

ACADEMIC PERFORMANCE OF STUDENTS ENGAGED IN ATHLETIC AND NON-ATHLETIC COMPETITION

Angelo B. Dalaguit

College of Technology and Engineering, Cebu Technological University,
San Francisco Campus, Cebu, Philippines

*Email: loloy2ann@yahoo.com / ann2loloydalaguit@gmail.com

(Received 23 September 2018; accepted 2 December 2018; published online 17 January 2019)

To cite this article: Dalaguit, A. B. (2019). *Academic performance of students engaged in athletic and non-athletic competition. Malaysian Journal of Movement, Health & Exercise*, 8(1), 93-102.

<https://doi.org/10.15282/mohe.v8i1.314>

Link to this article: <https://doi.org/10.15282/mohe.v8i1.314>

Abstract

Some say that students engaged in athletics and non-athletics competitions are usually fully into academics. Others say that after physical activities, students become active in the classroom. A descriptive research was used utilizing closed ended questionnaire to determine the welfare and or if its shortcoming outweighs the welfare and possibly propose measures to help students improved their academic performance. There were 67 students mostly in the Junior year who participated in this study. 22 were male and 45 were female. Most of them participated in sports and athletics while few were not in athletics. Most of them agreed that these activities helped them developed better time management skills. They spent less than three hours practice between all athletics/non-athletics commitments, while devoting more than three hours for school work outside classroom. Most said that they could have better or same grades if not involved but then they agreed to choose to compete and agreed that academic support services helped them succeed. Their involvement in these competitions helped them identify their life skills and determined their career direction and motivated them to attend classes. Most of them earned a General Point Average ranging from 1.0 to 2.0, and agreed that their involvement in sports and academic events in terms of credits totals for eligibility motivated them toward degree completion and persistence towards graduation.

Keywords: Academic performance, athletic and non-athletic competitions, descriptive research, time management and career direction

Introduction

Physical activities contribute to the development of learners physically, mentally, socially, and emotionally through participation in selected vigorous activities. Castelli et al.(2014) stated that physical activity can have both immediate and long-term benefits on academic performance. Almost immediately after engaging in physical activity, children are better able to concentrate on classroom tasks, which can enhance learning. Over time, as children engage in developmentally appropriate physical activity, their improved physical fitness can have additional positive effects on academic performance in mathematics, reading, and writing. Recent evidence shows how physical activities' effects on the brain may create these positive outcomes.

Participation in school sports was associated with higher GPAs, favorable perceptions of school safety, and increased perceptions of family and teacher/community support (Boekel et al., 2016). Student-athletes who were primed with their athletic identity attempted significantly fewer problems and received lower mean math scores than those who were not primed (Riciputi & Erdal, 2017).

One minor comment regarding a very specific athletic task may sometimes impair task performance and alter gender stereotypes of athleticism among women (Hively & El-Alayli, 2014). Contrariwise, large population strongly advocates that those who engage in physical activities like athletics give more positive impact than negative effects. Participation in athletics has a positive impact on learning and development (Bonfiglio, 2011). This means that those who are physically active enjoy better learning and development.

Exercise influences academic performance by modifying both brain structure and function. This physiological response occurs for both boys and girls, and beyond any initial gender differences in performance (Davis et al., 2011; Hillman, Kamijo & Scudder, 2011). It also enhances enjoyment of academic lessons, academic motivation (Vazou and Smiley-Oyen, 2014) and engagement with academic materials (Grieco, Jowers, Errisuriz & Bartholomew, 2016).

College athletes develop many strengths and skills during their athletic career (Scheyett, Dean & Zeitlin, 2016), such as dedication in which the students become highly dedicated to work on their subjects assignments that resulted to a better academic performance, ability to work across cultures that means the students athletes improve their performance by collaborating smoothly with students from other departments, in regard to leadership skills they became leaders in student organizations in their department. In community buildings in which they actively participate in the extension services, some become youth leaders.

