# Just Keep Moving: Positive Impact of Physical Activity During Pandemic Stress

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# INTRODUCTION

Physical activity as beneficial to well-being and coping with stress has been well established in the literature. Further, regular exercise is frequently associated with general well-being and lower rates of mood and anxiety disorders in cross-sectional studies (Goodwin, 2003).

Individuals who are regularly active or physically fit have better health outcomes in almost every measurable dimension when compared with inactive or less-fit individuals: psychological well-being, lower risk of cancer, cardiovascular disease, reduced all-cause mortality, longer life span, etc. (Wen, Wai, Tsai, et al., 2011).

At the onset of the COVID-19 pandemic, levels of well-being and stress were adversely impacted across the globe in response to uncertainty and isolation.

We examined self-reported Well-Being, Perceived Stress and Physical Activity during the onset of the COVID-19 pandemic and implementation of "stay-at-home" orders, to explore the impact of the pandemic on these factors.

### **METHOD**

Participants and Procedure: Study participants consisted of 93 adults. 77.4% of the participants identified as female, and 19.4% of them identified as male. Participants were recruited via Facebook and e-mail solicitation. In this study, participants completed surveys in which they completed demographic items and a series of questionnaires regarding overall well-being, stress and health behaviors including physical activity.

#### Measures:

- Well Being- PERMA Profiler (Butler & Kern, 2016)
- Stress: Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983)
- Physical Activity: Godin Leisure Time Questionnaire (Godin, 2011).

