# Anna Woodcock, Ph.D.

Research Faculty,
Psychological Science Department
California State University San Marcos
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#### **Education**

## Ph.D., Social Psychology. Purdue University, 2012

Advisor: Dr. William G. Graziano

Dissertation Topic: Implicit Ingroup Biases and Performance Under Threat: Do Successful Counterstereotypic

Exemplars Help or Harm?

## M.A., Experimental Psychology. California State University, San Marcos (CSUSM), 2004

Advisor: Dr. P. Wesley Schultz

Thesis topic: The Role of Self-Efficacy in Stereotype Threat

B.A., Psychology. Macquarie University, NSW, Australia, 1997

#### Research Interests

My research interests lie in the broad areas of diversity, prejudice and stereotyping. Specifically, I am interested in the contextual factors that promote and reinforce social disparities such as the underrepresentation of women and minorities in science, technology, engineering, and mathematics (STEM) fields. My research focusses on 1) the processes by which identity threat and identity balance operate across time, 2) psychological interventions to increase interest, performance, and persistence in STEM, 3) the role of identity and managing stereotypically incompatible identities on a STEM career, and 4) the role of person and thing orientations in academic choices and success.

#### **Peer Reviewed Publications**

- Pulvers, K., Ridenour, C., Woodcock, A., Savin, M. J., Holguin, G., Hamill, S., & Romero, D. R. (2018). Marijuana use among adolescent multiple tobacco product users and unique risks of dual tobacco and marijuana use. *Drug and Alcohol Dependence*. 10.1016/j.drugalcdep.2018.04.031
- Hernandez, P.R., Woodcock, A, Estrada, M, & Schultz, P.W. (2018). Undergraduate research experiences broaden diversity in the scientific workforce. *BioScience*, 68, 204-211. doi: 10.1093/biosci/bix163
- Hernandez, P.R., Estrada, M, Woodcock, A, & Schultz, P.W. (2017). Protégé perceptions of high mentorship quality depend on shared values more than on demographic match. *The Journal of Experimental Education, 85*(3), 450-468. doi: 10.1080/00220973.2016.1246405.
- Emami, A.S., Woodcock, A., Swanson, H.E., & Kapphahn, T., & Pulvers, K. (2016). Distress tolerance is linked to unhealthy eating through pain catastrophizing, *Appetite*, 107, 454-459. doi: 10.1016/j.appet.2016.08.119
- Bairaktarova, D. & Woodcock, A. (2016). Engineering student's ethical awareness and behavior: A new motivational model. *Science and Engineering Ethics*.

- Woodcock, A., Hernandez, P.R., & Schultz. P.W. (2016). Diversifying science: Programs weaken the effect of chronic stereotype threat on maladaptive achievement goals. *Social Psychological and Personality Science*, *2*, 184-192. doi: 10.1177/1948550615608401.
- Bairaktarova, D. & Woodcock, A. (2015). Engineering ethics education: Aligning practice and outcomes. *IEEE Communications Magazine*. 53(11):18-22
- Woodcock, A. & Bairaktarova, D. (2015). Gender -biased self-evaluations of first-year engineering students. *Journal of Women and Minorities in Science and Engineering, 21,* 255-269. doi: 10.1615/JWomenMinorScienEng.2015013125
- Branch, S. E., Woodcock, A., & Graziano, W.G. (2015). Person orientation and encouragement: Predicting interest in engineering research. *Journal of Engineering Education*, 104, doi: 10.1002/jee.20068
- Estrada, M., Woodcock, A., & Schultz, P.W. (2014). Tailored Panel Management: A theory-based approach to building and maintaining participant commitment to a longitudinal study. *Evaluation* Review. *38,* 3-28. doi: 10.1177/0193841X14524956
- Monteith, M.J., Woodcock, A., & Lybarger, J. E. (2013). Automaticity and control in stereotyping and prejudice: The revolutionary role of social cognition across three decades of research. *Oxford Handbook of Social Cognition*.
- Woodcock, A., & Monteith, M.J. (2013). Creating a link with the self to combat implicit bias. *Group Processes and Intergroup Relations*. 16, 445—461. doi: 10.1177/1368430212459776.
- Woodcock, A., Graziano, W. G., Branch, S. E., Ngambeki, I., & Evangelou, D. (2013). Person and thing orientations:
  Psychological correlates and predictive utility. *Social Psychological and Personality Science, 4*, 117 124. doi: 10.1177/1948550612444320
- Hernandez, P. R., Schultz, P. W., Estrada, M., Woodcock, A., & Chance, R. C. (2013). Sustaining optimal motivation: A longitudinal analysis of personal and contextual predictors of achievement goals. *Journal of Educational Psychology*, 105, 89-107. doi: 10.1037/a0029691
- Woodcock, A., Hernandez, P. R., Estrada, M., & Schultz, P. W. (2012). The consequences of chronic stereotype threat:

