the initial hypothesis. It maybe could be the effect of teaching methodology; the basis of field hockey like shooting or passing, were trained with directive methodologies, spending many training sessions only for them. Anyway it's clear the gap between control and research group(+2,24 seconds), but it's necessary showing some hidden traps. Research group showed a better efficacy of the field hockey basis in other works and games like a real hockey match, for example, where the tactical aims were most important.

Anyway, starting hypothesis don't work and for this reason, directive methodologies apparently seems to be the better way to learn quickly and exactly the field hockey.

Conclusions

Generally, studies about learning field hockey by ludic strategies seems to deserve other studies in deep and of course the starting hypotheses appear to be only partially filled with some limitations. These limits like the sample quantity and the number of hours used for training, for example, are a factor that apparently stops the knowledge process of the pilot project. Therefore, some research gaps appear evident in the field of hockey, learning, and coordination skills. Anyway, these lacks could become some opportunities for expansion and deepening of the research, starting from the same methodological basis.

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