

**POPCLINIC: ID# 99406**

**Title:**

Dog Walking: An Exercise Incentive for Older Adults

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**ACCEPTED**

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**Session Title:**

Clinical Poster Session 2 (Monday/Tuesday, 18 & 19 November)

**Slot:**

CLIN PST2: Monday, 18 November 2019: 8:00 AM-8:45 AM

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**Abstract Describes:**

Ongoing Work/Project

**Applicable Category:**

Students

**Keywords:**

dog walking, older adults 65 and above and physical activity

**References:**

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### **Abstract Summary:**

This review will study the literature in outcomes of dog walking in promoting physical activity in older adults. Subjectively reported data showed trends towards dog walkers being more active compared to their counterparts. This may assist in improving physical and mental health in seniors.

### **Content Outline:**

Content Outline

I. Background and Introduction

A. Physical inactivity is a national problem that can lead to poor physical and mental functioning in adults 65 and older

B. Dog walking can assist in motivating the elder in engaging in physical activity

## II. Results from Literature Review

### A. Comparison between Dog Owners and Non-Dog Owners

#### 1. Dog ownership doesn't translate into better health

a) Curl et al., (2017)

b) Richards (2016)

2. Dog owners that do chose to dog walk have much better health outcomes than those that chose not to walk

a) Curl et al., (2017) fewer MD visits, less limitations in ADL's

b) Gretebeck et al., (2013) dog owners who dog walk cite more walking activity and higher functional ability than those that don't

### B. Characteristics of Dog Walking Behavior

#### 1. Participants Self-Reported Behaviors

a) Toohey et al., (2013) dog walkers have self-reported high health status, physical activity, and social interactions

b) Richards (2016) dog walkers reported better moods and higher self-efficacy

#### 2. Measured Outcomes of Studies

a) Richards (2015) dog walks minimum of 10 minutes or more, 28% ( $p < 0.05$ ) took 2 more walks/day and averaged over 13-minute bouts

b) Richards (2016) No significant difference in dog walkers and non-walkers in TC, HDL, glucose, BMI, days walked, and walks/day

### C. Accelerometer use in Dog Walking Behavior

1. Accelerometers measurements verify benefits with more physical activity—problem with prior studies using self-reported activity to determine benefice

a) Richards et al., (2014) Accelerometer usage verified dog walking as beneficial in meeting the physical activity requirements for older adults

b) Dall et al., (2017) accelerometer usage with dog walking verified

with physical activity diary of elders that dog walkers were overall more physically active than non-dog walkers

2. Accelerometer usage doesn't necessarily promote activity

a) Jeffries et al., (2014) accelerometer usage showed more activity than non-accelerometer usage

b) Jeffries et al, (2014) recommends more research in accelerometers as a motivator

III. Conclusion

A. Dog walking can assist in promoting activity and a healthier lifestyle

B. Limitations

1. Majority of studies analyzed used questionnaire and self-reported activity

2. Sampled older adults who were well-educated and fairly affluent, limiting generalizability of study findings to more diverse populations

C. Future Research

1. What role (if any) does accelerometer usage have in motivation in dog walking activities

2. Does dog walking behavior differ if canine is walked off leash than on leash

D. Applications for Practitioners

1. Take more holistic approach in client care

2. Use dog walking to encourage elders in engaging in activity to promote a healthier lifestyle

**Topic Selection:**

Clinical Poster Session 2 (Monday/Tuesday, 18 & 19 November) (26148)

**Abstract Text:**

Physical inactivity among older adults is associated with poorer quality of life, complications from chronic diseases, and higher mortality rates (Curl, Bibbo, & Johnson, 2017). Approximately 31 million people over 50 are inactive, with only one quarter to one third of adults 65 and older meeting the current physical activity recommendations (U.S. Department of Health and Human Services, 2018). Physical activity in older adults can help to treat and or minimize the effects of several chronic diseases

such as heart disease, arthritis, and diabetes, thereby possibly assisting in increasing the quality of life for this age group (National Institute on Aging, 2018).

Physical activity may also help to combat many of the mental health issues prevalent among older adults, such as depression, loneliness, and social isolation (Toohey, McCormack, Doyle-Baker, Adams, & Rock, 2013). There is preliminary data to suggest that seniors who own and walk their dog may have the potential for continuous physical activity (Richards, Ogata, & Cheng, 2016). Therefore, dog walking activities could allow elders to reap the benefits that physical activity may offer, such as better physical and mental health (National Institute on Aging, 2018).

Due to the detriments associated with inactivity and the older adult, there is a need to encourage and increase exercise within this population (U.S. Department of Health and Human Services, 2018). Walking is a very popular exercise choice amongst older persons. It is an activity that is very common, is easy to do, and it can be performed by many people almost anywhere (Curl et al., 2017). Dog walking provides an added incentive of activity for the older adults because of their perception of the needed exercise for their pet (Curl et al., 2017). This in turn, may make the older adult more apt to return to the activity of walking with their dog (Curl et al.).

Inactivity, can not only lead to physical issues, but can contribute to mental health issues such as: isolation, depression, and loss of independence (National Institute of Mental Health, 2016). Older adults who walk their dogs have much to gain from being physically active. The purpose of this literature review is to determine how older adults are affected by dog walking and if dog walking helps the older adult to remain and sustain an active lifestyle. Lastly, this review will include the use of accelerometers, and if their use changes any of these behaviors through self-monitoring reinforcing walking and motivation for physical activity.

This review included studies of independently-living elders 65 and older, who are relatively healthy without severe debilitating diseases, and walk dogs. Among the articles analyzed, there was a total of 22,661 older adults sampled from these studies. Of those participants, they were predominately female, highly educated, Caucasian, and of a higher socio-economic status.

The U.S. Department of Health and Human Services (2018) recommends that the older adult obtain a minimum of 150 minutes of vigorous activity per week to support health of the individual. Unfortunately, the majority of the seniors evaluated in these studies fell short of this 150 minute target (Jefferis et al., 2014). However, the older adult that participates in dog walking, are walking longer than those that walk alone (Jefferis et al., 2014). The older adult still needs more work in meeting the 150-minute guidelines. However, there is promising evidence to show that elders that participate in dog walking are meeting this goal better than those that do not dog walk. Accelerometer data coincides with self-reported activity of the older adult, showing trends towards more activity (Richards et al., 2014). Further investigation showed that there was no direct connection that this activity was due to self-monitoring as a motivator (Dall et al., 2017). Therefore, further research is needed in this area to determine if accelerometers are intrinsic in motivation for dog walking in this population.

This literature review is limited by the quality of the studies examined. The majority of the studies review utilized self-reported activity from the older adult. This brings into question whether the activity they reported actually coincided with the walking that they actually performed. Additionally, the

majority of the elders sampled in these studies were well-educated and fairly affluent, which limits the generalizability of the study finding to a more diverse population.

Healthcare practitioners should take a more holistic approach in issuing their client's care. The patient, or client, is more than a series of conditions and diseases, and should be looked upon as an individual. For this reason, alternative therapies such as dog walking should be considered. Practitioners can use data from dog walking studies to encourage exercise for their clients to assist in diminishing or even alleviate chronic physical and mental issues.

This poster has addressed the issues that are associated with inactivity and the adult over 65. Dog walking and the older adult points positively towards encouraging the senior to engage in exercise and activities that promote a healthier lifestyle. From the analysis of the literature reviewed, it gives one hope that aging does not necessarily have to be negative and something to be feared.