

Shandell Pahlen, Ph.D.

University of Colorado, Boulder

July 2024

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Education

Ph.D., Developmental Psychology, 2022

Subfield Specialization: Quantitative Psychology, 2022

Dissertation Title: The Influence of Smoking Behavior on Cognitive Functioning Approaching Midlife

University of California, Riverside

Chair: Dr. Chandra Reynolds

M.A., Developmental Psychology, 2018

University of California, Riverside

Advisor: Dr. Chandra Reynolds

B.S., Psychology, 2011

University of Minnesota, Twin Cities

Current Employment

Postdoctoral Associate, July 2023*Institute for Behavioral Genetics- University of Colorado, Boulder*

Supervisor: Dr. Chandra Reynolds

Honors and Awards

Associate Member Travel Fellowship for Behavior Genetic Association, 2019	\$150
Associate Member Travel Fellowship for Behavior Genetic Association, 2018	\$250
Associate Member Travel Fellowship for Behavior Genetic Association, 2017	\$250
Chancellor's Distinguished Fellowship, 2016-2017	\$20,000
Golden Key International Honor Society, 2011	N/A

First Authored Published Manuscript

Pahlen, S., Hamdi, N.R., Dahl Aslan, A.K., Horwitz, B.N., Panizzon, M.S., Petersen, I., ... & McGue, M. (2018)Age-moderation of genetic and environmental contributions to cognitive functioning in mid- and late-life for specific cognitive abilities. *Intelligence*, 68, 70-81.**Published Manuscripts**

*Indicates mentorship role of listed undergraduate or post-baccalaureate individuals

Zheng, A., **Pahlen, S.**, Vo, T. T., Lawrence, F., Dungore, F., Lor, E., Bowman, N. D., Corley, R. P., Friedman, N. P., Wadsworth, S. J., Reynolds, C. A. (In Press). A genetically and environmentally informed study of digital screen time, video game play, and impulsivity in early adulthood. *Computers in Human Behavior*.

- Bruellman, R., **Pahlen, S.**, Ellingson, J., Corley, R. P., Wadsworth, S. J., & Reynolds, C. A. (Revise & Resubmit). Activity and sitting-time associations with cholesterol ratio and BMI in adults approaching midlife: Aging implications. *PLOS ONE*
- Luna*, M., **Pahlen, S.**, Corley, R. P., Wadsworth, S., & Reynolds, C. A. (2023). Frailty and Processing Speed Performance at the Cusp of Midlife in CATSLife. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*
- Luczak, S. E., Beam, C. R., **Pahlen, S.**, Lynch, M., Pilgrim, M., Reynolds, C. A., Panizzon, M. S., & Gatz, M.; for the IGEMS Consortium (2023). Remember This: Age Moderation of Genetic and Environmental Contributions to Episodic Memory from Midlife through Late Adulthood. *Intelligence*, 99.
- Silventoinen, K., Li, W., Jelenkovic, A., Sund, R., Yokoyama, Y., Aaltonen, S., ... **Pahlen, S.**, ... & Kaprio, J. (2022). Changing genetic architecture of body mass index from infancy to early adulthood: an individual based pooled analysis of 25 twin cohorts. *International Journal of Obesity*, 1-9.
- Vo, T. T., **Pahlen, S.**, Kremen, W. S., McGue, M., Aslan, A. D., Nygaard, M., Christensen, K., & Reynolds, C. A. (2022). Does sleep duration moderate genetic and environmental contributions to cognitive performance? *Sleep*, 45(10).
- Phillips, D. M., Finkel, D., Petkus, A. J., Muñoz, E., **Pahlen, S.**, Johnson, W., ... & Pedersen, N. (2022). Longitudinal analyses indicate bidirectional associations between loneliness and health. *Aging & Mental Health*, 1-9.
- Finkel, D., Zavala, C., Franz, C. E., **Pahlen, S.**, ... & Whitfield, K. E. (2022) Financial strain moderates genetic influences on self-rated health: Support for diathesis-stress model of gene-environment interplay. *Biodemography and Social Biology*, 67(1), 58-70.
- Whitsel, N., Reynolds, C. A., Buchholz, E. J., **Pahlen, S.**, Pearce, R. C., Hatton, S. N., ... & Franz, C. E. (2022). Long-term Associations of cigarette smoking in early midlife with predicted brain aging from midlife to late life. *Addiction*.
- Silventoinen, K., Bogl, L. H., Jelenkovic, A., Vuoksimaa, E., Latvala, A., Li, W., ... **Pahlen, S.**, ... & Kaprio, J. (2021). Educational attainment of same-sex and opposite-sex dizygotic twins: An individual-level pooled study of 19 twin cohorts. *Hormones and Behavior*, 136, 1-6.
- Gustavson, D. E., Panizzon, M. S., Kremen, W. S., Reynolds, C. A., **Pahlen, S.**, Nygaard, M., ... & Franz, C. E. (2021). Genetic and Environmental Influences on Semantic Verbal Fluency Across Midlife and Later Life. *Behavior Genetics*, 51(2), 99-109.
- Silventoinen, K., Jelenkovic, A., Sund, R., Latvala, A., Honda, C., Inui, F., ... **Pahlen, S.**, ... & Busjahn, A. (2020). Genetic and environmental variation in educational attainment: An individual-based analysis of 28 twin cohorts. *Scientific Reports*, 10(1), 1-11.
- Jelenkovic, A., Sund, R., Yokoyama, Y., Latvala, A., Sugawara, M., Tanaka, M., ... **Pahlen, S.**, ... & Mankuta, D. (2020). Genetic and environmental influences on human height from infancy through adulthood at different levels of parental education. *Scientific Reports*, 10(1), 1-11.

