

The Limited Role of Grit in the Associations between Lifestyle Behavior and Feelings of Energy and Fatigue during the Early Stages of the COVID-19 Pandemic

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ABSTRACT

Grit has been positively associated with feelings of energy (when measured as the opposite end of fatigue). During the COVID-19 pandemic, grit has been inter-related with positive health-related behaviors, which are known to influence feelings of energy and fatigue. **PURPOSE:** To identify the association between grit, health-related behaviors and feelings of mental and physical energy (ME, PE) and fatigue (MF, PF) during the COVID-19 health crisis. **METHODS:** Using snowball sampling method during the early stages of the pandemic, participants (n=859) completed validated online surveys regarding physical activity (PA), diet, time sitting, grit, and feelings of ME, MF, PE and PF. Using a series of multi-variate regression models, we assessed the association between grit, health-related lifestyle, and the moods of ME, MF, PE and PF. **RESULTS:** Approximately, 31% of participants reported testing positive for COVID-19. In our models that accounted for all factors, only vigorous PA ($\beta_{PE}=.229, p<.001; \beta_{PF}=-.102, p<.01; \beta_{ME}=.091, p<.05; \beta_{MF}=-.097, p<.05$), time sitting ($\beta_{PE}=-.183, p<.001; \beta_{PF}=.164, p<.001; \beta_{ME}=-.139, p<.001; \beta_{MF}=.193, p<.001$), and diet habits ($\beta_{PE}=.173, p<.001; \beta_{PF}=-.182, p<.001; \beta_{ME}=.118, p<.001; \beta_{MF}=-.133, p<.001$) were associated with the four moods, while grit and all COVID-associated factors (e.g., COVID-19 diagnosis, 7-day inflection rates) measured in this study were not ($p>.05$). **CONCLUSION:** This study is innovative as it examines the aforementioned relationships in the context of a pandemic. Our findings underscore the need to adopt a healthy lifestyle behavior (i.e., performing vigorous PA, sitting less, eating a high-quality diet) to improve feelings of energy and fatigue in the face of high-stress situations, such as a global pandemic. Unlike previous literature, our results indicate that grit is not associated with feelings of energy and fatigue during at least the early stages of the COVID-19 health crisis.