

## **Article Review (Jenna Lee)**

### **Developing an Exercise Routine among People with Serious Mental Illness in the Clubhouse Structured Exercise Program by Ingyu Moon**

#### **1. Formulation of the Problem**

There are well-documented physical health problems associated with Serious Mental Illness (SMI) that pose a great deal of health and lifestyle concerns for those suffering from this ailment. People with SMI, who tend to be physically inactive and have difficulties maintaining health-oriented behavior, tend to have shorter lifespans and greater co-morbid physical health problems than the general population in the United States. Those with SMI are more likely to develop physical diseases such as cardiovascular diseases, type II diabetes, and obesity-related diseases. This study examines whether participating in the CSE program affects clubhouse members' HRQOL and health-related psychosocial factors, which are linked to health behaviors. In addition, the study aims to demonstrate the motivational and behavioral components of adopting and maintaining fitness routines in a clubhouse setting.

#### **2. Research Questions and Hypotheses**

The following research questions were developed to understand the influence of the CSE Program on HRQOL and health-related psychosocial factors: (1) Does participation in the CSE Program have positive effects on perceived physical and mental health of the participants? (2) Is participation in the CSE Program associated with increases in health-related psychosocial factors (i.e. health self-efficacy, health motivation, and self-esteem)? Open-ended interviews were used to explore the following research question: how do members experience the motivational and

behavioral process of adopting and maintaining an exercise routine during participation in the CSE?

### **3) Important factors identified in the study.**

A study's dependent variables are the participants' perceived physical and mental health, as well as health-related psychosocial factors. Participation in the CSE program is the independent variable. Purposive sampling was used to reach individuals with SMI who participate in the CSE program through the clubhouse model. A mixed study was conducted to address the gap in research that there have been no studies explaining how clubhouse members develop exercise routines after participating in a CSE program. It will benefit developing clubhouses and other mental health service providers to understand how to support clubhouse members in developing exercise routines during their participation in the CSE program in order to provide more effective physical activity interventions to individuals with SMI. As a result, this mixed study will fill the research gap and benefit mental health professionals who work with people suffering from SMI. This supports the significance of this study.

### **4) Research Design**

In this article, both quantitative and qualitative methods were used in a mixed design. In this mixed study, the effects of CSE participation on health outcomes are explained through an explanatory experimental design. A qualitative research method is also used in this study, which is exploratory. A longitudinal study design is used in this study, since the same sample of participants was followed over time (pre- and post-study). Considering the time and resources available, this study design was effective. It should be noted, however, that the study participants

were not chosen at random. The study did not have a control group. As a result, some limitations may be associated with the study results. I recommend using a random control study with a control and experimental group if the research has more resources.

## **5) Sampling**

Individuals with SMI are the target population of the study. Participants in this study had SMI and participated in the CSE program through a clubhouse model. A total of 25 participants were recruited for the study (sample size). Purposive sampling was used in the study. Non-probability convenient sampling was used in this study. According to the study, participants had to meet the following criteria: 1) Over the age of 18; 2) Diagnosed with severe mental illness according to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V). 3) Medical permission from a primary care physician for exercise. 4) Ability to attend at least two group exercise programs per week. It is efficient and simple to implement the non-probability convenient sampling method. Research outcomes from this method, however, are not clearly generalizable.

## **6) Conceptualization and Measurements**

Participants' perceptions of their physical and mental health, as well as health-related psychosocial factors, are dependent variables. Participation in the CSE program is the independent variable. This researcher designed a paper-based, self-administered survey to collect quantitative data regarding HRQOL and psychosocial factors of the CSE Program participants. There were four scales used in the study: Health motivation in physical activity scale, Health self-efficacy in exercise scale, Rosenberg Self-esteem scale, and HRQOL measure (SF-12). Most

groups showed substantial reliabilities ( $\alpha \geq 0.70$ ), but health intention in post-test and health self-efficacy have weak reliability. There was sufficient evidence that SF-12, which is a briefer version of SF-36, is a reliable and valid tool for evaluating perceived mental health and physical health in people with SMI. The test-retest reliability for SF-12 among people with SMI was tested by intraclass correlation coefficients (ICCs) and shows substantial reliabilities for both the MCS (ICC=0.37) and the PCS (ICC=0.80) (Salyers et al., 2013). These measures showed acceptable reliability. There was, however, no evidence to support the validity of the scales.

## **7) Data collection**

Pre-test surveys were conducted at the Genesis Club and Independence Center in January 2013. In May 2014, post-tests were conducted in both clubhouses. This researcher, who is a PhD candidate at Simmons College, administered the survey and obtained informed consents. Four members and one staff member of the Genesis Club were interviewed during the CSE Program between March 2014 and April 2014. Face-to-face interviews were conducted and taped. The pre- and post-tests are effective for the research. This will, however, increase the risk of social desirability issues. Researchers may get more favorable answers from participants.

## **8) Findings and Discussion**

A significant improvement in health-related psychosocial factors was observed as a result of participation in the CSE Program. Participants in the CSE program showed an increased desire to exercise as a result of increased motivation to engage in physical activities. Self-esteem, another important indicator of health satisfaction, was also improved. Also, physical activity was associated with improved HRQOL. The study hypotheses were supported by the results. The

findings of this study emphasize the importance of developing an exercise routine for people with SMI, which is best achieved through the distinctive culture and social networks in clubhouses.