
Matthew A. Ladwig

Curriculum Vitae

(Updated August 2023)

Assistant Professor of Integrative Human Health

Department of Biological Sciences

Purdue University Northwest

Hammond, IN, 46323

Office: Nils K. Nelson Bioscience Innovation Building –Room 340B

Office phone: (219) 989-2738

Email: mladwig@pnw.edu



EDUCATION

2015 - 2019

Doctor of Philosophy, Kinesiology

Iowa State University, Ames, IA, USA

Areas of Concentration: Exercise Psychology & Youth Physical Activity Promotion

Dissertation title: *Dorsolateral prefrontal cortical hemodynamics, cognitive inhibition, and affective responses to exercise among children: Implications for pediatric exercise prescription.*

2013 - 2015

Master of Science, Kinesiology

Ball State University, Muncie, IN, USA

Majors: Sport and Exercise Psychology & Cognitive and Social Processes

Thesis title: *Toward a better peak: Does a pre-workout warm-up improve the exercise affective experience? Implications for subsequent behavioral decision-making.*

2008 - 2013

Bachelor of Arts, General Psychology, with Honors

Purdue University – Calumet, Hammond, IN, USA

ACADEMIC EMPLOYMENT

- 2022 – present** **Assistant Professor of Integrative Human Health**
Department of Biological Sciences
Purdue University Northwest, Hammond, IN, USA
- 2019 – 2022** **Postdoctoral Scholar**
Department of Medicine
Division of General Internal Medicine
Pennsylvania State University College of Medicine, Hershey, PA, USA
- 2015 – 2019** **Graduate Teaching Assistant**
Department of Kinesiology
Iowa State University, Ames, IA, USA
- 2013 – 2015** **Graduate Teaching and Research Assistant**
Department of Psychological Science
Ball State University, Muncie, IN, USA

TEACHING EXPERIENCE

Purdue University Northwest

HST 10800: First Year Experience in Integrative Human Health
HST 35200: Human Lifespan Development
HST 35800: Cultural Diversity in Health and Illness
HST 44800: Stress Management
HST 49500: Exercise Psychology
HST 49500: Health and Wellness Promotional Strategies

Iowa State University

KIN 158: Tennis
KIN 166: Weight Training
KIN 164: Walking for Fitness
KIN 366: Exercise Psychology
KIN 467/567: Exercise and Health: Behavior Change

Ball State University

PSYS 100: Introduction to Psychological Science
PSYS 301: Health Psychology

Purdue University – Calumet

PSY 12000: Elementary Psychology – Supplemental Instructor (SI)

RESEARCH FUNDING (*★ indicates funded project*)

- ★2023** **Evaluation and implementation of lifestyle changes and Life's Simple 7 in northwest Indiana**
Source: Indiana Department of Health: Epidemiology and Laboratory Capacity Extension
Role: Co-Investigator (PI: John J. Durocher)
Total costs: \$50,000
- ★2022** **The development of novel methods to better predict health-related behaviors.**
Source: Purdue University Northwest Catalyst Grant
Role: Principal Investigator (Co-I: Matthew J. Bauman)
Total costs: \$11,249
- 2022** **Fitness opportunities for students in need.**
Source: Subaru of Indiana Automotive Foundation
Role: Principal Investigator (Co-I: John J. Durocher)
Total costs: \$14,386
- ★2022** **Evaluation and implementation of lifestyle changes and Life's Simple 7 in northwest Indiana.**
Source: Indiana Department of Health
Role: Co-Investigator (PI: John J. Durocher)
Total costs: \$133,000
- 2021** **How can we promote physical activity among adolescents with below-average movement skill competency?**
Source: National Institute of Child Health and Human Development (NICHD)
Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)
Total costs: \$445,994
- 2021** **Designing enjoyable physical activity for adults with low physical activity enjoyment.**
Source: National Heart, Lung, and Blood Institute (NHLBI)
Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)
Total costs: \$445,994
- 2020** **Identifying the optimal home prescription of functional exercises for older adults in primary care.**
Source: National Institute on Aging (NIA)
Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)
Total costs: \$2,174,963
- 2020** **Impact of automatic enrollment into a digital physical activity program for older adults in primary care.**
Source: National Institute on Aging (NIA)
Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)
Total costs: \$2,246,497

