



2024 ICSPAH PRESENTATION GUIDELINES

1st Edition

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I. GUIDELINES FOR ORAL PRESENTATIONS

1. General Information

- You (the presenter) must have registered for the conference.
- Make sure you are clear about your oral presentation session number and time, presentation number, and location before the presentation (see the presentation schedule).
- You have 8 minutes to present your PowerPoint presentation. The presider will remind you at the 7th minute mark.
- Immediately following your presentation, a 2-minute Q&A section is allowed for the audience to ask 2–3 questions and transition to the next presentation.
- You shall store your presentation slides in a portable device (e.g., a USB or a hard drive), or bring your own laptop, for the presentation.
- Materials used in the presentation (e.g., images, graphs, videos, etc.) must be original work. For non-original work, you must have acquired permission to use and provide adequate citations.

2. Technical Guidelines

- Set your slides to 16:0 screen ration.
- The total number of your presentation slides should not exceed 15, due to the 8-minute presentation time limit.
- Be concise and precise, using short bullet points (≤ 3 lines) rather than paragraphs on your slides.
- Set regular font size to 24 pt, while font size in tables and graphs may be smaller.
- Please follow the Recommended Structure and Presenting Time listed below to format and present your slides.
 - a. **Title page** (1 page): Include the title and author information (e.g., name and affiliation). Introduce this information within 30 seconds.
 - b. **Background** (1 or 2 pages): Describe the background of your study, define terms, and explain the rationale of the study. Complete this section in 1.5 minutes.

- c. **Purpose** (1 page): Describe the primary purpose(s) and specific research questions or hypotheses of this study, in 30 seconds.
 - d. **Method** (2–3 pages): Describe specific information about participants and research setting, data collection, and data analyses. Complete this section in 1.5–2 minutes.
 - e. **Results** (2–4 pages): Present specific results of the study. Use visuals (e.g., tables, graphs) to assist your presentation. Complete this section in 1.5–2 minutes.
 - f. **Discussion** (2–3 pages): Discuss the conclusion, limitations, implications of this study. Complete this section in 1.5–2 minutes.
 - g. **References** (1 page): List up to 5 primary references used in your study. Quickly show the page to your audience without further explanation.
- At the end of the 8th minute, acknowledge the completion of your presentation and welcome questions from your audience.

3. Oral Presentation Tips

- Keep the 8-minute presentation time limit in mind.
- Rehearse and time yourself before presenting on the conference.
- Avoid reading your slides off word-by-word.

II. GUIDELINES FOR POSTER PRESENTATIONS

1. General Information

- You (the presenter) must have registered for the conference.
- Make sure you are clear about your poster presentation session number and time, poster number, and location before the presentation (see the presentation schedule).
- Mount your poster to the designated board at least 5 minutes before the session begins.
- You are required to present and stand by your poster during the entire session.
- Materials used in the presentation (e.g., images, graphs, videos, etc.) must be original work. For non-original work, you must have acquired permission to use and provide adequate citations.
- Unmount your poster at the end of the session.
- ICSPAH does not provide poster printing services; please print at your own cost.

2. Technical Guidelines

- The poster board is measured 100 cm in height and 125 cm in width. Therefore, we recommend you size your poster 80 cm (H) × 120 cm (W) or less.
- Be concise and precise, using short bullet points (≤ 3 lines) rather than paragraphs on your poster.
- Use proper font types and sizes to ensure visibility and readability.
- Please include the following sections in your poster.
 - a. **Header:** Include the title and author information (e.g., name and affiliation).
 - b. **Background:** Briefly describe the background of your study, define terms, and explain the rationale of the study.
 - c. **Purpose:** Identify the primary purpose(s) and specific research questions or hypotheses of this study. Can be included in the Background section.
 - d. **Method:** Detail information about participants and research setting, data collection, and data analyses.