In the study of Petersen, Enghoff & Demant (2018), the use of prescribed stimulants to enhance cognition generates considerable uncertainty in terms of unclear effects, varying practices and ambivalent ethics. The work of Akbas and Ünver (2018) concludes that Pilates mat exercise protocols contribute to the physical and psychological well-being of young females.

Sports competition and other physical activities may stimulate cognitive enhancement. Thus, the intention of this study is to assess the implication of student engagement in athletics and non-athletics competition to their academic performance, and whether the benefits of their participation outweighs the shortcomings and possibly propose measures to help students improve their academic performance at the Cebu Technological University (CTU) San Francisco Campus, San Francisco, Cebu, Philippines

Method

This research employed a descriptive survey using a questionnaire developed by the researchers and distributed to 67 randomly selected officially enrolled students of CTU San Francisco Campus, San Francisco, Cebu, Philippines engaged in athletics and non – athletics local, regional and national competitions. The questionnaire was composed of 15 questions, including a demographic profile such as gender, educational attainment, and athletics and non-athletics activities engaged in academic activities as well as their academic performance. They were also asked how their involvement in non-academic activities affects their academic performance. The data collected were collated and analyzed using descriptive statistics such arithmetic mean and simple percentage.

Research findings

To establish a profile of the students’ respondents, demographic profiling as to gender and educational attainment was collated from 67 students, with 22 males and 45 females. A majority of the respondents are at the Junior Level. The results are presented in the table below.

Table 1: Gender of the respondents

Gender	Frequency	Percentage
Male	22	32.84 %
Female	45	67.16
Total	67	100

Table 2: Educational attainment of the respondents

Educational attainment	Male		Female		Total Percentage
	Frequency	Percentage	Frequency	Percentage	
Freshmen	9	13.43%	4	5.98%	100%
Sophomore	1	1.49%	1	1.49%	
Junior	11	16.42%	30	44.78%	
Senior	1	1.49%	9	13.42%	
Total	22	32.84%	45	67.72%	

The educational attainment of students who were engaged in athletics and non-athletics competitions ranged from the Freshmen to Senior level. Most were in the Junior Level for both genders, with 11 males (16.4 %) and 30 females (44.8 %) followed by freshmen males

and senior females with the same numbers and percentages. Next were 4 (6 %) freshmen females, while sophomores, both male and female, and senior males were approximately 1.5 each.

As shown in the figure 1, a majority of the respondents were engaged in academics at 54.3%, followed by sports with 28.57% and the fewest with athletics at 17.42%. This means that academics were more widely participated in compared to sports and athletics.

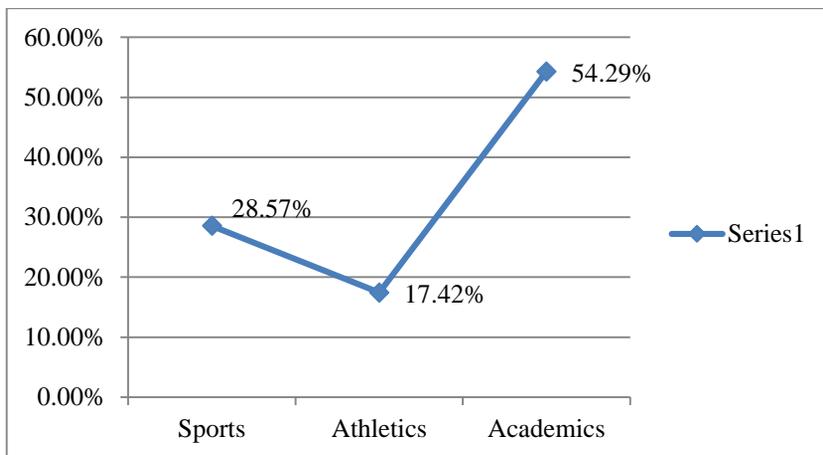


Figure 1: Percentage of athletics and non-athletics activities engaged for the last three years

