

## Letter to the Editor

### *A Commentary on “Positive Psychology Interventions for Patients With Heart Disease: A Preliminary Randomized Trial”*

TO THE EDITOR: In a recent randomized feasibility trial, Nikrahan et al.<sup>1</sup> found that positive psychological interventions (PPIs) led to significant improvements in psychological wellbeing in patients who had undergone a procedure to treat cardiovascular disease. We were enthused to see this line of inquiry and agree this is a crucial step in determining the generalizability of PPIs in non-Western clinical populations.

Although this study is a preliminary randomized trial, we would like to highlight a number of methodological issues that should be addressed in a definitive trial. The preliminary trial compared 3 separate PPIs (Seligman, Lyubomirsky, and Fordyce) to a wait-list control. Although this facilitated comparison of the different PPIs with each other, and against an inactive control group, there are 2 key issues relating to the trial design. First, this design cannot rule out the possibility of placebo or expectancy effects associated with PPIs. Participants presumably believed that the PPI activities were likely to be beneficial, or at least, understood that the facilitator held this belief. Therefore, our first recommendation for a definitive trial is that the effect of the PPIs be contrasted with an active control group (i.e., a control group engaged in some cognitive or

behavioral activity comparable to that involved in the PPIs), to evaluate the unique contribution of PPIs over and above placebo/expectancy effects. The second consideration relates to the social support implicit in the PPIs. Each of the PPIs involved a degree of weekly contact with other participants and the group facilitator, providing opportunities to interact and form relationships with peers who also recently underwent a medical procedure. Additionally, the Lyubomirsky (week 2) and Fordyce (week 1) interventions contained explicit social support components dedicated to building relationship quality. The potential for social support to enhance coping and improve psychological wellbeing in patient samples is well-established,<sup>2</sup> and indeed, support is a known predictor of each of the study outcomes.<sup>3</sup> The benefits of PPIs in this instance cannot be clearly ascribed to the targeted positive psychological constructs, such as gratitude, kindness, mindfulness, flow or all of these. Thus, our second recommendation for a definitive trial is that it incorporates a social support arm involving comparable levels of social contact with the facilitator, and with peers.

Next, we are interested to observe differences in completion rates across the 3 PPI groups. The authors offer several possibilities for these differences. This leads us to suggest that future feasibility trials on clinical samples could be greatly enhanced by a qualitative evaluation of the trial alongside the quantitative evaluation. This would

allow researchers to understand participant experiences of PPIs, identify barriers to engagement and to completion, help identify the active ingredients of PPIs, and determine the groups for which PPIs might be most likely to be acceptable and beneficial.

Finally, we are impressed by the authors' engagement with the PPI literature and their efforts to develop comprehensive PPIs based on the work of key researchers in this field. Nonetheless, we observe that many of the problems associated with psychological interventions generally are inherent in PPIs. For example, in the field of behavior change, researchers have advocated for improvements in intervention reporting, specification of the active ingredients or “core intervention component” necessary for an intervention to work, and evaluation of the fidelity with which an intervention is delivered across participants and contexts.<sup>4</sup> These same principles need to be adopted for PPIs if they are to be beneficial for patients with cardiac disease.

In summary, as stated recently,<sup>5</sup> the application of PPIs to people with serious physical health impairments needs to be done in a highly sensitive manner, while maintaining empirical rigor. Addressing the methodological issues described here is critical to determine the efficacy (or otherwise) of PPIs in clinical populations and healthcare practice going forward.

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*interest in any product mentioned or concept discussed in this article.*

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