- Silventoinen, K., Jelenkovic, A., Latvala, A., Yokoyama, Y., Sund, R., Sugawara, M., ... **Pahlen, S.**, ... & Freitas, D. L. (2019). Parental education and genetics of BMI from infancy to old age: A pooled analysis of 29 twin cohorts. *Obesity*, 27(5), 855-865.
- Silventoinen, K., Jelenkovic, A., Yokoyama, Y., Sund, R., Sugawara, M., Tanaka, M., ... **Pahlen, S.**, ... & Hjelmberg, J. V. B. (2019). The CODATwins Project: The current status and recent findings of Collaborative project of Development of Anthropometrical measures in Twins. *Twin Research and Human Genetics*, 22(6), 800-808.
- Jelenkovic, A., Mikkonen, J., Martikainen, P., Latvala, A., Yokoyama, Y., Sund, R., ... **Pahlen, S.**, ... & Lee, J. (2018). Association between birth weight and educational attainment: An individual-based pooled analysis of nine twin cohorts. *Journal of Epidemiology and Community Health*, 72(9), 832-837.
- Jelenkovic, A., Sund, R., Yokoyama, Y., Hur, Y. M., Ullemar, V., Almqvist, C., ... **Pahlen, S.**, ... & Bogl, L. H. (2018). Birth size and gestational age in opposite-sex twins as compared to same-sex twins: An individual-based pooled analysis of 21 cohorts. *Scientific Reports*, 8(1), 1-8.
- Jelenkovic, A., Yokoyama, Y., Sund, R., Hur, Y. M., Harris, J. R., Brandt, I., ... **Pahlen, S.**, ... & Magnusson, P. K. (2018). Associations between birth size and later height from infancy through adulthood: An individual based pooled analysis of 28 twin cohorts participating in the CODATwins project. *Early Human Development*, 120, 53-60.
- Yokoyama, Y., Jelenkovic, A., Hur, Y. M., Sund, R., Fagnani, C., Stazi, M. A., ... **Pahlen, S.**, ... & Knafo-Noam, A. (2018). Genetic and environmental factors affecting birth size variation: a pooled individual-based analysis of secular trends and global geographical differences using 26 twin cohorts. *International Journal of Epidemiology*, 47(4), 1195-1206.
- Bogl, L. H., Jelenkovic, A., Vuoksimaa, E., Ahrenfeldt, L., Pietiläinen, K. H., Stazi, M. A., ... **Pahlen, S.**, ... & Silberg, J. L. (2017). Does the sex of one's co-twin affect height and BMI in adulthood? A study of dizygotic adult twins from 31 cohorts. *Biology of Sex Differences*, 8(1), 1-12.
- Silventoinen, K., Jelenkovic, A., Latvala, A., Sund, R., Yokoyama, Y., Ullemar, V., ... **Pahlen, S.**, ... & Kandler, C. (2017). Education in Twins and Their Parents Across Birth Cohorts Over 100 years: An Individual-Level Pooled Analysis of 42-Twin Cohorts. *Twin Research and Human Genetics*, 20(5), 395-405.
- Silventoinen, K., Jelenkovic, A., Sund, R., Yokoyama, Y., Hur, Y. M., Cozen, W., ... **Pahlen, S.**, ... & Iwatani, Y. (2017). Differences in genetic and environmental variation in adult BMI by sex, age, time period, and region: an individual-based pooled analysis of 40 twin cohorts. *The American Journal of Clinical Nutrition*, 106(2), 457-466.
- Jelenkovic, A., Yokoyama, Y., Sund, R., Pietiläinen, K. H., Hur, Y. M., Willemsen, G., ... **Pahlen, S.**, ... & Stazi, M. A. (2017). Association between birthweight and later body mass index: an individual-based pooled analysis of 27 twin cohorts participating in the CODATwins project. *International Journal of Epidemiology*, 46(5), 1488-1498.
- Wright, Z. E., **Pahlen, S.**, & Krueger, R. F. (2017) Genetic and environmental influences on DSM-5 maladaptive