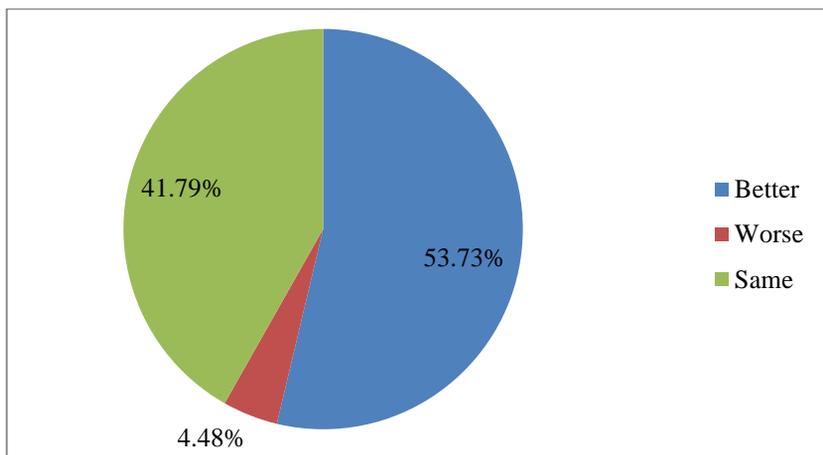


Figure 2: Percentage of respondents who believe their grades would be if not getting involved in athletics and non-athletics competitions.

The respondents of this survey were asked to state whether they believe their grades would be “better,” “worse,” or “the same” if they were not actively involved in athletics and non-athletics competitions. There were 53.73% who said their grades would be better, followed by 41.79% same and 4.48% worse.

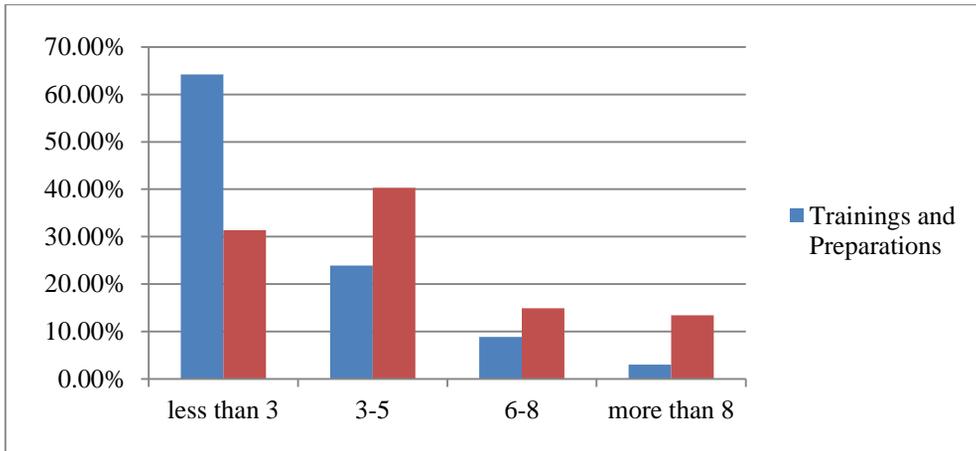


Figure 3: Percentage of hours per week devoted to trainings and preparations, and school work

Result showed that the responses on the time allotted for practice, trainings and preparation before they compete has 64.18% less than three (3) hours, 23.88% for 3-5 hours, 8.96% for 6-8 hours, and 2.99% for more than eight (8) hours in a week.

Hours per week devoted to school work outside classroom had the highest percentage at 40.30% for 3-5 hours, 31.34% for less than three hours, and 14.93% for 6-8 hours. Only 13.4 percent said that they spent more than eight hours in advanced study outside classroom.

