



Is Posttraumatic Stress Disorder Meaningful in the Context of the COVID-19 Pandemic? A Response to Van Overmeire's Commentary on Karatzias et al. (2020)

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In a recently published study in this journal that used a population-based sample in the Republic of Ireland (Karatzias et al., 2020), we concluded that 17.7% of the sample met the diagnostic requirements for COVID-19–related posttraumatic stress disorder (PTSD). Subsequently, Van Overmeire (2020) has raised concerns about the validity of our findings, arguing that simply experiencing the COVID-19 pandemic is not sufficient to meet the trauma exposure criterion for a PTSD diagnosis and, consequently, our estimated PTSD prevalence figure was inflated. In this response, we provide (a) an explanation for why the COVID-19 pandemic can be reasonably considered to be a traumatic event, (b) evidence that PTSD in response to the COVID-19 pandemic is a meaningful construct, and (c) an argument for why our estimated prevalence rate is not unreasonably high.

Following the announcement by the World Health Organization (WHO) on March 11, 2020, that COVID-19 had reached pandemic status, our research consortium launched parallel studies in the Republic of Ireland, the United Kingdom, and other European and Middle Eastern countries to assess the impact of the pandemic on the mental health of the general population in these nations. When considering what measures of mental health to use, vigorous discussions took place about whether posttraumatic stress disorder (PTSD) was a meaningful construct in the context of the COVID-19 pandemic. We concluded that it was, and we have recently published findings from the first wave of our study in the Republic of Ireland in this journal (Karatzias et al., 2020), reporting that 17.7% of a nationally representative sample of the general adult population ($N = 1,041$) met the diagnostic requirements for PTSD. Subsequently, Van

Overmeire (2020) has raised concerns about the validity of our findings, arguing that simply experiencing the COVID-19 pandemic is not sufficient to meet the trauma exposure criterion for a PTSD diagnosis and, consequently, our estimated PTSD prevalence figure was severely inflated. In this response letter, we will provide (a) an explanation for why the COVID-19 pandemic can be reasonably considered to be a traumatic event, (b) evidence that PTSD in response to the COVID-19 pandemic is a meaningful construct, and (c) an argument for why our estimated prevalence rate is not absurdly high.

Van Overmeire (2020) critiqued our study (Karatzias et al., 2020) on the basis that “the basic requirement for a PTSD diagnosis was not fulfilled—namely, a life-threatening or severely stressful event.” The answer to the question of whether the COVID-19 pandemic is a valid traumatic event for PTSD depends on the diagnostic lens through which one chooses to view the COVID-19 pandemic. In the *International Classification of Diseases* (11th rev.; *ICD-11*; WHO, 2018), PTSD is described as a disorder that can develop “following exposure to an extremely threatening or horrific event or series of events.” Of note, *ICD-11* also includes complex PTSD (CPTSD) as a related but distinct disorder that can arise following trauma exposure. Whereas the *ICD-11* provides this general guidance on what constitutes a traumatic event, the *Diagnostic and Statistical Manual of Mental Disorders* (fifth ed.; *DSM-5*; American Psychiatric Association [APA], 2013) provides a more specific definition in its description of Criterion A, which defines a as

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“exposure to actual or threatened death, serious injury, or sexual violence,” and it can involve (a) “directly experiencing the traumatic event(s),” (b) “witnessing, in person, the event(s) as it occurred to others,” (c) “learning that the traumatic event(s) occurred to a close family member or close friend,” or (d) “experiencing repeated or extreme exposure to aversive details of the traumatic event(s).” It is important to note that the *DSM-5* states that the fourth type of event “does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work-related.” The inclusion of these descriptions herein is not meant as a tutorial on the nosology of PTSD; rather we aim to demonstrate the different diagnostic lenses through which an event may be considered “traumatic.” Thus, through the lens of the *ICD-11* criteria, the COVID-19 pandemic may be viewed as a valid traumatic event, whereas through the lens of the *DSM-5*, it is likely not a valid traumatic event.

From March 2020 onward, it is reasonable to assume that individuals throughout society may well have felt threatened and horrified by the existential threat posed by COVID-19. We have witnessed the inevitable and relentless global spread of the virus from China and the corresponding deaths and illness. There were associated and unprecedented restrictions on movement (i.e., quarantine or lockdown), with devastating economic consequences. Images of overrun hospitals, mass graves, and COVID-19 patients being placed on assisted ventilation were common in the media. The chance of contracting COVID-19 was (and is) a serious risk for billions of people, and for individuals over 65 years of age and those with existing medical problems, the threat to life was (and is) very real. The possibility and reality of the loss of one’s livelihood and the associated problems related to providing and protecting family and loved ones was (and is) increasing. Obviously, there was (and is) also the actual or potential threat of one’s own death or the death of a loved one due to the disease. We contend that direct exposure to the virus, either as a survivor or health worker in close proximity to individuals with the disease, is clearly stressful and meets the *DSM-5* Criterion A definition, but we also believe that living through the most deadly infectious respiratory disease pandemic since the 1918–1920 Spanish Flu could potentially be “...extremely threatening or horrific” and, hence, meets the guideline set in the *ICD-11*.