  Domain disidentification and abandonment. *Journal of Personality and Social Psychology, 103*, 635-646.

  doi: 10.1037/a0029120
- Woodcock, A., Graziano, W. G., Branch, S. E., Ngambeki, I., & Evangelou, D. (2012). Engineering students' beliefs about research: Sex differences, personality, and career plans. *Journal of Engineering Education*, 101, 495-511.
- Estrada, M., Woodcock, A., Hernandez, P. R., & Schultz, P. W. (2011). Toward a model of social influence that explains minority student integration into the scientific community. *Journal of Educational Psychology,* 103, 206-222. doi: 10.1037/a0020743.
- Graziano, W. G., Habashi, M. M., & Woodcock, A. (2011). Exploring and measuring differences in person-thing orientation. *Personality and Individual Differences*, *51*, 28-33. doi: 10.1016/j.paid.2011.03.004.
- Schultz, P.W., Hernandez, P.R., Woodcock, A., Estrada-Hollenbeck, M., Chance, R.C., Aguilar, M.A., & Serpe, R. (2011). Patching the pipeline: Reducing educational disparities in the sciences through minority training programs. *Educational Evaluation and Policy Analysis*, 33, 95-114. doi: 10.3102/0162373710392371.
- Monteith, M. J., & Woodcock, A. (2009). Modern forms of prejudice. In Levine, J., & Hogg, M. (Eds.) *Encyclopedia of group processes and intergroup relations.* Thousand Oaks, CA: Sage.

Monteith, M. J., Lybarger, J. E. & Woodcock, A. (2009). Schooling the cognitive monster: The role of motivation in the regulation and control of prejudice. *Social and Personality Psychology Compass*, 3, 211-226.

# Manuscripts Under Review

Woodcock, A., Schultz, P.W., Hernandez, P., & Hashemi, M. (under review). Balancing stereotypically compatible and incompatible identities. *Psychological Science*.

# Manuscripts in Preparation

- Woodcock, A., Price, E., De Leon, C, Chen, R-J, & Andreason, C. (in preparation). Balanced Identity Design: A Framework for Understanding How Prospective Science Teachers Balance Identities as Both Teacher and Scientist
- Woodcock, A., Hernandez, P.R., Schultz, P.W. (in preparation). Ten Years of TheScienceStudy: Key Findings about Diversifying the Biomedical Sciences and Future Directions. *American Psychologist*.
- Woodcock, A., Graziano, W. G., (in preparation). *Person and thing orientations: Interest in and comprehension of orientation-congruent material.*
- Woodcock, A. (in preparation). *Implicit ingroup biases and performance under threat: Do successful counterstereotypic exemplars help or harm?*

## **Conference Proceedings**

- Ramanchandran, M., Bairaktarova, D., Woodcock, A., and Baweren, O. An Exploratory Study to Predict Ethical Awareness using Linguistics Inquiry and Word Count. *Proceedings of the 122th ASEE Annual Conference and Exposition,* June 13-17, 2015, Seattle, Washington.
- Bairaktarova, D. and Woodcock. A. The Role of Personality Factors in Engineering' students Ethical Decisions.

  \*Proceedings of IEEE Conference on Engineering Ethics, May 21-23, 2014, Chicago, Illinois.
- Bairaktarova D., Evangelou, D., Woodcock, A., Graziano, W.G. The Role of Personality Factors in Engineering Students Ethical Decisions. *Proceedings of 40th European Society for Engineering Education (SEFI) Annual Conference*, Thessaloniki, Greece, 23 26 September, 2012.