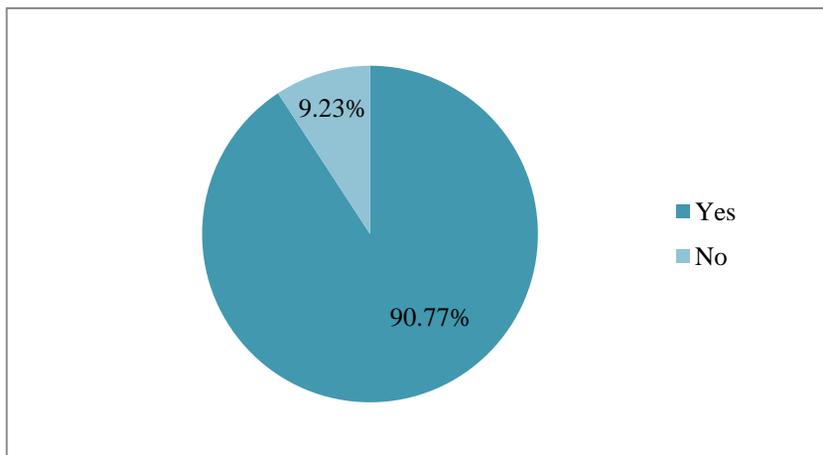


Figure 4: Percentage of respondents who said that if they have used these academic services they have participated in athletics and non-athletics competitions.

Result showed that 90.77% of the respondents said yes, while only 9.23% said no. This means that students involved in athletics and non-athletic competitions need the support of academic services.

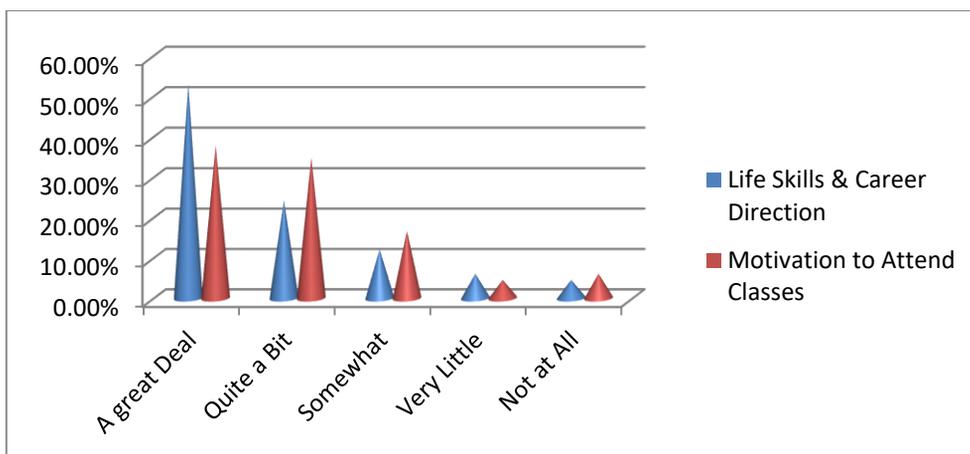


Figure 5: Result on the degree of benefits in their involvement in athletics and non-athletics competitions toward identifying life skills and determining their career direction and the effects on their involvement in athletics on their motivation to attendance to classes

53.03% answered a great deal, followed by 24.24% quite a bit, 12.12% somewhat, 6.06% very little and 4.55% not at all for the question regarding the degree of benefit of students involvement in athletics and non-athletics competitions toward identifying life skills and determining their career direction.

37.88% described as “a great deal”, followed by 34.85% described as a “quite a bit”, 16.67% “somewhat”, 6.06% “not at all” and 4.54% “very little” in terms of the benefits in students’ involvement in athletics and non-athletics competitions on their motivation to attend classes. This means that their involvement in these activities greatly affect with their attendance in their classes.