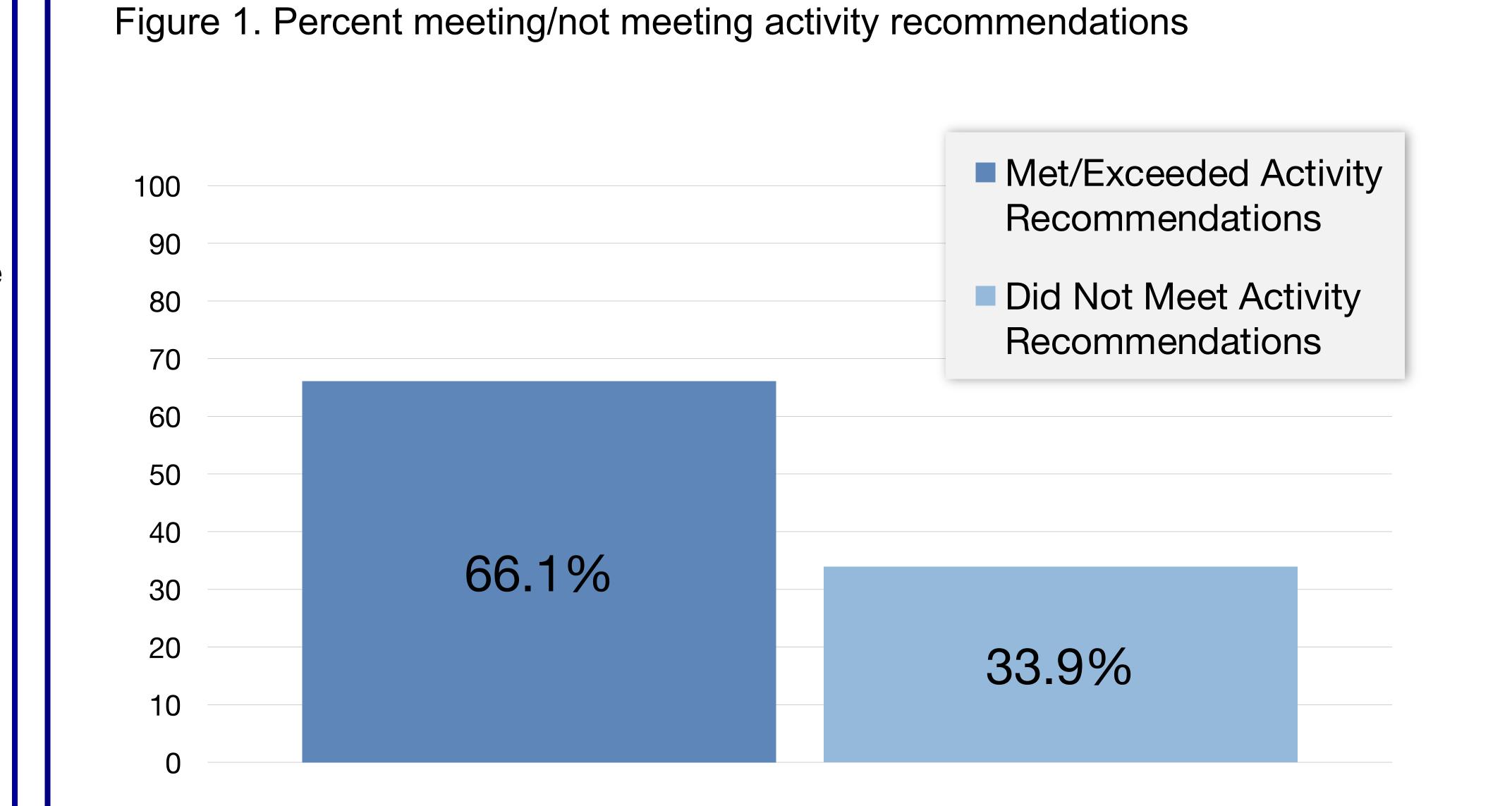
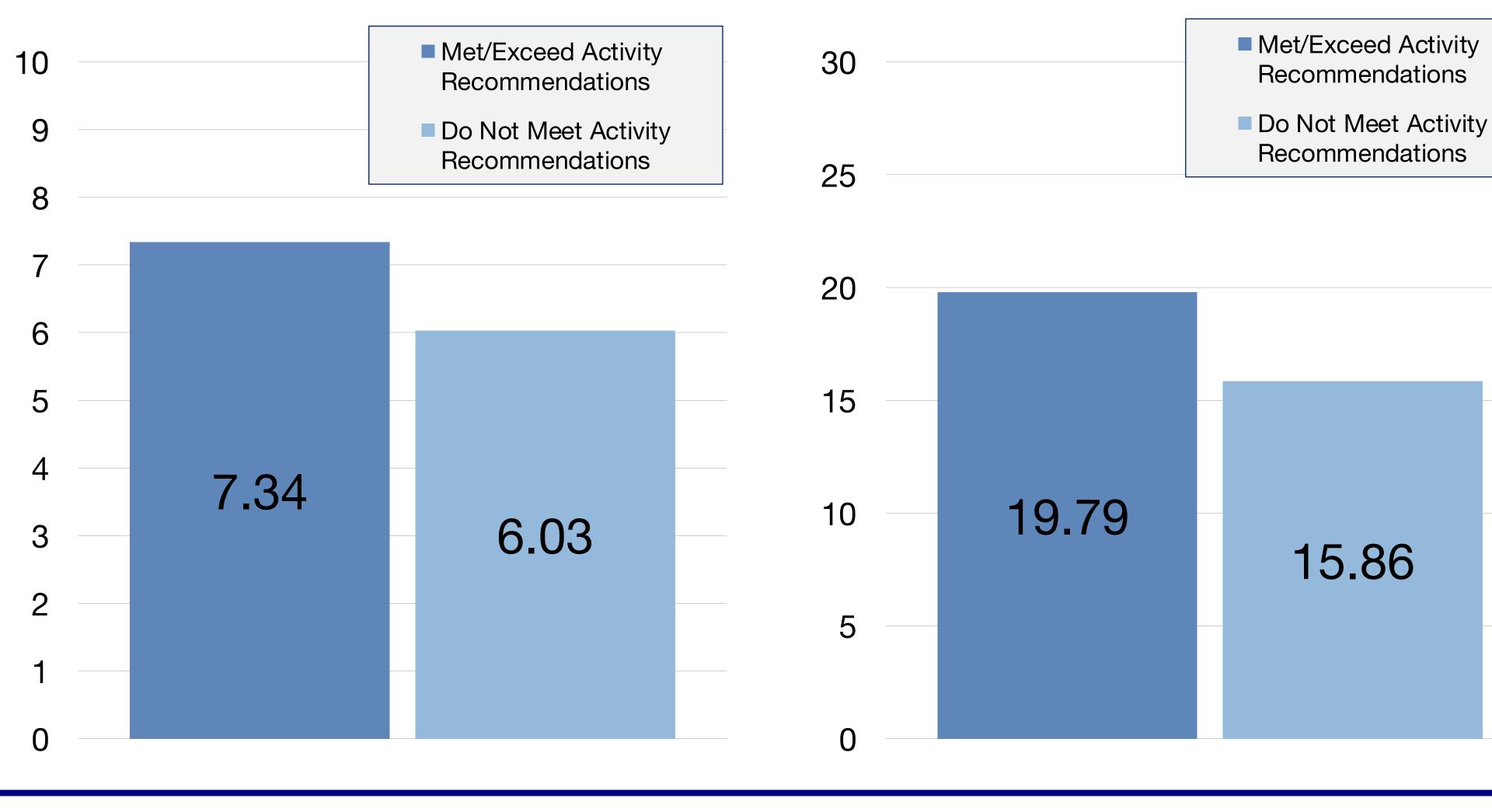


Figure 3. Perceived Stress Score by Activity

Recommendation Category

Figure 2. Mean Well-being score by Activity Recommendation Category



# **RESULTS**

- Approximately two-thirds of the sample met or exceeded weekly activity recommendations (Figure 1).
- Those who met or exceeded recommended health-related physical activity guidelines scored significantly higher on total Well Being t(60) = -3.24, p=.002 (Figure 2) and all five well-being components: Positive Emotion, Engagement, (positive) Relationships, Meaning and Accomplishment (All p's < .05).</li>
- Those who met activity recommendations during this time period scored significantly lower on lower on Perceived Stress scores **t**(76) = 2.53, p=.014 (Figure 3).

## **DISCUSSION**

We hypothesized that groups may not differ on these measures due to the COVID-19 related context. However, this was not the case. Consistent with previous research, these results suggest that the potential protective role of regular physical activity in support and maintenance of Well-Being endures even in times of prolonged stress of uncertainty (e.g., the COVID-19 pandemic). These results provide support for committed action in regular physical activity as supportive of well-being in the context of external stressors.

When considering the Covid-19 pandemic as a continuing stressor with long-term impacts, physical activity interventions should be researched, tested and implemented in communities that are especially at risk for the potential of increased stress and decreased overall well-being.

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