

# **Penn Positive Psychology Center Annual Report**

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May 25, 2023

**Martin Seligman, Director**

**Peter Schulman, Executive Director**

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This is a report on the activities of the Positive Psychology Center (PPC), the birthplace of Positive Psychology. The PPC was officially created November 7, 2003 and is thriving intellectually and financially. It is a leading center in the world for research, education, and the dissemination of Positive Psychology. It is widely recognized in both the scholar community and public press. The PPC is financially self-sustaining.

The mission of the PPC is research, education, and the dissemination of Positive Psychology. Positive Psychology is the scientific study of the factors that enable individuals and communities to thrive. This field is founded on the belief that people want to lead meaningful and fulfilling lives, to cultivate what is best within themselves, and to enhance their experiences of love, work, and play.

## **I. RESEARCH SUMMARIES**

Following are summaries of current research at the Positive Psychology Center . . .

### **Professor Martin Seligman's Research**

[Professor Seligman](#) is presently working on **Agency**, the mental state “I can bring about my goals” produces progress and the opposite “I am helpless” produces stagnation.

Agency is a psychological state that has changed the course of history and it is the immediate cause of progress and innovation. In the absence of this mindset, humanity stagnates.

Agency is the belief that I can influence the world, made up of three components: efficacy, optimism, and imagination. Efficacy is the expectation that I can achieve a specific goal now. Optimism is how long into the future I believe I can achieve that goal. Imagination is the range of goals that I believe I can achieve. Efficacy causes trying hard, optimism causes persistence, and imagination causes innovation. These are the mechanisms by which Agency causes progress.

Progress over the sweep of human history has been viewed through the lens of economics, ecology, theology, ‘great man’ biography, and ‘social force’ history, but almost never through the lens of psychology.

Over the last 14,000 years there have been several psychological epochs in which agency changes radically to keep pace with new social and material demands. Before writing, we can infer agency from behaviors such as the control of fire, burial practices, and the invention of agriculture. The first epoch for which we have writing is the Divine Age in which the gods command and humans obey. We have limited agency and not even much ‘self.’ Then, after the Bronze Age, between 1100 BCE and 600 BCE, the balance between the agency of the gods and of humans tilts toward humans. Greece develops much expanded Agency by 400 BCE with considerable efficacy, considerable optimism, and enormous imagination. Material, technological, artistic and political progress all follow from this Agentic self. This is true, and at about the same time, of Greece, of the Judeo-Christian Bible, and of China. Chinese history adds the importance of the balance between “I” agency and “We” agency.

As Rome declines, the theology of Augustine, in which only God has true Agency, looms large. The quality of human life in the West becomes miserable and life stagnates for almost one thousand years. Very little is invented, but then, around 1450 CE, an Age of Progress in the West, but not elsewhere, begins as humans re-acquire substantial Agency. The printing press, the New World, Michelangelo and Shakespeare appear. Sadly, the Reformation in 1525 abandons free will and human progress in Europe grinds to a halt. With the overthrow of Puritanism in England in 1660, progress resumes. Newtonian science, vaccination in medicine, true wealth in capitalism, and political revolution all stem from this rebirth of Agency. Agency democratizes, particularly in America, during the Industrial Revolution of 1800 and it becomes almost universal around 1950 as technology explodes.

The world is now in labor, about to birth an Age of Agency populated by fully Agentic individuals who peer far into the future in order to flourish. If potential barriers – nuclear war, pandemic, climate catastrophe, racial warfare, and financial collapse – can be overcome, this will

be an age of unprecedented progress. Mindful of the limits of human agency, this will be our first Age of Well-being.

### **Professor Angela Duckworth's Research**

With Katy Milkman, [Dr. Duckworth](#) is co-directing Behavior Change for Good (BCFG). They recently completed a mega study with Zearn Math, testing more than a dozen treatments aimed at increasing student achievement. They are now planning a BCFG mega study aimed at improving college persistence and performance. The novel feature of this mega study is that the unit of change and level of random assignment will be groups of students, not individual students.

In partnership with National Education Equity Lab and also Wharton-SAS, Dr. Duckworth is planning an RCT field study of Grit Lab 101, a psychoeducational intervention aimed at improving life outcomes for students at Title 1 eligible high schools.

And finally, with doctoral and post-doctoral students, Dr. Duckworth is studying the effects of previewing information on self-efficacy and performance, reference frame bias in questionnaire responses, overconfidence in scientists' predictions of treatment effects, the role of friction in decision-making, and more.

### **Professor Lyle Ungar's Research**

The World Well-Being Project ([WWBP](#)) is a collaboration with Stanford University and Stony Brook University. Led by [Dr. Lyle Ungar](#), WWBP is pioneering scientific techniques for measuring psychological well-being and physical health based on the analysis of language in social media and text message data.

As a collaboration between computer scientists, psychologists, and statisticians, they are shedding new light on the psychosocial processes that affect health and happiness and exploring the potential for our unobtrusive well-being measures to supplement, and in part replace, expensive survey methods.

In the past year, they have used Twitter to study a wide range of regional variations in well-being, for example looking at how concerns about Covid have varied across U.S. counties and over time. They are studying what people's text messages reveal about their healthy and unhealthy drinking habits. They are also starting to extend these methods to work in other languages (Chinese, Spanish, Hindi, etc.) so that they can run similar studies in other countries.

They have also started building "chatbots," computers that can hold text-based conversations, that have adjustable personalities and different levels of empathy. This will eventually allow us to make chatbots that can appropriately respond to people's medical questions, balancing the amount of information and sympathy that they supply. They are also using large language models to build positive interventions such as expressing gratitude, showing how AI can be used to help people become who they want to be.

## **Professor Allyson Mackey's Research**

Children will grow up to solve problems we cannot even imagine today. To be successful, they need to learn not only to read and write, but also to reason and imagine. [Dr. Mackey](#) is interested in understanding how children's experiences shape the development of their minds and brains, so we can develop new ways to support their learning. She has focused on how children's experiences influence neuroplasticity, the brain's ability to change. During development, maturational processes stabilize synaptic connections, cementing knowledge and skills. Even once brakes on plasticity are in place, brains retain mechanisms to boost plasticity when learning is essential.

Neurotransmitters, including dopamine, can signal that current neural configurations are a poor match for new inputs. Dr. Mackey's research program examines how early life experiences influence *maturation* and *motivation*, and their consequences for learning. Her research on the theme of maturation reveals how brain structure and function change through childhood, and how the pace of maturation of the brain and the body varies as a function of early life stress. Her work on motivation explores how early experiences shape motivation systems in the brain, and motivational behaviors. Together, these lines of work can inform interventions to improve children's well-being.

