Letters From Our Readers

To: Editor, *The Angle Orthodontist*

Re: Response to: Pain and discomfort following insertion of miniscrews and premolar extractions: *A randomized controlled trial. The Angle Orthodontist*; 2016;86:891–899.

We would like to thank Dr Abdelkader and colleagues for their questions. This gives us the opportunity to clarify a few things about our current research. As mentioned In the article: this research project is registered at clinicaltrials.gov under NCT02644811. Additional detailed information about this project can be found there.

1. In many situations one could conduct an investigation with only the experimental arm. Even the data for this study could have been collected within group A only. The drawback would be that the collected data is dependent since it originates from the same individuals. Therefore, we always try to use an independent control arm. The further can randomization only be conducted with at least two groups. Through randomization it can be assured that unknown factors that might influence the results are equally distributed to both groups.

   Actually, in this article, we did both: Analyzed differences between miniscrew installation and tooth extractions in the control group and within the experimental group. The boxplots display these results and we can show that there is no difference between groups in experience of pain and discomfort under tooth extractions. We regard this a strength of this study.
2. The used questionnaires ask after pain and discomfort separately. One could wonder if pain and discomfort is not the same thing. We believe that mental or physical suffering has many dimensions. The number of words to describe this condition may vary between languages but both English and Swedish cover a wide range of conditions from uneasiness over numbness, itching, tingling, tension, glowing or soreness to pang, harm or torment. Skevinton[1] described that inclusion of discomfort with pain addresses a greater range of sensory experience and helps to overcome the problem of individual differences in labelling of sensations.

   The further criticized Carr and Higginson[2] that many questionnaires are constructed after what healthcare professionals believe. This restricts patients' choice and leads to questionnaires that basically are not patient centered. Therefore, the questionnaires used in our study originate from focus group interviews, then validity and reliability was tested on Swedish adolescents.[3] Our findings show that pain intensity and discomfort follow the same tendencies on a group level. However, the median values are a bit different. On an individual level we found both cases with no pain but plenty of discomfort or lots of pain in combination with moderate discomfort. This indicates that the participants were capable of differentiating between pain and discomfort.
3. We describe the used questionnaires as self-report questionnaires. This intends that the patient reads the questions and answers without interference from the observer, thus no interviews were done. In the original article the questionnaires are described in detail on page 894–5: The patients in both groups were instructed to complete the questionnaires on their own. The baseline questionnaire was administrated in the clinic after the randomization process. The other questionnaires were filled in at home the evening after and one week after extraction/insertion of the screws. They were asked to bring it to the clinic at the follow-up visit. All questionnaires were done in paper-and-pencil-form.

   The circumstances when answering a questionnaire at home are surely not as controlled as in the clinic, however, Reissmann et al. showed that the administration method on oral health-related quality of life assessments had no substantial influence on the results.[4]
4. The age and sex distribution can be found in the original article on page 896: Group A consisted of 35 patients (24 girls, 11 boys; mean age, 16.3 years; SD, 0.28 years) and group B of 38 patients 26 girls, 12 boys; mean age, 14.9 years; SD, 0.3 years).
5. The patients that were included in this study were cases that needed anchorage reinforcement. In the anchorage classification according to Burstone this

would comply to Group A. This is not to be confused with need for absolute anchorage.

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3. Feldmann I, List T, John MT, Bondemark L. Reliability of a questionnaire assessing experiences of adolescents in orthodontic treatment. *Angle Orthod* 2007;77(2):311–317.
4. Reissmann DR, John MT, Schierz O. Influence of administration method on oral health-related quality of life assessment using the Oral Health Impact Profile. *Eur J Oral Sci*. 2011;119(1):73–78.