Invited Talks	
Summer 2017	Gordon Research Confernce on Undergraduate Biology Education Research!
Spring 2016	CSUSM OTRES Seminar Series. "Aligning Identities to Broaden Participation in STEM"
Fall 2014	Activist San Diego and the United Nations Association Panel: The Many Faces of Violence Against Women. Panelist: "Implicit Gender Bias and Violence Against Women"
Fall 2013	University of Texas, Pan American, Awesome Investigator Research Hour. "Diversifying Science: Minority Training Programs and Why They Work"
Fall 2012	American Psychological Association, Women with Disabilities in STEM Education Research Agenda Development Project (WWDSE) Experts Workshop. Panelist: "Implicit Bias"
Spring 2010	Purdue University School of Engineering Education Seminar Series. "Examining the Exodus: Measuring Women's Socialization into STEM"

Spring 2008 Purdue University Social Psychology Brownbag Series. "Exploring the Moderating Effects

of Self-Efficacy on Stereotype Threat"

Fall 2005 & 2006 Palomar College: Information Sources and Resources (LT 120). "Finding, Using, and,

Presenting Statistics and Data Resources"

### **Presentations**

#### 2017

Woodcock, A., Hernandez, P. R., Estrada, M., &Schultz, P. W. (February, 2017). *Broadening the scientific workforce through long-term high intensity undergraduate research experiences*. Paper presented at the annual Understanding Interventions conference, San Antonio, Texas.

#### 2016

- Hernandez, P. R., Woodcock, A., Estrada, M., Schultz, P. W. (February, 2016). *Undergraduate research experiences: A longitudinal assessment.* Paper presented at the annual Understanding Interventions conference, Philadelphia, PA.
- Hernandez, I. A., Andreason, C., Quartucci, S., Nare, T., Shepherd, A., Woodcock, A., Hernandez, P. R., Estrada, M., Schultz, P. W. (2016, January). *Aligning identities to reduce stereotype threat.* Poster presented at the 17th annual meeting of the Society for Personality and Social Psychology, San Diego, CA.

#### 2015

- Ramachandran, M, Bairaktarova, D, & Woodcock, A. (June, 2015). *Differences in ethical decision making between experts and novices: A comparative study.* Paper submitted for presentation at the 122<sup>nd</sup> annual American Society for Engineering Education conference, Seattle, WA.
- Lawson, M. A., Woodcock, A., Johnson, A.M., Schultz, P. W., McGee, R., & Anderson, S M. (May, 2015). *Re-assessing what works-A novel approach to measuring efficacy and early findings from a broad intervention partnership.* Paper accepted for presentation at the 7<sup>th</sup> Annual Conference on Understanding Interventions, San Diego, CA.
- Woodcock, A, Hernandez, P. R., & Schultz, P.W. (May, 2015). *Diversifying science: Programs weaken the effect of chronic stereotype threat on maladaptive achievement goals.* Paper accepted for presentation at the 7<sup>th</sup> Annual Conference on Understanding Interventions, San Diego, CA.
- Woodcock, A, & Graziano, W.G. (May, 2015). *Diversifying STEM: Attracting person and thing-oriented people*. Poster accepted for presentation at the 7<sup>th</sup> Annual Conference on Understanding Interventions, San Diego, CA.
- Woodcock, A., & Bairaktarova, D. (February, 2015). *Gender differences in engineering students' self-evaluations.*Poster presented at the 16<sup>th</sup> annual meeting of the Society for Personality and Social Psychology, Long Beach, CA.
- Watson, L.A., Audish, M.H., Huerta, M.A., Woodcock, A., Estrada, M., Hernandez, P.R., & Schultz, P.W. (February, 2015). *Patching the academic pipeline: Minority training programs impact success and persistence.* Poster presented at the 16<sup>th</sup> annual meeting of the Society for Personality and Social Psychology, Long Beach, CA.

#### 2014

Hernandez, P. R., Estrada, M., Woodcock, A., & Schultz, P. W. (October, 2014). *Mentor qualities that matter: The importance of perceived (not demographic) similarity.* Poster presented at the 7th Annual Mentoring conference, Albuquerque, NM.

- Graziano, W.G., & Woodcock, A. (September, 2014). Interest and persistence *in STEM: The case for person and thing Orientations.* Poster presented at Integrating Cognitive Science with Innovative Teaching in STEM Disciplines conference, St. Louis, MO.
- Bairaktarova, D., & Woodcock, A. (June, 2014). *The role of motivation in engineering students' ethical decisions.*Paper presented at the 2014 IEEE International Symposium on Ethics in Engineering, Science, and Technology, Chicago, IL.
- Lawson, M. A., Woodcock, A., Johnson, A., Schultz, P. W., McGee, R., & Anderson, S. M. (May, 2014). *The endocrine network for undergraduate research and career development opportunities: A model for broad training partnerships.* Paper presented at the 6<sup>th</sup> Annual Conference on Understanding Interventions, Baltimore, MD.
- Hernandez, P. R., Woodcock, A., Estrada, M., Aguilar, Gonzales, B., Flores, L., Quartucci, S., & Schultz. P. W. (February, 2014). *Weathering the storm: STEM training programs buffer minority students from the negative outcomes, but not the experience, of stereotype threat.* Poster presented at the 15<sup>th</sup> annual meeting of the Society for Personality and Social Psychology, Austin, TX.
- Woodcock, A., Graziano, W.G., Flores, L., & Gonzales, B. (February, 2014). *Attracting person and thing oriented people to STEM.*Poster presented at the 15<sup>th</sup> annual meeting of the Society for Personality and Social Psychology, Austin, TX.