personality traits. *Journal of Abnormal Psychology*, 126(4), 416-428.

- Jelenkovic, A., Sund, R., Hur, Y. M., Yokoyama, Y., Hjelmborg, J. V. B., Möller, S., ... **Pahlen, S.**, ... & Aaltonen, S. (2016). Genetic and environmental influences on height from infancy to early adulthood: An individual-based pooled analysis of 45 twin cohorts. *Scientific Reports*, 6(1), 1-13.
- Jelenkovic, A., Hur, Y. M., Sund, R., Yokoyama, Y., Siribaddana, S. H., Hotopf, M., ... **Pahlen, S.**, ... & Pang, Z. (2016). Genetic and environmental influences on adult human height across birth cohorts from 1886 to 1994. *Elife*, 5.
- Silventoinen, K., Jelenkovic, A., Sund, R., Hur, Y. M., Yokoyama, Y., Honda, C., ... **Pahlen, S.**, ... & Ji, F. (2016). Genetic and environmental effects on body mass index from infancy to the onset of adulthood: an individual-based pooled analysis of 45 twin cohorts participating in the COllaborative project of Development of Anthropometrical measures in Twins (CODATwins) study. *The American Journal of Clinical Nutrition*, 104(2), 371-379.
- Jelenkovic, A., Yokoyama, Y., Sund, R., Honda, C., Bogl, L. H., Aaltonen, S., ... **Pahlen, S.**, ... & Kim, B. (2015). Zygosity Differences in Height and Body Mass Index of Twins From Infancy to Old Age: A Study of the CODATwins Project. *Twin Research and Human Genetics*, 18(05), 557-570.
- Silventoinen, K., Jelenkovic, A., Sund, R., Honda, C., Aaltonen, S., Yokoyama, Y., ... **Pahlen, S.**, ... & Skytthe, A. (2015). The CODATwins Project: The cohort description of collaborative project of development of anthropometrical measures in twins to study macro-environmental variation in genetic and environmental effects on anthropometric traits. *Twin Research and Human Genetics*, 18(4), 348-360.
- Suzuki, T., Samuel, D. B., **Pahlen, S.**, & Krueger, R. F. (2015). DSM-5 alternative personality disorder model traits as maladaptive extreme variants of the five-factor model: An item-response theory analysis. *Journal of Abnormal Psychology*, 124(2), 343.

Book Chapter

- Pahlen, S.** & Reynolds, C. A. (2020) Gene-environment interplay. In Benson, J. (Ed.), *Encyclopedia of infant and early childhood development* (2nd edition). London: Elsevier.