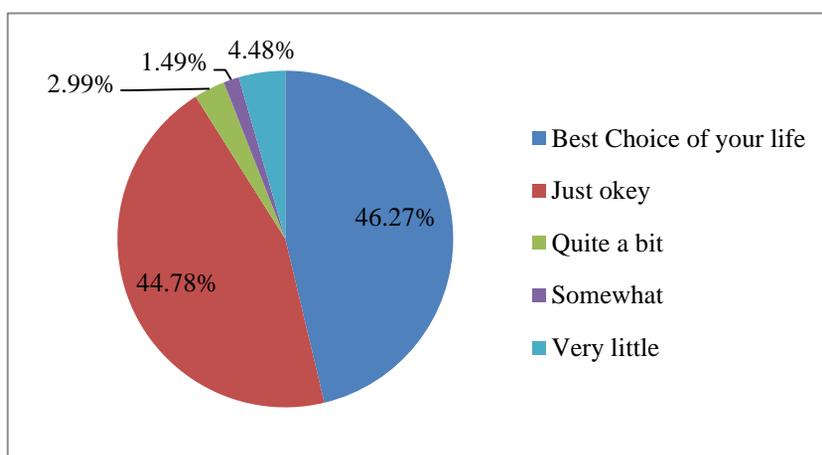


Figure 6: Respondents description on the effect of athletic and non-athletic involvement in their life.

Question on the effect of athletic and non-athletic involvement in their life shows that 46.27% best Choice of your life, 44.78% just okay, 4.48% very little, 2.99% quite a bit and 1.48% somewhat. This implies that becoming active these activities are the most or just suitable decisions made in their life.

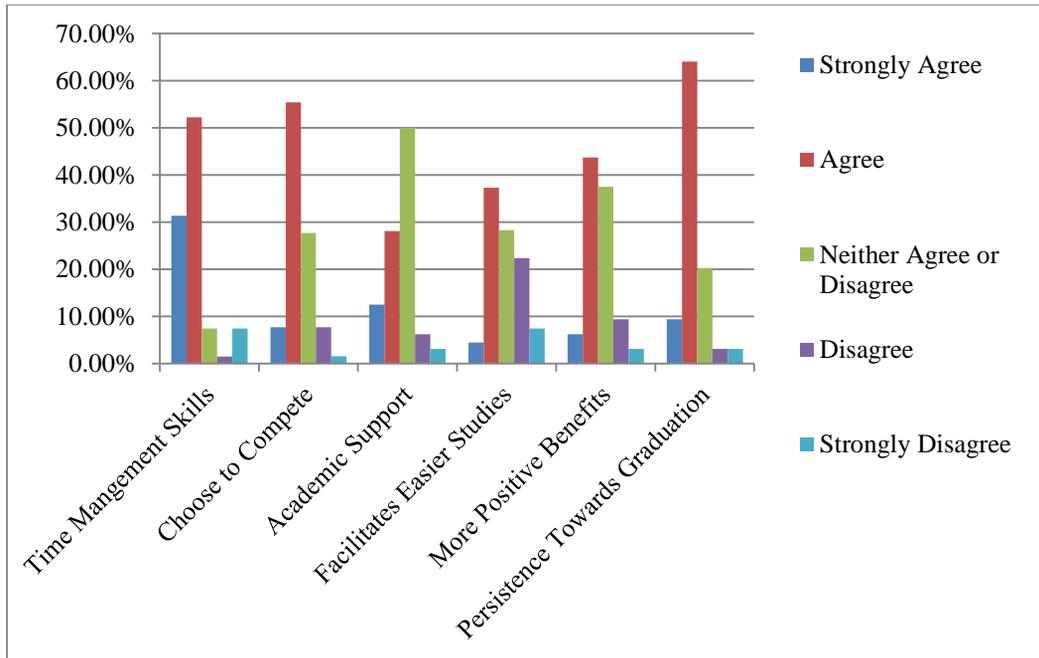


Figure 7: Percentage of respondents who choose to participate in athletics and non-athletics competitions on academic- related parameters

Out of 67 students actively engaged in athletic and non-athletic competitions, 52.24% agreed that such activities helped them develop better time management, with strongly agree at 31.34%, neither agree nor disagree tied with those who said strongly disagree at 7.46%, and 1.50% disagree.

Despite of the negative effects on their grades, 55.39% of the respondents agreed to still choose to participate in athletics and non-athletics competitions; 27.69% neither agree nor disagree; 7.69% strongly agree tied with disagree; and 1.54% strongly disagrees.