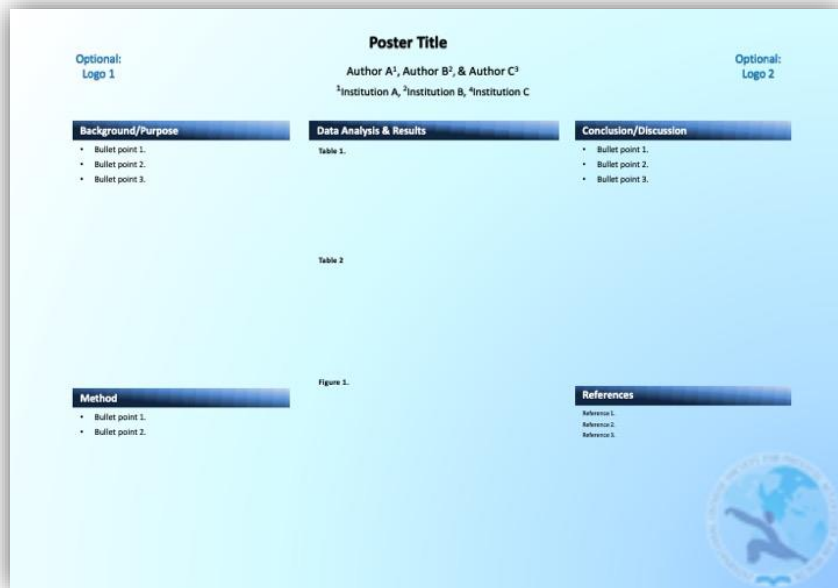
- e. **Results:** Present specific results of the study. Use visuals (e.g., tables, figures) to assist your presentation.
- f. **Discussion:** Discuss the conclusion, limitations, implications of this study.
- g. **References:** List up to 5 primary references used in your study.
- Other information such as acknowledgement and funding sources can be added.
- Consider distributing a handout if necessary for the audience.

3. Poster Presentation Tips

- Be courteous to your audience.
- Prepare answers to possible questions about your research.

4. Poster Samples and Template

- To assist you with your poster design, we provided a downloadable template on our website. There are four colored themes, and you only need to choose one to complete your poster. You can also use your own template, as long as your contents match what is required in the Technical Guidelines section.



- We also attached a few samples on the next pages for your reference. Following either one will suffice our recommendations.



Perceived Competence and Achievement Goals in a Summer Sports Camp

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Background/Purpose

- Perceived competence (PC) refers to how students evaluate their competence in physical education and physical activity settings.
- According to achievement goal theory, task mastery, personal improvement, or outperforming others are three standards primarily used for one's competence evaluation, resulting in PC-mastery, PC-self, and PC-other (Elliot & McGregor, 2001).
- The three types of PC play distinct roles in predicting the adoption of achievement goals and resulting motivational outcomes (Su et al., 2015).
- Mastery goals mediate the relationship between perceived support and intrinsic motivation in physical activity participation (Liu et al., 2018).
- This study examines (1) whether PC-mastery, PC-self, and PC-other play a different predictive role in adopting of achievement goals and (2) whether achievement goals mediate the relationship between three types of PC and intention for future participation (IFP) in physical activity.

Method

- Participants were 98 at-risk boys ($M_{age} = 11.88$, $SD = 1.21$) enrolled in a summer sports camp in Southwest, including 38 (20.7%) White, 18 (20.7%) Black, 46 (52.9%) Hispanic, and 5 (5.7%) Other.
- Established questionnaires (Spray & Warburton, 2011) were administered to assess the three types of PC, achievement goals (mastery-approach goals (MAp), performance-approach goals (PAp), mastery-avoidance goals (MAv), performance-avoidance goals (MAv), and IFP. The boys rated each question on a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5).

Data Analysis & Results

Table 1. Construct Validity and Scale Reliability

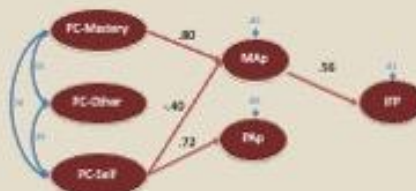
Construct	Chi-Square	DF	RMSEA	SRMR
Perceived Competence	PC-Mastery			
	PC-Other	$\chi^2_{(34)} = 6.81, p = .27$.35	.04
	PC-Self			
Achievement Goals	MAp			
	PAp	$\chi^2_{(34)} = 10.90, p = .21$.37	.06
	MAv			
IFP	$\chi^2_{(34)} = 6.81, p = .01$.38	.04	.03

