UNIVERSITY OF WISCONSIN-LA CROSSE

Graduate Studies

GROWTH OF RPE DURING RESISTANCE TRAINING

A Manuscript Style Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in Clinical Exercise Physiology

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By Jeena Lucas-Komarek

We recommend acceptance of this thesis in partial fulfillment of the candidate's requirements for the degree of the Master of Science in Clinical Exercise Physiology.

The candidate has completed the oral defense of the thesis.

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ABSTRACT

Lucas-Komarek, J.L. Growth of RPE during resistance training. MS in Clinical Exercise Physiology, December 2011, 42 p. (C. Foster)

Purpose: This study was conducted to understand teleoanticipation throughout various resistance training sets using the Rating of Perceived Exertion (RPE) scales. Methods: Twenty-one men performed four sets for bench press and leg press consisting of a 5 repetition maximum (RM), 10RM, 20RM, and 30RM. RPE was measured after each repetition. Results: The results showed that regardless of the number of repetitions completed, RPE increased throughout each set in a linear fashion. When normalized to the relative number of repetitions, RPE had scalar properties, and there was a strong correlation between RPE and repetitions. Conclusion: This study reinforced that the RPE scale can be used to measure intensity during resistance training. Since RPE was strongly correlated to the relative number of repetitions, this suggests that teleoanticipation occurs during resistance training as in aerobic training. Regardless of the number of repetitions, the brain recruits the anticipated muscle fibers and develops a pacing strategy in order to complete the task at hand.

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