## **Professor James Pawelski's Research**

Music, the visual arts, literature, film, theater, history, philosophy, religion, and similar cultural pursuits have been central to human flourishing from time immemorial. In our daily lives, we experience firsthand the power of the arts and humanities. These domains make our lives richer and more meaningful, offer insights into perspectives beyond our own, and help us forge connections and cultivate thoughtful, engaged, and civically-minded communities. While positive psychology has had a tremendous impact on a wide range of fields like economics, medicine, and education, there has been surprisingly little scientific work over the years investigating the effects engagement in the arts and humanities may have on individual and communal well-being.

[The Humanities and Human Flourishing \(HHF\) Project](#) aims to change that by bridging these fields and asking: How can we unlock more of the flourishing benefits of the humanities for individuals and communities around the world? HHF was founded in 2014 by Dr. James O. Pawelski, who continues to serve as its Director. With a core team of researchers, our mission is to explore how engaging in arts and culture—which we refer to broadly as the humanities—can bring well-being to individuals and communities.

Since its inception, HHF has spearheaded the development of the Positive Humanities, an emerging field that integrates the science of positive psychology with the wisdom of arts and culture. We seek to understand the nature of human flourishing more deeply, investigate its causes and correlates more broadly, and support its cultivation more effectively. We are interested in how various domains within arts and culture can promote flourishing outcomes (such as empathy, mindfulness, subjective well-being, and social connection) and mitigate against languishing outcomes (such as anxiety, depression, and social isolation) that are increasingly common today. Likewise, HHF is dedicated to well-being for everyone and strives for equitable access to arts and culture.

Over the course of the past year, HHF has made a number of important contributions to research and practice in the Positive Humanities, including:

- Publishing an initial six volumes as part of the [Humanities and Human Flourishing Book Series](#) established with Oxford University Press (with an additional three volumes anticipated within the next year):
  - [Philosophy and Human Flourishing](#), edited by John J. Stuhr
  - [History and Human Flourishing](#), edited by Darrin M. McMahon
  - [Literary Studies and Human Flourishing](#), edited by James F. English and Heather Love
  - [Cinema, Media, and Human Flourishing](#), edited by Timothy Corrigan
  - [Theater and Human Flourishing](#), edited by Harvey Young
  - [Music and Human Flourishing](#), edited by Anna Harwell Celenza
- Receiving renewal of our designation as a National Endowment for the Arts Research Lab, which supports our “[Art Museums: Institutions for Well-Being](#)” initiative, after successful completion of our initial grant term.
- Launching an innovative line of research on virtual art museum engagement and well-being outcomes with the publication of [two papers](#) and making freely available a co-developed [virtual art museum research tool](#).
- Testing and creating the [Core Art Museum Survey for Well-Being](#), a freely available instrument which enables art museum professionals and researchers to understand visitor well-being and inform programming and outreach.
- Establishing a new line of research, “Positive Predictors of Black Flourishing: Identity, Arts, and Culture,” led by Dr. Christa Mahlobo, who was awarded a Penn Provost’s Postdoctoral Fellowship beginning in Fall 2023.
- Partnering with leading cultural organizations on research and application, including the Philadelphia Museum of Art, the Metropolitan Museum of Art, the Barnes Foundation, the Carnegie Museum of Art, the Andy Warhol Museum, the Westmoreland Museum of American Art, Fondazione Brescia Musei (Italy), and others.
- Launching [In Conversation](#), part of the HHF Colloquium Series. With “In Conversation,” HHF hosts a series of conversations between scientists and practitioners on topics concerning the arts, culture, and well-being.
- Disseminating a [monthly newsletter](#), offering topical perspectives and scholarly resources on the Positive Humanities.
- Maintaining and regularly updating the [Humanities and Human Flourishing website](#) to make our work publicly available.

### **Dr. Jer Clifton’s Research**

The [Primals Project](#) promotes empirical research on the origins and psychological impact of primal world beliefs. Primal world beliefs are very simple and general beliefs about the world (e.g., *the world is abundant*) that are generally uncorrelated to demographic backgrounds (e.g., personal wealth) but highly correlated to well-being and behavior patterns (e.g., low depression and curiosity). They also seek to communicate important empirical findings to the public, such as through a recently launched [freely available opportunity](#) for the general public to take the scientifically validated primals survey, get their scores, and participate in research studies in the process.

One of the topics his group is currently researching, for example, is the plasticity of primals. [Dr. Nick Kerry](#) is leading investigations into (a) if demographic backgrounds influence primals (e.g., do rich people see the world as more abundant?), (b) the impact of very extreme life experiences on primals (incarceration for negligent homicide after accidentally killing a loved one; getting cancer; having cystic fibrosis), and (c) if new interventions can influence primals to improve wellbeing. Much of their work is in partnership with others. For example, [Dr. Clifton](#) is working with [Dr. Alia Crum](#) at Stanford on the relationship between primals and personality, [Dr. David Yaden](#) at Johns Hopkins on how psilocybin impacts primals, and robotics expert [Dr. Bilge Mutlu](#) at the University of Wisconsin-Madison on giving different primal world beliefs to robots to simulate human personality characteristics.

### **Max Genecov's Research**

Mr. Genecov has two research initiatives. First, how do very happy people stay happy? This work surveys people with highly stable positive emotions to understand how this stability, rather than just their average emotion, affects their social lives and internal worlds. The mechanisms are also being examined. For the average person, emotions help regulate behavior. Emotions tell you whether to keep going forward or to change tactics and goals. If someone is stably happy, what non-emotional information are they using to navigate challenges and opportunities?

Second is translating concepts and methods between positive psychology and clinical psychology. Important details often get lost across the divide between the study of human flourishing and the study of mental disorder. For instance, how much of well-being is just psychological distress in reverse, and how much is uniquely positive? How can clinical methods be used to characterize and investigate well-being? Understanding the shared and distinct components of these subfields can help better illustrate the landscape of human experience.

## **II. RECENT NEWS**

**New Book:** *Tomorrowmind: Thriving at Work with Resilience, Creativity, and Connection*, by Gabriella Rosen Kellerman and Martin E.P. Seligman. Released in January 2023, this book provides actionable, evidence-based advice to help people thrive in the workplace during these turbulent times, by cultivating resilience, creativity, meaning, and connection.

