

## Authors' Response to Comments on "A Study of Magnitude and Psychological Correlates of Smartphone Use in Medical Students: A Pilot Study with a Novel Telemetric Approach"

Sir,

We thank Arya and Narasimha<sup>[1]</sup> for their interest in and comments on our article.<sup>[2]</sup> We accept their commendation and complement and express our gratitude for the same. Their critical comments do share some valid concerns regarding the study methodology.

We agree that the criteria used in selecting tracker apps should have been explicitly mentioned in the article. We searched Google Play Store with search strings "app tracker" and "usage tracker." Apps developed by Indian developers which had a rating of 4.0 or higher and had been downloaded by more than 50,000 users were shortlisted. The authors (SP and DH) installed all the apps on their own Android smartphones for test-runs and after vetting them for their accuracy by (1) using a particular app for a fixed duration and checking usage log from the tracker app, (2) keeping one app running in the background and checking usage log from the tracker app, and (3) user-friendliness. We communicated with the app developers to seek their permission to use the apps for this project. We also verified that keeping the phone locked and screen deactivated does not log as usage. We agree that these apps are not intended for research purposes. We, however, included them as they were available without any in-app purchases, were small

in size, were easy to use, and were fairly accurate. After installation, daily app notifications were disabled to avoid any deliberate change in usage pattern by students.

We partly agree that 1 week is far too small a period to comment upon the magnitude of someone's smartphone usage. This was a pilot project where, apart from outcome measures, we also wanted to assess the plausibility of such an approach. It is also worth noting that with social media, smartphone usage shows spikes of escalated use on various functions, events, and occasions. For a college student, an impending examination, cultural festival, or even a birthday will suddenly lead to a spike in his or her smartphone usage. We, therefore, restricted our study to a 7-day period which did not include any major cultural, religious, social, professional, or recreational events, including examinations. We, however, agree with Arya and Narasimha<sup>[1]</sup> that a long-term telemetric monitoring will yield more robust data reflecting patterns of use that may not be apparent in a 7 day period.

Tracker apps can go a long way in psychiatric research. Not only do they measure the magnitude of smartphone usage but also they can offer data from the phone's gyroscope and GPS, showing a person's degree of mobility, independence, and activity. These data will

be useful in the management of persons suffering from chronic and severe psychiatric disorders such as schizophrenia and bipolar disorder which present with numerous exacerbations and have a significant effect on socio-occupational functioning.

To summarize, the points made by Arya and Narasimha<sup>[1]</sup> must be considered before research involving telemetric measurement of smartphone usage is planned. The study in question<sup>[2]</sup> had addressed some of their concerns.

#### Financial support and sponsorship

Nil.

#### Conflicts of interest

There are no conflicts of interest.

**Saras Prasad, Devavrat Harshe, Navneet Kaur,  
Sudha Jangannavar, Aishwarya Srivastava,  
Unnati Achanta, Samra Khan, Gurudas Harshe**

Department of Psychiatry, Dr. D. Y. Patil Medical College,  
Kolhapur, Maharashtra, India

**Address for correspondence:** Dr. Devavrat Harshe,  
Department of Psychiatry, D Y Patil Medical College, Kolhapur,  
Maharashtra, India.  
E-mail: devavrat.harshe@gmail.com

## REFERENCES

1. Arya S, Narasimha VL. Comments on "a study of magnitude and psychological correlates of smartphone use in medical students: A pilot study with a novel telemetric approach". *Indian J Psychol Med* 2018;40:596-7.
2. Prasad S, Harshe D, Kaur N, Jangannavar S, Srivastava A, Achanta U, *et al.* A study of magnitude and psychological correlates of smartphone use in medical students: A pilot study with a novel telemetric approach. *Indian J Psychol Med* 2018;40:468-75.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
<b>Website:</b> www.ijpm.info	<b>Quick Response Code</b> 
<b>DOI:</b> 10.4103/IJPSYM.IJPSYM_431_18	

**How to cite this article:** Prasad S, Harshe D, Kaur N, Jangannavar S, Srivastava A, Achanta U, *et al.* Authors' response to comments on "A study of magnitude and psychological correlates of smartphone use in medical students: A pilot study with a novel telemetric approach". *Indian J Psychol Med* 2018;40:597-8.

© 2018 Indian Psychiatric Society - South Zonal Branch | Published by Wolters Kluwer - Medknow