Manuscript under Review/Revision

- Muñoz, E., Arogyaswamy, S., Petkus, A., **Pahlen, S.**, Phillips, D., Gatz, M., & Reynolds, C. A. (to be resubmitted) An assessment of life events checklist measures: Severity appraisals and individual differences.
- Pahlen, S.**, Stallings, M. C., Corley, R. P., Wadsworth, S. J., & Reynolds, C. A. (to be resubmitted). The Influence of Smoking Persistence on Cognitive Health before Midlife: Considerations of Education, Childhood IQ, and Tobacco Control Policies.
- Pahlen, S.**, Dahl Aslan, A. K., McGue, M., Lee, T., Sachdev, P. S., Catts, V. S., Christensen, K., Gatz, M., ... & Reynolds, C. A.; for the IGEMS Consortium (Revise & Resubmit). Smoking behaviors and cognitive functioning in mid- to late-adulthood: Gene-environment interplay. *Behavior Genetics*.
- Pahlen, S.**, Phillips, D. M., Muñoz, E., Petkus, A. J., Christensen, K., Dahl Aslam, A. K., Franz, C. E., Kremen. W.

K., Martin, N. G., Mosing, M. A., Neiderhiser, J. M., Nygaard, M., Pedersen, N. L., Vuoksimaa, E., McGue, M., & Reynolds, C. A.; for the IGEMS Consortium (to be submitted for special issue). Longitudinal loneliness and age-associated cognitive performance and change in mid- and late-life. *Frontiers in Public Health*

Trubenstein, B. P., **Pahlen, S.**, Corley, R. P., Rey, S., Wadsworth, S., & Reynolds, C. A. (to be submitted). Cognitive Functioning in Context: Activity Engagement, Social Capital, and Urbanicity-Rurality Interplay. *Journal of Leisure Research*.

Vo, T. T., ***Pahlen, S.**, Zheng, A., Yu, S., Lor, E., Bowman, N. D., Corley, R. P., Friedman, N. P., Wadsworth, S. J., Reynolds, C. A. (Revise & Resubmit). From controllers to cognition: The importance of selection factors on video game and game genre-derived cognitive differences. *Behavioral and Brain Functions*.

*Note: first shared co-author

Manuscripts in Preparation

Pahlen, S., S., Stallings, M. C., Corley, R. P., Wadsworth, S. J., & Reynolds, C. A. (in prep). Evaluate longitudinal associations of smoking behavior with cognitive functioning from adolescence to midlife.

Conference Presentations

Pahlen, S., Zheng, A., Vo, T. T., Bowman, N. D., Corley, R. P., Wadsworth, S. J., Reynolds, C. A., & the IGEMS Consortium (2024, June). New Game+: Video Gaming Correlates with Cognition, a Co-Sibling Control Design. *Behavior Genetics Association*, London, England.

Pahlen, S., Kremen, W., Reynolds, C. A., & the IGEMS Consortium (2021, June). Gene-environment interplay between smoking behavior and cognition among older adults. *Behavior Genetics Association*, Virtual Online Conference

Pahlen, S., Kremen, W., Reynolds, C. A., & the IGEMS Consortium (2019, November). Gene-environment interplay between smoking behavior and cognition among older adults. *Gerontological Society of America*, Austin, TX.

Pahlen, S., Kremen, W., Reynolds, C. A., & the IGEMS Consortium (2019, June). Smoking behaviors and cognitive functioning in mid- to late-adulthood: gene-environment interplay. *Behavior Genetics Association*, Stockholm, Sweden.

Pahlen, S., Reynolds, C. A., & the IGEMS Consortium. (2018, November). The relationship between smoking duration, years of education, and cognitive functioning in mid- and late-life: A co-twin control study. *Gerontological Society of America*, Boston, MA.

Pahlen, S., Reynolds, C. A., & the IGEMS Consortium. (2018, June). The relationship between smoking duration, years of education, and cognitive functioning in mid- and late-life: A co-twin control study. *Behavior Genetics Association*, Boston, MA.