<https://www.simonandschuster.com/books/Tomorrowmind/Gabriella-Rosen-Kellerman/9781982159764>

**Media Coverage:** PPC faculty have been featured in national media.

- A February 2023 *New York Times* article spotlights an interview with Dr. Seligman on the benefits of optimism and how people can learn to build optimism. <https://www.nytimes.com/2023/02/03/well/mind/optimism-questions.html/>
- In a January 2023 article in *Time*, Dr. Seligman reported a psychological study of U.S. Army soldiers that found a correlation between catastrophizing and greater risk of PTSD. Seligman provides advice on how to manage negative thoughts. <https://time.com/6244557/catastrophic-thinking-how-to-manage/>

- In the January 2023 *Harvard Business Review*, Dr. Seligman discusses cultivating four kinds of creativity in the workplace.  
<https://hbr.org/2023/01/cultivating-the-four-kinds-of-creativity/>  
<https://hbr.org/podcast/2023/01/a-deeper-understanding-of-creativity-at-work/>
- A February 2023 *Forbes* article interviews Dr. Seligman about his research on how to flourish amidst the challenges of an uncertain world.  
<https://www.forbes.com/sites/rodgerdeanduncan/2023/02/02/stressed-by-work-you-can-tap-your-own-resilience/>
- In the May 1, 2023 *Happiness Lab* podcast, Dr. Laurie Santos interviews Dr. Martin Seligman about founding the field of Positive Psychology and his decades of research on measuring and building well-being.  
<https://www.pushkin.fm/podcasts/the-happiness-lab-with-dr-laurie-santos/the-man-who-invented-happiness-science-marty-seligman>
- The October 2022 PBS show *Tell Me More* interviews Professor Angela Duckworth about grit and passion as it relates to success.  
<https://www.pbs.org/video/angela-duckworth-k8wbgb/>
- A December 2022 article in *Forbes* featured a study of art museum professionals led by Professor James Pawelski and his Humanities and Human Flourishing team.  
<https://www.forbes.com/sites/natashagural/2022/12/31/art-museum-visitors-must-experience-positive-and-negative-emotions-to-work-toward-empathy-study/>
- A June 2022 article in *WHYY* featured research led by Professor James Pawelski and his Humanities and Human Flourishing team on the mental health benefits of visiting art museums.  
<https://whyy.org/articles/mental-health-benefits-museums/>
- In March 2023, Dr. Jeremy Clifton was a guest on the popular podcast *Hidden Brain* and discussed primal world beliefs research by his team.  
<https://hiddenbrain.org/podcast/how-your-beliefs-shape-reality/>
- A March 2023 article by Dr. Jeremy Clifton in *Scientific American* discusses the relationship between primal world beliefs and political ideology.  
<https://www.scientificamerican.com/article/many-differences-between-liberals-and-conservatives-may-boil-down-to-one-belief/>
- An August 2022 article in the *Philadelphia Inquirer* reported that applicants to Penn are being asked to pen a thank-you note to someone who has influenced their life. Admissions Dean Whitney Soule worked with Angela Duckworth and Martin Seligman of the School of Arts & Sciences and Adam Grant of the Wharton School to develop this unique prompt.



<https://www.inquirer.com/news/penn-admissions-assignment-gratitude-thank-you-notes-20221001.html?/>

### **Awards and Recognition:**

- *Academic Influence* cited Professor Martin Seligman as the single most influential psychologist in the world for the time period 2010-2020 and 2023, and one of the top 10 most influential psychologists of the last 50 years (1970-2020).  
<https://academicinfluence.com/rankings/people/most-influential-psychologists-today/>
- Professor Martin Seligman was selected as an awardee for the 2023 Liberal and Professional Studies Award for Distinguished Teaching in Professional Graduate Programs.  
<https://www.lps.upenn.edu/about/news/lps-faculty-announced-2023-distinguished-teaching-award-winners/>
- Professor Allyson Mackey received the 2022 International Mind, Brain, and Education Society Early Career Award.  
<https://imbbs.org/IMBES-award-recipients/>
- On April 19, 2022, Dr. Karen Reivich was awarded honorary membership to the *Penn Friar Senior Society* for “outstanding work, enthusiasm, and commitment to Penn.”  
<https://friarsseniorsociety.com/honorary-friars/>

### **III. ORGANIZATION AND OPERATION**

#### **PPC Personnel:**

Martin Seligman, Ph.D., Director of PPC and Zellerbach Family Professor of Psychology

Peter Schulman, Executive Director

Angela Duckworth, Ph.D., Christopher H. Browne Distinguished Professor of Psychology

Allyson Mackey, Ph.D., Associate Professor of Psychology

James Pawelski, Ph.D., Professor of Practice, Director of Education

Karen Reivich, Ph.D., Director of Training Programs

Lyle Ungar, Ph.D., Professor, Computer and Information Science

Paul Rozin, Ph.D., Professor of Psychology (emeritus)

Jeremy Clifton, Ph.D., Primals Project Director

John Hollway, J.D., Associate Dean and Executive Director of the Quattrone Center for the Fair Administration of Justice, Penn Law School

Howard Blumenthal, Senior Scholar

Michael Baime, MD, Clinical Associate Professor of Medicine, Penn School of Medicine,  
Director, Penn Program for Mindfulness

David Yaden, Ph.D., Visiting Scholar



**Master of Applied Positive Psychology Program (MAPP):**

James Pawelski, Ph.D., Director of Education  
Leona Brandwene, Associate Director  
Aaron Boczkowski, Program Coordinator  
Laura Taylor, Program Assistant Coordinator  
Nicole Stottlemeyer, Assistant Coordinator, Positive Education Programs

**Humanities and Human Flourishing Project:**

James Pawelski, Ph.D., Principal Investigator  
Sarah Sidoti, M.S.Ed., Assistant Director  
Katherine Cotter, Ph.D., Associate Director, Research  
Christa Mahlobo, Ph.D., Postdoctoral Fellow

**Resilience and Positive Psychology Training Programs:**

Karen Reivich, Ph.D., Director of Training Programs  
Peter Schulman, Client Development, Operations Oversight  
Judy Saltzberg, Ph.D., Instructor and Curriculum Developer  
Robert Szybist, MAPP, Instructor and Project Director, PRP for Law Enforcement  
Jennifer Knapp, Strategic Advisor  
Erin Oelkers, Project Manager  
Colleen Fegley, Project Manager  
Erin Fitzgerald, Project Coordinator

**Primals Grant:**

Jeremy Clifton, Ph.D., Primals Project Director  
Rive Cadwallader, Project Manager  
Nicholas Kerry, Postdoctoral Fellow

**Agency and the History of Human Progress**

Martin E.P. Seligman, Ph.D., Project Director  
Noah Love, Research Manager  
Jacob Lisner, Data Scientist

**Happy People Project:**

Max Genecov, Graduate Student and Project Leader  
Abigail Blyler, Research Manager

**World Well Being Research:**

Lyle Ungar, Ph.D., Project Director  
Young-Min Cho, Data Scientist  
Tingting Liu, Postdoctoral Fellow

**Graduate Student with Dr. Seligman:**

Max Genecov

**Dr. Allyson Mackey's Research: Brain Plasticity and Development:**

Austin Boroshok, Graduate Student  
Cassidy McDermott, Graduate Student

Maayan Ziv, Research Coordinator  
Isis Cowan, Research Coordinator

**Dr. Angela Duckworth's Research: Grit, Self-Control, and Character Development:**

Sean Talamas, Executive Director  
Paolo Terni, Director, Senior Research Support