Table 2. Correlations and Scale Reliability (on diagonal)

	PCM	PCO	PCS	MAp	PAp	IFP
PC-Mastery	.82					
PC-Other	.72	.74				
PC-Self	.85	.31	.82			
MAp	.68	.22	.64	.80		
PAp	.22*	.56	.01*	.09*	.70	
IFP	.44	.17*	.17*	.61	.36*	.87

* $p > .05$; PCM = PC-Mastery, PCO = PC-Other, and PCS = PC-Self.

Figure 1. Structural Equation Modeling



Conclusion/Discussion

- PC-mastery positively predicted MAp and PC-other positively predicted PAp and negatively predicted MAp. These results provide additional empirical support for the achievement goal theory research that perceived competence plays distinct roles in predicting the adoption of achievement goals among students.
- Consistent with Spray and Warburton (2011), PC-other was found to positively predict PAp of at-risk boys in our study.
- Contrary to the achievement goal theory research, MAp and PAp failed to mediate the relationship between perceived competence and IFP.
- Boys in this study who adopted MAp indicated a stronger intention for future participation in physical activity than their counterparts who did not adopt MAp. This finding adds another support for the view that MAp is motivationally beneficial to students. We recommend the promotion of MAp at summer sports camps.

References

Elliot, A. J., & McGregor, H. A. (2001). A 2 x 2 achievement goal framework. *Journal of Personality and Social Psychology*, 80, 501-519. <http://doi.org/10.1037/0022-3514.80.3.501>

Liu, J., Xiang, P., & McBride, R. E. (2018). The mediating role of mastery-approach goals between coach supports and intrinsic motivation among underserved adolescents. *The ICHPER-SD Journal of Research*, 8, 3-8.

Spray, C. M., & Warburton, V. E. (2011). Temporal relations among multidimensional perceptions of competence and trichotomous achievement goals in physical education. *Psychology of Sport and Exercise*, 12(5), 515-524. <http://doi.org/10.1016/j.psychsport.2011.04.007>

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Unfolding Young Children's Physical Activity Participation during School Hours

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INTRODUCTION

- Physical activity (PA) promotion remains a big challenge as over half of the children aged 6-11 in the United States do not meet the 60 minutes of daily moderate-to-vigorous physical activity (MVPA) guidelines (Hastie, 2017).
- PA opportunities during school hours include physical education (PE), recess, lunch time, and classroom break, which are crucial components to help young children accumulate MVPA time (SHAPE America, 2013).
- The distribution of young children's MVPA during those PA intervals is not clear as well as how that may differ based on various demographic background.

PURPOSES

- To evaluate young children's daily MVPA levels at various time segments of school days, including PE time, lunch time, and recess time.
- To examine the effects of gender (boy vs. girl), weight status (healthy vs. unhealthy), and ethnicity (Hispanic vs. non-Hispanic) on MVPA in each segment.

METHODS

- A cross-sectional research design was used in this study.
- Participants were 342 third-grade students ($M_{age} = 8.40, SD = 0.50$) recruited from four elementary schools in North Texas.
- Girls = 155, 45.3%, Boys = 187, 54.7%;
- Hispanic = 146, 42.7%, Non-Hispanic = 196, 57.3%;
- Healthy weight [healthy BMI zone] = 191, 55.8%, unhealthy weight = 151, 44.2%.
- PA was objectively measured using Actical accelerometers for 5 consecutive school days (6-7 hours/day); non-dominant hand wrist; 60 seconds epochs; specified each individual's age, gender, height, and weight.
- Cutoff points: MPA: $0.04 \text{ kcal/min/kg} \leq AEE < 0.1 \text{ kcal/min/kg}$
VPA: $AEE \geq 0.1 \text{ kcal/min/kg}$
- Average minutes spent in school-based MVPA, MPA, VPA during PE time, recess time, and lunch time were calculated separately.