Of course, the traumatic exposure criterion is only the gatekeeper to a potential diagnosis of PTSD; symptoms and functional impairment also need to be present. Might people have dreams or flashbacks about events related to COVID-19, such as the potential for death, illness, or economic hardship? Might people avoid exposure to internal or external reminders of the pandemic? Might people be watchful or on guard in relation to the virus? We attempted to answer these questions by asking individuals. We used the PTSD module of the International Trauma Questionnaire (ITQ; Cloitre et al., 2018), which measures the core PTSD symptoms described in the *ICD-11*. It is important to note that as we concluded that the COVID-19 pandemic was a valid traumatic event and our interest was in

measuring the effects of the pandemic on the public’s mental health, we asked participants to complete the ITQ symptom and functional impairment items under the following instructions: “Please answer the following questions in relation to your experience of the COVID-19 pandemic. Please read each item carefully, then select one of the answers to indicate how much you have been bothered by that problem in the past month.” We found that many of our participants did report experiences consistent with reexperiencing in the here and now, avoidance of traumatic reminders, and a sense of current threat, and that these experiences were associated with functional impairment in daily life.

One could argue of course that these responses are the result of a demand characteristic of being presented with a scale, but this is unlikely for several reasons. First, the ITQ scores were correlated with mental health (e.g., depression, $r = .81$; generalized anxiety, $r = .81$; somatic problems, $r = .53$) and COVID-19 related variables (e.g., perceived risk of infection, $r = .25$; anxiety about the pandemic, $r = .17$) in a theoretically predictable way. Second, an analysis of the latent structure of the ITQ item scores using confirmatory factor analysis (CFA) supported a correlated three-factor model, $\chi^2(6, N = 1,041) = 43.08, p < .001, RMSEA = .078, 90\% CI [.06, .10], CFI = .99, TLI = .98, SRMR = .015$, and this is consistent with a large body of evidence from previous CFAs (Brewin et al., 2017). Finally, the endorsement of the ITQ symptoms was associated with functional impairment (total PTSD and functional impairment scores correlated at $.70, p < .001$) in very similar ways to previous studies based on commonly accepted definitions of trauma-exposed participants (Cloitre et al., 2018). Thus, the ITQ PTSD scores related to participants’ experience of the COVID-19 pandemic behaved in a remarkably similar way to ITQ scores from, for example, refugees (Vallières et al., 2018), victims of interpersonal trauma (Hyland et al., 2017), and institutional abuse survivors (Knefel et al., 2015).

Van Overmeire (2020) also critiqued our finding that 17.7% of people met the diagnostic requirements for PTSD as “staggering considering that in a United States–based sample, Cloitre and colleagues (2019) found a rate of only 3.4% when using the same PTSD scale.” Although we agree that approximately 1 in 6 people meeting the diagnostic requirements for PTSD as assessed using a self-report scale is a high figure, the comparison made by Van Overmeire is misguided. The figure of 3.4% reported by Cloitre et al. (2019), a study that we coauthored, represents the rate after a differential diagnosis of CPTSD was made. Cloitre et al. (2019) noted that 7.2% of the participants in their sample met the diagnostic requirements for PTSD, and, of those, 3.8% were differentially diagnosed with CPTSD, meaning that only 3.4% retained a PTSD diagnosis. As we noted in our paper, we assessed only the symptoms of PTSD, which precluded our making a similar differential diagnosis. A more apt comparison, we believe, is the one we provided in our original paper showing that 13.2% of Irish adults met the same PTSD requirements as those assessed using the ITQ a year earlier in February 2019 (Hyland et al., 2020). It is worth noting

that in that study, we were able to perform a differential diagnosis for CPTSD and found that 8.1% of the participants who met the ITQ PTSD criteria qualified for a diagnosis of CPTSD. Thus, although our estimated rate of COVID-19-related PTSD (i.e., 17.7%, 95% CI [15.4%, 20.0%]) was statistically significantly higher (i.e., $p < .05$) than the estimated rate of PTSD we found 1 year prior (i.e., 13.2%, 95% CI [11.2%, 15.3%]), the result did not appear to be staggeringly out of line with existing data from the same country. Furthermore, in a trauma-exposed, population-based sample from the United Kingdom surveyed in 2018, Karatzias et al. (2019) found that a similar proportion of individuals screened positive for PTSD using the ITQ (i.e., 18.4%, 95% CI [15.9%, 20.6%]). Finally, in our parallel COVID-19 survey in the United Kingdom, we found that the prevalence estimate of COVID-19-related PTSD was extremely similar to what we reported in our Irish sample (i.e., 16.8%, 95% CI [15.2%, 18.4%]; Shevlin et al., 2020).