**Information Technology Support Staff:**

Tammer Ibrahim, IT Systems Administrator  
Ani Leonhart, IT Systems Support Specialist

**Undergraduate Student Assistants:** Various Penn student research assistants help with various projects.

**PPC Advisory Board:**

The advisory board for PPC and the MAPP program includes:

David Brainard

Associate Dean for the Natural Sciences, SAS  
Director, Vision Research Center  
RRL Professor of Psychology

Nora Lewis

Vice Dean, Professional and Liberal Education

Susan Meyer (emeritus)

Professor of Philosophy

Michael Platt

Professor of Neuroscience, James S. Riepe University Professor  
Professor of Neuroscience, Professor of Psychology, Professor of Marketing

Lyle Ungar

Professor of Computer and Information Science

**Research Grants:**

**PI MARTIN SELIGMAN RESEARCH GRANTS:**

The Primals Project: Seeding Catalytic Investigations in Psychology, February 2021 to July 2024, Templeton Religion Trust (PI Seligman, Co-PI Clifton).

Penn Resilience Program for Law Enforcement Personnel, January 2018 to September 2023 (PI Seligman), Subcontract from International Association of Chiefs of Police (IACP), under prime award from the U.S. Department of Justice.

Online Positive Psychology Interventions to Prevent Depression and Anxiety and Increase Well-Being, September 2021 to December 2024, MadHappy, (PI Seligman).

**PI JAMES PAWELSKI RESEARCH GRANTS:**

Humanities and Human Flourishing Project: The Impact of the Arts on Well-being and Shifting Attitudes, 2022-2024, National Endowment for the Arts. Designated as an NEA Research Lab. (PI Pawelski).

**PI ANGELA DUCKWORTH RESEARCH GRANTS:**

Creating the Conditions for Equity and Excellence in Adolescence, Walton Family Foundation, (PI Duckworth).

Using Behavioral Science to Help Students Thrive, Walton Family Foundation. (PI Duckworth)

**PI ALLYSON MACKEY RESEARCH GRANTS:**

From Cradle to Grave: Measuring the Lifetime Impact of Early-Life Stress, Scialog: Research Corporation and CIFAR. (PIs: Mackey, Robinson-Drummer, Trask).

Stable and Dynamic Home Environment Predictors of Learning Engagement and Success, CIFAR. (PIs: Mackey & Ansari).

CAREER: Leveraging neuroscience to predict and improve science learning in early elementary school, National Science Foundation. (PI Mackey).

Evaluating the impact of early cognitive enrichment on brain development, William Penn Foundation. (PI Mackey).

**IV. EDUCATION: GRADUATE, UNDERGRADUATE, AND NON-CREDIT:**

**The Master of Applied Positive Psychology Program (MAPP):**

The MAPP program has completed its eighteenth year and this program has been successful in academic and financial terms. During the pandemic, we quickly transitioned to virtual delivery of this program, with positive results. The number and quality of applicants and matriculates has been consistently high and the students have given the program high marks in their evaluations. Following are the number of applicants and admissions each year:

	<u>2005/6</u>	<u>2006/7</u>	<u>2007/8</u>	<u>2008/9</u>	<u>2009/10</u>	<u>2010/11</u>	<u>2011/12</u>	<u>2012/13</u>
Applications	106	111	123	166	163	181	178	236
Admits	34	36	41	38	45	36	36	36
	<u>2013/14</u>	<u>2014/15</u>	<u>2015/16</u>	<u>2016/17</u>	<u>2017/18</u>	<u>2018/19</u>	<u>2019/20</u>	<u>2020/21</u>
Applications	198	166	162	209	178	189	182	187
Admits	39	32	38	39	42	47	49	43

	<u>2021/22</u>	<u>2022/23</u>	<u>2023/24</u>
Applications	223	192	133
Admits	39	54	50 (est.)

In line with the PPC’s stated mission of promoting education, PPC faculty, lecturers, post-doctoral fellows and graduate students teach the following undergraduate and graduate-level courses through the School of Arts and Sciences and the College of Liberal and Professional Education:

**Martin Seligman**

- MAPP 600: Intro to Positive Psychology (graduate level)

**Angela Duckworth**

- Psych 005: Grit Lab: Fostering Passion and Perseverance (undergraduate level)

**James Pawelski**

- MAPP 602: Foundations of Positive Interventions (graduate level)
- MAPP 710: Humanities and Human Flourishing (graduate level)

**Allyson Mackey**

- MAPP 712: Positive Education (graduate level)

**Leona Brandwene**

- MAPP 603: Perspectives on Well-being (graduate level)
- MAPP 714: Applying Positive Interventions in Institutions (graduate level)

**Karen Reivich**

- MAPP 708: Positive Psychology and Individuals (graduate level)

**Judith Saltzberg**

- MAPP 708: Positive Psychology and Individuals (graduate level)
- MAPP 800: Capstones (graduate level)

**Laura Taylor**

- MAPP 710: Humanities and Human Flourishing (graduate level) – Assistant Instructor
- MAPP 800: Capstone (graduate level) – Assistant Instructor

**Michael Baime**

- MAPP 603: Approaches to Well-being (graduate level) – Guest Speaker

**David Yaden**

- MAPP 601: Research Methods and Evaluation (graduate level)
- MAPP 708: Positive Psychology and Individuals (graduate level) – Guest Speaker

**Chris (John) Feudtner**

- MAPP 714: Applying Positive Interventions in Institutions (graduate level) – Guest Speaker

**Faisal Khan**

- MAPP 600: Intro to Positive Psychology (graduate level) – Assistant Instructor
- MAPP 708: Positive Psychology and Individuals (graduate level) – Assistant Instructor

**Tamara Myles**

- MAPP 708: Positive Psychology and Individuals (graduate level) – Assistant Instructor

**Jodi Wellman**

- MAPP 708: Positive Psychology and Individuals (graduate level) – Assistant Instructor

**Mina Simhai**

- MAPP 708: Positive Psychology and Individuals (graduate level) – Assistant Instructor

**Courtney Daly**

- MAPP 708: Positive Psychology and Individuals (graduate level) – Assistant Instructor

**Gloria Park**

- MAPP 708: Positive Psychology and Individuals (graduate level) – Guest Speaker
- MAPP 800: Capstone (graduate level) – Assistant Instructor

**Eric Patterson**

- MAPP 600: Intro to Positive Psychology (graduate level) – Assistant Instructor

**Lyle Ungar**

- MAPP 600: Intro to Positive Psychology (graduate level) – Guest Speaker

**Katherine Cotter**

- MAPP 710: Humanities and Human Flourishing (graduate level) – Guest Speaker

**Online Certificate through LPS: Applied Positive Psychology (APOP):**

The [Applied Positive Psychology \(APOP\) certificate](#) launched in January 2019 with support from the Positive Psychology Center, as a part of Penn’s College of Liberal and Professional Studies (LPS) online Bachelor of Applied Arts and Sciences ([BAAS](#)). This online, accredited degree offers a variety of degree concentrations and certificate “clusters” that are designed to meet the needs of working adults and non-traditional students who wish to pursue a liberal arts education with career enhancement in mind.

