

# SOCIAL COGNITIVE FACTORS AND PREVENTIVE BEHAVIORS IN RESPONDING TO THE COVID-19 PANDEMIC: A LONGITUDINAL STUDY OF PHYSICAL ACTIVITY PATTERNS IN SPORTS SCIENCE STUDENTS

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## ABSTRACT

### **Background:**

The Covid-19 pandemic has caused enormous health, social and economic burdens, and has had a far-reaching impact. Social cognitive factors can affect Covid-19 preventive behavior including a physically active lifestyle. The physical activity patterns of FIK UNY students have been studied in 2019 but it is not yet known whether the social cognitive factors in the Covid-19 pandemic era are related to changes in student physical activity patterns and to their Covid-19 preventive behavior in general.

### **Research purposes**

This study aimed to determine the relationship between social cognitive factors with general Covid-19 preventive behavior, adequate physical activity and stability of physical activity patterns before the Covid-19 pandemic of FIK UNY students.

### **Method:**

The research subjects were 111 students from 141 FIK students who were involved in the 2019 physical activity survey. Social-cognitive factors and preventive behavior were measured by an instrument adapted from WHO (2020), while physical activity was measured by the Global Physical Activity Questionnaire. "High" preventive behavior was defined as performing > 50% of the recommended behavior. "Adequate" level of physical activity was defined as activity > 600 Meters / week. "Fixed" level of physical activity was defined as physical activity > 90% pre-Pandemic. Odds ratios based on logistic regression were calculated to see the relationship between social cognitive factors and preventive behavior (high / low), adequacy of physical activity (sufficient / insufficient) and patterns of physical activity (stable / decreased).

### **Research result:**

Students with the perception that Covid-19 information from objective authorities, believing social restrictions are still needed, believing being able to take preventive measures and having high knowledge of Covid-19 are more likely to report "high" Covid-19 prevention behavior. Students with knowledge of sports are more likely to have "adequate" and "stable" physical activity. Students with self-efficacy, self-regulation, social-support, self-reward, and high outcome expectations were more likely to engage in "moderate" and "stable" physical activity.

### **Conclusion**

The level of knowledge of Covid-19 and exercise is positively related to prevention behavior, adequate physical activity and stability of pre-pandemic physical activity. Other social cognitive factors are associated with adequate physical activity but not the stability of pre-post-pandemic physical activity. It should be noted that the physical activity of pre-pandemic FIK students was relatively high, so the results of this study may not be generalized to populations with lower pre-pandemic physical activity.

**Keywords:** Cognitive social risk factors, preventive behavior, physical activity, Covid-19

Kata Kunci: *Cognitive social risk factors, preventive behavior, physical activity, Covid-19*