Breathing to Manage Anxiety
The effect of a mindfulness breathing exercise on COVID-19 anxiety

A CityStudio project one-pager by Tavia McQuay, Hannah Young, Samantha Huezo, Ruby Erck & Harsimar Kaur.

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Background:	The COVID-19 pandemic has negatively impacted many individuals' mental health and wellbeing over the last year. This project attempted to find an effective strategy to help individuals deal with stress and anxiety relating to COVID-19 news.
Relevance to City Goals:	The research study was designed to enhance the City's recognition of well-being and quality of life for all community members (Goal 3.1 of Official Community Plan) by providing insight into potential resources in mindfulness, as well as support in reducing stress and anxiety during the COVID-19 pandemic. It acknowledges the need to advance services related to mental health within the community.
Overview of the project:	This study aimed to test the effectiveness of a mindful breathing technique on COVID-19 related anxiety. We predicted that those who were exposed to a mindful breathing exercise would score lower on the anxiety questionnaire compared to the control group. Our hope is to provide insight on resources in mindfulness activities for the city to support individuals in reducing stress and anxiety.
Methods / Project Details:	The between-participants study design had a total sample of 41 participants (control = 30, experimental = 11), consisting of Capilano University intro psychology students and residents of North Vancouver. Both groups were exposed to a COVID-19 news video and then asked to complete an activity, a neutral activity for the control group, and mindful breathing activity for the experimental group. The study concluded by having both groups complete a questionnaire rating their current anxiety levels within the categories of physiological, fear, hopelessness, stress, and emotional.
Key findings / Recommendations:	- The descriptive statistics show minimal differences between mean scores and standard deviations of both groups across all question categories. Between the two groups, however, the number of participants is greatly imbalanced (control = 30, experimental = 11), which likely is driving the higher standard error in the experimental condition, thus, presenting greater variability within that group. - The inferential statistics display a small-medium effect size in 4 out of the 5 question categories. This aligns with the experimental hypothesis. The influence of the treatment on these variables may have been larger if more data was collected, and if the study had stronger controls. - Although the results of the effect size were in line with our prediction, at this time, the null hypothesis should be accepted as there is not enough data to conclude otherwise. It is recommended that further research is conducted on the effectiveness of mindful breathing exercises on anxiety related to COVID-19. We suggest that a larger sample is selected in order to better represent the population.

This student project was developed as part of a CityStudio North Vancouver course collaboration.

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