- The certificate continues to sustain strong enrollments. In Summer 2022, Fall 2022, and Spring 2023, we offered 11 courses with a combined total of 337 course enrollments.
- We added APOP 3400: Flourishing Through Creativity and the Arts. The new course was developed by Katherine Cotter and is being taught in Spring 2023. This course showcases

the emerging research in the field and Penn's leadership in the domain of the humanities and human flourishing.

- We have a new instructor of record for APOP 2000: Positive Psychology at Work. Diane Rosen, JD, EdD, has succeeded Meredith Myers, PhD, and is refreshing the course to feature Martin Seligman's new book about positive psychology in the workplace, *Tomorrowmind: Thriving at Work with Resilience, Creativity, and Connection – Now and in an Uncertain Future*.
- APOP 2200 and APOP 1200 are making minor updates to assignment and course structure.

The APOP four-course certificate launched with its first courses in Spring 2019 and **total course enrollments to date are 1,417**. Those students have learned from 33 different U.S. states, the District of Columbia, and 30 different countries. There is also a six-course "advanced" certificate. The six courses are:

- 100: Introduction to Positive Psychology
- 120: Human Flourishing: Strengths and Resilience
- 200: Positive Psychology at Work
- 220: Flourishing with Others: Building Thriving Relationships
- 290: Understanding the Science of Positive Psychology
- 340: Flourishing through Creativity and the Arts

APOP develops tools and practices to enhance human flourishing. Students are introduced to the field of Positive Psychology and learn practical strategies that support personal, organizational, and community well-being. The courses teach the theoretical and empirical foundations of human flourishing, how well-being is measured, and what activities increase human flourishing in various contexts and settings.

### **Online Certificate on Coursera: Foundations of Positive Psychology:**

Under the leadership of Dr. Martin Seligman, the Positive Psychology Center and the College of Liberal and Professional Studies produced a popular five-course online specialization on the Coursera platform called Foundations of Positive Psychology, which launched March 2017. Students learn about the theories, research, and applications of Positive Psychology.

The five courses are taught by Positive Psychology Center personnel, including:

- **Positive Psychology: Martin Seligman's Visionary Science**, taught by Dr. Seligman.
  - Total Learners as of May 1, 2023: 98,862.
  - Student rating = 4.9 out of 5.0 (5,551 ratings).
- **Positive Psychology: Resilience Skills**, taught by Dr. Karen Reivich.
  - Total Learners as of May 1, 2023: 69,825.
  - Student rating = 4.9 out of 5.0 (1,972 ratings).

- **Positive Psychology: Applications and Interventions**, taught by Dr. James Pawelski.
  - Total Learners as of May 1, 2023: 41,865.
  - Student rating = 4.8 out of 5.0 (1,962 ratings).
- **Positive Psychology: Character, Grit, and Research Methods**, taught by Dr. Angela Duckworth.
  - Total Learners as of May 1, 2023: 26,566.
  - Student rating = 4.4 out of 5.0 (1,084 ratings).
- **Positive Psychology Specialization Project: Design Your Life for Well-Being**, taught by Dr. Martin Seligman.
  - Total Learners as of May 1, 2023: 24,455.
  - Student rating = 4.8 out of 5.0 (746 ratings).

### **Education Through Popular Websites:**

The PPC has two popular websites to promote Penn educational programs, as well as educate people around the world about the Positive Psychology Center and the field of Positive Psychology:

- <https://ppc.sas.upenn.edu/>
  - Google Analytics from May 22, 2022 to May 21, 2023:
    - 329,502 Users
      - Google’s definition: “Users who have initiated at least one session during the date range.”
    - 669,768 Pageviews
      - Google’s definition: “Pageviews is the total number of pages viewed. Repeated views of a single page are counted.”
- <https://www.authentic happiness.sas.upenn.edu/>
  - Google Analytics from May 22, 2022 to May 21, 2023:
    - 1,321,471 Users
    - 13,654,878 Pageviews
    - Total Registered Users: 6,307,616

### **Dissemination through Professional Associations:**

- **The International Positive Psychology Network (IPPA).** <http://www.ippanetwork.org/>  
 Dr. Seligman is Senior Advisor for IPPA and played the lead role in creating IPPA, with contributions from Dr. James Pawelski. IPPA has thousands of members and its three-part mission is to promote the science and practice of Positive Psychology to enable individuals and institutions to thrive; to facilitate collaboration among researchers, teachers, students, and practitioners of positive psychology around the world and across academic disciplines; and to share the findings of positive psychology with a broad audience. IPPA will host the Eighth World Congress in July 2023 in Vancouver, Canada. IPPA virtually hosted the Seventh World Congress in July 2021. IPPA hosted the Sixth World Congress on Positive Psychology in June 2019 in Melbourne, Australia and there were more than 1,200 registrants. At each conference, the Positive Psychology Center staffs a booth at the conference to promote Penn’s Online Applied Positive Psychology



Certificate program (APOP), Penn's Master of Applied Positive Psychology program (MAPP) and the online Foundations of Positive Psychology Coursera Certificate. Speakers from the PPC included Dr. Martin Seligman, Dr. James Pawelski, among others.

- **The International Positive Education Network (IPEN).** <https://www.ipen-network.com/>

Dr. Seligman is Senior Advisor for IPEN and played a lead role in creating IPEN with Lord James O'Shaughnessy to bring together teachers, parents, academics, students, schools, colleges, universities, charities, companies and governments to promote a new approach to education: academics + character + well-being. The goals are to support collaboration, change education practice and reform government policy. IPEN hosted the Second World Positive Education Conference in June 2018 in Fort Worth, Texas and there were more than 600 registrants. The Positive Psychology Center staffed a booth at this conference to promote the MAPP program and the online Foundations of Positive Psychology Coursera Certificate. Speakers from the PPC included Dr. Martin Seligman, Dr. James Pawelski, and Dr. Angela Duckworth. IPEN has thousands of members.

## **V. RESILIENCE TRAINING PROGRAMS**

Since 2007, we have delivered more than 350 Penn Resilience and Well-Being Programs to more than 60,000 people. Many of these programs are train-the-trainer programs in which we train people how to teach resilience and well-being skills to others, using a structured curriculum. Attendees of these programs have gone on to teach these skills to well over a million people around the world. These train-the-trainer programs are an effective model for large-scale and sustainable dissemination of the resilience skills.