- 2020 Impact of ultra-brief functional exercise prescriptions on physical performance among older adults in primary care.**
 Source: National Institute on Aging (NIA)
 Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)
Total costs: \$1,974,963
Impact Score: 45, Percentile: 39
- 2020 Adolescents and parents playing together: A dyadic approach to physical activity promotion.**
 Source: National Institute of Child Health and Human Development (NICHD)
 Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)
Total costs: \$432,450
- 2020 Developing more enjoyable exercise for adolescents with low tolerance of exercise intensity.**
 Source: National Institute of Child Health and Human Development (NICHD)
 Role: Postdoctoral Scholar (PI: Christopher N. Sciamanna)
Total costs: \$435,344
- *2019 Development of a novel exercise program to maximize youth enjoyment.**
 Source: Pennsylvania Department of Health: Commonwealth Universal Research Enhancement (CURE) Program
 Role: Co-Investigator (PI: Christopher N. Sciamanna)
Total costs: \$150,000
- 2018 Affective and neurophysiological responses to physical activity among children: Implications for subsequent physical activity behavior.**
 Source: American Psychological Foundation (APF) Visionary Grant
 Role: Co-Principal Investigator (Co-PI: Panteleimon Ekkekakis)
Total costs: \$14,492
- 2018 Affective and neurophysiological responses to graded exercise in children: What are the mechanisms?**
 Source: American College of Sports Medicine (ACSM) Foundation Doctoral Student Research Grant
 Role: Co-Principal Investigator (Co-PI: Panteleimon Ekkekakis)
Total costs: \$4,486
- *2015 The psychological effects of a pre-workout warm-up: An exploratory study.**
 Source: Ball State University Thesis Grant Competition
 Role: Graduate Student
Total costs: \$300
- *2015 The psychological effects of a pre-workout warm-up: An exploratory study.**
 Source: Ball State University ASPIRE Travel Grant
 Role: Graduate Student
Total costs: \$100

2014 Toward a better peak: Does a pre-workout warm-up improve the exercise affective experience? Implications for subsequent behavioral decision-making.