Pahlen, S., & McGue, M. (2016, June). Age-moderation of genetic and environmental contributions to

cognitive functioning in mid- and late-life for specific cognitive abilities. *Behavior Genetics Association*, Brisbane, Australia.

Note: This talk was presented by Dr. Matthew McGue

Co-Authoring Conference Talks

Vo, T., **Pahlen, S.**, McGue, M., Kremen, W., & Reynolds, C. A. (2020, June). Testing for moderation of mid-life cognitive performance by sleep duration. *Behavior Genetics Association*, Virtual Online Conference.

McGue, M., Petersen, N., & **Pahlen, S.** (2017, June). Social class and healthy aging: What we can learn from IGEMS. *Behavior Genetics Association*, Oslo, Norway.

Conference Posters

*Indicates mentorship role of listed undergraduate or post-baccalaureate individuals

Pahlen, S., & Reynolds, C. A. (2022, June). Comparison of GEE and Mixed-Effects Approaches in Phenotypic Models. *Behavior Genetics Association*, Los Angeles, CA.

Vo, T., **Pahlen, S.**, Kremen, W., McGue, M., Dahl, A. D., Nygaard, M., Christensen, A., & Reynolds, C. A. (2022, June). Gene-environmental interplay of verbal fluency and episodic memory: Evaluating moderation by sleep duration and educational attainment. *Behavior Genetics Association*, Los Angeles, CA.

Lawrence*, F., Lee, T., Bach, D., Lee, S., Dungore, F., **Pahlen, S.**, Corley, R., Friedman, N., Reynolds, C. A. (2022, April). Video game play and associations with impulsivity in adolescence and adulthood. *Western Psychological Association*, Portland, OR.

Pahlen, S., Stallings, M. C., Corley, R. P., Wadsworth, S., & Reynolds, C. A. (2021, November). Consequential impacts of tobacco use on cognitive performance. *Gerontological Society of America*, Virtual Online Conference.

Luna*, **Pahlen, S.**, Corley, R. P., Wadsworth, S., & Reynolds, C. A. (2021, November). Frailty and processing speed performance at the cusp of midlife in CATSLife. *Gerontological Society of America*, Virtual Online Conference.

Vo, T., **Pahlen, S.**, Corley, R. P., Wadsworth, S., & Reynolds, C. A. (2021, November). Are genetic and environmental contributions to verbal fluency and episodic memory solely moderated by sleep?. *Gerontological Society of America*, Virtual Online Conference.

Warren, T., **Pahlen, S.**, Xian, H., De Anda, J., Kremen, W. S., Franz, C. (2020, November). The effect of midlife cardiovascular risk factors on cognitive function nearly half a decade later. *Gerontological Society of America*, Virtual Online Conference.

Gatz, M., Luczak, S. E., **Pahlen, S.**, Lee, T., Nygaard, M., Panizzon, M. S., Plassman, B. L., Reynolds, C. A., Whitfield, K. E., IGEMS Consortium. (2020, June). Remember this: Harmonization of episodic memory measures across twin studies of aging. *Behavior Genetics Association*, Virtual Online Conference.

