Abstract and Suggested Citation Format

Poster Presentation Presented at the

2021 American College of Sports Medicine Annual Meeting & World Congress on Exercise is Medicine®

By

Ethan N. Tse,[1] Savannah A. Longoria,[1] Cameron N. Christopher,[2] and Jafrā D. Thomas[1]

[1]California Polytechnic State University, San Luis Obispo, USA

[2]Boston University, Massachusetts, USA

Funding: This work received funding support from the Frost Undergraduate Research Fund (College of Science and Mathematics, California Polytechnic State University, San Luis Obispo; 2020 Winter Quarter, 2020 Summer Session).

Correspondence: Jafrā D. Thomas, Assistant Professor, Department of Kinesiology and Public Health, California Polytechnic State University, 1 Grand Avenue, San Luis Obispo, California 93407-0386. E-mail: jthoma84@calpoly.edu

Description of Listed Elements

The submitted presentation material summarizes a project presented at the 2021 American College of Sports Medicine Virtual Annual Meeting and World Congress on Exercise is Medicine®. The project which the presentation is based on is titled, "Communicating About Physical Activity: Issues and Opportunities for Improvement Part 1." The uploaded documents consist of the following material: (a) the presentation abstract, and (b) a copy of the e-poster presented at the virtual event. Please follow the social media profiles of Dr. Jafrā Thomas, for timely project updates (e.g., ResearchGate dot net and GoogleScholar dot com). You may find related work from this lab group published to Cal Poly Digital Commons under the Kinesiology and Public Health section (see URL): https://digitalcommons.calpoly.edu/kinesp/ .

Presentation Abstract

The credibility *and* usability of lay physical activity promotion material are a persistent problem (Thomas & Cardinal, 2020*, TJACM*). These quality issues deter the material in promoting health literacy, a major predictor of prevention-oriented health behaviors (e.g., regular exercise, U.S. *National Action Plan to Improve Health Literacy*). Few studies, however, have evaluated the quality of lay material over time

(Thomas et al., 2018, *Quest*). **PURPOSE:** In order to conduct a repeated-measures study of the quality of physical activity promotion web articles for lay adults, one experienced researcher (JDT) trained undergraduates on how to use the *Suitability Assessment of Materials* (SAM) protocol (Doak et al., 1996). **METHODS**: An adapted version of the SAM protocol was used (Thomas & Cardinal, 2020, *Quest*). Three undergraduates were part of the pilot project (ENT, SAL, CNC; Feb.-Aug. 2020). Each was introduced to the protocol and practiced its methods using six web articles that were written in English and not used in the longitudinal study. Coding by ENT was compared to JDT for analytic purposes; ENT was pre-assigned to evaluate material for the longitudinal study. Per Krippendorff's alpha and intraclass coefficient measures, ENT showed acceptable between/within coder agreement during the training phase. Jul.-Aug. 2020, ENT then tested his skills further using a random subset of 16 unique web articles that were part of the longitudinal study. **RESULTS**: ENT between-coder agreement ranged from *Good/Substantial* (both .68) to *Excellent/Almost Perfec*t (both .86) across the SAM's main categories. Overall agreement was *Excellent/Substantial* (range: .76-.77). Within-coder agreement was *Excellent/Almost Perfect* across *all* main categories (both ≥ .85). **CONCLUSION**: This pilot study demonstrates that a novice coder can *learn* to code material with a high degree of fidelity. This contrasts with speculation that the SAM protocol may be *too* subjective for good coder agreement. Debriefing revealed key insights: (a) four "rules" that helped the novice coder achieve fidelity (e.g., review notes often) and (b) developer "bad habits" that limit the educational quality of material (e.g., jargon-filled advice). We will discuss our results and practical lessons based on post-hoc text profiles of material sampled in our pilot study.

Suggested citation format for Abstract

Tse, E. N., Longoria, S. A., Christopher, C. N., & Thomas, J. D. (2021). Training novices to evaluate physical activity promotion material quality: Results of a pilot study [Abstract No. 4118]. *Medicine and Science in Sports and Exercise*, *53*(Supplement 5).

Suggested citation format for Poster Presentation

Tse, E. N., Longoria, S. A., Christopher, C. N., & Thomas, J. D. (2021, June 1-5). *Training novices to evaluate physical activity promotion material quality: Results of a pilot study* [Electronic poster presentation, Abstract No. 4118]. 68th Annual Meeting of the American College of Sports Medicine and 12th Annual World Congress on Exercise is Medicine. Virtual Conference.