

Is there hope for negative results?

Welcome to the South European Journal of Orthodontics and Dentofacial Research.

We live in a time of fast information dissemination and evidence-based clinical practice. The evidence-based approach is an absolute requirement nowadays since it facilitates integration of the best research evidence in clinical practice. We need “fresh” evidence, because it is the foundation of evidence-based treatments, and evidence-based practice. Journals try to reach this goal by fast turnover of manuscripts, shorter review time, etc. Thanks to on-line content publishing the problem of “space” has been overcome but still, a lot of researches never reaches publication, and cannot be used as evidence. Main reason for rejecting and not publishing some research is that same or similar data have been previously published, or that the authors report “negative” results (i.e. the hypothesized effect not observed).

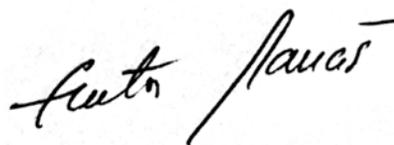
Thus, the following questions present themselves: Are these decisions improving science? Do they facilitate evidence-based treatment and practice?

The idea behind the rejection of “same” or “similar” research to that already reported in the literature is based on the notion that the same experiments always yield the same results - regardless of who performs them. So, the editors and the reviewers may conclude that reporting new evidence within previously published research paradigms is not necessary. However, even if this was true, one of the shortcomings of orthodontics and dentofacial research is the low sample size in clinical trials, as well as in experimental studies. Therefore, to produce reliable results and conclusions, we need to perform meta-analyses. Meta-analysis is a statistical procedure that integrates the results of several independent studies. However, most meta-analyses in this

field of research produce similar conclusions due to small overall sample sizes of the reviewed studies, and their heterogeneity. We would argue, therefore, that studies based on the same or similar design to those already described in the literature should be published in order to increase the reliability and generalizability of findings, and facilitate their translation into evidence-based clinical practice.

It should also be noted that the same experimental paradigm will not always produce the same results. Studies that report findings different from “classical” work which they emulate, tend to be desk-rejected by editors, or during the peer review process. Yet, even negative results provide research-based evidence, as long as they are statistically trustworthy (see “Trouble in the Lab”, *Economist*, October 2013). If we rely on statistics in concluding the results of the study, we need to stick to statistics and have as much research done as possible to have real evidence. These days we need to focus on reliability of scientific publications, thus the research should be judged by quality of evidence, and not only its evaluation in the context of previously published work.

South European Journal of Orthodontics and Dentofacial Research welcomes all research, as long as it is ethical and based on robust evidence. After all, science is about questioning of the established theories. More questions generate more evidence.



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