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Social Interactions in College Physical Activity Classes: “Something Else is Taking Place Here”

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Abstract

Physical activity has been found to benefit a person in many ways. One of the benefits of being physically active is the social component. This deals with interacting with someone before, during or after the activity. The purpose of this study was to investigate social interactions effects on college-aged students during their physical activity class. For this study 408 college-aged students (272 males & 136 females) participated in this study. College-aged students were surveyed regarding their interactions during their physical activity class. The survey contained Likert scale questions and open-ended questions, requiring the students to respond with written answers. Briefly, it was discovered from these students that their interactions during their physical activity were important them and that the interactions they were having were enjoyable. These results from this study along with other results from this study, highlight another positive benefit that comes from being involved in physical activity.

Keywords: Socializing, Interactions, College-Aged Students, Physical Activity

23 The literature has strongly endorsed the benefits of physical activity (PA) in a person's
24 life. For example, physical activity can reduce risks of cardiovascular disease (Lee, Hsieh, &
25 Paffenbarger, 1995), diabetes (Helmrich, Ragland, Leung, & Paffenbarger, 1991), osteoporosis
26 (Kohrt, Snead, Slatopolsky, & Birge, 1995), depression (Camacho, Roberts Lazarus, Kaplan, &
27 Cohen, 1991), and others. One population that can benefit from the benefits of PA are college-
28 aged students (Brown & Fry, 2014). For the college student, one of the main opportunities to be
29 physically active is through physical activity classes offered through the university or college
30 they attend. College students take physical activity classes for a variety of reasons. Barney and
31 McGaha (2006) studied why college students took basketball or tennis classes and the likelihood
32 of being active in the activities after graduation. It was discovered that college students
33 participated in these physical activity classes for the reasons of having fun, getting exercise,
34 getting credit to graduate, improve their skills in the sport, social outlet and a stress reliever. The
35 one finding of physical activity classes serving as a social outlet can have an effect on a person's
36 PA throughout their life. Dhurup (2012) mentioned that social interactions with friends and
37 family lead to the development of life skills and positive relationships, positively affecting a
38 person's life time PA.

39 The social component in physical activity can have different effects on a person. Fahey,
40 Insel, Roth and Insel (2017) feel a person can be successful having a partner/friend to work with
41 and/or during the participation of an activity. Having that social interaction can be motivating,
42 can serve for safety reasons, can help to adhere to activities, and simply time to talk with their
43 partner/friend. Burke, et. al, (2006) studied the effects of exercising with a group of people, as
44 compared to exercising at home alone. The researchers concluded that exercising with a group
45 of people is superior to exercising at home alone. The researchers summarized that when

46 someone exercises with a group of people, the amount of contact with the people aids in them
47 getting the health benefits of their exercising. There is a built in social support that can come in
48 the form of encouragement and social interactions. Another study looked at social interactions in
49 a college PA class, more specifically a caring climate in an exercise setting in relationship of
50 well-being, hope, happiness and perceived self-concept (Brown & Fry, 2014). The researchers
51 defined a caring climate as one that fosters cooperation, where members feel welcomed and
52 comfortable with their classmates and instructor. The researchers concluded that college
53 students in college PA classes experienced greater hope and happiness when they perceived a
54 caring climate.

55 Barney, Benham and Haslem (2014) studied the effects of college student's perceptions
56 of participation in PA classes on stress in their lives. The results of the study were favorable for
57 the fact that the college student's perceptions were that their participation in the PA class did
58 help them to manage stress they experienced as a college student. A secondary finding from this
59 study was that the student's felt that the socializing they had during their PA classes helped them
60 cope with stress in their lives. It was found that 75% for the males and 85% for the females felt
61 that the socializing aspect of their PA classes was helpful in coping with stresses in their life.
62 Student comments dealing with socializing during their PA classes were "I have met people in
63 class and talking to them about anything is how I deal with things", "I can unwind to visit and
64 talk through some of my stressors", and "Because I can talk and joke they (students) don't know
65 anything I'm going through so they don't bring it up."