- Luna*, M., Radican*, M., Myers, C., Trubenstein, P., Vo, T., **Pahlen, S.**, & Reynolds, C. A. (2020, May). The effect of physical activity on daily spatial reasoning tasks: A smartphone study in young adults. *The 2nd Annual R'PSYC conference at University of California, Riverside*. Riverside, CA.
- Vo*, T., **Pahlen, S.**, & Reynolds, C. A. (2018, November). Sleep, cognition, and health status amongst retired and non-retired older adults. *Gerontological Society of America*, Boston, MA.
- Pahlen, S.**, Reynolds, C. A., & the IGEMS Consortium (2018, April). The relationship between smoking duration, years of education, and cognitive functioning in mid- and late-life: A co-twin control study. *Western Psychological Association*, Portland, OR.
- Pahlen, S.**, Reynolds, C. A., & the IGEMS Consortium (2018, March). The relationship between smoking duration, years of education, and cognitive functioning in mid- and late-life: A co-twin control study. *Cognitive Aging Conference*, Atlanta, GA.
- Pahlen, S.**, & McGue, M., & Reynolds, C. A. (2017, June). The rank-order stability of cognitive performance across time in a longitudinal twin design. *Behavior Genetics Association*, Oslo, Norway.
- Krueger, R. F., **Pahlen, S.**, & Johannes, Z. (2016, March). Using graded unfolding IRT models and non-parametric regression approaches to characterize the shape of the relation between personality dimensions and functioning. *Society for Personality Assessment*, San Francisco, CA.
- Wright, Z., **Pahlen, S.**, & Krueger, R. F. (2016, March). Genetic and environmental influences on DSM-5 maladaptive personality traits. *Society for Research in Psychopathology*, Baltimore, MD.
- Suzuki, T., Samuel, D. B., **Pahlen, S.**, & Krueger, R. F. (2015, October). Comparing PID-5 and IPIP-NEO coverage of shared latent traits. *The International Society for the Study of Personality Disorders*, Montreal, Canada.
- Anderson*, A., Elkins, I., Iacono, W., Keyes, M., McGue, M., & **Pahlen, S.** (2014, June). Persistence of Attention Deficit Hyperactivity Disorder symptoms through adolescence. *Behavior Genetics Association*, Charlottesville, VA.
- Pahlen, S.**, & McGue, M. (2014, June). Moderation of verbal and performance IQ by selected leisure activities. *Behavior Genetics Association*, Charlottesville, VA.
- Suzuki, T., Samuel, D. B., **Pahlen, S.**, & Krueger, R. F. (2014, March). Comparing and contrasting the PID-5 and the IPIP NEO-PI-R. *Society for Personality Assessment*, Arlington, VA.

Teaching Experience

Graduate Teaching Assistant; University of California, Riverside

Course	Instructor	Rating ⁼	Quarter, year
Health Psychology	Janine Medina	7.00/7.0	Summer, 2022
Adult Development & Aging	Dr. Chandra Reynolds	7.00/7.0	Fall, 2021
Introduction Psychology 1	Dr. Kelly Huffman	6.67/7.0	Summer, 2021

Lifespan Development	Dr. Brianne Coulombe	-	Summer, 2020
Biological Issues of Development	Dr. Chandra Reynolds	-	Spring, 2020
Applied Longitudinal Data Analysis	Dr. Chandra Reynolds	-	Fall, 2019
Socioemotional and Personality Development	Dr. Elizabeth Davis	-	Summer, 2019
Research Methods	Dr. Brent Hughes	6.73/7.0	Fall, 2018
Abnormal Psychology	Dr. Michelle Calderwood	-	Summer, 2018
Environmental Psychology	Dr. Paige Trubenstein	6.19/7.0	Spring, 2018
Introduction Psychology 2	Dr. Rachel Wu	6.54/7.0	Winter, 2017
Abnormal Psychology	Dr. Sofia Stepanyan	-	Summer, 2017

*Rating based on average overall effectiveness as an instructor

Courses delivered during the summer before 2021 or courses taught without a separate lab/discussion section are not evaluated.

Membership in Professional Societies

Behavior Genetics Association (BGA), Student Member	2014 – present
Gerontological Society of America (GSA), Student Member	2016 – 2022
Western Psychological Association	2018 – 2019

Employment History

Staff Research Associate, April 2023-June 2023

Biobehavioral Research (BBR) Lab: *University of California, Riverside*

Supervisor: Dr. Chandra Reynolds

Multilevel Modeling Consulting, February 2023-March 2023

Student graduation achievement for Southern California community college districts: San Diego, Santa Barbara, San Mateo, Coastline

Graduate Research & Teaching Assistant, September 2016-December 2022

BBR Lab: *University of California, Riverside*

Mentor: Dr. Chandra Reynolds

Lab Manager, June 2012-August 2016

Minnesota Twin Study of Adult Development and Aging (MTSADA): *University of Minnesota, Twin Cities*

Supervisor: Dr. Matthew Mc Gue

Research Coordinator, June 2011-August 2016

Minnesota Twin Registry (MTR): *University of Minnesota, Twin Cities*

Supervisor: Dr. Robert Krueger