Course Outline Economics of Sport Participation and Health University of Zurich - April 2020

Instructor:

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Course Description & Expected Learning Outcomes: The objective of this course to study the individual determinants of sport participationa and its effect on health and other outcomes through the lens of economics. Upon completion of this course students should be able to:

- demonstrate an understanding of the policy context surrounding sport participation, physical activity and health;
- evaluate economic models and statistical analyses of individual decisions about sport participation;
- synthesize the influence of macro-economic and community-level factors such as GDP, economic freedom and government spending on individual decisions about participation in sport;
- evaluate economic models and statistical analyses of the effect of sport participation and physical activity on physical and mental/psychological health;
- evaluate economic models and statistical analyses of the effect of sport participation and physical activity on other economic outcomes;
- analyze and critique methods and estimates of the economic costs of physical inactivity and the benefits of physical activity

Course Format: There is no formal textbook for this course. The required reading for the course is a series of published or forthcoming journal articles or working papers. When reading journal articles, you should think about the following questions:

- What is the primary question of the study and why is it important?
- How does the author apply microeconomics to the question?
- How does the author use microeconomic theory to derive testable hypotheses?
- What data are used in the analysis?
- What econometric methods are used in the analysis?
- Are the econometric methods appropriate for both the research question and the data?
- Are the data appropriate for the research question?
- How does the author improve upon prior research?
- What are the major findings? Do they make sense?
- What are the policy implications?
- What are the limitations of the data and methods?

• How could the study be improved?

<u>Course Grade Determination</u> :Grades will be based on an essay of 2000 to 3000 words on topics covered in the course.

<u>Tentative Class Schedule</u> :

Session	Date	Time	Topic
#1	2 April 2020	10:15-12:00	Policy Context
#2	2 April 2020	14:00-15:45	Policy Context
#3	3 April 2020	10:15-12:00	Individual Determinants: Theory & Evidence
#4	3 April 2020	14:00-15:45	Individual Determinants: Theory & Evidence
#5	6 April 2020	10:15-12:00	Individual Determinants: Theory & Evidence
#6	6 April 2020	14:00-15:45	Macro-level Determinants: Evidence
#7	7 April 2020	10:15-12:00	Sport Participation & Physical & Mental Health
#8	7 April 2020	14:00-15:45	Sport Participation & Physical & Mental Health
#9	8 april 2020	10:15-12:00	Sport Participation & Economic Outcomes
#10	8 April 2020	14:00-15:45	Estimating Economic Costs & Benefits of (In)activity

Course Outline & Reading - Subject to Change

Topic 1: Policy Context

Required

- 1. World Health Organization. Global Recommendations on Physical Activity for Health. Technical report, World Health Organization, 2010.
- 2. U.S. Department of Health and Human Services. Physical Activity Guidelines for Americans. Technical report, U.S. Department of Health and Human Services, 2008.
- Physical Activity Guidelines Advisory Committee. Physical Activity Guidelines Advisory Committee Report. Technical report, U.S. Department of Health and Human Services, 2008.
- 4. WL Haskell, IM Lee, RR Pate, KE Powell, SN Blair, BA Franklin, CA Macera, GW Heath, PD Thompson, and A Bauman. Physical activity and public health: Updated recommendation for adults from the American College of Sports Medicine and the American Heart Association. *Medicine and Science in Sports and Exercise*, 39(8):1423–1445, 2007.

Supplemental

- 1. U.S. Department of Health and Human Services. The Surgeon General's Vision for a Health and Fit Nation. Technical report, Office of the Surgeon General, 2010.
- Charlotte Cabane and Michael Lechner. Physical activity of adults: A survey of correlates, determinants, and effects. Jahrbücher für Nationalökonomie und Statistik, 235(4-5):376–402, 2015.
- 3. World Health Organization. Physical inactivity: A global public health problem, 2010.