66 With research that has highlighted socializing during physical activity and the positive
67 effects that can come, additionally there is a document that promotes PA class instructors to do
68 their part of providing socializing opportunities. The National Association for Sport and

69 Physical Education (NASPE) have created a document titled Appropriate Instructional Practice
70 Guidelines for Higher Education Physical Activity Programs (NASPE, 2014). The purpose of
71 the document is to give “guidance to college and universities for offering quality instructional
72 physical activity programs” (pg.3). The document has seven topic areas. They are 1)
73 Administration/Support, 2) Assessment, 3) Curriculum, 4) Instruction Strategies, 5) Program
74 Staffing, 6) Learning Environment and 7) Professionalism. An appropriate instructional practice
75 in the Curriculum section, it states:

76 “Program offerings include content that allows students to develop social skills
77 (cooperation and communication) and responsible behavior that will lead them to become
78 productive members of society. Curriculum is designed to ensure that these skills are
79 taught intentionally, and are not left for “teachable moments” only.”

80 This statement encourages college PA instruction to put students in situations to socialize in a
81 positive manner to be responsible in social situations when involved in physical activity. With
82 the literature and research presented, it is hoped that this study will shed light on the important
83 benefits social interactions can have on college-aged students during PA. Thus, the purpose of
84 this study was to investigate social interactions effects on college-aged students during their
85 physical activity classes.

86 **Methods**

87 **Participants**

88 Participants for this study were 408 college-aged students (272 males & 136 females)
89 from a private university located in the western United States. Participants were comprised of
90 undergraduates (94 freshman, 96 sophomores, 86 juniors, & 119 seniors) and graduate (13)
91 students. The participants were enrolled in volleyball, basketball, bowling, Zumba and

92 badminton activity classes. The university Institutional Review Board (IRB) granted approval to
93 conduct this study.

94 **Instrumentation**

95 A review of the literature failed to identify an instrument specific to addressing social
96 interactions during physical activity. Therefore, the researcher developed a 14-question survey
97 instrument (See Table 1). The survey consisted of three Likert scale questions, eight open-ended
98 questions and three demographic questions. To establish content validity, the researcher had
99 college-aged student review survey questions for clarity and understanding (Barney, Gust, &
100 Liguori, 2012). For reliability, the instrument was further pilot-tested on college-aged students
101 that did not participate in the subsequent study.

102 **Procedures**

103 Convenience sampling was employed to collect data for the study. The researcher
104 contacted the instructors of the physical activity course explaining both the study and the survey.
105 After obtaining instructor agreement, the researcher attended each physical activity class (16
106 classes were surveyed) and administered the survey to the students. For this study 97% of the
107 students agreed to participate by taking the survey. All students were assured that their voluntary
108 decision to participate in the study would not affect their grade in the class or class standing.

109 **Data Analysis**

110 Descriptive statistics were derived from the survey. Also, qualitative data analysis was
111 used for this study. This comprised of a thematic content analysis of respondent's short answers.
112 The researcher read and re-read the data until common themes became evident for each survey
113 question (Mueller & Skamp, 2003).

114 **Results**

115 Table 2 provides descriptive statistics about student interactions in their physical activity
116 class. The first statement on the survey asked college students “How important are the
117 interactions you have in your physical activity class to you?” For this statement, a majority of
118 the males felt their interactions were very important (17%) and important (42%). Also, a
119 majority of the females felt their interactions were very important (16%) and important (51%) to
120 them. Interestingly, a third of the college students were neutral (38% males & 33% females)
121 regarding their interactions in their physical activity class. The second statement asked the
122 college students, “Have you found your interactions with classmates during your physical
123 activity class enjoyable or not enjoyable?” A large majority of the students (88% males & 89%
124 females) felt the interactions were enjoyable to them. And statement 10 stated, “When do your
125 social interactions take place?” Here again, a majority (60% males & 63% females) had
126 interactions before and after class. Yet, 37% of the males and 30% of the females had
127 interactions just during class.

128 Other data collected in this study were short answer responses from seven survey
129 statements. The following are common responses from the college students. When asked what
130 positive interactions they had with classmates in their physical activity classes (statement 3),
131 student responses were, “I made new friends”, “It’s fun to get to know people and share
132 experiences”, and “People have been friendly and not judgmental when I or anyone else get
133 something wrong. For example, if I ever mess up with a serve, no one judges or minds.”
134 Students were asked, what negative interactions they have had with classmates in their physical
135 activity class (statement 4). Two common responses to this survey question was students were
136 “too competitive” and “ball hogs.” Other comments dealing with this survey statement were,
137 “Trash talking. People who think they know the sport” and “Being co-ed classes I’ve found it

138 takes about a third of the semester for guys to take girls seriously as athletes with skills equal to
139 theirs.”

