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Education

- 1997 Ph.D. in Anthropology, University of California, Berkeley
Dissertation Title: A Biocultural Perspective on Schizophrenic Communication in New Zealand and Papua New Guinea
- 1994 M.A. in Anthropology, University of California, Berkeley
- 1987 B.S. in Biological Science, Cornell University
Concentration: Neurobiology and Behavior

Research Interests

Facial and nonverbal signaling behavior
Psychosocial impact of facial movement disorders
Aging and emotional expression

Professional Appointments

Assistant Professor, University of Pittsburgh, Department of Psychiatry, July 2003-present

Adjunct Assistant Professor, University of Pittsburgh, Department of Psychology, 2002-2003

Assistant Professor, Indiana University of Pennsylvania, Department of Anthropology, 1998-2000; 2002-2003

National Institutes of Health Post-doctoral Fellow, University of Pittsburgh, Department of Psychology, 2000-2002

Lecturer, University of California, Berkeley, Department of Anthropology, 1998

Lecturer, Diablo Valley College, Division of English and Social Sciences, 1998

Assistant Professor, University of the Pacific School of Dentistry, Department of Anatomy, 1995-1997

Refereed Publications

Schmidt, K.L., VanSwearingen, J.M., and Levenstein, R.M. (in press).

- Speed, amplitude, and asymmetry of lip movement in voluntary puckering and blowing expressions: Implications for facial assessment. *Motor Control*.
- Cohn, J.F., and Schmidt, K.L. 2004. Cohn, J. F. & Schmidt, K. L. 2004.
The timing of facial motion in posed and spontaneous smiles. *International Journal of Wavelets, Multiresolution and Information Processing*, 2, 1-12.
- Schmidt, K.L., Cohn, J.F., and Tian, Y. 2003.
Signal Characteristics of Spontaneous Facial Expressions: Automatic Movement in Solitary and Social Smiles. *Biological Psychology* 65(1):49-66.
- Liu, Y., Schmidt, K.L., Cohn, J.F., and Mitra, S. 2003.
Facial Expression Quantification for expression invariant human identification. *Computer Vision and Image Understanding* 91:138-159.
- Brewis, A., and Schmidt, K.L. 2003.
Gender variation in the identification of Mexican children's psychiatric symptoms. *Medical Anthropology Quarterly* 17:376-393.
- Brewis, A.A., Schmidt, K.L., and Sanchez-Casas, C.A. 2003.
A Cross-cultural study of the childhood developmental trajectory of attention and impulse control. *International Journal of Behavioral Development* 27(2):74-181.
- Schmidt, K.L. 2002.
The evolutionarily novel context of clinical caregiving and facial displays of pain. *Behavioral and Brain Sciences*. 25(4):471-472.
- Brewis, A.A., Meyer, M., and Schmidt, K.L. 2002.
Does school, compared to home, provide a unique adaptive context for children's ADHD-associated behaviors? A cross-cultural test. *Cross-cultural Research* 36(4):303-320.
- Brewis, A.A., Schmidt, K.L., and Meyer, M. 2002.
On the biocultural study of children's hyperactive and inattentive behavior. *American Anthropologist* 104(1):287-289.
- Schmidt, K.L. and Cohn, J.F. 2001.
Human facial expressions as adaptations: evolutionary questions in facial expression research. *Yearbook of Physical Anthropology* 44:3-24.
- Schmidt, K.L., J.S. Allen and Attah Johnson, F.Y. 2000.
Cross cultural analysis of eventfulness in the lives of people with schizophrenia. *Schizophrenia Bulletin* 26(4):825-834.
- Brewis, A.A., Schmidt, K.L., and Meyer, M. 2000.

ADHD-type behavior and harmful dysfunction in childhood: A cross-cultural model. *American Anthropologist* 102(4):823-828.

Allen, J.S., Lambert, A.J., Attah Johnson, F.Y., *Schmidt, K.L.*, and Nero, K.L. 1996. Antisaccadic eye movements and attentional asymmetry in schizophrenia in three pacific populations. *Acta Psychiatrica Scandinavica* (October) 94 (4): 258-265.

Schmidt, K.L., Liu, Y., and Cohn, J.F. (under review). The role of structural facial asymmetry in asymmetry of peak facial expressions. submitted to *Evolution of Human Behavior*.

Refereed Conference Proceedings

Cohn, J.F., Reed, L.I., Moriyama, T., Xiao, J., *Schmidt, K.L.*, and Ambadar, Z. 2004 Multimodal Coordination of Facial Action, Head Rotation, and Eye Motion during Spontaneous Smiles. Proceedings of the Sixth IEEE International Conference on Automatic Face and Gesture Recognition, Seoul, Korea, 2004.

