



**University of  
Zurich**<sup>UZH</sup>

**Zurich Open Repository and  
Archive**

University of Zurich  
University Library  
Strickhofstrasse 39  
CH-8057 Zurich  
[www.zora.uzh.ch](http://www.zora.uzh.ch)

---

Year: 2022

---

## The reply

Krittanawong, Chayakrit ; Maitra, Neil Sagar ; Virk, Hafeez Ul Hassan ; Fogg, Sonya ; Wang, Zhen ; Gritsch, David ; Storch, Eric A ; Tobler, Philippe N ; Charney, Dennis S ; Levine, Glenn N

DOI: <https://doi.org/10.1016/j.amjmed.2022.08.025>

Posted at the Zurich Open Repository and Archive, University of Zurich

ZORA URL: <https://doi.org/10.5167/uzh-225082>

Journal Article

Published Version

Originally published at:

Krittanawong, Chayakrit; Maitra, Neil Sagar; Virk, Hafeez Ul Hassan; Fogg, Sonya; Wang, Zhen; Gritsch, David; Storch, Eric A; Tobler, Philippe N; Charney, Dennis S; Levine, Glenn N (2022). The reply. *American Journal of Medicine*, 135(12):e440.

DOI: <https://doi.org/10.1016/j.amjmed.2022.08.025>

## The Reply



We thank Dr Ito for his interest in our systematic review and meta-analysis.<sup>1</sup> Dr Ito points out that optimism is a non-permanent mental state, which changes over time. Indeed, we agreed that multiple measurements to achieve accurate matrices is needed in optimism measurement. Unfortunately, most included study did not measure optimism multiple times; we, therefore, agreed this would be a limitation in this kind of study related to nonpermanent mental state. Readers should take into account the possible fluctuation of optimism over time. Future studies on novel methods or biomarkers reflecting mental health state or traits of optimism may be needed.

Chayakrit Krittanawong, MD<sup>a</sup>  
 Neil Sagar Maitra, MD<sup>a</sup>  
 Hafeez Ul Hassan Virk, MD<sup>b</sup>  
 Sonya Fogg, MLS<sup>c</sup>  
 Zhen Wang, PhD<sup>d,e,f</sup>  
 David Gritsch, MD, PhD<sup>g</sup>  
 Eric A Storch, PhD<sup>h</sup>  
 Philippe N. Tobler, PhD<sup>i</sup>  
 Dennis S. Charney, MD<sup>j</sup>  
 Glenn N. Levine, MD<sup>a</sup>  
<sup>a</sup>Section of Cardiology, Baylor College of Medicine, Houston, Tex  
<sup>b</sup>Harrington Heart & Vascular Institute, Case Western Reserve University, University Hospitals Cleveland Medical Center, Cleveland, Ohio

<sup>c</sup>Library and Learning Resource Center, Texas Heart Institute, Houston, Tex

<sup>d</sup>Mayo Clinic Evidence-based Practice Center, Rochester, Minn

<sup>e</sup>Robert D. and Patricia E. Kern Center for the Science of Health Care Delivery, Mayo Clinic, Rochester, Minn

<sup>f</sup>Division of Health Care Policy and Research, Department of Health Sciences Research, Mayo Clinic, Rochester, Minn

<sup>g</sup>Department of Neurology, Mayo Clinic, Phoenix, Ariz

<sup>h</sup>Menninger Department of Psychiatry and Behavioral Sciences, Baylor College of Medicine, Houston, Tex

<sup>i</sup>Laboratory for Social and Neural Systems Research, Department of Economics, University of Zurich, Switzerland

<sup>j</sup>Department of Psychiatry, Depression and Anxiety Center for Discovery and Treatment, Icahn School of Medicine at Mount Sinai, New York, NY

<https://doi.org/10.1016/j.amjmed.2022.08.025>

## Reference

1. Krittanawong C, Maitra NS, Hassan Virk HU, et al. Association of optimism with cardiovascular events and all-cause mortality: systematic review and meta-analysis. *Am J Med* 2022;135(7):856–863.e2. <https://doi.org/10.1016/j.amjmed.2021.12.023>.

**Funding:** None.

**Conflicts of Interest:** None.

**Authorship:** All authors had access to the data and a role in writing this manuscript.

Requests for reprints should be addressed to: Chayakrit Krittanawong, MD, NYU School of Medicine, Cardiology Division, 550 First Ave, New York, NY, 10016.

E-mail address: [Chayakrit.Krittanawong@nyulangone.org](mailto:Chayakrit.Krittanawong@nyulangone.org)