These programs have been delivered to a variety of populations – health care professionals, educators (secondary and college), U.S. Army soldiers, law enforcement personnel, a professional sports team, and corporate executives and their employees.

**Resilience programs we have or will soon deliver, organized by market, since we began delivering these programs in 2007:**

- **Higher Education:**
  - University of North Carolina
  - University of Notre Dame
  - Western Governors University
  - University of Texas
  - Oklahoma State University
  - University of Pennsylvania
- **Secondary Schools:**
  - Oklahoma City public school high school students, sponsored by the Oklahoma City Thunder
  - UK public schools
  - Geelong Grammar School (Australia)

- St. Peter's College (Australia)
- The Hackley School
- St. Catherine's School (Australia)
- Wellington College (England)
- **Health Care:**
  - Centerstone
  - Ochsner Health
  - Hemophilia patients and their caregivers, sponsored by Genentech
  - Royal College of Surgeons in Ireland: Students, leadership, staff, faculty
  - University of Michigan Medical School: Leadership Development Team
  - Penn School of Medicine: Faculty and Physicians
  - Penn Dental Medicine: Students
  - Yale School of Medicine: Physicians
  - Sentara Healthcare: Executives
  - Children's Hospital of Philadelphia Foundation: Leadership and Staff
- **Government / Law Enforcement / Military:**
  - U.S. Army
  - U.S. Department of Justice
  - International Association of Chiefs of Police
  - City of Philadelphia Fire Department
  - Pennsylvania State Police
  - Penn Division of Public Safety
  - World Bank
- **Corporations:**
  - Schneider Electric
  - PSI Pharma
  - Indeed
  - Oklahoma City Thunder (NBA team)
  - BAE Systems (British Aerospace)
  - Delta Galil
  - Alcon Vision
  - Deloitte
  - Kimberly-Clark
- **Wharton Executive Education programs:**
  - Estée Lauder Companies
  - Merrill Lynch Financial Bootcamp
  - Merrill Lynch Certified Financial Advisors
  - Sun Life
  - Sompo International
  - Client Psychology for Certified Financial Planners
  - Client Psychology Program for Citi Global Sales Managers
  - Client Psychology Program for Citi Advanced Sales Program
  - Securities Industry Institute
  - Athlete Development Professional Certification Program

Following are clients of these programs in reverse chronological order . . .

Penn Resilience and Well-Being Train-the-Trainer Program for University of North Carolina System Students, June 2023 to August 2024.

Penn Resilience Program for Law Enforcement Personnel, January 2018 to September 2023 (PI Seligman), Subcontract from International Association of Chiefs of Police (IACP), under prime award from the U.S. Department of Justice.

Penn Resilience Program for Schneider Electric Vice Presidents, September 2022 to May 2023.

Penn Resilience and Well-Being Train-the-Trainer Program for Centerstone Employees, September 2022 to August 2023.

Penn Resilience and Well-Being Train-the-Trainer Program for PSI Pharma Support Inc. Employees, November 2021 to June 2023.

Penn Resilience Program for Ochsner Health Nurses, September to December 2022.

Penn Resilience and Well-Being Train-the-Trainer Program for University of Notre Dame Students, September 2021 to October 2022.

Penn Resilience and Well-Being Train-the-Trainer Program for Western Governors University Employees, May 2021 to April 2022.

Following are older resilience training contracts for a broader historical context:

Penn Resilience Program for Indeed Inc. Marketing Employees, July to December 2021.

Penn Resilience and Well-Being Train-the-Trainer Program for Medical Students at the Royal College of Surgeons in Ireland, September 2021 to July 2022.

Penn Resilience Program for Hemophilia Patients and their Caregivers, December 2018 to December 2021 (PI Seligman), Sponsored by Genentech USA, Inc.

Penn Resilience Program for City of Philadelphia First Responders, July 2020 to December 2021 (PI Seligman).

Penn Resilience Program for Oklahoma City Thunder, September 2014 to August 2020.

Penn Resilience Program for Oklahoma City Thunder Community Outreach with Oklahoma City High School Students, January 2018 to June 2020.

Penn Resilience and Well-Being Program for Senior Leaders at British Aerospace, 2020.

Penn Resilience and Well-Being Train-the-Trainer Program for University of Michigan Medical School, 2020.

Penn Resilience and Well-Being Train-the-Trainer Program for Western Governors University, 2020.

Penn Resilience Program for Western Governors University, 2019.

Penn Resilience Program for Oklahoma State University, 2019.

Penn Resilience Program for Alcon Vision, 2019.

Penn Resilience Program for University of Michigan Medical School, 2019.

Penn Resilience and Well-Being Program for Sales Managers at Investors Group, 2019.

Penn Resilience Program for Sentara Healthcare, June 2018.

Penn Well-Being Program for the World Bank, June 2018 (PI Seligman).

Penn Resilience Program for Royal College of Surgeons in Ireland, November 2017.

Penn Resilience Program for Yale School of Medicine Faculty and Staff, 2017 (PI Seligman).

Positive Psychology Program for Delta Galil Executives, August 2017.

Penn Resilience Program for UAE Ministry of Happiness, March 2017.

Penn Resilience Program for U.S. Department of Defense, Washington Headquarters Services, FY17.

Penn Resilience Program for Deloitte Senior Leaders, September 2016.

Penn Resilience Program for University of Texas System, May 2015 to August 2016 (PI Seligman).

Penn Resilience Program for St. Catherine's School Educators (Australia) FY16.

Penn Resilience Program for Deloitte Clinicians, FY16.

Penn Resilience Program for Kimberly-Clark Professional Global Marketing & Sales Team, FY16.

Penn Resilience Program for U.S. Army, Sept 2014 through Sept 2016 (PI Seligman).

U.S. Army Resilience Training of Soldiers 2012 through Sept 2014 (PI Seligman).

U.S. Army Resilience Training of Soldiers in 2011 (PI Seligman).

U.S. Army Resilience Training of Soldiers in 2010 (PI Seligman).

U.S. Army Resilience Curriculum Development and Training Soldiers in 2009 (PI Seligman).