140 Students were asked if their interactions in their physical activity class were beneficial or
141 non-beneficial (statement 5). A majority of the students stated that their interactions were
142 beneficial because their physical activity class was a “good way to meet people.” Another
143 common response was their interactions in physical activity class helped relieve stress. Other
144 responses for this statement were, “Knowing that I have friends to talk to is comforting” and
145 “this class helps me stay sane.” Yet, a number of the students were “neutral” in regards with
146 their interactions during their class. For statement six, students were asked if their interactions
147 they have in their physical activity class has carried on outside of their physical activity class.
148 For this statement, the researcher noticed that two themes were common among taking their
149 physical activity class and from their class they were able to find players for their intramural
150 teams. One student stated, “As I play basketball in class I can find good players to be on my
151 intramural team.” A second theme was that students dated a classmate from their physical
152 activity class. One student said, “I went on a couple dates with a nice girl from my basketball
153 class.” The next survey question asked the students if their interactions with their classmates
154 positively or negatively affected their experience in their physical activity class (statement 7).
155 Student responses were, “I actually really look forward to the class and not solely because of the
156 bowling”, “they have very positively affected my experience. I have felt more comfortable and
157 secure and as a result learned better and enjoyed myself more.” Another student stated, “My first
158 class was negative because I was intimidated, but now it’s positive”, and “so many boys make
159 me feel inadequate.”

160 Continuing on with the survey results, students were asked if their interactions with
161 classmates helped them manage stress in their lives (statement 8). Student responses were “we
162 always talk about how our week has been and sometimes talk about hard things. It’s nice to
163 know someone cares”, and “Interactions with people keep me less stressed.” It should be noted
164 that a majority of the students stated that the physical activity relieved their stress and not
165 particularly their interactions with the classmates. For statement 9, on the survey, students were
166 asked what factors led to forming or not forming interactions in their physical activity class. One
167 student stated, “Being part of a team”, another student said, “You form friendships by just
168 playing.” A majority of the students felt their interactions “naturally happened” because of the
169 sports they were participating in. And finally, students were asked if the social interactions they
170 have in their physical activity class will have a positive or negative effect on their physical
171 activity throughout their lives (statement 11). A majority of students felt that their participation
172 and experiences in the physical activity class would translate into their lives after college. One
173 student said, this class “would make me more willing to sign up for community teams in the
174 future.”

175 Discussion

176 The purpose of this study was to investigate social interactions effects on college-aged
177 students during their physical activity class. Results from this study suggest that college
178 student’s interactions do have a positive impact on them. The survey results showed what kind
179 of interactions they have had, if their interactions were beneficial, if their interactions positively
180 or negatively affected their experience in the physical activity class and the effects of their
181 interactions on future PA in their life. The results of this study coincide with previous research.
182 For example, Kahn et. al., (2002) conducted a systematic review of certain interventions to

183 increase physical activity. One of the interventions the researchers discussed was the social
184 support interventions. Here the researchers discussed building, strengthening and maintaining
185 social networks. They call this having a “buddy system.” Having a buddy system gives the
186 participant a chance to maintain and to strengthen relationships to help with a person’s physical
187 activity. For this study students felt that by playing with their classmates on teams helped them
188 to build friendships by working together during team play, having fun and making new friends.
189 Another finding from this study that coincides with the literature was that the students felt their
190 interactions with classmates during their physical activity class was beneficial. Burke et. al.,
191 (2006) studied the effects of people that exercised with people or as a group and those that stayed
192 home and exercised on their own. It was discovered that those that exercised with people had
193 support in the form of being with someone to keep them on-task with their exercises. The
194 researchers stated that exercising with people is far superior then exercising on your own. The
195 results from this study found that the students felt it was beneficial for them because they were
196 with friends, and because they were with friends they looked forward to coming to class, and in
197 many cases, they wanted to come to class and have those interactions during class activities.

198 Other discussion points from the results of this study dealt with student interactions in
199 their physical activity class and if it helped them manage stress in their life. Van Kim and
200 Nelson (2013) studied the association of vigorous PA with mental health, perceived stress, and
201 socializing with college-aged students. The results of this study found that when college
202 student’s physical activity was vigorous and they socialized during their PA class the benefits
203 were positive in regards with mental health and stress they were experiencing. For this study,
204 many of the students felt the PA relieved their stress more than the socializing. Yet, one student
205 stated, “I think to an extent, the physical activity and being able to talk to classmates, it helps me