Topic 2: Individual Determinants of Sport Participation: Theory & Evidence

Required

1.	J. Cawley. An economic framework for understanding physical activity and eating behav- iors. American Journal of Preventive Medicine, 27(3):117–125, 2004.		
2.	Brad R. Humphreys and Jane E. Ruseski. An economic analysis of participation and time spent in physical activity. The BE Journal of Economic Analysis & Policy, 11(1):1–47, 2011.		
3.	H. Brown and J. Roberts. Exercising choice: The economic determinants of physical activity behaviour of an employed population. Social Science and Medicine, 73(3):383 – 390, 2011.		
4.	Christoph Breuer, Kirstin Hallmann, and Pamela Wicker. Determinants of sport partici- pation in different sports. <i>Managing Leisure</i> , 16(4):269–286, 2011.		
5.	Brad R Humphreys and Jane E Ruseski. The economic choice of participation and time spent in physical activity and sport in Canada. <i>International Journal of Sport Finance</i> , 10(2):42–61, 2015.		
6.	B. Eberth and M.D. Smith. Modelling the participation decision and duration of sporting activity in Scotland. <i>Economic Modelling</i> , 27(4):822–834, 2010.		
7.	D.O. Meltzer and A.B. Jena. The economics of intense exercise. <i>Journal of Health Economics</i> , 29(3):347–352, 2010.		
8.	S. Maruyama and Q. Yin. The opportunity cost of exercise: Do higher-earning Australians exercise longer, harder, or both? <i>Health Policy</i> , 106(2):187–194, 2012.		
9.	Brad R Humphreys, Jane E Ruseski, and Li Zhou. Physical activity, present bias, and habit formation: Theory and evidence from longitudinal data. Technical report, SSRN, 2015. Working Paper #2643049.		
Supp	blemental		
1.	J. Mullahy and S.A. Robert. No time to lose: Time constraints and physical activity in the production of health. <i>Review of Economics of the Household</i> , pages 1–24, 2010.		
2.	N.K. Anokye, S. Pokhrel, M. Buxton, and J. Fox-Rushby. The demand for sports and exercise: results from an illustrative survey. <i>The European Journal of Health Economics</i> , pages 1–11, 2011.		
3.	John Cawley, David Frisvold, and Chad Meyerhoefer. The impact of physical education on obesity among elementary school children. <i>Journal of Health Economics</i> , 32(4):743–755, 2013.		
4.	P. Downward, F. Lera-Lopez, and S. Rasciute. The zero-inflated ordered probit approach to modelling sports participation. <i>Economic Modelling</i> , 28(6):2469–2477, 2011.		
5.	J. García, F. Lera-López, and M.J. Suárez. Estimation of a structural model of the deter- minants of the time spent on physical activity and sport. <i>Journal of Sports Economics</i> , 12(5):515–537, 2011.		
6.	F. Lera-López and M. Rapún-Gárate. The demand for sport: Sport consumption and participation models. <i>Journal of Sport Management</i> , 21(1):103, 2007.		

7. Paul Downward and Simona Rasciute. The relative demands for sports and leisure in england. *European Sport Management Quarterly*, 10(2):189–214, 2010.

Paul covering in his class

Topic 3: Macro-level Determinants of Sport Participation

- Required
 - C. Van Tuyckom. Macro-environmental factors associated with leisure-time physical activity: A cross-national analysis of EU countries. *Scandinavian Journal of Public Health*, 39(4):419, 2011.
 - P. Wicker, K. Hallmann, and C. Breuer. Micro and macro level determinants of sport participation. Sport, Business and Management: An International Journal, 2(1):51–68, 2012.
 - 3. B.R. Humphreys and J.E. Ruseski. Participation in physical activity and government spending on parks and recreation. *Contemporary Economic Policy*, 25(4):538–552, 2007.
 - 4. Fernando Lera-López, Pamela Wicker, and Paul Downward. Does government spending help to promote healthy behavior in the population? evidence from 27 european countries. *Journal of Public Health*, 38(2):e5–e12, 2016.
 - 5. Jane E Ruseski and Katerina Maresova. Economic freedom, sport policy, and individual participation in physical activity: An international comparison. *Contemporary Economic Policy*, 32(1):42–55, 2014.
 - J. Cawley, C. Meyerhoefer, and D. Newhouse. The impact of state physical education requirements on youth physical activity and overweight. *Health Economics*, 16(12):1287– 1301, 2007.

Supplemental

- P. Wicker, C. Breuer, and T. Pawlowski. Promoting sport for all to age-specific target groups: The impact of sport infrastructure. *European Sport Management Quarterly*, 9(2):103–118, 2009.
- 2. J. Cawley, C. Meyerhoefer, and D. Newhouse. The correlation of youth physical activity with state policies. *Contemporary Economic Policy*, 25(4):506–517, 2007.
- 3. D. Eisenberg and E. Okeke. Too cold for a jog? Weather, exercise, and socioeconomic Status. The BE Journal of Economic Analysis & Policy, 9(1):1–30, 2009.

Topic 4: Sport Participation & Physical Health

Required

- 1. Brad R Humphreys, Logan McLeod, and Jane E Ruseski. Physical activity and health outcomes: Evidence from canada. *Health Economics*, 23(1):33–54, 2014.
- Sisira Sarma, Gregory S Zaric, M Karen Campbell, and Jason Gilliland. The effect of physical activity on adult obesity: Evidence from the Canadian NPHS panel. *Economics* and Human Biology, 14:1–21, 2014.