**Penn Resilience Programs for Penn Students, Faculty, and Staff:** We are delighted to bring our programs to the Penn community. These programs have received positive feedback and word-of-mouth has increased demand, especially during the pandemic. Since the pandemic, we have delivered about 60 resilience programs to more than 1,500 Penn staff, faculty, and students, so they can benefit from these evidence-based programs. We have been delivering programs to:

- Penn Global (Kristyn Palmiotto): One, 3-hour workshop for 30 study abroad leadership from Ivy League schools in FY23.
- Penn Medicine at Home (Joanne M Piscitello): One, 90-minute workshop for about 200 leadership in long-term care communities in FY23.
- Penn Human Resources Work-Life Program (Karen Kille): Six, 90-minute virtual resilience workshop series for 70 faculty and staff in FY23.
- Penn EVP Center (Craig Carnaroli): One, 90-minute resilience workshop for 45 Executive Assistants in EVP Center in FY23.
- Penn Wellness Initiative under Dowd / Sanders Gift Donation (Benoit Dubé): Three, 90-minute resilience workshops for 38 undergraduates in FY23.
- Penn Wrestling (Roger Reina): Four, 90-minute resilience workshops for 44 wrestling students and 6 wrestling coaches in FY23.
- Penn Athletics Wharton Leadership Academy (PAWLA: Rudy Fuller): Five, 90-minute to 2-hour resilience workshops for 285 Penn student-athletes in FY23.
- Wharton Graduate Division (Samuel Jones): One, 90-minute resilience workshop for 31 MBA Career Management staff in FY23.
- Wharton Undergraduate Division (Diana Robertson): Three, 90-minute resilience workshops for 6 students in FY23.
- Wharton Undergraduate Division (Diana Robertson): One, 3-hour resilience workshop for 26 staff in FY23.
  
- Penn Human Resources Work-Life Program (Karen Kille): Six, 90-minute virtual workshop series for 35 faculty and staff in FY21 and 45 in FY22.
- Penn Dental Medicine (Margaret Yang): Six, 90-minute virtual workshop series for 150 Penn Dental Medicine students in FY22.
- Penn School of Medicine (Megan Maxwell): One, 90-minute virtual workshop for 30 Penn Medicine Master's Students in FY22.
- Penn Athletics Wharton Leadership Academy (PAWLA: Rudy Fuller): Five workshops for 350 Penn student-athletes in FY21 and 300 in FY22.
- Penn Executive Vice President (Craig Carnaroli): One-hour virtual presentation for 100 senior administrative leadership speaker series in FY21 (July 2020).
- Penn Provost Centers (Ufuoma Pela): Six, 90-minute virtual workshop series for 20 staff in FY21.
- Penn Division of Human Resources (Jack Heuer): Six, 90-minute virtual workshop series for 75 staff in FY21.
- Penn Development and Alumni Relations (Gretchen Ekeland): Six, 90-minute virtual workshops (3+3) for 100 staff in FY21.
- Penn Graduate School of Education (Emma Grigore): Two, 90-minute virtual workshops for 37 staff in FY21.

- Penn Law School (John Hollway): Two-hour workshop for 4 law school students in FY21.
- Penn School of Medicine (Lisa Bellini, Deborah Driscoll). Five, one-day programs for 203 faculty and physicians in FY18-20.
- Penn Professional and Liberal Education (Nora Lewis): One-day program for 60 staff in FY19.
- Penn Athletics (Rudy Fuller): For 91 coaches in FY19.
- Penn Athletics (Rudy Fuller): Two-semester course for 87 student athletes in FY19.
- Penn Division of Human Resources (Jack Heuer): A two-day program for 30 leadership and 30 staff in FY17-18.
- Penn Wharton MBA Staff (Paula Greenberg): One-day program for 50 staff in FY17 and 30 in FY19.
- Penn Rodin College House (Kathryn McDonald): A 1.5 hour workshop for 20 undergraduate students in January 2019 and 20 in February 2020.
- Penn Division of Finance (Paul Richards): A 2-hour program for 220 staff in FY18.
- Penn Wharton Computing (Scott McNulty): One-day program for 50 leadership and staff in FY18.
- Penn Office of Audit, Compliance, and Privacy (Greg Pellicano). One-day program for 30 staff in FY18.
- Penn School of Social Policy and Practice (Regine Metellus): One-day program for 9 staff in FY18.
- Penn Business Services Division (Marie Witt): A 3-day program for 40 on the leadership team and a one-day program for 120 staff in FY17.
- Penn Division of Public Safety (Maureen Rush): A one-day program for 170 police officers and staff in FY16 (10 cohorts of about 17).
  - In July 2020, Dr. Karen Reivich and the Positive Psychology Center produced a video, “Resilience: Strategies of Optimistic Thinking” for Penn’s Division of Public Safety”. <https://vimeo.com/438684773/afb52085a7>
- [Online resilience course through PLE for Penn staff \(click here for press coverage\).](#)

**Penn Outreach:** The PPC has provided actionable wellness resources for the Penn community:

- Throughout FY21-23, the PPC’s Penn Resilience Program team, under the leadership of Dr. Karen Reivich, has delivered more than 60 resilience workshops to more than 1,500 Penn faculty, staff and students through numerous departments.
- In spring 2023, we offered a virtual six-workshop series in partnership with the Penn Division of Human Resources, which all Penn staff and faculty could sign up to attend.
- On May 22, 2022, Professor Angela Duckworth gave the Commencement speech for the graduating Penn Classes of 2020 and 2021.  
<https://penntoday.upenn.edu/news/oft-delayed-never-deterred-class-2020-and-2021-grads-celebrate-person-commencement/>
- A December 2022 article in Penn Today interviewed Professor James Pawelski about strategies for boosting well-being in the holiday season.  
<https://penntoday.upenn.edu/news/six-tips-happy-holiday-season-positive-psychology/>

## **VI. RESEARCH PUBLICATIONS 2022-2023**

### **Martin E.P. Seligman Publications:**

**Book:** Kellerman, G. and Seligman, M. (2023). *TomorrowMind*. N.Y.: Atria/Simon & Schuster.

Genecov, M. & Seligman, M. (2023). Optimism and pessimism. In D.J. A. Dozois & K. S. Dobson (Eds.), *Treatment of psychosocial risk factors in depression* (pp. 253–280). American Psychological Association. <https://doi.org/10.1037/0000332-012>

Rashid, T., Summers, R.F. & Seligman, M.E.P. (2023). Positive Psychology Model of Mental Function and Behavior. In A. Tasman, M.B. Riba, T.G. Schulze, C.H. Ng, C.A. Alfonso, D. Lecic-Tosevski, S. Kanba, R.D. Alarcon, & D.M. Ndeti (Eds.). *Tasman's Psychiatry* (Fifth Edition). Cham, Switzerland: Springer Nature Switzerland AG.