Source: Association for Applied Sport Psychology (AASP): Student Research Grant

Role: Graduate Student

Total costs: \$2,100

MANUSCRIPTS IN PEER-REVIEWED JOURNALS

- 15) **Ladwig, M. A.**, Sciamanna, C. N., Luzier, G., Blaker, J. M., Agans, J. P., Visek, A. J. (2023). Improving reflective evaluations of sport through repeated experiences of fun – Rationale, design, feasibility, and acceptability of the PlayFit Youth Sport Program. *Pilot and Feasibility Studies*, 9(1). <https://doi.org/10.1186/s40814-023-01350-x>
- 14) **Ladwig, M. A.** (2023). Fostering weight status understanding among exercise science and health students by simulating common physical activities with additional body mass. *Advances in Physiology Education*. <https://doi.org/10.1152/advan.00255.2022>
- 13) Sciamanna, C. N., Lemaster, K. A., Danilovich, M. K., Conroy, D. E., Schmitz, K. H., Silvis, M. L., **Ladwig, M. A.**, & Ballentine, N.H. (2023) Accuracy of self-reported physical capacities as a clinical screening test for older adults with mobility disability. *Gerontology and Geriatric Medicine*, 9. <https://doi.org/10.1177/23337214231167979>
- 12) Ekkekakis, P., Hartman, M. E., & **Ladwig, M. A.** (2023). A methodological checklist for studies of pleasure and enjoyment responses to high-intensity interval training: Part II. Intensity, timing of assessments, data modeling and interpretation. *Journal of Sport and Exercise Psychology*, 45, 92-109. <https://doi.org/10.1123/jsep.2022-0029>
- 11) Ekkekakis, P., Hartman, M. E., & **Ladwig, M. A.** (2023). A methodological checklist for studies of pleasure and enjoyment responses to high-intensity interval training: Part I. Participants and measures. *Journal of Sport and Exercise Psychology*, 45, 77-91. <https://doi.org/10.1123/jsep.2022-0027>
- 10) **Ladwig, M. A.**, Sciamanna, C. N., Auer, B. J., Oser, T. K., Stine, J. G., & Agans, J. P. (2021). When American adults *do* move, *how* do they do so? Trends in physical activity intensity, type, and modality: 1988-2017. *Journal of Physical Activity & Health*, 18(9), 1181-1198. <https://doi.org/10.1123/jpah.2020-0424>
- 9) **Ladwig, M. A.**, Sciamanna, C. N., Rovniak, L. S., Conroy, D. E., Auer, B. J., Gottschall, J. S., Silvis, M. L., Smyth, J. M., & Wang, M. (2021). Adult group sport play during a pandemic: Feasibility, acceptability, and program adherence results from a study of modifications to mitigate COVID-19 risk. *Preventive Medicine Reports*, 101476. <https://doi.org/10.1016/j.pmedr.2021.101476>
- 8) **Ladwig, M. A.**, Sciamanna, C. N., Rovniak, L. S., Conroy, D. E., Auer, B. J., Gottschall, J. S., Silvis, M. L., Smyth, J. M., & Wang, M. (2021). Comparative effectiveness of social physical play versus traditional group exercise for adherence and fitness: Protocol for a randomized-controlled trial. *Contemporary Clinical Trials Communications*, 21, 100736. <https://doi.org/10.1016/j.conctc.2021.100736>
- 7) Hartman, M. E., **Ladwig, M. A.**, & Ekkekakis, P. (2021) Contactless differentiation of pleasant and unpleasant valence: Assessment of the acoustic startle eyeblink response with infrared reflectance oculography. *Behavior Research Methods*, 53, 2092-2104. <https://doi.org/10.3758/s13428-021-01555-z>

- 6) Sciamanna, C. N., **Ladwig, M. A.**, Conroy, D. E., Schmitz, K. H., Silvis, M. L., Ballentine, N. H., Auer, B. J., & Danilovich, M. K. (2021). Feasibility and impact of a 1-minute daily functional exercise regimen prescribed to older adults by their primary care physician. *Preventive Medicine Reports, 21*, 101307. <https://doi.org/10.1016/j.pmedr.2020.101307>
- 5) Vazou, S., Mischo, A., **Ladwig, M. A.**, Ekkekakis, P., & Welk, G. (2019). Psychologically informed physical fitness practice in schools: A field experiment. *Psychology of Sport & Exercise, 40*, 143-151. <https://doi.org/10.1016/j.psychsport.2018.10.008>
- 4) **Ladwig, M. A.**, Ekkekakis, P., & Vazou, S. (2018). "My best memory was when I was done with it": PE memories are associated with adult physical activity. *Translational Journal of the American College of Sports Medicine, 3*(16), 119-129. <https://doi.org/10.1249/TJX.0000000000000067>
- 3) Ekkekakis, P., Hartman, M. E., & **Ladwig, M. A.** (2018). Mass media representations of the evidence as a possible deterrent to recommending exercise for the treatment of depression: Lessons five years after the extraordinary case of TREAD-UK. *Journal of Sports Sciences, 1*-12. <https://doi.org/10.1080/02640414.2018.1423856>
- 2) **Ladwig, M. A.**, Hartman, M. E., & Ekkekakis, P. (2017). Affect-based exercise prescription: An idea whose time has come? *ACSM's Health & Fitness Journal, 21*(5), 10-15. <https://doi.org/10.1249/FIT.00000000000000332>
- 1) **Ladwig, M. A.** (2013). The psychological effects of a pre-workout warm-up: An exploratory study. *Journal of Multidisciplinary Research, 5*(3), 79-87.