RESULTS

- On average, the overall school-based MVPA of these third graders was 102.06 min ($SD = 37.95$) within a school day ($M = 391.87, SD = 15.52$).
- Over half of the school-based MVPA were from the combination of PE time (33%), recess (19%), and lunch time (9%).
- 30% of the school-based MPA were contributed by the PE time, and most of the VPA were composed of the PE (50%) and recess (49%).
- MANOVA results demonstrated significant multivariate effects for gender, $F(12, 239) = 5.74, p < .001, \eta^2 = .22$, and weight status, $F(12, 239) = 1.84, p < .05, \eta^2 = .09$, but not for ethnicity: $F(12, 239) = 1.08, p > .05, \eta^2 = .05$.
- Boys vs. Girls: higher overall school-based MVPA (107.92 vs. 90.36, Cohen's $d = 0.39$), higher VPA at PE time (7.81 vs. 5.67, Cohen's $d = 0.37$), and higher VPA at recess time (8.59 vs. 4.54, Cohen's $d = .93$).
- Healthy weight vs. unhealthy weight children: higher VPA at recess (7.02 vs. 6.28) and at lunch time (1.51 vs. 0.61).

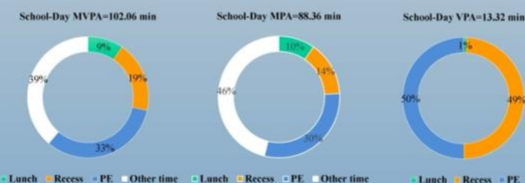


Figure 1. Distributions of Physical Activity in Different Segments



Figure 2. School-day MVPA Time Comparisons between Groups

RESULTS (cont.)

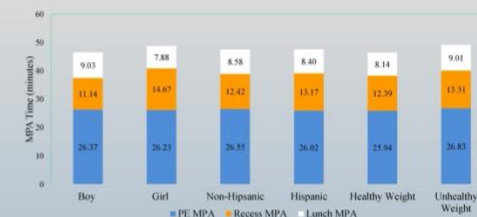


Figure 3. School-day MPA Time Comparisons between Groups

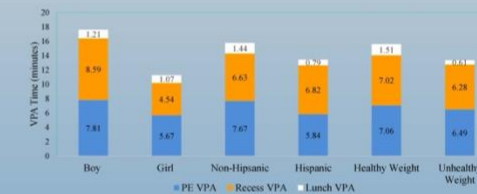


Figure 4. School-day VPA Time Comparisons between Groups

DISCUSSION AND CONCLUSIONS

- These findings highlight the important role of school-based MVPA in developing physically active and healthy children in line with the goal of "50 Million Strong".
- The primary component of school-based MVPA is to PE time; recess time also can contribute to a substantial amount of MVPA during a school day.
- School-based MVPA promotion should provide both structured (i.e., PE) and unstructured (i.e., recess) PA opportunities to engage young children, especially girls during early school years, in MVPA.

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Fighting hypertension in the Digital Age – a randomized control trial to promote physical activity

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ABSTRACT

Introduction: The purpose of the study was to determine the effectiveness of wearable activity trackers alone or in combination with behavior change strategies for promoting physical activity (PA) among individuals with pre-hypertension or hypertension.

Study design: Randomized Controlled Trial.

Setting/participants: A sample of 44 adults with pre-hypertension or hypertension (88% female) were recruited.

Intervention: Participants randomized to receive either a Fitbit Charge HR 3 alone (FB) or the Fitbit in combination with behavior change strategies delivered by a trained health coach (FB+) for 12 weeks.

Main outcome measures: Activity behaviors of moderate and vigorous PA (MVPA), steps, and sedentary time were assessed using ActiGraph wGT3X-BT. Wear time and daily activity data were tracked by Fitbit. Data were collected in 2019 and analyzed in 2020.