206 with stress from school.” And finally, do the students feel their interactions have any effect on
207 their future PA. Barney and McGaha (2006) studied college student’s perspectives on taking a
208 physical activity courses (basketball and tennis) and if participation in these courses will
209 influence their participation after the course was completed. A student response was, “As I get
210 older, playing basketball will help me stay fit and give me the chance to be with friends.” Many
211 of the other student responses to this question used the word “confident” or “confidence” in
212 future participation later in their life. For this study, a majority of the students concurred with
213 previous research when they stated, “I am building healthy habits that will help me be active in
214 my later years”, and “I would be willing to sign up for community teams in the future.” The
215 results from this study will add to the limited research highlighting the positive benefits of social
216 interactions that can and do take place in a physical activity setting. These results are further
217 evidence of the importance of physical activity courses that when taken can be beneficial for
218 students. Cardinal, Sorensen, and Cardinal (2012) found that many four-year colleges and
219 universities are not requiring physical activity courses for graduation. If this is the case, Li,
220 Cardinal and Settersten (2009) have put forth this concern for colleges and universities, when
221 they stated, “Greater attention must be paid to their (college students) health and physical
222 activity habits to help them establish positive health and physical activity trajectories across their
223 life course.”

224 **Implications for College Physical Activity Classes**

225 The results from this study should let college physical activity programs know that they
226 are doing more than helping their students improve their skills they learn in their class and that
227 they are improving their cardiovascular functions and strengthening muscles. They are helping
228 their students to form friendships that may last throughout their life. That through the

229 interactions the students have during their physical activity class they are talking through
230 situations that they are believed to be stressful at this time in their life and that these interactions
231 are helping the students manage and work through the stress they are experiencing. The
232 interactions students are having is and does affect them learning in activities they are
233 participating in. These outcomes that students are purporting as positive and will benefit college
234 students as they participate during their college experience and throughout their life. As one
235 student stated, “I think there is more going on here than just playing volleyball.”

236 **Study Limitations**

237 The researcher has noted limitations to this study. Because the participants came from
238 one university, it may not allow a representative sampling of participants from other colleges or
239 universities or geographic regions, thus limiting the generalizing of the findings. Thus, the
240 conclusions and implications are mostly applicable to those participants demographics. Also, the
241 research study was conducted at a private university. Here again, this has generalized the
242 findings.

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References

Barney, D., Benham, L., & Haslem, L. (2014). Effects of college students' participation in physical activity classes on stress. *American Journal of Health Studies*, 29, 155-160.

Barney, D., Gust, A., & Liguori, G., (2012). College students' usage of portable music players (PMP) during exercise. *ICHPER*SD Journal of Research*, 7, 23-26.

Barney, D., & McGaha, P. (2006). College students' perspective and after course participation in basketball and tennis classes. *Journal of International Council for Health, Physical Education, Recreation, Sport, and Dance*, 42, (3), 23-26.

Brown, T.C., & Fry, M.D. (2014). College exercise class climate, physical self-concept, and psychological well-being. *Journal of Clinical Sport Psychology*, 8, (2), 299-313.

Burke, S.M., Carron, A.V., Eys, M.A., Ntoumanis, N., & Estabrooks, P.A. (2006). Group versus individual approach? A meta-analysis of the effectiveness of interventions to promote physical activity. *Sport & Exercise Psychology Review*, 2, 19-35.

Camacho, T.C., Roberts, R.E., Lazarus, N.B., Kaplan, G.A., & Cohen, R.D. (1988). Physical activity and depression: Evidence from the alameda county study. *American Journal of Epidemeology*, 134, 220-231.

Cardinal, B.J., Sorensen, S.D., & Cardinal, M.K. (2012). Historical perspective and current status of the physical education graduation requirements at American 4-year colleges and universities. *Research Quarterly for Exercise and Sport*, 83, 503-512.

Dhurup, M. (2012). A dimensional analysis of the benefits derived from physical activity participation among university students and variation in terms of gender. *African Journal for Physical, Health Education, Recreation and Dance*, 18, 614-627.

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276 Fahey, T.D., Insel, P.M., Roth, W.T., & Insel, C.E.A. (2017). *Fit & Well: Core Concepts and*
277 *Labs in Physical Fitness and Wellness* (12th ed.). New York, NY: McGraw Hill
278 Education.

279 Helmrich, S.P., Ragland, D.R., & Paffenbarger, R.S. (1991). Physical activity and reduced
280 occurrence of non-insulin-independent diabetes mellitus. *New England Journal of*
281 *Medicine*, 325, 147-152.

282 Kahn, E.B., Ramsey, L.T., Brownson, R.C., Heath, G.W., Howze, E.H., Powell, K.E., Stone,
283 E.J., Rajab, M.W., & Corso, P. (2002). The effectiveness of interventions to increase
284 physical activity: A systematic review. *American Journal of Preventive Medicine*, 22, 73-
285 107.

