



Using Mental Imagery as an Effective Coping Mechanism During the COVID-19 Pandemic

Rianna Di Jesus
Advisor: Lysandra Perez-Strumolo, Ph.D.
Ramapo College of New Jersey, Mahwah, NJ, 07430



Abstract

Given the current status of mental health in America due to the COVID-19 pandemic, it seems clear that many people are in need of adequate coping mechanisms to relieve their stress, anxiety, and general sense of unease. In this study, the researcher aimed to test whether or not mental imagery can be used as a no-cost, self-care technique that individuals can utilize to temporarily relieve some of their negative cognitions and emotions. Additionally, the study aimed to assess which imagery content (social, relaxation, or prosocial) is best suited to solve people's individual problems, which may include stress, negative affect, social disconnectedness, and/or poor overall well-being. The researcher conducted an online study on Qualtrics with N = 52 students at Ramapo College of New Jersey. The results show that mental imagery can help to decrease stress and increase perceived social connectedness (PSC). Social daydreaming produced the greatest increases in PSC. There is also evidence of an interaction between mental imagery content and gender.

Introduction

- Poerio et al. (2015, 2016) found that social daydreaming can increase PSC and positive affect.
- Nelson et al. (2016) found that prosocial behavior can increase well-being and positive affect. Prosocial behavior can also mitigate the effects of stress (Raposa et al., 2016). If social daydreaming provides the benefits of socializing, then prosocial daydreaming should provide the benefits of prosocial behavior.
- Relaxation mental imagery is a well-known therapeutic technique.

Method

Participants were collected from the participant pool at Ramapo College. Qualtrics randomly assigned each participant to one of four groups. Each group completed a pretest, a five-minute activity, and a posttest. The groups and their respective activities were as follows:

- **Control:** complete an online word search
- **Social:** visualize yourself interacting with someone you have a close, positive relationship with
- **Relaxation:** visualize yourself relaxing in a comfortable environment
- **Prosocial:** visualize yourself helping a person, organization, or community in need

Hypotheses

1. Mental imagery, in comparison to a control task, will decrease one's stress level, increase positive affect, decrease negative affect, increase PSC, and increase well-being.
2. Social daydreaming will produce the greatest improvements in PSC.

Results

Sample

- N = 52 Ramapo College students
- 82.7% female, 17.3% male
- 50% White/Caucasian, 19.2% Asian, 11.5% Hispanic/Latinx, 1.9% Black/African American, 17.3% multiracial or other
- Mean age = 19.3 years (SD = 1.2)

Hypothesis Test 1

- An independent samples t-test comparing daydreamers to the control group for all DVs revealed significant findings for posttest stress score ($t = 2.115, p = 0.039$; see Figure 1), posttest PSC score ($t = -2.714, p = 0.009$), and the change in PSC from pretest to posttest ($t = -2.996, p = 0.004$).
- The daydreaming groups had lower stress and felt more connected. Daydreaming improves feelings of social connectedness.

Hypothesis Test 2

- An ANOVA for each DV with condition (control, social, relaxation, or prosocial) as the fixed factor revealed significant findings for posttest PSC score ($F = 3.332, p = 0.027$; see Figure 2) and the change in PSC from pretest to posttest ($F = 3.725, p = 0.017$; see Figure 3).
- Post hoc tests reveal that the social daydreaming group had significantly different posttest PSC scores than the control group ($t = -2.730, p = 0.042$). The social daydreaming group, in comparison to the control group, also had a significant change in PSC scores ($t = -3.260, p = 0.011$).
- Social daydreaming produced better PSC scores compared to the control group, but social daydreaming is not necessarily better or worse than other types of daydreaming when it comes to the impact on PSC.

Miscellaneous Findings

- The control group was the only one that decreased in PSC from pretest to posttest (see Figure 3).
- The control group had the greatest changes in positive and negative affect, though these findings were not statistically significant.
- There is evidence of an interaction between gender and group/condition, specifically for posttest PSC, the change in PSC, and posttest well-being.

Figure 1

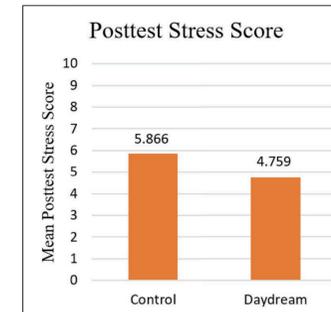


Figure 2

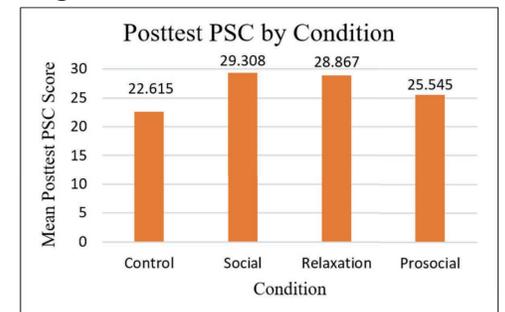
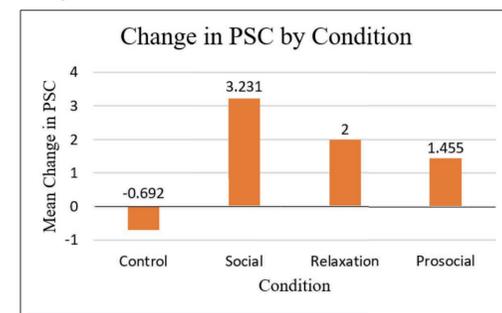


Figure 3



Conclusions

- Hypothesis 1 was partly correct. Mental imagery only significantly impacted stress and PSC.
- Hypothesis 2 was correct. Social daydreaming produced the greatest improvements in PSC, especially when compared to the control group.
- The results are promising overall, especially considering that the intervention period was only five minutes long.
- Future studies may examine the effects of a longer intervention period (e.g., ten minutes a day for a week).
- It would also be useful to determine how long the intervention effects last.

Limitations

- Sample lacks diversity in terms of age, gender, and education.
- Some people had technical difficulties with the online survey, which impacted data collection.
- The word search for the control group may have impacted one or more of the DVs. A new control task may be needed for replications or future studies.
- Testing may have been a confound because the same test was used as the pretest and posttest for every participant.