Results: Participants in FB+ had higher adherence with a mean [SD] of 70.4 (20.7) valid days (at least 30 hr/day) out of 84 days in total compared to FB of 65.0 (21.0) days. The FB+ group significantly increased daily steps [+1854 (2518) steps/day, p<.01], moderate and vigorous physical activity [MVPA, +26 (34) mins/day, p<.05], and decreased in sedentary time [-63 (73) mins/day, p<.01]. A similar pattern was found in participants from the FB but with smaller change from baseline to post-intervention [Δ steps: +764 (1952) day, p<.1; MVPA: +10 (16) mins/day, p<.05; sedentary time: -89 (117) mins/day, p<.01]. Participants in FB+ had significantly greater increase in MVPA/day compared to FB-only with a between-group effect size of 0.6 (p<.05).

Conclusions: Using Fitbit for self-monitoring is effective in increasing PA and reducing sedentary time among pre-hypertensive and hypertensive patients. Additional behavior change support amplified the intervention effectiveness for promoting MVPA.

PURPOSE

- 1.) Determine the effectiveness of the wearable activity monitor, Fitbit Charge HR, for increasing PA in inactive adults with hypertension.
- 2.) Assess the efficacy of the Fitbit charge HR in combination with customized PA feedback and counseling through phone-based health coaching.

METHOD

Participants

Between January 2019 and May 2020, a total of 44 participants were recruited and randomly assigned to FB or FB+ group. Eligible participants were 34 to 60 years old, diagnosed with either pre- or hypertension [resting systolic or diastolic blood pressure >120 or >80 mmHg, respectively], with access to a computer and/or smartphone, and inactive (participating in less than 150 min/week of PA over the past 3 months). The sample was primarily female (68.2%), white (95.5%), overweight, and half had used a pedometer or activity monitor before.

Intervention

- FB-only group: use their Fitbit on their own for the duration of 3-month
- FB+ group: use their Fitbit on their own for the duration of 3-month + 7 sessions of health coaching guided by motivational interviewing + goal setting + weekly report



Procedure

Visit 1 includes anthropomorphic measures, resting blood pressure, and resting heart rate. ActiGraph GT3X+ accelerometer was used to assess PA for 7 consecutive days as the baseline (pre-test) assessment.

Prior to Visit 2, participants were randomized to one of two study arms.

Visit 2 includes information session about Fitbit usage. Those assigned to the FB+ discussed their perceived benefits and barriers of becoming more active with a trained and certified health coach. The rest of the health coaching sessions are delivered through the rest of the intervention with a gradually reduced fashion. Participants completed a series of psychological questionnaires.

Visit 3, participants completed the same measures assessed at baseline. **Statistical Analysis**

The difference between pre- and post-intervention (time) on the main outcome measures of daily steps, MVPA, and ST and psychological variables between FB and FB+ (group) were tested using Two-way ANOVA. The primary analyses consisted of a series of linear regressions using percent change as the dependent variable of daily steps, MVPA, and ST within each analysis. Fitbit data for valid wear days, weekly average steps, and weekly average MVPA were plotted by group over the 12-week intervention.

RESULTS

Table 1. Participants' demographic characteristics and pre and post physical changes

	FB+ (n=22)	FB-only (n=22)	FB (n=22)
Age in years	51.8 (8.8)	51.7 (8.5)	50.2 (8.4)
Female	54 (68.2%)	18 (81.8%)	12 (54.5%)
Caucasian	42 (65.2%)	20 (90.9%)	21 (65.2%)
Employment			
Full-time	23 (52.2%)	11 (50.0%)	12 (54.5%)
Part-time	18 (23.7%)	4 (17.9%)	4 (18.2%)
Retired	4 (26.7%)	3 (12.7%)	4 (18.2%)
Married	14 (27.2%)	17 (77.3%)	13 (59.1%)
Insurance (Medicare)	27 (61.8%)	11 (50.0%)	13 (59.1%)
College degree	44 (100%)	21 (100%)	22 (100%)
Pedometer use	22 (100%)	13 (59.1%)	4 (18.2%)

