

The Impact of the Stay Active and Independent for Life (SAIL) program on the Quality of Life in Community-dwelling Older Adults

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Introduction

- Falls have a major impact on this population; they can cause serious health concerns and create a fear that can reduce function on a daily basis. In addition to affecting the quality of life in older adults, there are also major concerns about the costs of fall-related injuries.
- A variety of fall prevention program have been created to address risk factors such as balance, strength, confidence and strategies to reduce potential environmental risk factors.
- Stay Active and Independent for Life (SAIL) program is an evidence-based fall prevention program for adults 65 and older or anyone concerned about falling. The SAIL program curriculum includes:
 - Aerobics
 - Dynamic and static balance exercises
 - Strength training
 - Stretching
 - Fall prevention education
- Previous studies have explored the impact of completion of the SAIL program on more physical components as well as fear of falling
 - Including strength, agility, perceived occupational performance
- Minimal research has been conducted focusing on if the SAIL program has an impact on overall
 quality of life and is an outcome category of the occupational therapy process.
- Quality of life encompasses the client's satisfaction with life, hope, self-concept, health and functioning, and socioeconomic factors
 - Quality of life in older adults can be greatly impacted by falls and the negative health problems that may result
- The purpose of this capstone project was to look at the impact the Stay Active and Independent for Life (SAIL) program can have on the overall quality of life in community-dwelling older adults.

Methods

- A 6-week evidence-based fall prevention program (SAIL) was implemented at a local Birmingham assisted/independent living facility, Regency Retirement Village
- 10 total participants were recruited through flyers posted at facility as well as word of mouth
 Inclusion criteria: 1. 60 years or older, 2. Community-dwelling, 3. English as
 - primary language, 4. Independent in toileting and mobility
 Exclusion criteria: 1. 59 and younger, 2. Cognitive impairment (unable to follow one-step instructions), 3. Unable to communicate verbally or with another language than English, 4. Need assistance with toileting and mobility
- Two trained SAIL coaches held classes for one hour, twice a week, for 6-weeks
 - Each class consists of the same exercises/motions
 - New fall prevention tip every session
- Prior to program start, participants completed a demographic data sheet, Perceived Quality of Life (PQoL) Scale, consent and required SAIL documentation (liability waiver)
 - Demographic data sheet obtained information regarding
 - Age
 - Gender
 - Previous fall experience
 - If past experiences or current fears impact their quality of life
 - The PQoL scale was also provided following completion of the program
- Perceived Quality of Life scale includes items addressing different components that encompass ones overall well-being including:
 - Physical well-being
 - Relationships
 - Social, community and civic activities
 - Personal development and fulfillment
 - Recreation
- Deidentified demographic information and quantative survey results from individual items from PQoL scale and overall mean score were entered into excel sheet
 - Pre and post test survey scores were analyzed and compared from individual item scores as well as overall mean score
- Trends among Quantative data are noted in the discussion

Results

Participants

- 7 female (70%)
- 3 male (30%)
- Age 84 and below: 4 participants (40%)
- Age 85+: 6 participants (60%)
- 6 participants (60%) have experienced previous falls
- 3 participants (30%) report they have a fear of falling
- 2 participants (20%) report their past experiences of fear of falling negatively impact their quality of life

Post-test results

- 7 participants (70%) experienced an increase in overall quality of life
- 2 participants (20%) experienced a decrease in quality of life
- 1 participant (10%) experienced no change in quality of life

Specific overall scores and results from the 3 domains will be presented in the tables below.

Figure 1: Comparisons of participants Perceived Quality of Life scale cores pre and post-test

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Participant	Pre-test	Post-test	Difference
1	5.26	5.79	+0.53
2	3.79	3.21	-0.58
3	3.05	3.28	+0.23
4	2.74	3.84	+1.10
5	8.32	9.00	+0.68
6	7.42	7.79	+0.37
7	8.63	8.58	050
8	8.05	8.21	+0.16
9	8.58	8.58	0
10	9.11	9.90	+0.79

Figure 2: Health domain averages from Perceived Quality of Life Scale pre and post-test

Domain	Pre-test	Post-test	Difference
Physical Health	6.38	7.00	+0.62
Social Health	6.47	6.65	+0.18
Cognitive Health	6.90	7.30	+0.40

Discussion

Findinas

- The largest positive increase in participants Perceived Quality of Life was in the domain of physical health
 - This is likely due to the SAIL program consisting of a variety of exercises and activities to address improving strength, balance, and endurance
- Participants reported little change in their social health and well-being
- Limited change in cognitive health and well-being scores
- All general happiness scores either remined the same or increased
- Two participants reported many scores as a zero, therapy staff reports this is likely evident of mental health challenges and other comorbidities they were experiencing
- Subjectively, participants and staff reported positive feedback
 - Residents of independent living reported it gave them a reason to get out of the house and walk outside to get to the class
 - The facility inquired about the steps to continue the program secondary to positive outcomes
 - Therapy staff reported increased engagement from residents that do not do so in other areas of occupation

Limitations

- Participants were recruited from a single facility
- Participant inconsistencies attendance and participation
- Program duration had to be shortened to six weeks due to constraints of capstone deadline
- Participants cognitive abilities impacted understanding of survey completion

Conclusion

In conclusion, implementing the evidence-based *Stay Active and Independent for Life* fall prevention program has a small impact on perceived quality of life in community-dwelling older adults, mostly in terms of physical health and well-being. While participants reported and appeared to subjectively experience positive outcomes, additional research is indicated to support the effects of fall prevention programs on quality of life in this population.

References

American Occupational Therapy Association. (2020). Occupational Therapy Practice Framework: Domain and Process- Fourth Edition. The American journal of occupational therapy: official publication of the American Occupational Therapy Association, 74 (Supplement_2), 7412410010. https://doi.org/10.5014/ajot.2020.74S2001

Muniak, J., Swan, L., & Piersol, C. V. (2019). Enhanced Sail Program: Evaluation of an evidence-based fall prevention program for community dwelling elders. *Physcial&Occupational Therapy in Geriatrics*, 37(1), 67-75. https://doi.org/10.1080/02703181.2019.1613465

National Council on Aging. (n.d.). *Evidence-Based Program: Stay Active & Independent for Life (SAIL) Program.* https://www.ncoa.org/article/evidence-based-program-stay-active-independent-for-life-the-sail-program/

Ozcan, A., Donat, H., Gelecek, N., Ozdirenc, M., & Karadibak, D. (2005). The relationship between risk factors for falling and the quality of life in older adults. *BMC Public Health*, *5*, 90. https://doi.org/10.1186/1471-2458-5-90

Acknowledgement & Contact information

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