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Letter to the Editor

The Science of Respiratory Characteristics in Individuals with Chronic Low Back Pain: Interpreting through Statistical Perspective.

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Dear Editor,

Having read the above paper in JBMT (Goosheh et al., 2016) we would like to offer suggestions for the methodology and results, which might help the reader to understand the research and clinical practice better.

We consider cognitive tasks (simple and difficult conditions) to be a crucial methodology that affects the results of this study. Although non-probability sampling methods were used, the randomization procedures needed to be balanced for the application of two different cognitive tasks. In addition, adequate wash-out periods between the tasks needed to be considered and clearly stated. These might have helped to distinguish the effects between the simple and more difficult task for low back pain (LBP) and no-LBP, and allow replication in future studies.

In general, The Shapiro-Wilk test, in normality assumption testing, is considered as the most powerful, preferred and recommended statistical test (Ghasemi and Zahediasl, 2012; Razali and Wah, 2011). If there are less than 50 samples, the Shapiro-Wilk test is suggested for use, which infers that in samples of greater than 50, the Kolmogrov-Smirnov test should be used. However, schools of thought in running statistics may choose to differ and be against the Kolmogrov-Smirnov test, which was used in this study. In the results of repeated measures, ANOVA suggests that the cognitive load had a significant impact on dependent