

Transcript

Video Summary of “*How Credible Is Online Physical Activity Advice? The Accuracy of Free Adult Educational Materials*”

Bethany C. Love, Caroline N. Smith, and Jafrā D. Thomas

California Polytechnic State University, San Luis Obispo

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Author Note:

Bethany C. Love is an undergraduate research assistant (majoring in Kinesiology) in the Department of Kinesiology and Public Health, College of Science and Mathematics, at the California Polytechnic State University, San Luis Obispo. **Caroline N. Smith** is an undergraduate research assistant (majoring in Public Health) in the Department of Kinesiology and Public Health, College of Science and Mathematics, at the California Polytechnic State University, San Luis Obispo. **Jafrā D. Thomas** serves as an Assistant Professor in the Department of Kinesiology and Public Health, College of Science and Mathematics, at the California Polytechnic State University, San Luis Obispo

Correspondence:

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

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Transcript Text

1: Hello, my name is Bethany Love. I am an undergraduate student and Kinesiology major at Cal Poly in the department of Kinesiology and Public Health. This is a video summary of the study “*How Credible Is Online Physical Activity Advice? The Accuracy of Free Adult Educational Materials*” authored by Doctors Thomas and Cardinal, associated with Cal Poly San Luis Obispo and Oregon State University. The full study can be found by scanning the QR code in the bottom right-hand corner. This study included 139 physical activity articles from a variety of sources on the Internet that were assessed for having at least one message consistent with each guideline from the *2008 National Physical Activity Guidelines* (see full report).¹

2: The National physical activity guidelines are widely accepted and grounded in research. However, many people find them hard to understand. According to the 2003 National Health Information Trends Survey², 75% felt overwhelmed by the amount of physical activity information that they didn’t know what to follow. Further, 80% did not take action towards change after hearing about a new physical activity recommendation. Confusion about guidelines is likely the cause of inaction towards implementing routines that align with recommendations. In a more recent article published in 2020 by Piercy et al., only 22% of respondents to an online survey were aware that guidelines existed and only 2% knew the recommended dose for moderate endurance activity, which is the kind of activity you can talk but not sing while doing³. As confusion about guidelines has persisted over time, it is important to take action towards a solution. We as providers have an important part to play by providing accurate information to patients. This video aims to address a key source of confusion: advice that does not match with guidelines.

¹ **Full study link:** Thomas, J. D., & Cardinal, B. J. (2020). How credible is online physical activity advice? The accuracy of free adult educational materials. *Translational Journal of the American College of Sports Medicine*, 5(9), 82-91. Retrieved from https://journals.lww.com/acsm-tj/Fulltext/2020/05010/How_Credible_Is_Online_Physical_Activity_Advice_.1.aspx

² Health Information National Trends Survey. (2006). *Hints Brief Number 4*. Retrieved from https://hints.cancer.gov/docs/Briefs/HINTS_Brief121306.pdf

³ Piercy, K. L., Bevington, F., Vaux-Bjerke, A., Hilfiker, S. W., Arayasirikul, S., & Barnett, E. Y. (2020). Understanding contemplators’ knowledge and awareness of the physical activity guidelines. *Journal of Physical Activity and Health*, 17(4), 404-411. Retrieved from <https://journals.humankinetics.com/view/journals/jpah/17/4/article-p404.xml>

3: The pie charts graphic represents the breakdown of articles with at least one consistent message versus those with none. The less orange, the less articles with a least one consistent message. Each pie chart summarizes the data for four areas of the guidelines. The turquoise running shoes represent health benefits from endurance physical activity. The purple running shoes with a plus sign are for additional health benefits from endurance exercise, the dumbbell for strength training, and the couch potato for adults with an inactive lifestyle. The less orange, the less consistent. The pie charts show most articles were blue—they did not provide advice consistent with the guidelines. Now, please direct your attention to the lower right pie chart. That pie chart has another key finding. It shows that adults with sedentary lifestyles would be least likely to receive credible advice about physical activity online. This puts them at a disadvantage when seeking out physical activity advice online and may hurt their progress towards a healthier and more active lifestyle.

