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# Reply to Bianchi et al.



### To the Editors:

Bianchi et al. (In this issue) have commented on our recent article addressing the relationship between sluggish cognitive tempo (SCT) and burnout in psychiatrists (Gül et al., 2017). They remarked that the relationship between symptoms will lead to a conceptual confusion. First of all, we thank them for their interest in our article. With this letter, we want to address a few important points.

As known, a primary limitation for the field of SCT is the lack of a unified set of symptoms, and it was found that previous studies have used 150 different items for assessing SCT (Becker et al., 2017). However, in recent studies from different parts of the world, and in a recent meta-analytic study in which these studies were analyzed, it was found that the internal consistency, test-retest variability and interrater reliability values of the SCT-related measures were very high and strong, and the results support the idea that it is a different diagnosis from attention deficit hyperactivity disorder (ADHD). The same analyses revealed that SCT is more common in older age groups; that it is associated with lower socioeconomic status, lower social function, and lower academic achievement; and that the relationship with ADHD mostly involves attention deficits and internalizing symptoms (Becker et al., 2016). But it is not clear yet if SCT is a condition that begins in childhood and continues over the lifespan, or if it is a condition that occurs later in life with the effect of some other factors. It is still important and necessary to identify other relevant situations, which are common recommendations in studies of SCT.

In addition, Bianchi et al. mentioned that the symptoms of SCT and emotional exhaustion seem to underlie fatigue (particularly cognitive fatigue). Adults with ADHD seem to have greater fatigue symptoms than healthy controls (Rogers et al., 2017), and SCT was supposed to be a resemblance of inattentive type of ADHD. However, the findings about cognition are inconclusive even in burnout patients and multifactorial causation may underlie the cognitive problems (Riedrich et al., 2017). We summarized some common features of cognitive fatigue, emotional exhaustion and SCT, as well as some distinctive ones (see Fig. 1), according to the literature (Borragán et al., 2017; Fassbender et al., 2015).

And finally, it is important in a few aspects to investigate the symptoms of SCT in a group with a high academic achievement, such as psychiatrists, who have succeeded in the process of medical training, completed the period of specialization examination and followed medical assistant

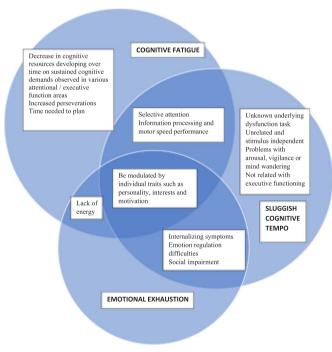


Fig. 1. The possible relationship between cognitive fatigue, emotional exhaustion and SCT.

process: Firstly, what is the prevalence of SCT in such a group with high cognitive capacity? Secondly, could it be a consequence of risk factors? And, thirdly, could burnout be one of these factors that is often observed in health workers and also in psychiatrists (Kumar, 2007) all over the world? One of our proposals for future studies is to examine individuals with SCT prospectively, whether they have more burnout symptoms or not.

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