MANUSCRIPTS IN PREPARATION OR UNDER REVIEW

- Ladwig, M. A.**, Rovniak, L. S., Blaker, J. M., Luzier, G., Conroy, D. E., Gottschall, J. S., Silvis, M. L., Smyth, J. M., Wang, M., Auer, B. J., Sciamanna, C. N. (*in preparation*). Results from a randomized trial comparing traditional group fitness to social sport play for physical activity enjoyment and adherence.
- Ladwig, M. A.**, Vazou, S., & Ekkekakis, P. (*in preparation*). Assessing exercise intensity preference and tolerance among children: The Preference for and Tolerance of Exercise Intensity Questionnaire for Youth (PRETIE-QY).
- Ladwig, M. A.**, Zenko, Z., Jones, L. (*in preparation*). Disentangling the impact of exercise on affect, emotion, and mood.
- Kurth, J. D., Sciamanna, C. N., Stine, J. G., **Ladwig, M. A.**, Conroy, D. E., Schmitz, K. H., & Herrell, C. (*in preparation*). Impact of a 4-minute, daily, functional strength training program on measures of lower body functional performance in older adults with mobility disability.
- Sciamanna, C. N., Kurth, J. D., Danilovich, M. K., Conroy, D. E., Schmitz, K. H., Silvis, M., **Ladwig, M. A.**, & Herrell, C. (*in preparation*). Older adults in the US much prefer shorter, more frequent resistance training programs, especially those with difficulty walking.

BOOK CHAPTERS

- 5) Zenko, Z., & **Ladwig, M. A.** (2021). *Affective responses to exercise: Measurement considerations for practicing professionals*. In Z. Zenko & L. Jones (Eds.), *Essentials of exercise and sport psychology: An open access textbook* (pp. 271–293). Society for the Transparency, Openness, and Replication in Kinesiology. <https://doi.org/10.51124/B1012>

- 4) Ekkekakis, P., Hartman, M.E., & **Ladwig, M. A.** (2019). *Affective responses to exercise*. In G. Tenenbaum & R.C. Eklund (Eds.), *Handbook of sport psychology* (4th ed.). New York: Wiley. <https://doi.org/10.1002/9781119568124.ch12>
- 3) Ekkekakis, P., Hartman, M.E., & **Ladwig, M. A.** (2019). *Conceptual foundations of exercise psychology: Facilitators, inhibitors, and a roadmap towards establishing societal relevance*. In M.H. Anshel (Ed.), *Handbook of sport and exercise psychology* (Vol 2). Washington, DC: American Psychological Association. <https://doi.org/10.1037/0000124-002>
- 2) Ekkekakis, P., **Ladwig, M. A.**, & Hartman, M.E. (2018). *Physical activity and the "feel-good" effect: Challenges in researching the pleasure and displeasure people feel when they exercise*. In S.R Bird (Ed.), *Research methods in physical activity and health*. New York: Routledge. <https://doi.org/10.4324/9781315158501-20>
- 1) Ekkekakis, P., Zenko, Z., **Ladwig, M. A.**, & Hartman, M.E. (2018). *Affect as a potential determinant of physical activity and exercise: Critical appraisal of an emerging research field*. In D.M. Williams, R.E. Rhodes, & M. Conner (Eds.), *Affective determinants of health behavior*. New York: Oxford University Press. <https://doi.org/10.1093/oso/9780190499037.001.0001>

