

Impact of Social Support on Physical Activity in College-Age Students

A.M. Garris, S.B. Bailey, E.E. Freeman, E.A. Easley, S.H. Sellhorst, W.F. Riner, FACSM.
University of South Carolina Lancaster, Lancaster, SC

Abstract

Social support from close friends has been shown to raise the efficacy and motivation in college students to participate in physical activity. **PURPOSE:** The purpose of this study was to determine the difference in number of physically active friends and friend support score between students that meet ACSM/CDC recommendations (≥ 150 minutes/week) and those who do not. **METHODS:** The population of this study was eighty-nine full-time college students aged 18-25 from a small, rural, commuter college campus. Using the Physical Activity Stages survey, the subjects self-reported their weekly physical activity, the number of physically active friends, and answered questions regarding friend support. **RESULTS:** Independent t-tests were used to compare the mean number of physically active friends and friend support score between groups. There was a significant difference in the number of physically active friends between those who met the ACSM/CDC guidelines (2.75 ± 1.44) and those who did not (2.11 ± 1.39), $p = 0.036$. There was no significant difference in mean friend support score between those who met the ACSM/CDC guidelines (2.69 ± 0.67) and those who did not (2.54 ± 0.62), $p = 0.085$. **CONCLUSION:** The study showed that college students that have more physically active friends are more likely to meet ACSM/CDC physical activity recommendations. However, social support in the form of encouragement only does not seem to affect physical activity in college students.

PURPOSE & HYPOTHESIS

- The purpose of this study was to determine the difference in number of physically active friends and friend support score between students that meet ACSM/CDC recommendations (≥ 150 minutes/week) and those who do not.
- It was hypothesized that the higher the number of physically active friends the student had the greater the likelihood the participants would be physically active.

METHODS

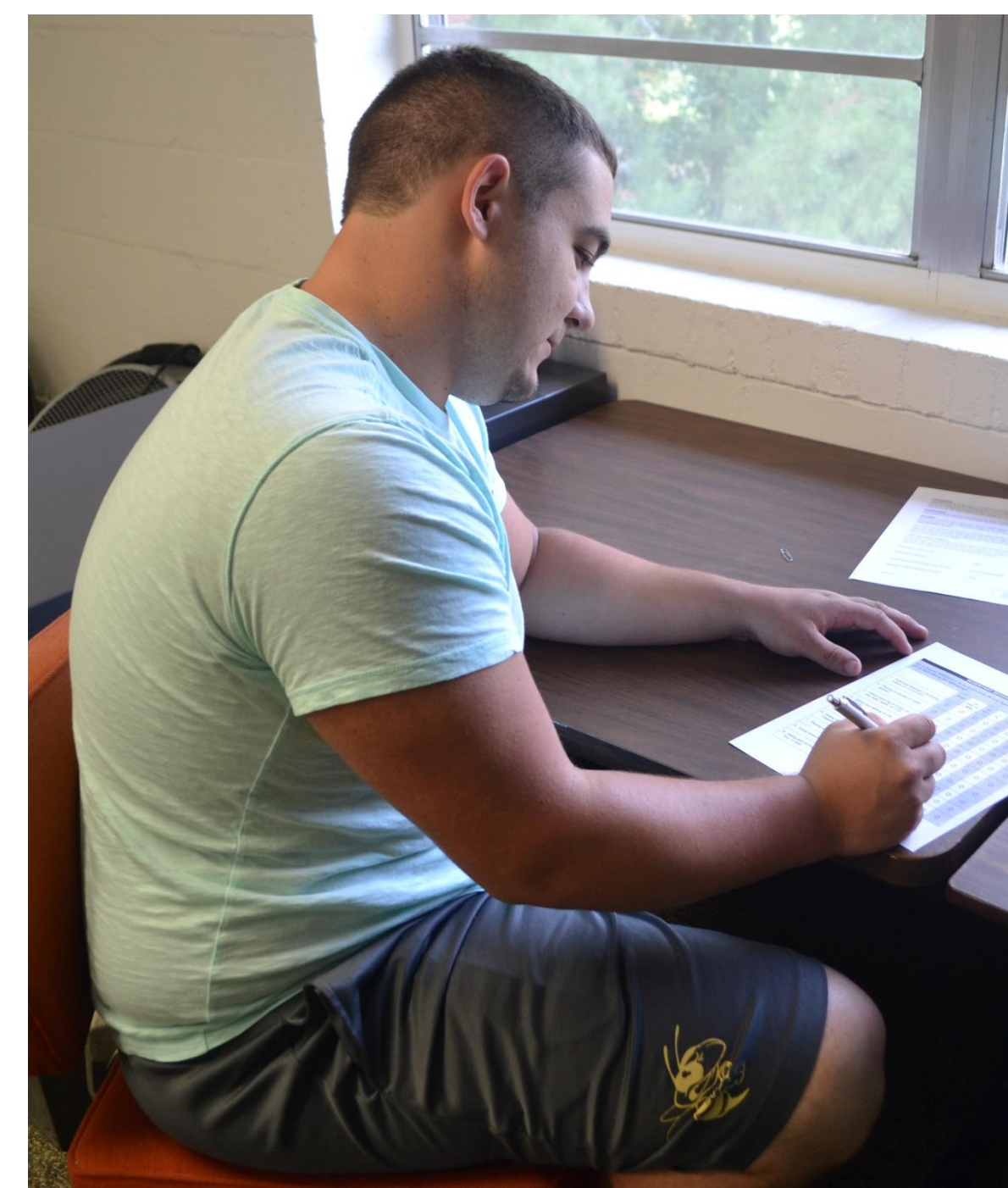
- Eighty-nine adults from the ages of 18-25.
- No participants could be pregnant at the time of the study.
- Participants were full-time (12 credit hours) college students recruited from a small, rural, commuter college.
- Participants were recruited via flyers as well as word of mouth.

