




# A Commentary on “Association Between Oral Behaviors and Painful Temporomandibular Disorders: A Cross-Sectional Study in the General Population” [Response to Letter]

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## Dear editor

We have carefully reviewed the commentary posted by Fang et al. We appreciate those perspectives they proposed and we are willing to apply in our future studies. We would like to do some replies regarding their suggestions and consideration below.

Undeniably self-reported data require further consideration in terms of accuracy, which was especially mentioned at the end of the discussion part in our article.<sup>1</sup> Self-reported oral behaviors may underestimate or overestimate their true prevalence due to lack of awareness. However, our study focused on the long-term and daily oral behaviors of the general population, considering accessible resources, it seemed difficult to seek for a better way of investigation in addition to self-reporting. Moreover, the Oral Behavior Checklist (OBC) is a clinically validated scale.<sup>2</sup> A recent research pointed out that electromyography (EMG) might not be useful, whether a combination of other variables like EMG is meaningful in figuring out correlations between oral behavior and orofacial pain remains unknown.<sup>3</sup> OBC has been reported correlated with orofacial pain while EMG not. OBC can be adopted as a first screening tool for a general overview of possible oral behaviors. Ecological momentary assessment (EMA) approach (which was adopted in the field of behavioral medicine for years) can be prescribed later when needing more detailed information about the oral behaviors.<sup>4</sup>

Cross-sectional studies do not produce causality, and we are fully aware of this. More studies are required to clarify the causality. Prospective or retrospective cohort studies may be our future project.

Many confounders can be underlying. Considering the feasibility of the study (for example, we cannot involve too many questions in a questionnaire) and previous research experience, we believe that psychological factors, occupational factors and other possible factors can be supplemented to the future study design.

Pain is indeed complicated and multi-dimensional. But as a subjective adverse emotional experience, in most cases, pain can only be assessed through subjective self-reporting. Although the 5 major TMD symptoms (5Ts) may not capture the full spectrum of TMD symptoms, as our study focus is the phenotype painful TMDs(PT), 5Ts as a scale of high sensitivity can already cover PT symptoms well combined with other pain-related indicators.<sup>5</sup> Nevertheless, we did lack objective data like clinical examination for this part, which we may add in future studies. In addition, more features of the pain symptom like the duration (acute or chronic) and frequency (transient, recurrent or persistent) can also be considered.

Finally, we would like to express our appreciation to Fang et al's affirmation and suggestions. Our team is committed to TMD-related researches, and we have long been working on content enrichment and method optimization. We will

take these suggestions into account and conduct more high-quality research to promote the development of this field in the future.

## Disclosure

The authors report no conflicts of interest in this communication.

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