



Exponent®
Engineering & Scientific Consulting

Karol Silva, Ph.D., M.P.H.

Managing Scientist | Human Factors
Philadelphia
+1-215-594-8907 | ksilva@exponent.com

Professional Profile

Dr. Karol Silva is a developmental psychologist who specializes in work related to the role of cognition and development in accidents and injuries.

At Exponent, Dr. Silva applies her expertise to the investigation of human factors and human performance in a wide range of contexts and settings, including pedestrian behavior, trip and falls, warnings evaluation, and driver behavior. Dr. Silva also evaluates injuries involving children and adolescents and addresses the role of parenting practices and behavior in child development and injury. Additionally, she has published on the effects of fatigue on decision-making, attention, and reward-seeking behavior and applies this expertise to her evaluation of human factors across different contexts. As a certified playground safety inspector, Dr. Silva is trained to identify hazards in playground and assess and categorize hazards according to injury potential. She conducts similar evaluations of consumer products and conducts product usability studies to examine how children and adult users interact with products and environments. For example, she has assisted clients in determining whether products and/or product packages are child resistant.

Dr. Silva worked as a public health researcher conducting qualitative and quantitative research on prescription drug misuse, overdose and overdose prevention, and the relationship between surgeons' clinical experience and quality of care and outcomes. She uses her public health background to help clients design and evaluate interventions to address knowledge gaps and operational concerns in healthcare settings.

Academic Credentials & Professional Honors

Ph.D., Psychology, Temple University, 2017

M.P.H., Public Health, Brown University, 2009

B.A., Psychology, Rutgers University, 2007

Eugene Walker Postdoctoral Fellow Award, Society of Pediatric Psychology, 2019

Outstanding Trainee Research Award, Society of Pediatric Psychology, 2019

Biomedical Postdoctoral Program Award, University of Pennsylvania, 2019

Loan Repayment Award, National Institute of Health, 2018-2020

Dissertation Completion Grant Award, Temple University, 2017

Tuition Scholarship Award, Brown University, 2007-2009

Henry Rutgers Honors Scholar, Rutgers University, 2007

Licenses and Certifications

Certified Playground Safety Inspector (CPSI)

Academic Appointments

Lecturer, School of Social Policy and Practice, University of Pennsylvania, 2018-2020

Adjunct Faculty, School of Public Health, Drexel University, 2018

Graduate Teaching Assistant, Psychology, Temple University, 2012, 2016

Prior Experience

Postdoctoral Research Fellow, Children's Hospital of Philadelphia, 2017-2020

Graduate Researcher, Temple University, 2013-2017

Research Assistant, Drexel University, 2010-2012

Program Coordinator, Miriam Hospital, 2008-2009

Research Assistant, Healthcentric Advisors, 2007-2008

Research Fellow, Institute of Health, Healthcare Policy, and Aging Research, 2006-2007

Professional Affiliations

Society of Research in Child Development

Society of Pediatric Psychology

Society of Adolescent Health and Medicine

Languages

Spanish

Publications

Silva K. The Teen Brain. In K.R., Ginsburg, & Z., McClain (Eds.), Reaching teens: Strength-based communication strategies to build resilience and support healthy adolescent development (2nd ed). Chicago, IL: American Academy of Pediatrics.

Silva, K., Robles, R.J., Friedrich, E., Thiel Fisher, M., Ford, C., & Miller, V.A. (2021). Stereotyped beliefs about adolescents and parent and teen well-being: The Role of parent-teen communication. *Journal of Early Adolescence*, 41(6).

Friedrich, E., Robles, R., Silva, K., Fisher-Thiel, M., Ford, C., & Miller, V.A. (2021). Feasibility and

acceptability of a novel primary care-based intervention to promote parent-teen communication about teen strengths. *Journal of Primary Prevention*, 42, 163-181.

Silva, K., Ford, C., & Miller, V.A. (2020). Daily parent-teen conflict and parent and adolescent well-being: The moderating role of daily and person-level warmth. *Journal of Youth and Adolescence*, 49, 1601-1616.

Miller, V.A., Silva, K., Friedrich, E., Robles, R.J., Ford, C. (2020). Efficacy of a primary care-based intervention to promote parent-teen communication and well-being: A randomized controlled trial. *Journal of Pediatrics*, 222, 200-206.

Silva, K., & Miller, V.A. (2020). Does self-efficacy mediate the link between impulse control and diabetes adherence from late childhood to late adolescence? A longitudinal mediation analysis. *Journal of Pediatric Psychology*, 45(4), 445-453.

Silva, K., Chein, J., & Steinberg, L. (2020). The influence of romantic partners on male risk taking. *Journal of Social and Personal Relationships*, 37(4), 1405-1415.

Silva, K., & Miller, V.A. (2019). Parenting and the development of impulse control in youth with type 1 diabetes: The mediating role of negative affect. *Applied Developmental Science*, 26(1), 94-108.

Silva, K., & Miller, V.A. (2019). The role of cognitive and psychosocial maturity in type 1 diabetes management. *Journal of Adolescent Health*, 64, 622-630.

Duell, N., Icenogle, G., Silva, K., Chein, J., Steinberg, L., et al. (2018). A cross-section examination of response inhibition and working memory on the Stroop task. *Cognitive Development*, 47, 19-31.