The question, “Have the academic support services at students actively engaged in athletics and non-athletics competitions helped you succeed?” showed 50% neither agree or disagree, 28.13% agree, 12.50% strongly agree, 6.25% disagree, and 3.13% strongly disagree.

37.31% believe that their involvement in athletic and non-athletic competitions made their college studies easier, with 28.36% neither agreeing nor disagreeing, which means they stay neutral. 22.39% disagree to believe that their active participation in these activities made their studies easier, while 7.46% strongly disagree and only 4.48% strongly agree.

Respondents were asked the level of agreement and disagreement with whether they believe that their participation in athletic and non-athletic competitions is irreplaceable and the benefits of involvement far exceed any negatives. Of the 67 respondents, 43.75% answered agree, 37.50% neither agree nor disagree, 9.38% disagree, 6.25% strongly agree, and only 3.13% strongly disagree. This implies that a majority agree that participation in athletic and non-athletic competitions is irreplaceable and the benefits of involvement far exceed any negatives. Only a few have strong agreement or disagreement.

A majority at 64.06% of the respondents agree that their involvement in athletic and non-athletic competitions on credits total for eligibility motivated them toward degree completion and persistence towards graduation followed by 20.31% neutral, 9.38% strongly agree, and 13.13% disagree tied with strongly disagree.

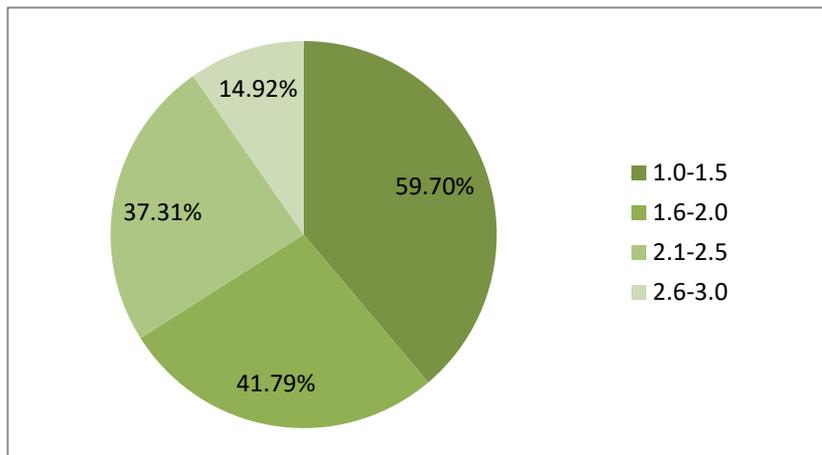


Figure 8: The respondents' current Grade Point Average.

The Point Grade Average of the students respondents range from 1.0-1.5 has 59.70%, 41.79% for 1.6-2.0, 37.31% got a GPA of between 2.1-2.5 and 14.92% 2.6-3.0. This shows that none of them have failed in any subjects taken.

Discussion

Most of the respondents were female and academics were more widely participated in compared to sports and athletics. Females have broken barriers with their athletic and non-athletic talent and their persistence and dedication to participate in physical and mental activities. The training that the students engage in helps in the development of being a responsible person. The competition serves as stimulants in the development of their cognitive skills in thinking and analyzing. Their involvement in athletic and non-athletic competitions motivates them to study hard and improve their academic performance; hence, grades are one of the requirements for them to participate in competitions A majority of them agree that their participation in athletic and non-athletic competitions is irreplaceable and that the benefits of involvement far exceed any negatives. This implies that the benefits of their participation outweigh the shortcomings.

No matter how busy people are, the willingness of doing a certain task will make them find time. It is believed that actively participating in both physical and mental activities helps develop better time management. Students able to manage their time could have better grades than those who don't, and with the support of the academic services they will succeed in their academic endeavors, helping them in identifying life skills and determining their career direction.

