

- Average attendance was 74%, among the 9 participants who completed the program.
- No significant reduction was seen in the primary outcome of generalized anxiety, however there was a decline over the 8 week program.
- A significant reduction was seen in Percieved Stress from pre-post program
- A reduction in State Anxiety was seen throughout the 8 weeks as well as pre-post program

Survey	Pre-Score mean ± SD	Post- Score Mean ± SD	P-value
General Anxiety	7.00 ± 4.500	5.22 ± 4.295	0.382
State Anxiety	35.32 ± 1.23	18.32 ± 0.952	<0.001
Health Related Quality of Life	16.44 ± 1.878	16.44 ± 1.424	1.000
Perceived Stress	19.44 ± 6.502	14.62 ± 6.423	0.032
Sleep Disturbances	25.56 ± 7.161	23.00 ± 7.533	0.437
Self-efficacy	22.11 ± 9.880	22.89 ± 8.373	0.770
Self-esteem	21.33 ± 4.528	20.56 ± 3.844	0.523
Psychological Well-being	99.44 ± 11.534	101.00 ± 9.695	0.776
Depression	8.33 ± 4.822	5.89 ± 4.285	0.116

- Negative mood symptoms such as stress and anxiety often co-occur (6).
- A reduction of Perceived Stress and State Anxiety aligns with past research that showed exercising outdoors elicited lower anxiety compared to exercising indoors (1).
- Additionally, larger reductions in state anxiety have been observed in physical activities that have taken place in greener environments (3).
- It is essential to find better behavioral and psychological interventions to reduce the risk of anxiety disorders among cancer survivors (2)

- The present study may have been too short of a timeframe to elicit a significant response in generalized anxiety.
- The current quantitative analysis was unable to measure the observed psychosocial changes that took place with each participant.
- Future studies should run for >8 weeks, and involve qualitative analysis such as post program interviews



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Take a Hike

The Effectiveness of Group Based Trail Walking on Anxiety in Cancer Survivors

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- There has been a steady rise in cancer survivorship due to the advancement of medical technology and preventative screening (5).
- A multitude of physical and psychological side effects continue to impact cancer survivors well beyond diagnosis.
- A synergistic relationship has been seen between the benefits of physical activity and exposure to nature and has been coined Green Exercise (3,4).
- The benefits of Green Exercise in reducing anxiety in cancer survivors could help provide insight to specific health care programming that could address the unique challenges faced by cancer survivors (6).
- This study aims to evaluate the impact of an 8-week trail walking program on anxiety in a population of adult cancer survivors.
- It is hypothesized there would be a reduction in generalized anxiety as well as improvements in other psychosocial and physical activity outcomes.

Population

- This study was a within group design consisting of adult cancer survivors cleared by their physicians to engage in physical activity.
- Ethics approval was granted by the University of the Fraser Valley Human Ethics Board

Study Instruments

- The primary outcome(Generalized Anxiety) and secondary outcomes (Perceived Stress, Sleep, Exercise Self-efficacy, Self-esteem, Well-being, and Depression) were measured with pre-post study surveys.
- State Anxiety was measured with a pre-post visual analog scale at each trail walking session.

Study Design

- The study consisted of two forest trail walks per week for eight weeks, meeting the recommended physical activity guidelines of > 150 minutes/week

Statistical Analysis

- A paired t-test was used to compare pre-post survey data as well as compare scores for the visual analog scale
- Statistical significance was set at p<0.05.

An 8 week group based trail walking program may be effective in reducing perceived stress and state anxiety in cancer survivors



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