	Pre	Post	Pre	Post	Pre	Post
Weight (kg)	92.1 (21.4)	91.3 (21.4)*	86.2 (28.4)	81.2 (28.8)	98.1 (21.8)	91.8 (21.1)
Body Mass Index	33.8 (8.5)	32.6 (8.4)*	32.2 (8.8)	31.8 (7.8)	33.8 (8.1)	32.2 (7.5)
Waist Circumference	108.2 (18.9)	106.6 (18.1)	104.2 (22.5)	105.1 (19.0)	114.0 (15.5)	112.8 (15.1)
% Body fat	41.9 (8.5)	39.6 (8.2)*	42.7 (8.2)	40.2 (8.0)*	40.2 (8.0)	39.0 (8.0)
Heart rate (bpm)	75.4 (11.4)	73.5 (9.1)	74.7 (13.8)	72.8 (10.6)	78.2 (8.6)	74.2 (7.7)
SBP (mm Hg)	134.8 (12.8)	133.0 (14.5)	152.1 (11.5)	151.2 (14.5)	157.7 (14.1)	154.8 (13.4)
DBP (mm Hg)	89.8 (8.1)	89.8 (8.2)*	87.1 (8.8)	87.8 (8.2)*	98.2 (8.7)	87.5 (8.2)

Table 2. Participants' demographic characteristics and pre and post physical changes

	Baseline	Post	Change	Within-group ES	Between-group ES for change
Steps/day	5128 (1490)	6424 (1861)	764 (1923)*	0.31	0.30
MVPA/day	46 (14)	57 (28)	10 (14)*	0.40	0.40*
Sedentary time/day	381 (88)	314 (102)**	-69 (11)	-0.35	-0.35

	Baseline	Post	Change	Within-group ES	Between-groups ES for change
Steps/day	5781 (2175)	7235 (2821)	1054 (2516)**	0.78	0.49
MVPA/day	32 (11)	78 (41)	46 (14)**	0.70	0.40*
Sedentary time/day	476 (28)	407 (107)**	-69 (11)	-0.43	-0.37

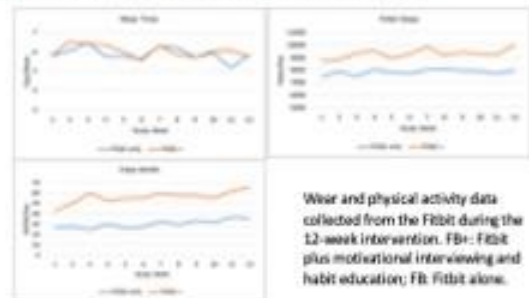
Notes: *Positive values for change scores indicate an increase from pre- to post-intervention. %B.I.; * p<.05, ** p<.01. ES: effect size; MVPA: moderate-to-vigorous intensity physical activity; FB+ = Fitbit plus health coaching group.

Table 3. Regressions examining predictors of change in physical activity over the intervention

	Steps (p<.05)			MVPA (p<.05)			ST (p<.05)		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Baseline ST	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.17	0.18
Age	0.00*	0.00*	0.00*	0.01*	0.01*	0.01*	0.0000	0.0004	0.0004
Female	0.01*	0.01*	0.01*	0.01*	0.01*	0.01*	0.00	0.00	0.00
ES	0.22	0.22	0.14	0.11	0.08	0.14	0.01	0.00	0.01
Age	0.01*	0.01*	0.01*	0.01*	0.01*	0.01*	0.00	0.00	0.00
Married	0.01*	0.01*	0.01*	0.01*	0.01*	0.01*	0.00	0.00	0.00
Insurance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Body fat	0.01*	0.01*	0.01*	0.01*	0.01*	0.01*	0.00	0.00	0.00
Postbaseline age	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Group*Interaction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R ²	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Notes: *Positive values for change scores indicate an increase from pre- to post-intervention. %B.I.; * p<.05. SE: standard error; DV: dependent variable; MVPA: moderate-to-vigorous intensity physical activity; ST: sedentary time.

Figure 1. Fitbit wear time and activity level over 12-week intervention



CONCLUSION

To the best of our knowledge, this pilot study is one of the first randomized controlled trials to investigate Fitbit and health coaching to promote physical activity in hypertensive patients. Despite the small sample size, this trial provides empirical evidence that this multi-dimensional PA promotion program is effective in promoting PA and reducing ST among a population with hypertensive symptoms. A future full trial is needed to investigate if the public health implications would be substantial.

Presented at the ACSM Annual Meeting, 2021.