#### 2004 - 2013

Available upon request

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CSUSM	Social Psychology Laboratory (PSYC 396)
CSUSM	Graduate Statistics (PSYC 520)
CSUSM	Intro. Statistics in Psychology (PSYC 220)
CSUSM	Psychology of Prejudice (PSYC 333)
CSUSM	Social Psychology (PSYC 332)
Purdue University	Stereotyping & Prejudice (PSY 33500)

# **Statistical Training**

Applied Regression	Purdue University
Factor Analytic Procedures	Purdue University
Multivariate Analysis in Organizational Research	Purdue University
Structural Equation Modeling	Purdue University
Fundamentals of Using R	The Georgia R School
Structural Equation Modeling (SEM) in Longitudinal Research	American Psychological Assoc. Adv. Institute
Hierarchical Linear Modeling (HLM)	Data Analysis Training Institute of Connecticut
Hierarchical Linear Modeling (HLM) Workshop	Scientific Software International
Longitudinal Research	The CALDAR/UCLA Summer Institute

## **Active Research Support**

- Schultz, P.W., & Woodcock, A. (2019-2024). Becoming a Scientist: A Longitudinal Study of Identity Balance and the Persistence of Hispanic Undergraduate Students in Engineering and Biological Sciences. National Science Foundation \$1,900,000.
- Schultz, P.W., Woodcock, A., & Hernandez, P.R. (2017-2019) Developing a Measure of STEM Identity and Balance \$300,000. National Science Foundation, \$300,000.
- Hernandez, A. (2016-2021) Researcher. ACCEPT: Aligning the Common Core for English learners. U.S.
   Department of Education. \$ 2,560,603

# Completed Research Support

- Ouyang, Y., Ochanji, M. & Woodcock, A, (2016-2019) Co-Pi. Inspiring commitment for a STEM career path through extended women's hackathon. National Science Foundation. \$1,199,971
- Schultz, P. W., & Woodcock, A. (2015 —2018). Co-PI. IMAGE program research evaluation. American Society for Biochemistry and Molecular Biology. National Science Foundation. \$150,254
- Schultz, P. W., & Woodcock, A. (2012—2016). Co-Pl. Minority access program evaluation. Endocrine Society.
   National Institute of General Medical Sciences. \$115,629
- CSUSM Faculty Development Grant (2014-2015). \$750
- American Psychological Association of Graduate Students (APAGS) Basic Psychological Research Grant honorable mention (2011)
- Society for the Psychological Study of Social Issues (SPSSI) Grant-in-Aid Award, \$1,000 (2011)
  - Department of Psychological Sciences award match \$1,000 (2011)
- Society for the Psychological Study of Social Issues (SPSSI) Grant-in-Aid Award, \$900 (2010)
  - Department of Psychological Sciences award match \$900 (2010)
- Psychological Sciences Graduate Student Grant. Using Counter-Stereotypic Affirmation Training to Reduce the Impact of Stereotype Threat. \$1,500. (2008)
- Co-writer and data support: Capacity Building Grant for Associate Degree Registered Nursing (ADN).
   California Community College Chancellor's Office. \$390,000. Judith Elkhart (2006-2009) Director.
- Co-writer. A nationwide study of the RISE program. National Institutes of Health, National Institute of General Medical Sciences. R01-GM075316. \$1,770,120. Schultz, P. W. (2005-2009) PI.