- Sisira Sarma, Rose Anne Devlin, Jason Gilliland, M Karen Campbell, and Gregory S Zaric. The effect of leisure-time physical activity on obesity, diabetes, high bp and heart disease among Canadians: Evidence from 2000/01 to 2005/06. *Health Economics*, 24(12):1–17, 2015.
- 4. Nazmi Sari and Michael Lechner. Long-run health effects of sports and exercise in canada. Technical report, Canadian Centre for Health Economics, 2015. Working Paper #150018.
- Logan McLeod and Jane E Ruseski. Longitudinal relationship between participation in physical activity and health. Technical report, Canadian Centre for Health Economics, 2015. Working Paper #150002.

Supplemental

- V. Kuvaja-Köllner, H. Valtonen, P. Komulainen, M. Hassinen, and R. Rauramaa. The impact of time cost of physical exercise on health outcomes by older adults: the DR's EXTRA study. *The European Journal of Health Economics*, 14(3):471–479, 2013.
- Paul Downward, Peter Dawson, and Terence C Mills. Sports participation as an investment in (subjective) health: a time series analysis of the life course. Journal of Public Health, 38(4):e504–e510, 2016.

Topic 5: Sport Participation & Mental Health/Well-Being

Required

- H. Huang and B.R. Humphreys. Sports participation and happiness: Evidence from US microdata. Journal of Economic Psychology, 33(4):776–793, 2012.
- 2. Jane E Ruseski, Brad R Humphreys, Kirstin Hallman, Pamela Wicker, and Christoph Breuer. Sport participation and subjective well-being: instrumental variable results from german survey data. *Journal of Physical Activity and Health*, 11(2):396–403, 2014.
- Tim Pawlowski, Paul Downward, and Simona Rasciute. Does national pride from international sporting success contribute to well-being? an international investigation. Sport Management Review, 17(2):121–132, 2014.
- 4. Pamela Wicker and Bernd Frick. Intensity of physical activity and subjective well-being: an empirical analysis of the who recommendations. *Journal of Public Health*, 2016.
- 5. Paul Downward and Peter Dawson. Is it pleasure or health from leisure that we benefit from most? an analysis of well-being alternatives and implications for policy. *Social Indicators Research*, 126(1):443–465, 2016.

Supplemental

- P. Downward and S. Rasciute. Does sport make you happy? an analysis of the wellbeing derived from sports participation. *International Review of Applied Economics*, 25(3):331–348, 2011.
- T. Pawlowski, P. Downward, and S. Rasciute. Subjective well-being in European countries: On the age-specific impact of physical activity. *European Review of Aging and Physical Activity*, 8:93–102, 2011.
- 3. S. Rasciute and P. Downward. Health or happiness? What is the impact of physical activity on the individual? *Kyklos*, 63(2):256–270, 2010.
- G. Kavetsos and S. Szymanski. National well-being and international sports events. Journal of Economic Psychology, 31(2):158–171, 2010.

Topic 6: Sport Participation & Other Economic Outcomes

Required

- 1. Michael Lechner. Long-run labour market and health effects of individual sports activities. Journal of Health Economics, 28(4):839–854, 2009.
- V.D. Kosteas. The effect of exercise on earnings: Evidence from the NLSY. Journal of Labor Research, pages 1–26, 2012.
- 3. Peter D Lunn and Elish Kelly. Participation in school sport and post-school pathways: evidence from Ireland. *National Institute Economic Review*, 232(1):R51–R66, 2015.
- 4. Fernando Munoz-Bullon, Maria J. Sanchez-Bueno, and Antonio Vos-Saz. The influence of sports participation on academic performance among students in higher education. *Sport Management Review*, 2017.

Supplemental

- 1. Michael Lechner and Nazmi Sari. Labor market effects of sports and exercise: Evidence from canadian panel data. *Labour Economics*, 35:1–15, 2015.
- 2. J.E. Long and S. Caudill. The impact of participation in intercollegiate athletics on income and graduation. *Review of Economics and Statistics*, 73(3):525–532, 1991.

Topic 7: Economic Costs/Benefits of Physical (In)Activity

Required

- B Sander and R. Bergemann. Economic burden of obesity and its complications in Germany. European Journal of Health Economics, 4:248–253, 2003.
- Nazmi Sari. Physical inactivity and its impact on healthcare utilization. *Health Economics*, 18(8):885–901, 2009.
- 3. John Cawley and Chad Meyerhoefer. The medical care costs of obesity: an instrumental variables approach. *Journal of Health Economics*, 31(1):219–230, 2012.

Supplemental

- 1. Nazmi Sari. Sports, exercise, and length of stay in hospitals: is there a differential effect for the chronically ill people? *Contemporary Economic Policy*, 32(2):247–260, 2014.
- 2. E.A. Finkelstein, J.G. Trogdon, J.W. Cohen, and W. Dietz. Annual medical spending attributable to obesity: payer-and service-specific estimates. *Health Affairs*, 28(5):w822–w831, 2009.