These are challenging, important, and difficult times for the study of traumatic stress. We not only have to grapple with the fact that there are differing conceptualizations of trauma-related psychopathology, but we must also find a way to respond to the current circumstances with compassion, integrity, and scientific rigor. Not all psychological scientists will agree on the best path forward; however, we believe that Van Overmeire's critique of our work, and our opportunity to reply, represents a healthy sharing of views during this difficult time. Such debate has been encouraged by Horesh and Brown (2020), who have already issued a call to arms for researchers and clinicians to address the myriad psychological issues that have arisen due to the COVID-19 pandemic. As such, we are prepared to countenance the idea that the anticipatory threat of COVID-19 and its consequences can be traumatic in nature for some and can produce psychological responses consistent with PTSD.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders*. (5th ed.). Author.
- Brewin, C. R., Cloitre, M., Hyland, P., Shevlin, M., Maercker, A., Bryant, R. A., Humayun, A., Jones, L. M., Kagee, A., Rousseau, C., Somasundaram, D., Suzuki, Y., Wessley, S., van Ommeren, M., & Reed, G. M. (2017). A review of current evidence regarding the ICD-11 proposals for diagnosing PTSD and complex PTSD. *Clinical Psychology Review, 58*, 1–15. <https://doi.org/10.1016/j.cpr.2017.09.001>
- Cloitre, M., Hyland, P., Bisson, J. I., Brewin, C. R., Roberts, N. P., Karatzias, T., & Shevlin, M. (2019). ICD-11 PTSD and complex PTSD in the United States: A population-based study. *Journal of Traumatic Stress, 32*(6), 833–842. <https://10.1002/jts.22454>
- Cloitre, M., Shevlin, M., Brewin, C. R., Bisson, J. I., Roberts, N. P., Maercker, A., Karatzias, T., & Hyland, P. (2018). The International Trauma Questionnaire (ITQ): Development of a self-report measure of ICD-11 PTSD and Complex PTSD. *Acta Psychiatrica Scandinavica, 138*(6), 536–546. <https://doi.org/10.1111/acps.12956>
- Horesh, D., & Brown, A. D. (2020). Traumatic stress in the age of COVID-19: A call to close critical gaps and adapt to new realities. *Psychological Trauma: Theory, Research, Practice and Policy, 12*(4), 331–335. <https://doi.org/10.1037/tra0000592>
- Hyland, P., Karatzias, T., Shevlin, M., McElroy, E., Ben-Ezra, M., Cloitre, M., & Brewin, C. R. (2020). Does requiring trauma exposure affect rates of ICD-11 PTSD and complex PTSD? Implications for DSM-5. *Psychological Trauma: Theory, Research, Practice, and Policy*. In press.
- Hyland, P., Shevlin, M., Brewin, C. R., Cloitre, M., Downes, A. J., Jumbe, S., Karatzias, T., Bisson, J. I., & Roberts, N. P. (2017). Factorial and discriminant validity of ICD-11 PTSD and CPTSD using the new International Trauma Questionnaire. *Acta Psychiatrica Scandinavica, 136*(3), 231–338. <https://doi.org/10.1111/acps.12771>
- Karatzias, T., Hyland, P., Bradley, A., Cloitre, M., Roberts, N. P., Bisson, J. I., & Shevlin, M. (2019). Risk-factors and comorbidity of ICD-11 PTSD and complex PTSD: Findings from a trauma-exposed community sample of adults in the United Kingdom. *Depression and Anxiety, 36*(9), 887–894. <https://doi.org/10.1002/da.22934>
- Karatzias, T., Shevlin, M., Murphy, J., McBride, O., Ben-Ezra, M., Bentall, R. P., Vallières, F., & Hyland, P. (2020). Posttraumatic stress symptoms and associated comorbidity during the COVID-19 pandemic in Ireland: A population-based study. *Journal of Traumatic Stress, 33*(4), 365–370. <https://10.1002/jts.22565>
- Knefel, M., Garvert, D. W., Cloitre, M., & Lueger-Schuster, B. (2015). Update to an evaluation of ICD-11 PTSD and complex PTSD criteria in a sample of adult survivors of childhood institutional abuse by Knefel & Lueger-Schuster (2013): A latent profile analysis. *European Journal of Psychotraumatology, 6*, 25290. <https://doi.org/10.3402/ejpt.v6.25290>
- Shevlin, M., McBride, O., Murphy, J., Miller, J. G., Hartman, T. K., Levita, L., Mason, L., Martinez, A. P., McKay, R., Stocks, T. V. A., Bennett, K. M., Hyland, P., Karatzias, K., & Bentall, R. P. (2020). *Anxiety, depression, traumatic stress, and COVID-19 related anxiety in the UK general population during the COVID-19 pandemic*. Manuscript submitted for publication.
- Vallières, F., Ceannt, R., Daccache, F., Abou Daher, R., Sleiman, J., Gilmore, B., Byrne, S., Shevlin, M., Murphy, J., & Hyland, P. (2018). ICD-11 PTSD and complex PTSD amongst Syrian refugees in Lebanon: the factor structure and the clinical utility of the International Trauma Questionnaire. *Acta Psychiatrica Scandinavica, 138*(6), 547–557. <https://doi.org/10.1111/acps.12973>
- World Health Organization. (2018). *International statistical classification of diseases and related health problems* (11th rev.). Author. <https://icd.who.int/browse11/l-m/en>