Kellerman, G.R. & Seligman, M. (2023). Reimagining HR for better well-being and performance. *MIT Sloan Management Review*, Spring 2023 Issue. <https://sloanreview.mit.edu/article/reimagining-hr-for-better-well-being-and-performance/>

Seligman, M. (2023). Memories of Jack. *Journal of Behavior Therapy and Experimental Psychiatry*, Special Issue in Honour of Stanley (Jack) Rachman, 78, <https://doi.org/10.1016/j.jbtep.2022.101798>

Kellerman, G.R. & Seligman, M. (2023). Cultivating the four kinds of creativity. *Harvard Business Review*, January-February Issue. <https://hbr.org/2023/01/cultivating-the-four-kinds-of-creativity/>

Seligman, M. (2023). How to Manage Catastrophic Thinking. *Time*, January 5, 2023. <https://time.com/6244557/catastrophic-thinking-how-to-manage/>

Lester, P.B., Diener, E., & Seligman M. (2022). Top performers have a superpower: Happiness: A large-scale study found that well-being predicts outstanding job performance. *MIT Sloan Management Review*, Spring 2022 Issue. <https://sloanreview.mit.edu/article/top-performers-have-a-superpower-happiness/>

Eubanks, A., Reece, A., Liebscher, A., Ruscio, A.M., Baumeister, R., and Seligman, M. (2022). Pragmatic Prospecion is linked with positive life and workplace outcomes, *PsyArXiv Preprints*, May 17, 2022, <https://psyarxiv.com/af9hj/>

Seligman, M. (2022). Psychological history and predicting the future. *Possibility Studies and Society*, <https://doi.org/10.1177/27538699221128224>

Seligman, M. (2022). The robust benefits of positive psychology interventions: Examining the evidence. *Psychology Today*, September 30. <https://www.psychologytoday.com/us/blog/positive-psychology/202209/the-robust-benefits-positive-psychology-interventions>

### **James Pawelski Publications:**

**Book Series:** Pawelski, J.O. (Series Editor) (2023). *The Humanities and Human Flourishing*. Nine volumes. New York: Oxford University Press.

**Book:** Pawelski, J.O. (Ed.). (under preparation). *The Humanities and Human Flourishing*. New York: Oxford University Press.

**Book:** Tay, L., & Pawelski, J. O. (Eds.) (2022). *The Oxford handbook of the Positive Humanities*. New York: Oxford University Press.



- Cotter, K. N., Rodriguez-Boerwinkle, R. M., Boerwinkle, M., Silvia, P. J., & Pawelski, J. O. (2023). Virtual art visits: Examining the effects of slow looking on well-being in an online environment. *Psychology of Aesthetics, Creativity, and the Arts*. doi:<https://doi.org/10.1037/aca0000548>
- Thapa, S., Vaziri, H., Shim, Y., Tay, L., & Pawelski, J. O. (2023). Development and validation of the mechanisms of engagement in the arts and humanities scales. *Psychology of Aesthetics, Creativity, and the Arts*. doi:10.1037/aca0000556
- Cotter, K. N., & Pawelski, J. O. (2023). Flourishing aims of art museums: A survey of art museum professionals. *Empirical Studies of the Arts*, 41(1), 52-79. doi:10.1177/02762374221118528
- Yaden, D. B., Batz-Barbarich, C. L., Ng, V., Vaziri, H., Pawelski, J. O., & Tay, L. (2022). A meta-analysis of religion/spirituality and life satisfaction. *Journal of Happiness Studies*, 23(11), 4147-4163. doi:10.1007/s10902-022-00558-7
- Pawelski, J. O. (2022). The Positive Humanities: A focus on human flourishing. Invited article for special issue on “The humanities in American life: Transforming the relationship with the public.” *Daedalus*, 151(3), 206-221. Doi:10.1162/daed\_a\_01939
- Pawelski, J. O. (2022). Martin Seligman: Answering the call to help others. *The Journal of Positive Psychology*, 17(2), 143-148. doi:10.1080/17439760.2021.2016914.
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- Waters, L., Cameron, K., Nelson-Coffey, S. K., Crone, D. L., Kern, M. L., Lomas, T., Oades, L., Owens, R. L., Pawelski, J. O., Rashid, T., Warren, M. A., White, M. A., & Williams, P. (2022). Collective wellbeing and posttraumatic growth during COVID-19: How positive psychology can help families, schools, workplaces and marginalized communities. *The Journal of Positive Psychology*, 17(6), 761-789. doi:10.1080/17439760.2021.1940251
- Pawelski, J.O. (2022). Teaching philosophy: The love of wisdom and the cultivation of human flourishing. In J.J. Stuhr (Ed.), *Philosophy and Human Flourishing* (pp. 237-261). New York: Oxford University Press.
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- Pawelski, J.O. (2022). The Positive Humanities: Culture and human flourishing. In L. Tay and J.O. Pawelski (Eds.), *The Oxford handbook of the Positive Humanities* (pp. 17-42). New York: Oxford University Press.
- Pawelski, J.O., & Yaden, D.B. (2022). William James and the quest for meaningful measurement. In S. Marchetti (Ed.), *The Jamesian Mind* (pp. 473-481). Routledge Philosophical Minds Series. New York: Routledge.

### **Angela Duckworth Publications:**

- Buyalskaya, A., Ho, H., Milkman, K. L., Li, X., Duckworth, A. L., & Camerer, C. (2023). What can machine learning teach us about habit formation? Evidence from exercise and hygiene. *Proceedings of the National Academy of Sciences*, 120(17), e2216115120. <https://doi.org/10.1073/pnas.2216115120>
- Park, D., Gunderson, E. A., Maloney, E. A., Tsukayama, E., Beilock, S. L., Duckworth, A. L., & Levine, S. C. (2023). Parental intrusive homework support and math achievement: Does the child’s mindset matter? *Developmental Psychology*. <https://doi.org/10.1037/dev0001522>

- Southwick, D. A., Liu, Z. V., Baldwin, C., Quirk, A. L., Ungar, L. H., Tsay, C. J., & Duckworth, A. L. (2023). The trouble with talent: Semantic ambiguity in the workplace. *Organizational Behavior and Human Decision Processes*, 174, 104223. <https://doi.org/10.1016/j.obhdp.2022.104223>
- Baldwin, C. R., Haimovitz, K., Shankar, P., Gallop, R., Yeager, D., Gross, J. J., & Duckworth, A. L. (2022) Self-Control and SAT outcomes: Evidence from two national field studies. *PLoS ONE*, 17(9), e0274380. <https://doi.org/10.1371/journal.pone.0274380>
- Buttenheim, A., Milkman, K. L., Duckworth, A. L., Gromet, D. M., Patel, M., & Chapman, G. (2022). Effects of ownership text message wording and reminders on receipt of an influenza vaccination: A randomized clinical trial. *JAMA Network Open*, 5(2), 1-9. <https://doi.org/10.1001/jamanetworkopen.2021.43388>
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- Leonard, J. A., Lydon-Staley, D. M., Sharp, S. D. S., Liu, H. Z., Park, A. T., Bassett, D. S., Duckworth, A. L., & Mackey, A. P. (2022). Daily fluctuations in young children's persistence. *Child Development*, 93(2), e222-e236. <https://doi.org/10.1111/cdev.13717>
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