

## **Mood Responses to Various Exercise Types Using the Ontological Definitions of Exercise**

NATHALIE BARRIOS<sup>1,2</sup>, SUCHARITA DODAMGODAGE<sup>2</sup>, OLAOLUWA OGUNLEYE<sup>2</sup>, MADUSHI WICKRAMASINGHE<sup>2</sup>, SUMONA MONDAL<sup>2</sup>, ANDREAS STAMATIS<sup>3</sup>, ALI BOOLANI<sup>4</sup>

<sup>1</sup>Psychology; Clarkson University; Potsdam, NY

<sup>2</sup>Mathematics; Clarkson University; Potsdam, NY

<sup>3</sup>Exercise and Nutrition Sciences; SUNY Plattsburgh; Plattsburgh, NY

<sup>4</sup>Physical Therapy; Clarkson University; Potsdam, NY

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*Category: Undergraduate*

*Advisor / Mentor: Boolani, Ali (aboolani@clarkson.edu)*

### **ABSTRACT**

Recently, a new ontological way of exploring sport and physical activity (PA) has been proposed: the type of PA performed is classified using the four ontological dimensions. This phenomenon has classified PA as *individual* (I-me), *encounter* (I-You), *team* (I-Society), and *nature* (I-Nature). There has only been one study that has examined how participating in these various types of PA influences moods; however, that study asked individuals to recall what types of PA were performed and how they felt more than 60 days before the commencement of the study. **PURPOSE:** To identify whether daily moods differ based on the four ontological dimensions of PA. **METHODS:** Subjects (n=144) were recruited from a small, private university in rural New York and asked to fill out the POMS-SF daily for 60 days. Participants (n=67) who completed 14 or more days of the survey were included in this study. Self-reported exercise type was classified based on the ontological dimension; however, if participants performed more than one type the day was classified as I-Multiple. Moods were scored using previously published methodology. Due to the non-normal distribution of data, a series of Kruskal-Wallis and post-hoc Dunn's tests were used. **RESULTS:** On days participants performed I-society activities, they reported significantly lower feelings of depression ( $p<.01$ ) compared to days when they performed I-Nature, I-Me, or no exercise. Participants also reported feeling significantly more vigorous ( $p<.001$ ) on days when they performed I-Me (compared to I-You, I-Society, I-Nature, and I-Multiple), I-Society (compared to I-You, I-Nature, and I-Multiple), I-Nature (compared to I-You and I-Multiple) and I-Multiple (compared to I-You). All exercise types reported significantly greater feelings of energy compared to days when they did not exercise. No other moods were significant. **CONCLUSION:** The findings support the need for PA, as they suggest that performing PA increases feelings of energy. Interestingly, individual PA results in the greatest increase in feelings of energy. Findings also suggest that feelings of depression were lowest when performing PA with several people. The depression findings may be explained by the fact that data was collected during the COVID-19 pandemic where our participants were socially distancing on most days.