Silva, K., Patrianakos, J., Chein, J., & Steinberg, L. (2017). Joint effects of peer presence and fatigue on risk and reward processing in late adolescence. *Journal of Youth & Adolescence*, 46, 1878-1890.

Silva, K., Chein, J., Steinberg, L. (2016). Adolescents in peer groups make more prudent decisions when a slightly older adult is present. *Psychological Science*, 27, 322-330.

Shulman, E.P., Smith, A.R., Silva, K., Icenogle, G., Duell, N., Chein, J., Steinberg, L. (2016). The Dual Systems Model: Review, Reappraisal, and Reaffirmation. *Developmental Cognitive Neuroscience*, 17, 103-117.

Silva, K., Shulman, E.P., Chein, J., Steinberg, L. (2015). Peers increase adolescents' exploratory behavior and sensitivity to positive and negative feedback. *Journal of Research on Adolescence*, 26, 696-705.

Kecojevic, A., Silva, K., Shell, R.L., Lankenau, S.E. (2015). Prescription drug misuse and sexual risk behaviors among young men who have sex with men (YMSM) in Philadelphia. *AIDS and Behavior*, 19, 847-856.

Lankenau, S.E., Kecojevic, A., Silva, K. (2015). Associations between prescription opioid injection and hepatitis C virus among young injection drug users. *Drugs: Education, Prevention, and Policy*, 22, 35-42.

Schrager, S.M., Kecojevic, A., Silva, K., Jackson Bloom, J., Iverson, E., Lankenau, S.E. (2014). Correlates and consequences of opioid misuse among high-risk youth. *Journal of Addiction*.

Silva, K., Lankenau, S.E., Kecojevic, A. (2013). Perceived drug use functions and risk-reducing practices among young prescription polydrug users. *Journal of Drug Issues*, 43, 483-496.

Silva, K., Schrager, S.M., Kecojevic, A., Lankenau, S.E. (2013). Factors associated with history of non-fatal overdose among young nonmedical users of prescription drugs. *Drug and Alcohol Dependence*, 128, 104-110.

Wong, C.F., Silva, K., Kecojevic, A., Schrager, S.M., Jackson Bloom, J., Iverson, E., Lankenau, S.E. (2013). Coping and emotion regulation profiles and patterns of nonmedical prescription drug and illicit drug use among high-risk young adults. *Drug and Alcohol Dependence*, 132, 165-171.

Lankenau, S.E., Wagner, K., Silva, K., Kecojevic, A., Iverson, E., McNeely, M., & Kral, A. (2013). Injection drug users trained by overdose prevention programs: Responses to witnessed overdoses. *Journal of Community Health*, 38, 133-141.

Johnson, K., Fibbi, M., Langer, D., Silva, K., & Lankenau, S.E. (2013) Prescription drug misuse and risk behaviors among young injection drug users. *Journal of Psychoactive Drugs*, 45, 112-121.

Fibbi, M., Silva, K., Johnson, K., Langer, D., Lankenau, S.E. (2012). Denial of pain medication among young adults with histories of opioid misuse. *Pain Medicine*, 13, 1040-1048.

Lankenau, S.E., Teti, M., Silva, K., Jackson Bloom, J., Harocopos, A., Treese, M. (2012). Initiation into prescription opioid misuse among young injection drug users. *International Journal of Drug Policy*, 23, 37-44.

Lankenau, S.E., Schrager, S.M., Silva, K., Kecojevic, A., Jackson Bloom, J., Wong, C.F., Iverson, E. (2012). Misuse of prescription and illicit drugs among high-risk young adults in Los Angeles and New York. *Journal of Public Health Research*, 1, 22-30.

Lankenau, S.E., Teti, M., Silva, K., Jackson Bloom, J., Harocopos, A., Treese, M. (2012). Patterns of prescription drug misuse among young injection drug users. *Journal of Urban Health*, 89, 1004-1016.

Kecojevic, A., Schrager, S.M., Wong, C., Silva, K., Jackson Bloom, J., Lankenau, S.E. (2012). Initiation into prescription drug misuse: Differences between lesbian, gay, bisexual, transgender (LGBT) and heterosexual high-risk young adults in Los Angeles and New York City. *Addictive Behaviors*, 37, 1289-1293.

Presentations

Silva K, Torres RJ, Friedrich E, Fisher Thiel M, Ford CA, Miller VA. Associations between parental beliefs about adolescence, parent-teen communication, and psychological well-being. Oral platform presentation, Society of Pediatric Psychology annual conference. New Orleans, LN, 2019.

Silva K, Miller VA. Parenting and the development of impulse control: The mediating role of negative affect. Poster presentation, Society for Research in Child Development biennial meeting. March Baltimore, MD, 2019.

Silva K, Chein J, Steinberg L. Cognitive fatigue increases risk-taking and reward sensitivity without affecting ability to learn from negative consequences. Poster presentation, Society for Research on Adolescence annual meeting. Baltimore, MD, 2016.

Silva K, Shulman EP, Chein J, Steinberg L. Peers increase adolescents' exploratory behavior and sensitivity to positive and negative feedback. Poster presentation, Association for Psychological Science conference. New York City, NY, 2015.

Peer Reviews

Journal of Cognition and Development

Journal of Pediatric Psychology

Journal of Research on Adolescence

Drug and Alcohol Dependence