4: People use web articles to educate themselves on how to plan and structure their exercise routines. It is our responsibility to provide patients with credible resource material, as well as help them learn how to judge the credibility of material they locate online. Sometimes the advice given in an article may seem credible, but a closer look reveals key information is missing. The case example on the next slide demonstrates this point. This article focuses on adults looking to start a weight training routine and is purportedly for those looking to start with the basics. Given this, we will critique this article with guideline 16 in mind. Guideline 16 falls under the group of guidelines for inactive adults. It is recommended that inactive adults “start with 1 day a week of light to moderate level effort for muscle-strengthening activity”. “Light to moderate” can be defined as doing 1 set of 8-12 repetitions that is perceived as easy to somewhat difficult.

5a: Our case article is a real article. This excerpt instructs the reader how to get started with their weight training.

5b: The bold text provides information similar to Guideline 16, so we are going to judge how well the two matched. It relates to guideline 16 because the phrase “first step” implies that this advice is for beginners or people who were not previously active in this capacity. Now recall the words of Guideline 16. What guidance did it contain for behavior and weekly routine? Okay, now state if the bold text matches Guideline 16 or not? If you would like more time, feel free to pause the video. Now let’s move on to the answer and suggested edits to make the message consistent with the guideline.

6: So, to the question, “does the bold text match Guideline 16?” the answer is no. While close and persuasive, it lacks key information to give the reader a good start. For example, “a lot of weight” goes against the guideline’s recommendation to start with lighter weight. Additionally, the term “lifting heavy” is opposite of “light to moderate.” Specifically, heavy can be defined as something hard to do or difficult.

7: Here is an example of a revised message that follows guideline 16. This exercise we did together is valuable. It helps us remember key information we should give our clients when advising them about exercise. It also helps us identify changes we could make to ensure material we select or provide matches national physical activity guidelines. There are other aspects of the excerpt we might critique. If you would like to see how, try our post-video practice material. It contains background information and more helpful exercises.

8: The study summarized in this video showed that confusion about physical activity guidelines is a persistent issue. A large cause of this perpetual confusion lays in how guideline information is presented to the public. There is little consistency in the advice that end-users receive and what is in *official* physical activity guidelines. Confusion is a negative reaction. People unsure about what is safe or effective exercise for them are less motivated to be active in their daily life. Careful attention to the accuracy of advice is needed. Professionals have a responsibility to verify if materials they produce or select for clients match official physical activity guidelines. Therefore, practice in recognizing if content matches official physical activity guidelines is crucial. As an illustration on why professionals and students must practice consistent communication, we completed an activity together, which helped us learn to identify information that does *not* match with guidelines. This skill is essential because it is our responsibility to provide clients with credible sources and teach them how to judge sources for themselves.

9: Finally, we have some QR codes to additional resources for you. First, we have the link to the full article⁴, followed by a free quiz⁵ to test your knowledge and understanding of the material from this video. Then we have a link to the Department of Health and Human Services website⁶ containing a variety of infographics on physical activity guidelines that can be adapted for your use. And lastly the link for an inquiry form⁷ for any follow up questions. Thank you!

⁴ **Full Study Link:** Thomas, J. D., & Cardinal, B. J. (2020). How credible is online physical activity advice? The accuracy of free adult educational materials. *Translational Journal of the American College of Sports Medicine*, 5(9), 82-91. Retrieved from https://journals.lww.com/acsm-tj/Fulltext/2020/05010/How_Credible_Is_Online_Physical_Activity_Advice_.1.aspx

⁵ **Post-Video Quiz Link:** <https://www.proprofs.com/quiz-school/ugc/story.php?title=postvideo-summary-quiz>

⁶ **2018 PAGs Infographics Link:** <https://health.gov/our-work/physical-activity/move-your-way-campaign/campaign-materials>

⁷ **Question Form Link:** <https://forms.gle/BDRXuFdAtMF2xqx46>