



Introduction to special editorial on statistical guidance for a successful research paper



Dear Readers,

Guidelines to prepare the perfect scientific article are difficult, if not impossible, to write, especially for a multidisciplinary journal like *Gait and Posture* where you can find many different types of studies ranging from basic research to specialized clinical applications. One common challenge of good scientific work is choosing appropriate statistical methods and describing these methods in sufficient detail.

For those of us who are editors, suitable statistical methods are an essential prerequisite to accept an article. We are confronted with a wide range of statistical methods, and it is sometimes difficult for us to decide whether the chosen method is really adequate to answer the principal study question. It is also a challenge to determine whether the number of subjects/samples is sufficient for the utilization of a specific statistical method or to answer the research question.

In various editorial discussions on how to establish guidelines for statistical methods for publications in *Gait and Posture*, we came to the conclusion that it is impossible to establish specific guidelines that apply to all studies. However, there are some principles of statistical analysis and data reporting that can be identified and should be treated in the future as guidelines for publication in *Gait and Posture*.

Gait and Posture is pleased to have Professor Robin Prescott from

the University of Edinburgh as the journal's official statistical editor. Since not all manuscripts submitted to *Gait and Posture* are sent for individual statistical review, Professor Prescott has prepared guidelines and recommendations to assist authors and reviewers regarding common statistical issues.

In this special editorial, Professor Prescott has summarized some of the principles of statistical methods that should be followed for manuscripts submitted to *Gait and Posture*. It is important to note that this editorial presents guidelines, but not strict rules, for preparing, conducting, and reporting studies. No guidelines can be comprehensive enough to cover every study, but these recommendations cover many of the situations that we commonly encounter. When submitting a manuscript to *Gait and Posture*, we ask authors to utilise the guidelines when they apply, or to provide justification of why the guidelines have not been followed.

It is a pleasure for us to share these basic but crucial principles that we hope will achieve the objective of providing statistical guidance for a successful research paper for publication in *Gait and Posture*.

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