286 Kohrt, W.M., Snead, D.B., Slatopolsky, E., & Birge, S.J. (1995). Additive effects of weight-
287 bearing exercise and estrogen on bone mineral density in older women. *Journal of Bone*
288 *Mineral Research*, 10, 1303-1311.

289 Lee, I.M., Hsieh, C.C., & Paffenbarger, R.S. (1995). Exercise intensity and longevity in men.
290 The Harvard alumni health survey. *Journal of American Medical Association*, 273, 1179-
291 1184.

292 Li, K.K., Cardinal, B.J., & Settersten, R.A. (2009). A life-course on physical activity promotion:
293 Application and implications. *Quest*, 61, 33-36.

294 Mueller, A., & Skamp, K. (2003). Teacher candidates talk: Listen to the unsteady beat of
295 learning to teach. *Journal of Teacher Education*, 54, (5), 428-440.

296 National Association for Sport and Physical Education. (2014). *Appropriate Instructional*

297 *Practice Guidelines for Higher Education Physical Activity Programs*. Reston, VA:
298 Author.

299 VanKim, N.A., & Nelson, T.F. (2013). Vigorous physical activity, mental health, perceived
300 stress, and socializing among college students. *American Journal of Health Promotion*,
301 28, (1), 7-15.

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320 Table 1
321 Social Interactions in Physical Activity Classes

322 The following survey questions will ask you about experiences dealing with social interactions
323 you have had in your physical activity class. Questions will ask you to circle your answer and
324 respond from your experiences dealing with your social interactions in your physical activity
325 class. Thank you for participating in this survey.

- 327
- 328 1. How important are the interactions you have in your physical activity class to you?
- 329
- | | | | | | |
|-----|----------------|-----------|----------------|---------------|------------|
| 330 | Very Important | Important | Not a big Deal | Not Important | Not at All |
|-----|----------------|-----------|----------------|---------------|------------|
- 331
- 332
- 333 2. Have you found your interactions with classmates during your physical activity class enjoyable or
334 not enjoyable?
- 335
- | | | | |
|-----|-----------|---------|---------------|
| 336 | Enjoyable | Neutral | Not Enjoyable |
|-----|-----------|---------|---------------|
- 337
- 338
- 339
- 340 3. What positive interactions have you had with your classmates in your physical activity class?
341 Please give some examples.
- 342
- 343
- 344
- 345
- 346
- 347 4. What negative interactions have you had with your classmates in your physical activity classes?
348 Please give some examples.
- 349
- 350
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- 354 5. Have your interactions with your classmates during your physical activity class been beneficial or
355 non-beneficial? Please explain your answer.
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- 360 6. Have your interactions you have had with classmates carried on outside of your physical activity
361 class? Please explain your answer.
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- 367 7. Have your interactions with classmates positively or negatively affected your experience in your
368 physical activity class? Please explain your answer.
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8. Have you noticed if your interactions with your classmates in your physical activity class has helped you manage stress in your life (school, family, dating and others)? Please explain your answer.

9. What factors led to you forming interactions (or not) in your physical activity class? Please explain your answer.

10. When do your social interactions take place?

___ During Class

___ Before or After Class

___ Both

11. Do you feel these social interactions you have in your physical activity class will have a positive or negative effect on your physical activity throughout your life? Please explain your answer.

Gender: Male ___ Female ___

Academic Year: Freshman ___ Sophomore ___ Junior ___ Senior ___

Grad Student ___

STAC Class (ex. Volleyball, basketball, Bowling) _____

414 Table 2
 415 Results from Social Interactions in Physical Activity Classes

416
 417 How important are the interactions you have in your physical activity class to you?
 418

	Male	Female
419 Very Important	17%	16%
420		
421 Important	42%	51%
422		
423 Not a Big Deal	38%	33%
424		
425		
426 Not Important	3%	0%
427		
428		
429 Not at All	0%	0%

430
 431
 432 Have you found your interactions with classmates during your physical activity class enjoyable
 433 or not enjoyable?
 434

	Male	Female
435 Enjoyable	88%	89%
436		
437 Neutral	12%	11%
438		
439 Not Enjoyable	0%	0%

440
 441
 442
 443 When do your social interactions take place?
 444

	Male	Female
445 During	37%	30%
446		
447 Before or After Class	3%	7%
448		
449		
450 Both	60%	63%

451
 452
 453