

To the Editor:

RE: Chiropractic treatment and the enhancement of sport performance: a narrative literature review. JCCA. 2010; 54(4):210–221.

In a review on chiropractic and sports performance,¹ it is stated that the study by Schwartzbauer et al.² “generated essentially no useful statistically or clinically significant results.” The literature review correctly notes that there were no statistically significant differences between groups in the Schwartzbauer study. However, that is not the entire story. As we reported in our paper, there were statistically significant improvements in the chiropractic group, namely, at 14 weeks for muscle strength and long jump distance compared to baseline ($p < 0.05$). Conversely, there were no such statistically significant improvements in the control group for any of the performance tests.

References

- 1 Miners AL. Chiropractic treatment and the enhancement of sport performance: a narrative literature review. *JCCA*. 2010; 54(4):210–221.
- 2 Schwartzbauer J, Kolber J, Schwartzbauer M, Hart JF, Zhang J. Athletic performance and physiological measures in baseball players following upper cervical chiropractic care: a pilot study. *J Vertebral Subluxation Research (JVSR)*. 1997; 1(4):33–9.

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In reply:

Thank you for forwarding Dr. Hart’s comments.

It is my opinion that I made a valid interpretation of the published work by Schwartzbauer et al., (1997).¹ It is still my perspective that the paper titled “Athletic performance and physiological measures in baseball players following upper cervical chiropractic care: a pilot study” offered essentially no useful statistically or clinically significant results.¹ I may bring attention to the word “essentially.” Although Dr. Hart does draw note to the reported statistic-

ally significant improvements in the chiropractic group at 14 weeks for “muscle strength” and “long jump distance” compared to baseline ($p < 0.05$), it is my argument that this result is of little value when taken in the context of the whole, and in addition the authors failed to present a valid argument as to how their observed improvements in repeated straight shoulder abduction and long jump distance was clinically or even sport specifically relevant to the athletic performance of baseball players.¹ There was also no mention of the validity or reliability of any of the tests of “performance” used in the study.¹ What was the potential for measurement error of the tests employed? Perhaps if the authors published the raw score changes instead of merely the percentages, we would be able to gauge just how much actual change occurred, from baseline, in each group. It would have been useful to compare the differences in score from baseline between the groups, to see if any statistically or clinically significant changes remained and whether any changes could be even remotely linked to athletic performance in baseball players.

References

- 1 Schwartzbauer J, Kolber J, Schwartzbauer M, Hart JF, Zhang J. Athletic performance and physiological measures in baseball players following upper cervical chiropractic care: a pilot study. *J Vertebral Subluxation Research (JVSR)*. 1997; 1(4):33–9.

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