Table 1. Descriptive characteristics of participants

Age (yr)	19.41 ± 1.40
Height (cm)	71.02 ± 18.51
Weight (kg)	168.17 ± 10.02
DXA Body Fat (%)	28.37 ± 9.06
BMI (kg/m^2)	24.93 ± 5.27

Physical Activity Stages Survey

- The participants self-reported their weekly physical activity, the number of physically active friends, and answered questions regarding friend support (Carlson et al., 2012).
- Participants were asked to report the number of days that they were active for 60 minutes or more.
- The Physical Activity Friend Support Survey was composed of multiple questions in an effort to gauge the amount of friend support in physical activities.
 - The questions were related to verbal encouragement or group physical activity.
- Participants were also asked to report how many of their five closest friends were regularly physically active.



Data Analysis

- Descriptive characteristics were calculated as means \pm standard deviations.
- Independent t-tests were used to compare the mean number of physically active friends and friend support score between groups.
- All analyses were performed using SPSS Version 22.0.

RESULTS

- Those that met the ACSM recommendations for physical activity had significantly more active friends than those who did not.
- There was no significant difference in friend support between the two groups.

Table 2: Number of active friends and social support.

	Did not meet recommendations	Met recommendations
Number of active friends	2.11 ± 1.40	$2.75 \pm 1.44^*$
Social support score	2.45 ± 0.62	2.69 ± 0.67

* Significantly different from those that did not meet physical activity recommendations.

Table 3: Descriptive characteristics of groups

	Did not meet recommendations	Met recommendations
Age (yr)	19.14 ± 1.03	19.62 ± 1.59
Height (cm)	165.20 ± 11.03	170.30 ± 8.74
Weight (kg)	66.10 ± 17.99	74.53 ± 18.25
DXA Body Fat (%)	32.06 ± 8.28	25.74 ± 8.74
BMI (kg/m^2)	23.97 ± 4.65	25.61 ± 5.61

CONCLUSIONS

- The study showed that college students that have more physically active friends are more likely to meet ACSM/CDC physical activity recommendations. However, social support in the form of encouragement only does not seem to affect physical activity in college students.
- One limitation of this study was that it included self-reported physical activity. Future studies would benefit from objectively measured physical activity.
- The results of this study lead us to believe that college students benefit most by associating with physically active peers.

REFERENCES

Carlson, J.A., Sallis, J.F., Wagner, N., Calfas, K.J., Groesz, L.M., Norman, G.J. (2012). Brief physical activity-related psychosocial measures: Reliability and construct validity. *Journal of Physical Activity and Health*, 9, 1178-1186.