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**Editorial**

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**RESEARCH, ETHICS AND THE ACSM POSITION STAND ON PROGRESSION MODELS  
IN RESISTANCE TRAINING FOR HEALTHY ADULTS.**

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A CRITICAL REVIEW OF PEER REVIEW: THE NEED TO SCRUTINIZE THE “GATEKEEPERS” OF RESEARCH IN EXERCISE PHYSIOLOGY. **Robergs, R.A., JEPonline**. 2003:6(2):i- xiii.

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**BACKGROUND**

In February 2002, the American College of Sports Medicine (ACSM) published a Position Stand entitled Progression Models in Resistance Training for Healthy Adults (1). In March, 2004, it was brought to my attention by Robert Otto via email that the contents of this publication, along with the summary recommendations, were mostly invalid. After a subsequent phone conversation with Robert Otto, it was explained to me that despite attempts to publish a rebuttal manuscript in three other journals, all with mostly outstanding reviewer feedback and praise for their work, each journal rejected the manuscript based on editorial decisions unrelated to the reviewers' comments.

I instructed Robert to email me all prior journal correspondence, and affirmed his request to submit the manuscript to **JEPonline**. When reading the prior peer reviewer comments of this manuscript during the peer review process of these other journals, the following quotes were made towards Carpinelli, Otto and Winett and their manuscript.

*“I still believe that the onus of the Position Stand by the ACSM was to base their recommendations on actual research findings in the population groups that they have targeted. As they were unable to do this unequivocally for a number of their statements, I feel that your article is most warranted. Your article will also be important for the field of strength and conditioning and highlight the areas where future research is required. ”*

*“I congratulate the authors on a very accomplished piece of work. This critical analysis of the ACSM position stand is very comprehensive, with great care having been taken to provide detailed research evidence to substantiate points. Given the importance of weight training for optimal athletic performance, bodybuilding or rehabilitation purposes, it is essential that organizations such as the*

*ACSM provide strength-training guidelines that are objective and evidence-based. It is clear that, in the case of the ACSM Position Statement, this has not been the case.”*

*“The article is well written and researched in a very comprehensive manner. There appear to be no typographical errors. The document addresses all aspects of weight training prescription and methods. The author/authors of the paper have identified some possible oversights in the ACSM guidelines for strength training that need to be addressed or updated. The document although accurate may need to be written in a less aggressive/confrontational style and may benefit from reporting the findings in a more objective fashion.”*

Of course, there were criticisms of the original versions of the manuscript, and Carpinelli, Otto and Winett replied to all criticisms and explained their interpretations clearly. The version I received was edited based on prior reviewer comments and recommendations.

I have reviewed the manuscript, word-by-word, and the final product is in this issue of **JEPonline** (2). It is an outstanding piece of work. It is thorough in its review of past research, and it is a significant contribution to the scientific study of resistance exercise training. It also reveals numerous topics and questions that require added research. In addition, the content of the manuscript and how the manuscript was handled by other journals, raises several questions and concerns, and as such, requires this accompanied editorial. These questions and concerns are as follows:

1. What is the Scientific Method, and who protects and nurtures it?
2. How does editorial peer-review fit into the Scientific Method?
3. The decision on manuscript rejection by three other journals, without reviewer support, questions the ethics of the editorial process of the journals at question.
4. Do organizations and/or businesses that publish journals have a conflict of interest with the content of the journal? If so, should there be clear guidelines used by the journal and organization/business that prevents such a conflict of interest?
5. Is any form of scientific censorship acceptable?
6. Should all published manuscripts be open to critical peer review after publication?
7. The manuscript directly opposes the work of several so-called experts in resistance exercise training and physiology.
8. There are sections of the manuscript critical of past research, and indirectly, also critical of certain researchers.
9. The field of resistance exercise and training is replete with unscientific and invalid practices. Surely a critical review of past research and past and current recommendations is needed more for the topic of resistance exercise and training than most other topics within exercise physiology.

As I have written a prior editorial on the Editorial Peer-Review process (3), I know that the negative experiences of Carpinelli, Otto and Winett are not isolated occurrences within the fields of exercise physiology, sports medicine, and applied physiology. There is a tremendous need for journals of these areas to refine their editorial and peer review processes. Until this happens, the development of these areas as research and academic emphases will be constrained.

As editor-in-chief of a research journal of a professional organization, I am totally aware of any conflict of interest in the Editorial and Peer Review process. Based on this awareness, the managing editor of ASEP's journals (Tommy Boone) and I developed a philosophy for **JEPonline** that allows the journal to be totally independent of the professional interest and politics of ASEP. **JEPonline**, as with any scientific research journal, needs to peer review and publish work based on a clear and consistent platform. I strongly believe that

such a platform consists of originality, contribution to the discipline, and valid methods, data processing, and data interpretation. Finally, there needs to be a logical discussion of findings in light of prior research. Issues such as protecting colleagues reputations, protecting “research turf”, protecting the credibility of an organization and/or a business, or favoring colleagues should not enter into any decision making process in the peer review or editorial process.

For example, I know several of the authors that Carpinelli, Otto and Winett are critical of (directly or indirectly) within their manuscript. It would be unethical for me to alter the contents of the Carpinelli, Otto and Winett manuscript simply based on my personal relationships with other colleagues. Furthermore, as all criticisms are based on the presentation of data and logical interpretations, the criticisms are done in a professional manner, and any author of a prior publication who feels the need to respond to Carpinelli, Otto and Winett is welcome to write to **JEPonline** and contribute to this topic. This correspondence will further the awareness of the research on resistance exercise and training, which is a good trait of the scientific method and the process of peer reviewed research publication.

Just because an article is published does not mean it is correct. All scientists need to be aware that when an article is published, the door is open to constructive criticism. In fact, exercise physiologists should invite such criticism, for it forces us to make our work all the more meticulous in preparation, and characterized by factual content and valid interpretation. Conversely, treating publications and colleagues with reverence promotes a type of class structure within the Scientific Method that functions like a disease that eats away at whatever integrity the process once had. The end result is a poorly researched discipline and/or topic.

Personally, I feel there are too many poorly researched topics within exercise physiology and its related disciplines. I am tired of being a victim and a witness of the diseased editorial peer review process within too many journals pertaining to exercise physiology, applied physiology, and sports medicine. I am proud of my professional and ethical duty to publish the manuscript by Carpinelli, Otto and Winett. I know that all who read this manuscript will gain in their understanding of resistance exercise and training. Isn't that the goal we are trying to achieve in editorial peer review?

## REFERENCES

1. American College of Sports Medicine. Kraemer, W.J. Writing Group Chairman. Position Stand: Progression models in resistance training for healthy adults. *Med Sci Sports Exerc* 2002;34: 364-80.
2. Carpinelli, RN, Otto, R.M., and Winett, R.A. A critical analysis of the ACSM position stand on resistance training: Insufficient evidence to support recommended training protocols. **JEPonline**. 2004;7(3):1-60.
3. Robergs R.A. A Critical Review of Peer Review: The Need To Scrutinize The “Gatekeepers” of Research In Exercise Physiology. **JEPonline**. 2003;6(2):i-xiii.