#### **Research Positions**

2012 — present	Research Faculty, Psychology Department, California State University San Marcos
2007-2012	Graduate Research Assistant, Department of Psychological Sciences, <i>Purdue</i> University
2004 — 2007	Institutional Research Analyst, <i>Palomar College</i>
2004 - 2012	Researcher III/Project Coordinator, California State University San Marcos
2003-2004	GEAR-UP Grant Program Evaluator, <i>Palomar College</i>
2002-2004	Graduate Research Assistant, California State University San Marcos
2002	Institutional Research Analyst (internship), Palomar College

#### Service

- O CHABSS Diversity Working Group Lecture faculty committee member
- Annual research competition/symposium judge 2012-2018
- Thesis committee member
  - Cliff Ridenour, Psychology, The Role of Resilience in Stress Response among Mexican-American and Non-Hispanic White College Students (successfully defended January 2019)
  - Rodolfo Rodriguez, Psychology, The War in the Valley: Farm Labor Organizing in a Hostile Anti-Union Environment (successfully defended November 2018)
  - Sarah De bellis, Psychology, The Role of Marijuana Use in the Relationship between Stress Response and Cognitive Functioning (successfully defended September 2018)
  - Kathryn Layton, Psychology, Day-to-Day Associations Between Anxiety and Impairment in Preschool-Aged Children (successfully defended July 2018)
  - O Donna Herd, Psychology, *The impact of humanizing information and prior contact on willingness to help and attitudes toward children with severe disabilities* (successfully defended February 2018)
  - Karli Chudeau, Psychology, The Physical and Behavioral Effects of Enrichment in Rehabilitating Eastern Pacific Harbor Seals (Phoca vitulina richardi) (successfully defended May 2017)
  - Myra Jane Rice, Psychology, Effects of Marijuana Use on Smokers Switching to Electronic Cigarettes
- Dissertation committee member
  - Debbie DeRoma, Psychology, Interpreting Motivational Challenges in the Science Classroom: Understanding the Relationship Between Preservice Teachers' Beliefs, Attributions, and Practices. (successfully defended October 2019)

# Service to Scientific Community

#### Journals: Ad hoc reviewer

- Journal of Experimental Social Psychology
- Personality and Social Psychology Bulletin
- Psychological Assessment
- Psychological Bulletin
- Sleep Medicine
- Sociological Perspectives
- Learning and Individual Differences

- Social Psychology Quarterly
- Journal of Engineering Education
- CBE--Life Sciences Education
- Social Psychology
- Social Behavior and Personality
- Sex Roles

#### Grant reviewer:

- NSF, Division of Research on Learning Panel Reviewer
- NSF Social Psychology directorate Ad Hoc
- NSF iTest Panel Reviewer

## Conferences: Submission reviewer

2015-2017 Society for Personality and Social Psychology (SPSP) conference - Graduate Student Poster Award

- 2014 Society for the Psychological Study of Social Issues (SPSSI) conference
- 2014 & 2015 Western Psychological Association (WPA) meetings
- 2014 Society for the Psychological Study of Social Issues (SPSSI) program at APA convention
- 2011 Society for Personality and Social Psychology (SPSP) conference Student Poster Award
- 2010 Gender and Science, Technology, Engineering and Mathematics (STEM) Research Symposium, Purdue University

## **Honors & Awards**

2016	Understanding Interventions, Adolphus Toliver "Tol" Award. In recognition of exemplary work in understanding interventions that broaden participation in science careers.
2014	Understanding Interventions Travel Award (\$800). 6th Annual Conference on Understanding Interventions That Broaden Participation in Research Careers, Baltimore, MD.
2011	Understanding Interventions Travel Award (\$800). 4th Annual Conference on Understanding Interventions That Broaden Participation in Research Careers, Nashville, TN.
2009	SPSP Student Travel Award (\$500). Annual meeting of the Society for Personality and Social Psychology, Tampa. FL.
2004	CSUSM Student Travel Award. Annual meeting of the Society for Personality and Social Psychology, Austin, TX.
1989 & 1990	University of Western Sydney: CEO/Vice Chancellor's Letter to top students in B.A. program

#### **Corporate Positions**

1998- 2000	Group Marketing Manager, Australia & New Zealand, <i>The Bradford Exchange</i>
1997-1998	Database & Website Information Manager, Australian Tourist Commission
1995-1997	Marketing & Operations Manager, Study Tours & Conventions Divisions, <i>Australian Investment Conferences</i>
1993-1995	Marketing & Communications Executive, Australia & New Zealand, <i>Nu Skin Personal Care Australia</i>

# **References**

William G. Graziano, Ph.D.

Professor

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Purdue University

P. Wesley Schultz, Ph.D.

Professor of Psychology

Dean of Graduate Studies and VP of Research

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