Cohn, J.F., *Schmidt, K.L.*, Gross, R., and Ekman, P. 2002. Individual differences in facial expression: stability over time, relation to self-reported emotion, and ability to inform person identification. Proceedings of the International Conference on Multimodal User Interfaces. Pittsburgh PA, October 2002. pp. 491-496.

Schmidt, K.L. and Cohn, J.F. 2001. Dynamics of facial expression: normative characteristics and individual differences. International Conference on Media and Expo. pp 728-730.

Liu, Y., *Schmidt, K.L.*, Cohn, J., and Weaver, R.L. 2000. Facial asymmetry quantification for expression invariant human identification. International Conference on Automatic Face and Gesture Recognition. Washington D.C., May 20-21, 2002.

Research Grants

Psychiatric Co-Morbidity in Facial Nerve Dysfunction.
National Institute of Mental Health Career Development Grant: 2003-2008, \$590,000

Facial Display and Prosodic Signaling in Schizophrenia.
National Institute of Mental Health Postdoctoral Fellowship: 2000-2002, \$75,000

Gender Differences in Children's Hyperactivity, Inattention, and Impulsivity.
National Science Foundation Cultural and Biological Anthropology Programs Grant: 2000-2003, \$252,000 (with A. Brewis)

Population Variation in ADHD-type Behaviors.
Wenner-Gren Foundation for Anthropological Research: 2000, \$19,900 (with A. Brewis)

Reading Emotional Expression: Can Schizophrenia be Recognized Cross-Culturally?
University Senate Research Grant, Indiana University of Pennsylvania: 1999, \$2000

Robert H. Lowie Graduate Fellowship. Department of Anthropology, U.C. Berkeley 1993-1995

Regents Graduate Fellowship. U.C. Berkeley: 1992

Conference and Invited Presentations

Schmidt, K.L. 2005 Disruptions in facial signaling: social consequences of facial movement disorders. Anthropology Department Colloquium, Indiana University of Pennsylvania. March 1st, 2005

Schmidt, K.L. 2003. The evolution of human facial signaling: new research in facial expression." Anthropology colloquium, Kent State University, November 6th, 2003

Wachtman, G.S., Liu, Y., Zhao, A., Cohn, J.F., *Schmidt, K.L.*, Henkelmann, T.C., VanSwearingen, J.M., and Manders, E.K. 2002. Measurement of asymmetry in persons with facial paralysis. Combined Meeting of the Robert H. Ivy Society and the Ohio Valley Association of Plastic Surgeons, June 2, 2002, Cleveland OH.

Brewis, A. and *Schmidt, K.L.* 2002. Childhood developmental trajectory of attention and impulse control." American Association of Physical Anthropologists annual meeting, Buffalo NY.

Schmidt, K.L. and Cohn, J.F. 2001. Dynamic modeling of facial expression. American Association of Physical Anthropologists annual meeting, Kansas City MO.

Schmidt, K.L. 2000. Smiles: The role of facial movements in social signaling. Anthropology Department Colloquium, University of Pittsburgh, October 2000.

Schmidt, K.L., Monaco, V., Peters, B., VanSwearingen, J., Tian, Y., and Cohn, J. 2000. Relation between automatic tracking of lip-corner motion and facial surface EMG of the Zygomaticus major muscle during spontaneous smiles" Society for Psychophysiological Research annual meeting, San Diego CA.

Schmidt, K.L., Sullivan, R. and Allen, J.S. 2000. Social thinking in schizophrenia: implications for the consumers of mental health services. Society for Applied Anthropology annual meeting, San Francisco CA.

Schmidt, K.L. 2000. Variation in the timing and display of the human smile. American Association of Physical Anthropologists annual meeting, San Antonio TX.

Schmidt, K.L. 1999. Recognizing the strangeness of nonverbal behavior cross-culturally. American Association of Physical Anthropologists annual meeting, Columbus OH.

Schmidt, K.L. 1999. The effects of schizophrenia on universal human facial expression. Anthropology Department Colloquium, Pennsylvania State University

Schmidt, K.L. 1998. Schizophrenia and facial expression in Papua New Guinea. American Anthropological Association annual meeting, Philadelphia, PA.

Schmidt, K.L. 1998. Effects of schizophrenia on universal human facial expression. American Association of Physical Anthropologists annual meeting, Salt Lake City, UT.

Schmidt, K.L. 1997. Schizophrenia nature and human nature. Human Behavior and Evolution Society Conference, Tucson, AZ.

Schmidt, K.L. 1997. The struggle between schizophrenia and society. Science Today radio program

Courses Taught

Human Gross Anatomy with lab
Biological Anthropology with lab
Contemporary Anthropology
Language and Culture

Functional Neuroanatomy with lab
Human Ethology Methods
Evolution of Human Behavior

Membership in Professional Societies

American Psychological Association
Gerontological Society of America
American Association of Physical Anthropologists
American Anthropological Association