PUBLISHED ABSTRACTS

- 6) Thivierge, G. S., **Ladwig, M. A.**, Mutai, E., Bishop, R., & Durocher, J. J. (2023). Evaluation and implementation of lifestyle habits and Life's Simple 7 in northwest Indiana. *Physiology*, 38(S1). <https://doi.org/10.1152/physiol.2023.38.S1.5795484>
- 5) **Ladwig, M. A.**, & Sciamanna, C. N. (2020). Adults want to play too: Social play versus group training for exercise enjoyment and adherence: Preliminary data from a randomized-controlled trial. *Journal of Sport & Exercise Psychology*, 42, S89-S89.
- 4) **Ladwig, M. A.**, Vazou, S., & Ekkekakis, P. (2019). Childhood prefrontal development and affect during fitness tests: Should we reconsider current practice norms? *Journal of Sport & Exercise Psychology*, 41, S275-S275
- 3) **Ladwig, M. A.**, Vazou, S., & Ekkekakis, P. (2018). Childhood experiences in physical education may have long-term implications. *Medicine & Science in Sport & Exercise*, 50(5), S319
- 2) **Ladwig, M. A.**, & Ekkekakis, P. (2017). Are physical education experiences associated with physical activity attitudes and intentions in adulthood? *Journal of Sport & Exercise Psychology*, 39, S276-S276.
- 1) **Ladwig, M. A.**, & Razon, S. (2014). The psychological effects of a pre-workout warm- up. *Journal of Sport & Exercise Psychology*, 36, S98-S98.

ACADEMIC PRESENTATIONS

- 14) Thivierge, G. S., **Ladwig, M. A.**, Mutai, E., Bishop, R., & Durocher, J. J. (2023, April). Evaluation and implementation of lifestyle habits and Life's Simple 7 in northwest Indiana. Presented at the annual American Physiology Summit. Long Beach, CA, USA.
- 13) Mutai, E. K., Del Rio, B. I., **Ladwig, M. A.**, Thivierge, G. S., Bishop, R. E., & Durocher, J. J. (2023, April). Evaluation and implementation of lifestyle habits and Life's Simple 7 in northwest Indiana. Presented at the annual Days of Discovery Conference. Purdue University Northwest, Hammond, IN, USA.

- 12) **Ladwig, M. A.,** & Sciamanna, C. N. (2020, June). Adults want to play too: Social play versus group training for exercise enjoyment and adherence: Preliminary data from a randomized-controlled trial. Presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity (NASPSPA). *Virtual conference due to SARS-CoV-2 pandemic.*
- 11) **Ladwig, M. A.,** Vazou, S., & Ekkekakis, P. (2019, June). Childhood prefrontal development and affect during fitness tests: Should we reconsider current practice norms? Presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity (NASPSPA). Baltimore, MD, USA.
- 10) Hartman, M. E., **Ladwig, M. A.,** & Ekkekakis, P. (2019, June). Prefrontal hemodynamics and affective responses to incremental exercise. Presented at the annual meeting of the American College of Sports Medicine (ACSM). Orlando, FL, USA.
- 9) **Ladwig, M. A.,** Ekkekakis, P., & Vazou, S. (2018, June). Childhood experiences in physical education may have long-term implications. Presented at the annual meeting of the American College of Sports Medicine (ACSM). Minneapolis, MN, USA.
- 8) **Ladwig, M. A.,** Ekkekakis, P. (2017, June). Are childhood physical education experiences associated with adult physical activity attitudes and intentions? Presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity (NASPSPA). San Diego, CA, USA.
- 7) **Ladwig, M.A.,** & Razon, S. (2015, February). Toward a better peak: Does a pre- workout warm-up improve the exercise affective experience? Implications for subsequent behavioral decision-making: Initial thoughts and results. Presented at the Midwest Sport and Exercise Psychology Symposium (MSEPS). Ball State University, Muncie, IN, USA.
- 6) **Ladwig, M. A.,** & Razon, S. (2014, June). The psychological effects of a pre-workout warm-up. Presented at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity (NASPSPA). Minneapolis, MN, USA.
- 5) Devia, M., Connor, B.D., **Ladwig, M.A.,** Phillips, C.M., Cook, L.M., Alves, K., & Butler, D.L. (2014, April). What do you believe? Developing accurate measures of myths and misconceptions. Presented at the 19th Student Symposium at Ball State University, Muncie, IN, USA.
- 4) Alves, K., **Ladwig, M. A.,** Pierce, J., Strzok, N., & Butler, D. (2014, April). Student attitudes toward concept map, essay, and multiple-choice testing. Presented at the Butler University Research Conference. Indianapolis, IN, USA.
- 3) **Ladwig, M. A.,** & Razon, S. (2014, February). Does a pre-workout warm-up facilitate performance on a concentration task? Presented at the Midwest Sport and Exercise Psychology Symposium (MSEPS). Bowling Green University, Bowling Green, OH, USA.
- 2) **Ladwig, M. A.** (2013, February). Differential effects of repetition counting techniques in weightlifting: Can they help reduce perceived exertion? Presented at the Midwest Sport and Exercise Psychology Symposium (MSEPS). Hope College, Holland, MI, USA.
- 1) **Ladwig, M. A.** (2012, May). The psychological effects of a pre-workout warm-up. Presented to faculty and students. Purdue University-Calumet Interdisciplinary Studies Program. Hammond, IN, USA.