In conclusion, a majority of the students who actively participated in athletics and non-athletics competition garnered higher grades; therefore, competition can stimulate cognitive ability. It is highly recommended to motivate students to engage in these kinds of activities, especially those who lag behind, to improve their academic performance.

Conclusions

The purpose of the current study was to compare the biomechanical and physiological variables during 2 km rowing time trial on stationary and dynamic ergometer. Findings from this study may provide insights regarding important variables that may determine the outcomes of rowing performance. Height, body fat and VO₂max are the major determinants of 2 km rowing time trial on both the stationary and dynamic ergometer. Rowers showed significantly shorter drive phase at the middle of 2 km time trial during rowing on dynamic ergometer than stationary ergometer. Increased knee flexion at the catch position was observed at the early sections of 2 km time trial on the dynamic ergometer. On the other hand, increased hip extension was noted at the finish position when rowing on the stationary ergometer.

References

- Akbas, E. & Ünver. (2018). A Six Week Pilates Exercise Protocol for Improving Physical and Mental Health-Related Parameters. *Malaysian Journal of Movement, Health and Exercise*, 7 (2), 65-79. <https://doi.org/10.15282/mohe.v7i2.239>
- Boekel, Martin Van. Okan Bulut. Luke Stanke. Jose R. Palma Zamora. Yoojeong Jang. Youngsoon Kang. Kyle Nickodem. (2016). Effects of participation in school sports on academic and social functioning. *Journal of Applied Psychology Developmental Psychology*, 46, 31-40
- Bonfiglio, Robert. A. (2011). Bottom line: Intercollegiate athletic programs deepening their educational impact. *About Campus*, 16(3), 29-32. doi:10.1002/abc.20066
- Castelli, D. M., Centeio, E. E., Hwang, J., Barcelona, J. M., Glowacki, E. M., Calvert, H. G. & Nicksic, H. M. (2014), VII. The History of Physical Activity and Academic Performance Research: Informing the Future. *Monographs of the Society for Research in Child Development*, 79, 119–148. doi: 10.1111/mono.12133.

- Davis, C.L., Tomporowski, P.D., McDowell, J.E., Austin, B.P., Miller, P.H., Yanasak, N.E., Allison, J.D., Naglieri, J.A. (2011). Exercise improves executive function and achievement and alters brain activation in overweight children: a randomized, controlled trial. *Health Psychology*, 30, 91–98.
- Grieco, L.A., Jowers, E.M., Errisuriz, V.L., Bartholomew, J.B., 2016. Physically active vs. sedentary academic lessons: a dose response study for elementary student time on task. *Preventive Medicine*. 89, 98–103.
- Hillman, C.H., Kamijo, K., Scudder, M., 2011. A review of chronic and acute physical activity participation on neuroelectric measures of brain health and cognition during childhood. *Prev. Med.* 52 (Suppl. 1), 21–28.
- Hively, Kimberly & El-Alayli. 2014. “You throw like a girl:” The effect of stereotype threat on women's athletic performance and gender stereotypes. *Psychology of Sports and Exercise*. 15(1), January 2014, Pages 48-55
- Petersen, Margit Anne, Oskar Enghoff, & Jakob Demant. 2018. The uncertainties of enhancement: A mixed-methods study on the use of substances for cognitive enhancement and its unintended consequences. *Performance Enhancement & Health*. <https://doi.org/10.1016/j.peh.2018.09.001>
- Riciputi, Shaina & Kristi Erdal. 2017. The effect of stereotype threat on student-athlete math performance. *Psychology of Sports and Exercise*. 32, September 2017, Pages 54-57
- Scheyett, Anna, Charlotte Dean & Lisa Zeitlin. 2016. Strength and Motivation: What College Athletes Bring to Social Work. *Journal of Teaching in Social Work* 36(3). 1-14 · May 2016
- Vazou, S., & Smiley-Oyen, A. (2014). Moving and academic learning are not antagonists: acute effects on executive function and enjoyment. *Journal of Sport and Exercise Psychology*, 36(5), 474-485.