

The Savior's Sandals curricular and pedometer program for increasing step counts in Catholic middle school students during Lent

Submission date 12/10/2018	Recruitment status No longer recruiting	☐ Prospectively registered ☐ Protocol
Registration date 23/10/2018	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 04/02/2019	Condition category Other	☐ Individual participant data

Plain English summary of protocol

Background and study aims

Schools are a good place to offer changes to tackle obesity and lack of activity in young people. Studies have shown that pedometers (step counters) can encourage activity throughout the day and can increase physical activity outside of physical education (PE) classes. In 2009-10, nearly 4.5 million children attended private PK-12 (pre-kindergarten to grade 12) Christian schools in the United States. In San Diego County, there are nearly 500 private PK-12 schools with nearly 40 Christian schools in San Diego City alone. It is important to discover if faith-based pedometer interventions will increase physical activity and religiosity, enjoyment of physical activity, and motivation for a faith-based physical activity program among parochial junior high school students. Positive findings from the study would set the stage for the intervention materials to be used in the future. The aim of the study is to measure changes in step counts and variables related to physical activity - religiosity, enjoyment, motivation - during a faith-based curriculum intervention provided during Lent.

Who can participate?

Any student regardless of gender, enrolled in grades 6-8, between ages 10-14, and who is ambulatory (able to walk) may participate.

What does the study involve?

Participants wear a pedometer during school hours for the 6 weeks of Lent. For 4 weeks they are given a workbook that allows them to learn about the locations that Jesus visited from birth until death as they attempt to virtually walk in his shoes by walking 110,000 steps during the 4 weeks. Participants are challenged to be mindful of "What would Jesus do?" when faced with a choice of how to spend break times (e.g., recess, lunch) during the school day: be sedentary or move. Participants record and graph daily step counts. If students walk 110,000 steps, they will have completed Jesus's life journey during the Lenten season, which is a time that all Catholics are enjoined to be mindful of being more Christ-like in their behavior. They are awarded a token (footie that can be worn on a necklace) for every 5000 steps and an Easter bookmark if they complete the journey. Participants complete two questionnaires (before and after the intervention) on religiosity and enjoyment of and motivation for physical activity. All participants

receive the same treatment; however, one cluster (2 schools) will begin with the intervention (4 weeks) while the other cluster (2 schools) will begin with no treatment (pedometers only; 2 weeks). Thereafter, the clusters will cross over to no treatment and intervention, respectively. We are comparing the effects of the faith-based workbook to no workbook conditions.

What are the possible benefits and risks of participating?

Participants may benefit by becoming more mindful of their behavior when faced with a choice to be active or sedentary during unstructured time at school; they may feel a closer connection to Christ and God; and they may feel a sense of personal accomplishment if they complete the virtual journey of 110,000 steps. Risks include personal disappointment for not completing the virtual journey and embarrassment if step counts are compared to others. These risks are mitigated by stressing that everyone undertakes a personal journey and it is not a competition and the path is important than the destination (i.e., not reaching step count goal is okay if you tried your best).

Where is the study run from?

The study takes place at 4 Catholic schools in San Diego, California, USA. The schools' names are St. Columba, St. Rita's, Nativity Preparatory, and Our Lady of the Sacred Heart School. There is no lead center.

When is the study starting and how long is it expected to run for?

February 2017 to April 2017

Who is funding the study?

The study is self-funded by the researcher

Who is the main contact?

David Kahan

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Contact information

Type(s)

Scientific

Contact name

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San Diego

United States of America

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Additional identifiers

Protocol serial number

1013089

Study information

Scientific Title

Effects of a faith-based pedometer intervention on physical activity in parochial middle school students: The Physical Activity for Lent (PAL) Program

Acronym

PAL

Study objectives

During the 6-week Lenten season, participants will accumulate significantly more steps during the 4-week intervention phase than the 2-week no-treatment phase.

Ethics approval required

Old ethics approval format

Ethics approval(s)

San Diego State University Institutional Review Board, 24/06/2016, Protocol No. 1013089

Study design

Cluster-randomized crossover trial

Primary study design

Interventional

Study type(s)

Other

Health condition(s) or problem(s) studied

Physical activity during the school day

Interventions

Intervention consists of material workbook, which includes 12-page workbook (The Savior's Sandals) by which participants trace their own step counts to the geographical path Jesus Christ took from birth through death. Each workbook page represents a city/place (e.g., Bethlehem, Cana, Jerusalem) and is accompanied by questions specific to it and to be answered by a participant using a Bible; historical/current visual images of the location; and facts about its history and present day. Participants are each given a workbook and work through it at their own pace with the goal to finish the virtual journey (i.e., accumulated steps count toward making the journey of Jesus's life) in 4 weeks. Daily progress is self-recorded and -reported on a recording sheet and step counts are also graphed.

Participants in schools during the no treatment phase do not have the workbooks but do wear pedometers and record and graph daily steps.

Intervention Type

Behavioural

Primary outcome(s)

Pedometer-measured step count (physical activity) - steps measured daily during the school week over 6 weeks.

Key secondary outcome(s)

1. Religiosity measured using the Short-Francis Attitudes toward Christianity Survey (SFACS; Cogollo, Gómez-Bustamante, Herazo, & Campo-Arias, 2012).
2. Enjoyment of physical activity while at school measured using the shortened Physical Activity Enjoyment Scale (S-PACES; Paxton, et al., 2008).
3. Motivation for physical activity for participating in the Physical Activity for Lent program measured using the Situational Motivation Scale (SIMS; Guay, Vallerand, & Blanchard, 2000). Questionnaires containing these items were administered before commencement of wearing pedometers (27/02/2017) and conducted once more on school days after the Easter holiday (16/04/2017)

Completion date

28/04/2017

Eligibility**Key inclusion criteria**

1. Ambulatory
2. Enrolled in any grade 6-8 (middle school in the USA)

Participant type(s)

Healthy volunteer

Healthy volunteers allowed

No

Age group

Child

Sex

All

Key exclusion criteria

1. Non-ambulatory or limited ambulatory during a portion or all of the 6-week study.

Date of first enrolment

30/01/2017

Date of final enrolment

24/02/2017

Locations**Countries of recruitment**

United States of America

Study participating centre
St. Rita's Catholic School
5165 Imperial Ave
San Diego
United States of America
92114

Study participating centre
St. Columba Catholic School
3365 Glencolum Dr.
San Diego
United States of America
92123

Study participating centre
Our Lady of the Sacred Heart School
4106 42nd St.
San Diego
United States of America
92105

Study participating centre
Nativity Prep Academy
2755 55th St.
San Diego
United States of America
92105

Sponsor information

Organisation
San Diego State University - Division of Research Affairs

ROR
<https://ror.org/0264fdx42>

Funder(s)

Funder type

Not defined

Funder Name

Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study will be stored in a publicly available repository. Raw data are stored on Zenodo (doi:10.5281/zenodo.1407244). Raw data are provided for all variables in Excel spreadsheet format. The data are currently and permanently available. Anyone who has access to Zenodo may view/download the data and use the data for any purpose. All data are anonymized (i.e. there is no means by which any individual participant may be identified by name).

IPD sharing plan summary

Stored in repository

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/02/2019	04/02/2019	Yes	No