SELECT NEWS COVERAGE OF RESEARCH

Achauer, Hilary. (2023). For a better workout, think like a kid. *The New York Times*.

<https://www.nytimes.com/2023/08/09/well/move/exercise-workout-childhood-kids.html>

Platzman Weinstock, C. (2018). Negative memories of gym class may impact adults' lifestyle. *Reuters*.

<https://www.reuters.com/article/us-health-fitness-phys-ed/negative-memories-of-gym-class-may-impact-adults-lifestyle-idUSKCN1LJ1UH>

Reynolds, G. (2018). How you felt about gym class may impact your exercise habits today. *The New York Times*.

<https://www.nytimes.com/2018/08/22/well/move/how-you-felt-about-gym-class-may-impact-your-exercise-habits-today.html>

REVIEWER FOR ACADEMIC JOURNALS AND PUBLISHERS

- 8) *Adapted Physical Education Quarterly*
- 7) *Journal of Aging and Physical Activity*
- 6) *Journal of Behavioral Medicine*
- 5) *Journal of Medical Internet Research: Formative Research*
- 4) *Journal of Medical Internet Research: Research Protocols*
- 3) *Journal of Sport & Exercise Psychology*
- 2) *PLoS One*
- 1) *Psychology of Sport and Exercise*

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS

North American Society for the Psychology of Sport and Physical Activity (NASPSPA)

American College of Sports Medicine (ACSM)

Society for Transparency, Openness, and Replication in Kinesiology (STORK)

ACADEMIC HONORS AND AWARDS

- | | |
|-------------|-------------------------------------------------------------------------------------------|
| 2019 | ▪ <i>University Research Excellence Award</i> – Iowa State University |
| 2018 | ▪ <i>Alice Ford Family & Consumer Science Scholarship</i> – Iowa State University |
| | ▪ <i>Barbara E. Forker Graduate Scholarship</i> – Iowa State University |
| 2015 | ▪ <i>Pease Family Doctoral Scholarship</i> – Iowa State University |
| | ▪ <i>Graduate Student Researcher of the Year</i> – Ball State University |
| | ▪ <i>Most Recognizable Graduate Student</i> – Ball State University |
| 2014 | ▪ <i>Most Recognizable Graduate Student</i> – Ball State University |
| 2013 | ▪ <i>Graduated with Distinction</i> – Purdue University–Calumet |
| 2012 | ▪ <i>Outstanding Senior</i> – Purdue University–Calumet, Liberal Arts and Social Sciences |
| 2010 | ▪ <i>Inductee</i> – Psi Chi: The International Honor Society in Psychology |